State of West Virginia

Offices of the Insurance Commissioner

Health Benefit Exchange

Vendor Responses to Request for Information:

Strategic Planning for the Future Health Insurance Exchange

WITHOUT PROPRIETARY INFORMATION

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WEST VIRGINIA OFFICES OF THE INSURANCE COMMISSIONER

Vendor Responses to Request for Information:
Strategic Planning for the Future Health Insurance Exchange

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Version	Delivered Date	Update Reason
1.0	January 10, 2012	Draft issued for OIC review.

Table i: Version History

Introduction

The purpose of this document is to provide a compilation of responses to questions from the Request for Information (RFI) released by the West Virginia Offices of the Insurance Commissioner (OIC) on October 21, 2011 titled "Strategic Planning for the Future Health Insurance Exchange." The RFI is included herein as an Appendix for reference. The RFI was issued as part of the Exchange planning process to obtain information regarding available third-party Information Technology (IT) platforms, costs, timelines, components and services for the design, development, implementation, and ongoing operational support of the Exchange. A separate deliverable summarizes and analyzes the RFI responses by question.

Twelve vendors responded to all or part of the RFI. The RFI instructed vendors to provide their responses in hard copy format. To streamline the process of reviewing the RFI responses, BerryDunn scanned each vendor response and converted them to text files using optical character recognition (OCR). Once that process was completed, the responses were aggregated by RFI question and sub-question, as presented in this document. The material herein is not formatted the same way it is presented in the vendor's original hard copy responses, however it does represent the vendor's original language (please note however that the quality of some of the graphics was compromised during the OCR translation process). BerryDunn has not edited any of the vendor responses in any way. If wording or an image is not clear in this document, the original vendor response should be referenced as errors may have been introduced during the OCR translation.

The RFI allowed vendors to designate portions of their responses as "proprietary" and provide them in a sealed envelope separate from non-proprietary responses for State review only. All propriety material has been removed from this document; a note is included to indicate where proprietary material was removed. A separate document was created that includes the vendors' full responses.

1.0 Vendor Executive Summaries

Provide an executive summary that includes an overview of your solution, its advantages, and what makes your solution unique. Include any previous experience with Exchange or similar technology. Your response should confirm that your solution is intended to be compliant with the ACA and all subsequent State and Federal rules and proposed regulations.

1.1 ACS EXECUTIVE SUMMARY

The Exchange has the potential to fundamentally enhance West Virginia's health insurance market and become an effective tool in reducing the uninsured population in the state, providing an easier and more transparent vehicle for individuals and small businesses to find affordable coverage. The ACS Team brings a unique mix of proven experience and tools, in both commercial and government health insurance, to help the West Virginia fulfill these goals.

West Virginia is at the forefront of implementing the provisions of the Patient Protection and Affordable Care Act (ACA) on behalf of its citizens. Integral to implementing reforms under the ACA is the establishment of a health insurance exchange that provides an organized, competitive marketplace to facilitate the comparison, choice, and purchase of health care coverage for individuals, families and for employees of small businesses. Through the West Virginia Health Insurance Exchange (the Exchange), individuals and employees will have access to comparable information on costs, benefits, health care providers, and quality that can be used to choose and enroll in the health benefit plan that best fits their needs.

Our unique HIX Solution Suite combines proven operational expertise with the most modern technology. Our solution is developed to be compliant with the ACA and all subsequent State and Federal rules and proposed regulations, providing flexibility through system configuration tools and open Application Programming Interfaces (APIs) to quickly accommodate regulatory and market trends. Our design also allows for a lower total cost of ownership than traditional, on-premise, IT models.

Overview

The ACS HIX Solution Suite is a comprehensive set of services to easily and completely provide an insurance exchange. It is designed specifically for state compliance with the ACA and includes all core elements of an exchange as outlined by CMS. Key components of our solution include:

- Call Center
- Web Portal
- Broker and Navigator Training
- Decision Support Tools
- Eligibility Verification
- Enrollment - Online, Paper and Phone

- Eligibility Determination for:
  - Cost Sharing Reductions
  - Advanced Premium Tax Credits
  - Exchange Participation
- Application and Notice of Appeals
- Individual Responsibility Determination
- Information Reporting to IRS and to Enrollees
- SHOP premium aggregation and list billing

While many federal rules and guidelines related to exchanges have yet to be finalized, it is a key ACA requirement that the Exchange be operational by January 2014 and self-sustaining by 2015. With our HIX Solution Suite, the ACS Team can help West Virginia to easily meet certification requirements for January 2013 and be ready to take enrollments by October 1, 2013.

Advantages

Successfully implementing and managing a health insurance exchange requires a combination of experience both in state government and the private market, working with all constituencies via effective communication and outreach, technology and system integration, customer service and call center operations, and all facets of health insurance exchange administration.

Setting up an exchange involves more than just implementing functionality. The ACS Team has real day-to-day experience with the "nuts and bolts" aspects of creating and operating sustainable health insurance exchanges. The ACS HIX Solutions Suite provides the State of West Virginia with a number of unique advantages. Among these include the following:

- **Experience** - Our team introduced one of the nation's first private insurance exchanges in 1996 and currently administers five distinct insurance exchanges. We continually enhance our services and technologies to meet the evolving needs of state exchanges. At present, our platform supports over 14.5 million users, 300,000 employers, and more than 760 data exchange links.
- **Efficiency** - Our platform provides significant flexibility and efficiency for the State of West Virginia which translates into fewer required state staff and lower operating costs
- **Flexibility** - Our solution can customize exchange protocols quickly to meet the unique needs of West Virginia's exchange.
- **Outreach and Communication** - We are uniquely experienced in designing communication and outreach plans based on our experience with the Connector in Massachusetts and in broker and consumer advocacy training in California, Massachusetts, Oklahoma, and other states.
- **Technology** - Our Software as a Service (SaaS) platform provides the most cost effective means to administer an exchange for both short-term implementation and longer terms maintenance costs.
- **Web Portal -** Sophisticated and user-friendly source for insurance information and enrollment.
- **Customer Service** - Comprehensive and innovative decision support tools backed by knowledgeable and empathetic customer service representatives.
- **Thought Leadership** - Our team has years of practical experience managing insurance exchanges. We also know the ACA and have published a series of white papers on exchange implementation.

A Partnership For a Successful West Virginia Health Insurance Exchange

In designing our HIX Solution Suite, ACS sought differentiating partners who have the experience to add value to our core strengths with smarter and more mature features. Just as no one exchange model can meet the unique needs of each state, no one vendor alone has the

scope of services needed to successfully provide compliant exchange services. We chose Benefitfocus® and *CHOICE* Administrators® to offer our comprehensive HIX Solution Suite. Their real-world experience provides the West Virginia with the opportunity to benefit from 15 years of knowledge in the private insurance exchange market.

As shown in Exhibit 1-1, Complete Exchange Solution, the ACS Team provides the unique technology, services, and business processes in an integrated solution for the Health Insurance Exchange.

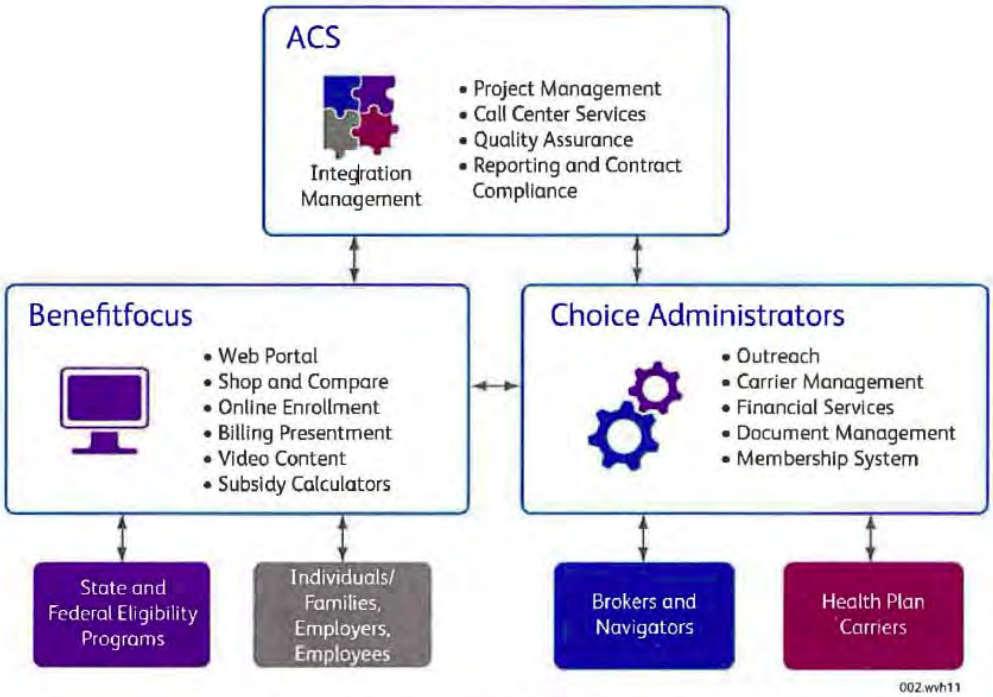


Exhibit 1-1. Complete Exchange Solution

Proven Performance and Proven Technology

There are two simple concepts we believe summarize our HIX Solution Suite and our benefit to West Virginia: Proven Performance and Proven Technology.

Proven Performance - A key differentiator of the ACS Team is our real-world experience in actually operating exchanges, administering Medicaid/CHIP eligibility programs, and working with commercial insurance carriers.

- **ACS** leverages our Gartner Magic Quadrant 2010 call center qualifications and extensive project management experience in large government and commercial projects, government contract management and compliance, quality assurance processes, and integration management. ACS' government experience across the country speaks for itself.
- **Benefitfocus** is the largest healthcare benefits software provider in the United States, serving over 14.5 million consumers and more than 300,000 employers. Benefitfocus provides a best-in class benefit shopping, enrollment, and online billing experience for consumers, employers, and brokers on a single Web-based platform.

- ***CHOICE* Administrators** has been operating five distinct, self-sustaining health insurance exchanges for more than 15 years covering over 150,000 members from more than 10,000 groups. Trusted by carriers, brokers, small business owners, and individuals, *CHOICE* Administrators is an expert in exchange operations and software with a verifiable track record of success.

Proven Technology - Our HIX Solution Suite provides faster time to market, lower total cost of ownership, and significantly reduced risk for West Virginia. Our SaaS delivery model has been supported by CMS' latest guidelines (May 2011) as a favorable alternative to traditional Government IT models. Our solution aligns with the latest guidance from CMS by providing:

- Technology neutral, isolated human-readable business rules enabling end-user configuration
- Service oriented architecture (SOA) for efficient integration with peripheral systems (e.g. eligibility systems, government agencies)
- HIPAA/PHI controls and audit trails for tracking and reporting
- Industry's most user friendly Web portal for all user types and education levels
- Maximization of real-time determinations and decisions through Web-service calls
- Single instance and single version of code allows upgrades and changes to be distributed automatically and easily across entire platform for the benefit of all clients
- High degree of flexibility and scalability to accommodate current and future market and regulatory trends

Additionally, many of the requirements for core functionality related to exchanges within the ACA and recently proposed rules are already in place, as evidenced in our five currently operational exchanges.

While it is essential that the Exchange be an efficient conduit to support the administration of the newly eligible Medicaid and subsidized populations, the Exchange must also create a vibrant transparent marketplace. The ACS Team will implement a West Virginia Exchange that enhances competition and ultimately adds value to consumers and small businesses. The ACS Team is confident in our ability to partner with the West Virginia Offices of the Insurance Commissioner to implement a comprehensive and compliant West Virginia Exchange.

1.2 CGI EXECUTIVE SUMMARY

Enactment of the Patient Protection and Affordable Care Act offers all citizens the promise of affordable health insurance. Realization of this promise will not be easy.

CGI stands ready to be West Virginia's transformation partner.

CGI brings a comprehensive package of experience, proven methodologies, business process management capabilities and software infrastructure that can be rapidly and successfully setup and fully deployed to service West Virginia's constituency within the tight state and federal timelines which includes:

The Experience and the Know-How. CGI has deep roots in both public and private health sectors as well as the commercial insurance industry. We understand the difficulties of translating health policy and legislation into business processes and IT solutions. CGI has

partnered with the Centers for Medicare and Medicaid Services (CMS) since the enactment of the Medicare Modernization Action of 2003. We were recently awarded the CMS contract to build the Federal Health Insurance Exchange which provides direct exposure to the federal initiative and an understanding how that relates to the State initiatives. In addition, we are the prime contractor for the build and maintenance of the CMS websites including www.medicare.gov and www.mymedicare.gov which serves over 45 million beneficiaries in their search for information and enrollment for Medicare benefits. Our Part D Prescription Plan Finder operating under www.medicare.gov is currently one of world's largest insurance benefits exchanges.

CGI continues to work with the federal government in navigating the new paradigm in healthcare by leading the development of the infrastructure and data management processes to stand up the Health Insurance Oversight System (HIOS) and the Rates and Benefits Information System (RBIS). Specifically, RBIS is answering CMS's call to create a platform independent, componentized architecture that can be leveraged by states seeking to create their own exchange and rates engine.

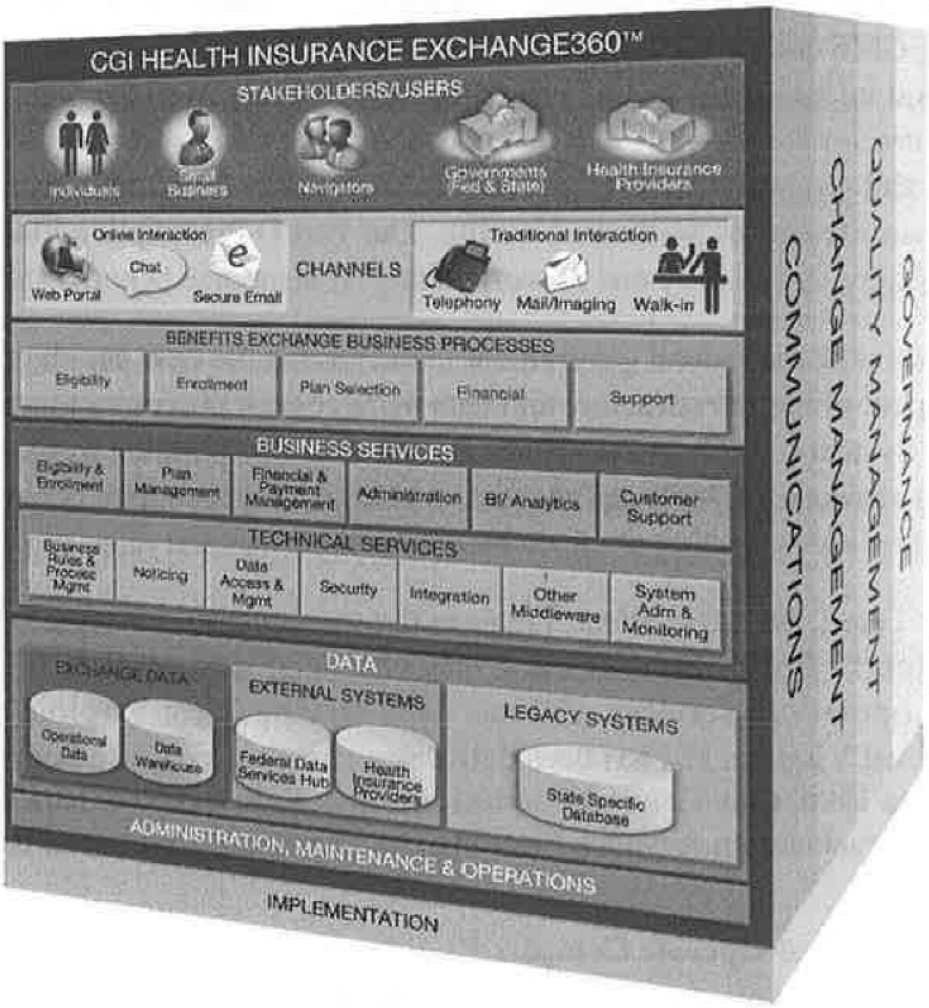
As part of our CGI Team, we offer West Virginia the opportunity to work with one of our subcontracting partners - Policy Studies Inc (PSI), who is able to provide the State with high quality, high-value operations services. PSI has been serving West Virginia and its counties for over 15 years. In West Virginia, PSI has been delivering Full Service Child Support operations in Kanawha County since 1996, Clay County (Charleston) since 2006 and New Hire reporting since 2000 and has completed contracts for an Advance Planning Document and a Financial Review of the Child Support System.

The Ability to Stand-Up and Operate Complex End-To-End Programs. Recently, CGI developed CGI Medicaid Incentive360 to assist the states in implementing the Medicaid EHR Incentive Payment Program under the American Recovery and Reinvestment Act of 2009. This suite of services translates directly into the service needs of the State Exchange, including Business Services, Technical Services and Program Management. In addition, CGI has worked with both the New England Collaborative Insurance Exchange Systems (NECIES), an early innovator, and the State of Utah to assist them with the aspects of their planning and design of their Health Insurance Exchanges.

A Thoughtful and Well-Informed Approach. In the balance of this document we introduce our vision, approach and the key success factors for the West Virginia Health Insurance Exchange and its business partners. A successful State Exchange is about much more than software. An implementation of a successful Exchange must also focus on architecting and building an enterprise of governance, business process and enabling tools that address the immediate needs of a diverse constituency while providing the ability to evolve with changing needs.

CGI's Health Insurance Exchange360™ ("Health Insurance Exchange360"), as displayed in Exhibit 1 illustrates our two fold approach: providing both technologies and services necessary to support the State Exchange. The services component includes Governance, Quality Management, Change Management, Communications, and Implementation. Our best practices approaches combine not only years of successful technology projects, but our project work with the federal, state and local government and commercial customers across the globe in insurance and healthcare and human services. Our solution is intended to be compliant with the ACA and subsequent State and Federal rules and proposed regulations.

Exhibit 1: CGI's Health Insurance Exchange360 Solution™



1.3 COGNOSANTE EXECUTIVE SUMMARY

Pursuant to the provisions of the Affordable Care Act (ACA), Public Law 111-148, West Virginia has the right to establish and determine the nature of any Health Insurance Exchanges (Exchanges) implemented in the State. The Exchanges will provide competitive marketplaces for individuals and small employers to directly compare available private health insurance options on the basis of price, quality, and other factors.

The Exchanges, which will become operational by January 1, 2014, will help enhance competition in the health insurance market, improve choice of affordable health insurance, and give small businesses the same purchasing clout as large businesses.

The Challenge

In March of 2011, West Virginia passed the West Virginia Health Benefit Exchange Act authorizing the creation of a West Virginia Health Benefit Exchange to facilitate:

1. Shopping for health insurance on the part of West Virginians needing individual coverage, and
2. Assistance for qualified small employers in the state (SHOP).

To this end, the Offices of the Insurance Commissioner (OIC) has released Request for Information (RFI) #INS12009 to seek vendor input into the strategic planning for the future Health Insurance Exchange (Exchange).

Cognosante Experience

Deep Knowledge of Healthcare Policy, Regulations, and Standards

Cognosante has a deep working knowledge of the Patient Protection and Affordable Care Act (ACA) and other federal statutes, regulations, policies and standards. We understand the technical requirements and architectures needed for integrated eligibility and enrollment systems and for state health insurance Exchanges. Cognosante has worked closely with the Centers for Medicare and Medicaid Services (CMS) over our twenty five year history serving over 40 state departments of health and social services, and we continue to do so as we work to implement the requirements called out in the ACA regarding Health Insurance Exchanges (HIX). We are constantly meeting with and monitoring the guidance from Health and Human Services (HHS) and CMS concerning the approach to meeting ACA requirements.

We are familiar with the major vendors providing components that may comprise portions of an integrated HIX solution and the products and technologies they offer. An analysis of the requirements for HIX found within ACA demonstrates that no one vendor produces a product that meets all of the requirements for HIX. Therefore, it is highly likely that an integrated solution is the only way to meet the needs of a state Exchange, the guidance of CMS, and the requirements of the ACA legislation.

As a result of Cognosante's extensive experience with state Medicaid programs, we have significant understanding of the CMS approach towards modular and open systems. The CMS Seven Conditions and Standards released in April, 2011 require new Medicaid Management Information Systems (MMIS) to be modular in construction with replaceable and interoperable components. It is critical that the West Virginia Exchange follow this guidance to maximize flexibility and leverage legacy systems.

Strong Knowledge of Exchange Solution Components and Vendors
Cognosante is currently engaged with the Federal agencies and twenty two states across the nation on the full spectrum of healthcare initiatives including the implementation of HIX. As a result, we work closely with many of the vendors and solution components throughout the industry and we partner with the vendors that can best meet the unique needs of our clients. Therefore, the breadth of our exposure to, and experience with a wide array of vendors, their products, and, in many cases, visibility of vendor delivery capability, will benefit OIC by allowing Cognosante to support OIC in selecting and integrating "best of breed" Exchange vendors and solution components.

Proven System Integrator Experience in Healthcare and HHS
Cognosante has many years of providing technical services for large IT projects in the healthcare and HHS fields, including the large complex government healthcare initiatives:

- New York Health Options Enrollment Center
- Nation-wide National Provider Identifier (NPI) Enumerator for CMS
- Armed Forces Health Longitudinal Technology Application (AHL TA) Electronic Health
- Record (EHR)
- Nationwide Health Information Network
- Assisted CMS in developing the Medicaid Information Technology Architecture (MITA)

Through this experience, we have developed robust project and contract management methodologies based on the Project Management Body of Knowledge (PMBOK) principles to ensure that we deliver on time and on budget. As the Systems Integrator (SI), we will employ these practices in managing the integration process, and in supporting the Project Management Office (PMO) in managing vendors that provide the components being integrated.

Cognosante's Proven System Integration Approach and Methodology
Cognosante follows a methodical approach to systems integration that begins early in the process. Some important steps in that methodology include:

- Validation of component and overall system needs and requirements, in collaboration with OIC, the Department of Health and Human Resources (DHHR), the Governor's Office of Health Enhancement & Lifestyle Planning (GOHELP), the West Virginia Health Information Network (WVHIN), and other HIX stakeholders;
- Development and/or validation of the logical architecture, documenting the role and requirements of each component to ensure seamless overall system functionality without gaps;
- Trade-off analysis of the various components available to fill roles in the logical architecture, independent of any vendor partnerships or bias;
- Development of a detailed business and information architecture that ensures the resulting system meets the needs of the state and ensures the lowest possible implementation risk;
- Design and implementation of the integration framework, utilizing common business and technical support to best meet State needs, and incorporating the necessary Service Oriented Architecture (SOA) governance structures;
- Management of the integration process, including requirements traceability, standards conformance, gap analysis, testing, risk analysis, change management, etc; and
- Testing that ensures conformance to interface specifications, Federal standards, and open Application Programming Interfaces (APIs) that support CMS' and the State's goals for modularity.

Cognosante will work closely with OIC and our team of partners to tailor our methodology and approach to the unique needs of the West Virginia Exchange initiative.

Solution Overview

Cognosante understands that via this RFI that West Virginia is seeking to better understand the landscape of vendors and products that are available in the market. Cognosante is not a Health Insurance Exchange solutions provider. Our response is to offer information to West Virginia regarding the value of a Systems Integrator and why this approach should be strongly considered by the State as a valid means of procuring, implementing, testing, and certifying a "best-of-breed" Commercial-off-the-Shelf (COTS) product based Exchange.

Why a Systems Integrator?

> *"You don't need to build from scratch. Nearly every exchange function already exists in the private sector. You just need to facilitate partnerships and collaborate."*[1]
>
> *- Dr. Norm Thurston, Utah Department of Health*

Currently, no single vendor offers a comprehensive set of functional components that provides all of the required functionality for a Health Insurance Exchange. Although a number of vendors are clearly working toward this goal, CMS has not defined all the required functional blueprints for Health Insurance Exchange. Thus, all business processes and components cannot yet be developed. Additionally, Early Innovators are currently not sufficiently far enough ahead of other states to provide complete solutions to the non-innovator states.

Therefore, each state is facing a race against time to develop, procure, or implement an Exchange solution that not only meets the requirements set forth by the Affordable Care Act (ACA), but also addresses the specific health insurance needs of a given State's population. States need assistance in helping them identify solutions that can be quickly adapted to meet the specific needs of a state. As no one solution currently addresses all of the ACA requirements, States need to identify the range of modules and components, understand how they work together, work with and manage multiple vendor contracts, and ensure the final solution meets Federal and state policy requirements, as well as mandated Federal timelines.

The Role of the Systems Integrator

Assisting states in assessing the vendor landscape, understanding and evaluating vendor solutions, capabilities, compliance with ACA guidelines, integration of components, and identification and mitigation of risks are the key functions a Systems Integrator (SI) provides to states. The initial role of the SI is to help states create the "blueprint" to establish the Exchange. The "blueprint" provides states with an understanding of the overall components, platform, from a conceptual, logical, and technical view of the system. The "blueprint" also provides states a roadmap for the identification of modules and components of the Exchange. The next key activity is the identification of the platform and mechanism by which functional components are integrated. The SI would partner with West Virginia to oversee the vendor scan process, help evaluate and select solutions, or at the States' direction, provide components or solutions to support management of the vendors that do provide functional components.

In identifying an SI, the State should evaluate the following questions and seek a vendor with the following knowledge, qualifications, and experience:

- Does the firm have a *sound Systems Integration approach and methodology* to provide the overall technical leadership for a successful Exchange?
- Does the firm have critical *Systems Integration experience* with large, complex systems in the Health Information Technology (HIT) domain?
- Does the firm have a strong understanding of Exchange solution components and vendors?
- Does the firm have a deep background in *health information technology and* expertise in state public assistance and Medicaid?
- Does the firm have *deep experience with CMS and Federal Policy?*

Additionally, to form the Exchange IT framework, West Virginia should seek an SI vendor that has a broad understanding of the Affordable Care Act, technology, and the types of products and capabilities being made available in the Exchange market place today. The SI vendor that the State selects should possess the following expertise and capabilities:

- Broad understanding of the CMS policies, regulations, and technical standards
- Deep understanding of the goals of Healthcare Reform, specifically the ACA, goals, and timelines

In-depth understanding of the MITA-based Center for Consumer Information and Insurance Oversight (CCIIO) architecture for the Exchange, including the defined business areas, blueprints, and business processes.

- Strong knowledge of the national Exchange marketplace, vendors, and available components Experience with large scale system architecture and Systems Integration
- Ability to understand and mitigate project risks, particularly time to implementation
- Will provide a COTS-based "best-of-breed" solution for the State of West Virginia
- Understanding of SOA architecture and principles
- Understanding of how the Exchange would integrate into and be interoperable with the West Virginia HIT architecture

West Virginia, as well as all other states, faces a myriad of challenges in implementing an Exchange solution within the timelines stipulated by the ACA. The use of an SI that understands the market, available tools, and how to integrate them in a common framework will help the state minimize risks in meeting mandated timeframes.

Overview of System Integrator Scope of Work

The scope of work for the SI covers the full range of activities required for West Virginia to establish and implement the Exchange in time to apply for certification on January 1, 2013, and commencement of full Exchange operations on January 1, 2014. The suggested range of responsibilities includes overall Project Management for the duration of the project, system design (creation of the "blueprint"), vendor identification and selection, oversight of integration, and development of test plans for certification. In addition, the SI will assist West Virginia by understanding the system implementation, integration, maintenance, and support costs, and if applicable, working with the state to develop the Level 2 grant application to procure system implementation funds. Furthermore, Cognosante recognizes and fully understands that all states face a 'race against time' in complying with ACA timelines. At West Virginia's direction,

Cognosante can not only provide full SI capabilities but can also provide a full solution by bringing together the necessary partners and components of the system.

The following is the suggested scope of responsibilities of the Systems Integrator:

- Project Management and Oversight (throughout Project period)
- Creation of Exchange "blueprint"
- Creation of Exchange questionnaires, identification of vendors, modules, and components
- Integration of System components in compliance with system "blueprints"
- Communication with the Insurance Commission, West Virginia Medicaid, coordination of eligibility and the Children's Health Insurance Program (CHIP) integration into the Exchange
- Integration of public health systems into the Exchange (establish interoperability)
- Financial planning and cost allocation for ongoing sustainability of Exchange
- Plan for integration of Social/Welfare Systems into integrated web portal
- Monitoring of Vendor Performance
- IV&V support during implementation and Certification Testing
- Management of Vendor Contracts throughout implementation and certification
- SOA Governance

The SI that West Virginia selects will need to possess a broad awareness of topics, including understanding of West Virginia's vision and policies, individual and group insurance markets, health care programs, Federal IT guidelines and recommendations from CCIIO.

"Blueprint" for the Exchange

Establishing the framework for decision making and the procurement of system components and modules requires having a complete vision of the Exchange. The vision of the Exchange provides a common understanding of the layers of the architecture, a logical view of the system components, module components, Information architecture, and technical architecture.

The "blueprint" becomes the State's roadmap for understanding the future vision of the Exchange and provides the basis for identification of required modules and components that will be integrated into the system. The "blueprint" provides the conceptual, logical, and architectural understanding of the system. This also establishes the framework of the Exchange by which will map the identification and acquisition of components.

The blueprint itself is a series of documents that describes the architecture of the system. The blueprint should provide a complete vision of the system, and as with any blueprint, serve as a "roadmap" for the identification of components and integration into the common architecture.

The following are the envisioned deliverables that define the "blueprint":

- Conceptual Model of Exchange
- Business Architecture for Exchange
    - Logical Component Model of Exchange (Functional Areas, business models)

    - Defines the Functional areas, sub areas, and business modules of the Exchange in line with CCIIO system "blueprints"
    - Incorporate federal and state specific eligibility business processes and business rules into the centralized rules engine within the Exchange
- Information Architecture for Exchange
    - Defines the interface Web services definition for all modules and programs connecting with the Exchange in Web Services Description Language (WSDL)
    - Provides standards and specifications for cross-system "interoperability", including data "touch points" for integration with public health (and ultimately social/welfare systems)
    - Define integration with Federal Data Hub
- Technical Architecture of the Exchange
    - Logical Deployment Model - The depiction within the technical architecture of the Exchange as to where the modules and capabilities are deployed (placement 9f the modules and components within the different layers of the technical architecture)
    - Hardware/Network Architecture Diagram - The key is to also include scalability for future growth of the Exchange in 2017 when mid/large scale employers are added to market place
    - Security/HIPAA assessment, governance, and requirements
- Concept of Operations Document
    - Final "to be" vision
    - Summary of Risks/Gap analysis

The SI will create the blueprint for the West Virginia Exchange, and ensure that it meets ACA and state specific requirements. The resulting MITA-based architecture must include business, technical, and data access services; a comprehensive information architecture; and utilize required technology standards. Collectively, these documents define the framework of the Exchange, including the business services, interoperability, connectivity, and data standards. The outcome for West Virginia will be a well-defined, modular architecture that supports the ability to select and replace functions, functional groups, or individual components to enhance, augment, or complete functionality in the envisioned Exchange.

Cognosante Advantages

From our deep involvement with Medicaid over the past quarter of a century, Cognosante well understands the challenges, and potential risks, of large scale system implementations. This understanding, coupled with our recognition of the need to make HIT architecture more flexible, agile, and modular, has led to our leadership of the Medicaid Information Technology Architecture (MITA). We are true leaders of the MITA architecture and have worked closely with CMS to author and evolve the MITA framework. For West Virginia, Cognosante will leverage our expertise in MITA to help design the blueprint for the new West Virginia HIX that is modular, flexible, agile, and in line with current CCIIO guidelines. We are engaged with a number of Exchange solution and systems vendors, helping them understand the requirements of ACA, and ensuring that their systems meet the MITA-based requirements put forth by CCIIO in the *"Guidance for Exchange and Medicaid Information Technology Systems".* We know and understand the strengths and weaknesses of a number of vendor products and their product roadmaps. We also understand the differences between the current online health insurance shopping portals available today and the functionality required to build an Exchange Framework to fully integrate public health systems and seamlessly determine eligibility. From our

experience, no single vendor in the market today currently has all of the required components developed and functioning. This underscores the need for West Virginia to select a partner, like Cognosante, that is "agnostic" to vendor products and technology, and can help you design a framework that is modular, flexible, and will allow you to integrate the combination of vendor and existing components to complete the vision of the West Virginia Exchange.

Cognosante is actively engaged with several states in the planning of the Health Insurance Exchanges, which gives us further insight into the issues and challenges states face in developing their Exchanges. We understand and have exposure to the range of technology and policy questions that influence architectural decisions, need for system scalability, and cross systems interoperability needs.

Lastly, Cognosante can provide to West Virginia a project team with a broad range of knowledge, HIT expertise and experience to design the Exchange Architecture. Our team has experience with HIX planning, Health Information Exchange (HIE) design and implementation, and Medicaid MMIS and data warehousing experience. Our team includes expertise in system security and HIPM policy and standards, state eligibility and enrollment systems, SOA design and governance, and healthcare reform policy. The result is a team that includes an unparalleled blend of capabilities, technical and policy knowledge, and operational experience to design the Health Insurance Exchange for West Virginia.

At Cognosante, we understand the complexity and the array of challenges each state faces in designing and eventually implementing a state-wide HIX. We offer to West Virginia a team with a wide range of knowledge, expertise, and operational experience in Exchange functionality. We understand Federal/CCIIO goals and guidance, West Virginia's goals, and the current capabilities of vendor products, including their strengths and weaknesses. We are a true Systems Integrator partner in that we are agnostic to products and technology. We will work with West Virginia to understand your current Exchange planning, review identified gaps, and leverage components and capabilities, where appropriate. We will assist West Virginia to design a framework that is modular and agile, based on common Enterprise Architecture utilizing standards-based interfaces, that meets West Virginia's vision and is flexible enough to rapidly adapt to the continued evolution of our healthcare system.

Business Overview

Based on guidance from CMS, the design of the Exchange should be based on MITA-based principles and architecture. This architecture allows efficient use of resources by sharing reusable software, assists in rules deployment to states, and provides timely responses to program changes and emerging health care needs.

MITA is a CMS business initiative in cooperation with state programs, initially intended to stimulate an integrated business and technological transformation of the Medicaid enterprise in all states. The MITA Framework 2.01 consolidates principles, business, and technical models. MITA principles are not confined to designing Medicaid applications; we leverage them to clearly define the business process, sub-processes, standardized processes, and interface definitions for each module throughout the enterprise. For West Virginia, MITA provides the guidance for the enterprise architecture.

Using MITA principles, Cognosante identifies common business processes and seeks to automate them into web services. Web services encompass standards that enable automated applications to communicate and exchange data over the internet (or intranet) across many

sites and organizations. Developing common data and information standards enables interoperability across different platforms, integration of applications, and modular programming enables us to introduce changes incrementally and leverage existing information assets.

Key design aspects require us to define the business, information, and technical architectural layers of the system. This MITA-based approach results in creating a logical architecture for the HIX enterprise. As shown in Table 1, this comprehensive logical architecture includes Business, Information, and Technical Architectural layers.

Table 1 - MITA Architectural Layers

Layer	Description
Business Architecture	Summarizes overall vision and business objectives to operate the Exchange. The Business Architecture defines and contains all of the six defined functional areas, including Eligibility and Enrollment, Financial Management, Plan Management and Oversight, Communications, and Customer Service.
Information Architecture	Aligns data and information needs with business requirements. Business processes and capabilities from the Business Architecture are mapped to a conceptual data model and a logical data model. The interface requirements of each module are matched in this process to ensure that correct data elements are identified and built into the interface definition.
Technical Architecture	Compiles models and approaches to support business and information needs of the West Virginia Health Insurance Exchange.

The resulting architecture includes business, technical, and data access services; application architecture; and technology standards. Collectively, these elements create a set of services, interoperability, connectivity, and data standards that will define the framework of the West Virginia Exchange. The outcome for West Virginia is a, well-defined, modular, architecture, that supports the ability for states to select and replace functions, major functional groups, or individual modules to enhance, augment, or complete missing functionality in the envisioned West Virginia technology framework. As defined in Section 1561 of the ACA, the business rules for each module are isolated and housed within a separate rules engine. The interface architecture defines the required interface definition, which describes the WSDL for each web service.

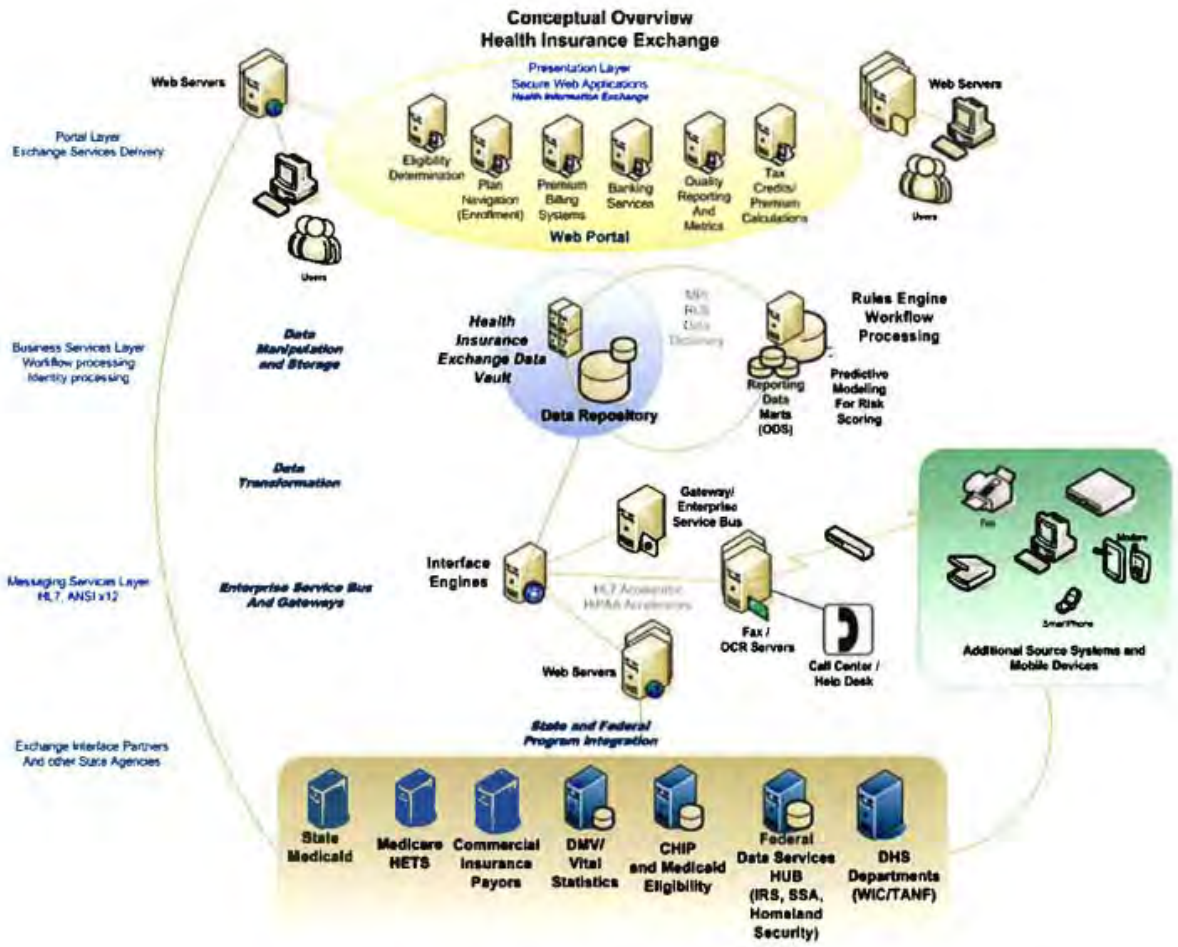
Implementation of the MITA architecture and adherence to its guidelines and principles results in the creation of well defined, business, interface, and technical architecture. The design provides West Virginia with flexibility to develop or procure individual modules, major functional groups, or entire functional groups within their state HIX solution.

Technical Overview

Cognosante has analyzed the requirements called out in ACA regarding HIX and has been monitoring the guidance from CMS concerning its approach to meeting ACA requirements. As a result, we are familiar with the major vendors providing functional and common support components that may comprise portions of an integrated HIX solution and the products and technologies they offer. An analysis of the requirements for HIX found within ACA and CCIIO

guidance demonstrates that no one vendor produces a product that meets all of the functional requirements for HIX, let alone meets the requirements for modularity found in *Guidance for Exchange and Medicaid Information Technology (IT) Systems.* Vendors have not fully developed all of the business processes and components of an Exchange. As a result, only an integrated solution will meet the needs of the State, the guidance of CMS, and the requirements of ACA legislation. The figure below represents a conceptual overview of an integrated solution.

Figure 1 - HIX Conceptual Overview



Each state is faced with the challenge of pulling together components from multiple sources in order to create a full set of Exchange functions. The role of the SI is to coordinate the range of tasks and activities required to establish the Exchange in time for the January, 2013 certification period. Over the next thirteen months, Cognosante can help West Virginia face the challenge of selecting Exchange vendors, updating eligibility systems, and integrating vendor solutions into a common, interoperable framework. Using a SI can relieve the State of the full administrative burden, plus provide the specific technical, eligibility, and Exchange expertise needed to help the State meet Federal timelines and establish the Exchange.

The Exchange must achieve seamless integration with Medicaid and CHIP. As required in section 1413 of the ACA, the Exchange must simplify and streamline the determination of

Medicaid/CHIP eligibility and enrollment. The Exchange must be fully integrated and interoperable with state, public, private, and Federal interfaces.

The *Guidance for Exchange and Medicaid Information Technology (IT)* Systems call for:

1. System Integration that provides an integration of process flow and information flow with business partners, and apply a modular, flexible approach to systems development using open interfaces and exposed APIs
2. Service-Oriented Architecture using web services methodologies for system design to ensure standards-based links to partners and information at federal and state levels
3. Isolation of Business Rules from transactional code, accessible in both human- and machine-readable format
4. Appropriate controls to provide Security and Privacy protection of enrollee and patient information
5. Efficient and Scalable Infrastructure, supporting the federal Cloud Computing strategy through Platform-as-a-Service and Infrastructure-as-a-Service approaches
6. Transparency, Accountability, and Evaluation leveraging COTS business intelligence functionality
7. System Performance to ensure quality, integrity, accuracy, and usefulness of information.

It is clear that both the State, through its blueprint for the Exchange, and CMS, through its *IT Guidance,* require a complete and seamless integration of independent modules that provide the major functionality for the Exchange. For the State, these modules comprise the functional components.

Cognosante embraces this approach and will partner with the State to support the selection and incorporation of best-of-breed functional components. Cognosante is independent of potential vendors of functional components, and as such provides the State with an unbiased partner to help select and incorporate components. With the SI approach, the State may desire to select those components, rather than have a single vendor make its own selections for the State. Only through State-involvement in the selection process, with the unbiased support of an SI like Cognosante, can the State ensure it incorporates those functional components that truly best meet the State's needs.

Understanding of the Vendor Landscape

As previously stated, no single vendor currently offers a comprehensive set of functional components that provides all of the required functionality for an Exchange. Although a number of vendors are working toward this goal, CMS has not defined all the required functional blueprints for HIX. Thus all business processes and components cannot yet be developed. Additionally, Early Innovator states are apparently not sufficiently far enough ahead of other states to provide complete solutions to the non-innovator states.

Cognosante has, and continues to, diligently monitor developments by vendors as they move toward more comprehensive solutions for Exchange functional components. While remaining unbiased, Cognosante can bring that understanding to the State to support validation and verification of its high-level architecture and functional component approach, as well as guide

the expectations on how vendors may now, or in the near future, meet the requirements of individual function components.

Compliance with Federal and State Regulations

While each component vendor takes some responsibility for compliance with technical standards, it is the SI that takes ultimate responsibility for overall system conformance and certification. Through integration testing, regression testing, and user acceptance testing processes, the SI not only displays an understanding of the technical standards used to integrate components and interface to external systems, but also demonstrates system conformance to those standards.

With respect to standards conformance, the SI is placed squarely in a leadership role. Therefore, it is paramount that the SI has a clear understanding of the standards prescribed in *Guidance for Exchange and Medicaid Information Technology (IT) Systems, Version 2.0,* and other applicable national standards.

Applying Federal Standards

Under contract to CMS since 2002, Cognosante has assisted in all aspects of the development of the MITA initiative. This initiative fosters the integration of business and IT transformation across the Medicaid enterprise and seeks to synthesize Medicaid business practices with clinical health care. The MITA common business and technology vision emphasizes a methodology for developing technical and data capabilities and maturity based on a clear understanding and analysis of the appropriate business processes and conformance to a vision that includes national standards. CMS has made it clear that MITA - while developed specifically for the Medicaid enterprise - contains the vision for SOA-based interoperability and the roadmap for modularity. As such, we apply the principals of MIT A to our development of enterprise architectures and the integration of modular components using a common process and conformance to MITA and national standards.

The *Guidance for Exchange and Medicaid Information Technology (IT) Systems, Version 2.0 ("IT Guidance")* extends the MITA initiative and the *Seven Conditions and Standards,* directing states to include (1) modularity; (2) MITA alignment; (3) reuse within and among states; (4) industry standard alignment; (5) support of business results; (6) reporting; and (7) seamlessness and interoperability. It provides national direction on how IT systems should support and enable business operations and the processes through Exchanges under ACA. CMS has stated that it intends to continue to review and revise the IT Guidance. Future guidance will be based on best IT practices, future policy decisions and regulations; ongoing feedback from states, vendors, and other stakeholders; lessons learned from early IT development projects; and further development and evolution of standards. Cognosante likewise monitors these important developments, and is committed to incorporating changes to the IT Guidance as they become available.

The role of the SI is to support the *IT Guidance* in promoting standards and developing the business process models, requirements, specifications, and technical architecture that the *IT Guidance* intends to share across implementations. The IT Guidance calls for development in four key areas:

1. Governance, using a System Development Life Cycle (SDLC)-type model that includes life-cycle phases and transition stage gate reviews for such items as business service

descriptions/definitions, requirements specifications, system design specifications, data models, interface control documents, and integration test cases.

2. Business Architecture, supporting a high quality customer experience, as well as seamless coordination between Exchanges, Medicaid, and CHIP, and between the Exchanges and carriers, employers, Navigators and brokers, community-based organizations, and providers providing enrollment assistance.
3. Appropriate Cost Allocation, necessitating highly integrated systems to support the high degree of interaction and seamlessness required between Exchanges, Medicaid, and CHIP, and leveraging the potential synergy between these systems.
4. Technical Architecture, including:
    a. Plans for a Federal Hub to verify citizenship, immigration, and tax information with appropriate federal agencies,
    b. Standards that support secure interoperability among state and federal health programs, with providers, and with community organizations, and complying with standards endorsed or adopted by the Secretary of Health and Human Services and the use of the National Information Exchange Model (NIEM),
    c. Standards for accessibility, and
    d. Standards for privacy and security based on the National Institute of Standards and Technology (NIST) security guidance compulsory for federal agencies but useful as a basis for state Exchanges, leading to an Exchange Architecture Guidance framework for developing Exchanges and aligning with MITA standards.

Cognosante is adopting the *IT Guidance* recommendations and making them a part of its standard SI processes.

The MITA initiative provided Cognosante with a rich understanding of the standards by which Medicaid and other payer systems and subsystems exchange information. We continued that involvement through our support of the Office of the National Coordinator (ONC) in the Nationwide Health Information Network (NwHIN) initiative. Under contract to the Federal Housing Administration (FHA), we assisted CMS and other federal agencies in the development of new interoperability specifications that conformed to nationwide exchange standards – both those already adopted by the NwHIN community, as well as borrowing from other standards' bodies as required to supplement existing specifications. For example, we developed needed extensions to the existing authorization framework for access to protected health information that enabled exchange with the payer community, and developed new services based on existing Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) operating rules that integrated clinical and payer systems successfully. The result was demonstrated in the Interoperability Showcase at Healthcare Information and Management Systems Society (HIMSS) in 2010, and NwHIN has adopted this new specification on a pilot basis.

Our understanding of nationwide standards continues to be supplemented by our involvement in national standards organizations - including the Healthcare Information Technology Standards Panel (HITSP) (no longer active), Integrating the Healthcare Enterprise (IHE) (upon which HITSP and many of the NwHIN interoperability specifications and other clinical exchange initiatives are based), HL7 (forming the basis for most information standards in the clinical health domain), Object Management Group (OMG) (supplementing HL7 standards within the health industry), National Council for Prescription Drug Programs (NCPDP), X12 (forming the

basis for most administrative transactions), CAQH (formalizing the operating procedures for the use of X12 standards are used), and others.

Role of the Systems Integrator in Ensuring Standards Conformance

In implementing the Exchange solution, the SI must leverage its own set of industry-based implementation best practices, all the while ensuring full compliance of the solution with federally-prescribed standards, protocols, and architectural guidance. Mandated by the Department of Health and Human Services, these standards and principles are grounded in the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the National Information Exchange Model (NIEM), the U.S. Chief Information Officer (US CIO) 25 Point Implementation Plan to Reform Federal Technology Management, and the Centers for Medicare & Medicaid Services (CMS) Exchange Architecture Guidance framework.

The main components of these standards and principles aim to:

- Ensure the interoperability of the solution components as well as between programs and state systems through standardization of communication and data exchange protocols
- Enforce security and privacy protection measures to preserve the safety and integrity of individually identifiable information and Personal Health Information (PHI)
- Enable access and service for all consumers, accommodating the diversity of needs without limitation due to disabilities or language
- Enhance the quality of developed solutions through disciplined integration and development rules such as SOA, tiered business rule/transaction process/data architecture, gate-based system development life cycle
- Promote scalable and shared infrastructure solutions such as cloud computing, Software as a Service (SaaS) to support future growth and evolution of the exchange in a cost effective way

Cognosante applies its understanding of national standards and active involvement in standards development in its systems integration activities. In our role as SI, we can take responsibility for:

1. Developing the overall SOA architecture and integration framework, including the use of common supporting components, in conformance with national guidance and standards, including the requirements for modularity and use of rules engines;
2. Developing interface specifications between functional components and the integration framework established by common supporting components in conformance with national standards;
3. Developing interface specifications with external systems, as necessary – including CMS-developed Federal Hub and Federal Exchange components as necessary – in conformance with national standards;
4. Developing and instituting SOA governance structures that ensure conformance with national standards and dictate how all components – functional components and common supporting components alike – interoperate;
5. Ensuring that all components are deployed in a manner that conforms to the interface specifications and SOA governance, through management – in partnership with the PMO – of component vendor activities and through integration testing;
6. Developing integration, regression, and end-to-end testing plans that demonstrate conformance to interface specifications and national standards;

7. Performing integration and end-to-end testing as specified in the test plans and required for user acceptance, and thereby demonstrating conformance of the Exchange to national standards and federal and state certification requirements;
8. Instituting a change management system that considers national standards in any alterations to existing systems or interface specifications; and
9. Performing regression testing as specified in the test plans to demonstrate continued conformance following any approved system changes.

It is only through the development of conforming architectures and specifications, strong SOA governance structures, and complete testing can the State guarantee that the Exchange is robust based on national standards and positioned to interoperate with all federal, state, and private-sector systems that make up the HIX enterprise.

1.4 CÚRAM SOFTWARE EXECUTIVE SUMMARY

Cúram Software Inc. is pleased to provide this response to the West Virginia Offices of the Insurance Commissioner (OIC) Request for Information RFI Number INS 12009 for a Health Insurance Exchange. Our solution - Cúram for Health Care Reform™ - provides a comprehensive COTS solution specifically designed to meet the mandates of the Affordable Care Act (ACA) while also providing a platform for the future. Cúram for Health Care Reform leverages a common system of record for eligibility, plan selection, and enrollment for individuals and families seeking health insurance. Our solution is a content-rich, out-of-the-box alternative to high-risk, custom-built solutions that use general purpose development tools.

The Cúram approach enables organizations to progress their transformation and compliance strategies with an eligibility, enrollment, and benefits delivery solution already employed by over 80 health and human services institutions globally. Because Cúram for Health Care Reform leverages this existing, proven functionality, and adds new, ACA-specific functionality, it will allow West Virginia OIC to safely and confidently address the challenges of health care reform, meet aggressive time lines, and maximize funding opportunities. The Cúram approach provides a clear roadmap for addressing the ACA's specific mandates and recommendations while supporting overall modernization efforts.

Cúram for Heath Care Reform provides the following benefits:

- Focuses on the heart of ACA requirements; namely, eligibility and enrollment. Streamlining eligibility and enrollment provides the greatest opportunity for improving the client experience by making it seamless, real-time, and paperless. Cúram for Health Care Reform provides pre-built rules, processes, and interfaces to support the integration between eligibility and plan enrollment within the Exchange.
- Provides out-of-the-box capability to capture required data and accurately determine eligibility for "split families" - a family may be eligible for Federal subsidies with children eligible for CHIP or a family may include an aged or disabled member whose eligibility is determined in a more traditional way. The Cúram solution provides ongoing eligibility and enrollment to support the "churn" as individual and family circumstances change over time. The solution is designed to interface with the Federal data services hub to verify client data, and also includes the rules and processes to support traditional verification.

- Supports a "No Wrong Door" approach to eligibility and enrollment. Cúram for Health Care Reform provides a streamlined, seamless, and consumer-centered user experience via a "unified front end" that spans users, programs, and channels across all required eligibility and enrollment processes in the Exchange.
- Key business processes for enrollment and eligibility are configurable including initial inquiry, screening, application submission, intake and verification, eligibility determination, renewals, and changes in circumstances. Multiple, program-specific business process models can be supported, including the ACA's streamlined business model and the "traditional" enrollment and eligibility models like specialized Medicaid programs and human service programs such as SNAP and TANF.
- Provides role-based access for stakeholders, including consumers, agency workers, community partners, and providers through a channel-agnostic solution, which also supports the full range of interaction models for enrollment - full service, assisted service, and self-service. Includes comprehensive rule sets that drive eligibility and entitlement for human services, derived from analysis of over 100,000 rules artifacts spanning nearly 40 states and 25 programs. Our solution brings together the data, rules, processes, and users to provide a pre-built, content-rich, integrated rules architecture.
- Supports the full range of Exchange functionality beyond eligibility and enrollment, including case management, appeals management, financial administration (including provider payment and premium collection), broker/navigator management, consumer account management, and consumer outreach and communications.
- Provides a solution that is SOA compliant and meets all Federal and industry standards, including MIT A and the CMS Seven Standards and Conditions.
- Integrates with existing state systems, and includes a number of pre-built adaptors and connectors to integrate with the various components and providers within a Health Insurance Exchange. Provides interoperability with Health Benefit Plan, Provider Display, Fund Aggregation and Payment vendors, and other enterprise systems such as call center solutions and electronic content management systems.
- Offers a range of deployment options that best suits business and technical strategies, including providing the platform for enterprise modernization that can support and streamline eligibility, enrollment and case management for the entire spectrum of West Virginia's health and human services programs.

Cúram Software understands the challenges presented by the ACA in a way that few other vendor organizations can because we are solely focused on developing the Cúram product suite which brings integrated health and human service solutions to social enterprise marketplace. We employ a wide range of industry subject matter experts and former legislative analysts and federal employees who continuously monitor the industry and analyze the impact of changes. When new legislation is introduced, such as the Affordable Care Act, we not only provide an initial solution module supporting eligibility and enrollment, but deliver regular product updates, ensuring that the Cúram solution maps to required State and Federal standards, policies and legislation at any given time.

1.5 DELOITTE EXECUTIVE SUMMARY

We understand that the OIC's objectives through this RFI are two-fold: (1) gain insight into and recommendations on the approaches, models and solutions to help the State create a conceptual design of a potential Health Insurance Exchange (HIX) and (2) solicit information regarding the range of products that would be suitable for use in a HIX.

Deloitte Consulting (Deloitte) appreciates the opportunity to provide our ideas, experience, and recommendations. Deloitte is a global Systems Integrator (SI). We have designed, developed and implemented complex and multi-faceted solutions for our clients for many decades. We have served states in the Public Sector in a similar way and, in particular, have enjoyed a long-standing relationship with the State of West Virginia. As an accomplished SI, Deloitte is seasoned in designing business solutions enabled by virtually any technology model, including custom, Commercial Off-the-Shelf (COTS), Best of Breed or any combined hybrid. As an experienced SI, with an exemplary record of delivery success in the Health and Human Services sector, we win our client's vote of confidence in assisting them with their most relevant, time critical, on point solution delivery.

In response to our state client base demand in early 2010, Deloitte developed a HIX solution for our clients to use in defining and deploying their HIX needs. We based our design on successful commercial (private) exchange experience in the Health Insurance sector. That foundation was further enhanced through the extensive evaluation of market solutions, COTS vendors and our State Integrated Eligibility experience. Additionally, we developed a complimentary business solution set that addresses some of the more challenging issues states face beyond their technology solution. In short, although we are about to describe our HIX solution, Deloitte stands prepared to support the State of West Virginia in successfully implementing its' HIX solution under any technology model, that best meets the State's needs and timeframe.

Foundation Already In Place. The State of West Virginia has a unique opportunity to lead the Country with the implementation of a HIX solution that provides individuals and small businesses a trustworthy, informative source for health insurance information. Since 1996, West Virginia has used the Recipient Automated Payment and Information System **(RAPIDS)** Platform to determine eligibility and issue benefits for the State's IV-A programs, such as Supplemental Nutrition Assistance Program, Cash Assistance, Medicaid, Chip and others. In addition to continuing to maintain and enhance RAPIDS, DHHR and Deloitte are performing an overall modernization, which includes 3 additional web-based applications.

- inROADS - The Information Network for Resident Online Access and Delivery of Services (inROADS) web-based application is a self-service solution allowing residents and community partners of West Virginia to screen for, apply for and renew benefits, as well as review benefit account information via the Internet.
- RAFT - The RAPIDS Analysis and Formatting Tool (RAFT) is a data warehouse and reporting solution to enhance reporting and data analysis. This is done through better organization of the data into an intuitive and easy-to-access structure and through the addition of a rich user interface that allows business users the freedom to access the reports or data they need.
- eRAPIDS - This initiative is an iterative development effort, which is incrementally modernizing the system that supports our county office workers. More specifically, the application takes advantage of a service oriented architecture and open technologies to

achieve screen consolidation, enhanced search capabilities, automation of processes, and enhanced data views.

By leveraging this existing technology infrastructure and components, West Virginia is already months ahead of other states struggling to find a solution to this Federal mandate. As such, our response to this RFI is predicated on the belief that the State of West Virginia has an excellent opportunity to leverage existing investments and technology assets, which are award winning web based solutions based on best business practices to very "difficult-to-automate" business functions. By consolidating similar business functionality across the enterprise the State is creating an efficient application portfolio that is easy to maintain.

Recommended Next Steps For the OIC. We applaud the OIC for the many accomplishments to date towards the implementation of a HIX solution for the State of West Virginia. Deloitte assumes that the result of the IT Strategic Plan will conclude that there are numerous information technology assets that can be leveraged in the future Exchange IT environment. Based on our experience working with other states across the country, the next logical step is for the OIC to contract for system integration services to assist with the design, development, integration, and implementation of the technology infrastructure required for the HIX Solution.

As such, Deloitte believes that the OIC should immediately engage a systems integrator with the experience, qualification, and understanding of the current environment required to deliver a fully operational HIX solution. With any large project, there are many moving parts and decisions to be made and, unfortunately, the timeline for completion is rapidly approaching. The OIC should engage a company with deep industry experience and technical qualifications that will be a quality fit to assist with the realization of a HIX solution. This is a critically important project and the OIC should be looking for an experienced business and technical advisor working in partnership with you to help complete your vision and goals across the Exchange operating stakeholders, developing your implementation roadmap, establishing your Technology Infrastructure Project Management Office (PMO) to assist with project governance, and finally beginning to leverage existing technology assets.

Deloitte is currently under contract with DHHR for the final phases of the eRAPIDS modernization effort, which concludes in 2014 and is uniquely qualified to complete that modernization. Our recommendation would be for OIC to work in partnership with DHHR to have Deloitte immediately begin work on the following:

- Self Service expansion and technology refresh of inROADS and e-RAPIDS
- Medicaid expansion to include revised Medicaid categories
- Modifications to include insurance subsidy and cost-sharing for HIX processing
- Establish a Unique Health Plan Identifier (Master Data Management Solution)
- MAGI Changes (Business Rules Engine)
- Interoperability and Data Exchange/Interface (Enterprise Service Bus)

These changes are all required for the HIX Solution and could immediately be initiated as other HIX decisions are finalized. As your Systems Integrator partner, Deloitte can then evaluate options for other important HIX requirements such as solutions for the Shopping Experience, Carrier Engagement, Employer Engagement, Rates and Forms including the use of SERFF, Consumer Services including the SBS system, Financial Conditions, and Financial Accounting. As you will see in our RFI response, Deloitte provides solutions to all areas of the HIX.

However, our solution also has the flexibility to adapt or incorporate any components that the OIC decides to procure separately.

Our Capabilities. Deloitte has a very broad perspective as it relates to assisting our clients with HIX Solutions. From working with the individual Health Plans, assisting Healthcare Providers, consulting with Life Sciences companies, to being the leader across the country assisting Public Sector Health Organizations, Deloitte can provide a very wide breadth of services and solutions to the State of West Virginia. By integrating the full complement of disciplines offered by our organization with the deep programmatic knowledge of a dedicated pool of HHS State Government practitioners, Deloitte offers what no other organization can - an all-in-one service source for the OIC. As your Systems Integrator, we will provide you with a single point of responsibility for all HIX project activities acting on your behalf and at your direction.

Since the recent passing of the Patient Protection and Affordable Care Act (PPACA or ACA), we have assisted multiple state and federal agencies in understanding and implementing healthcare reform. Deloitte has supported the Center for Consumer Information and Insurance Oversight within CMS with the design, development, and testing of a portal for information collection to confirm compliance with the ACA.

When the National Finance Center started to build a shared services center and Internet portal solution to provide subsidized coverage to a High Risk Insurance Pool of uninsured individuals with pre-existing conditions, Deloitte developed a public facing Pre-Existing Condition Insurance Plan (PCIP) web information portal (www.pcip.gov) in a mere three weeks, followed by an eight-week transfer of the Commonwealth of Pennsylvania's COMPASS Self-Service and CHIP and Adult basic Processing System (CAPS) solutions to serve as public-facing self-service application and case management systems.

Figure 1 illustrates more than 100 different HHS projects we have delivered, or are currently delivering across the United States. The work on 19 of these projects resulted in eligibility systems that administer Medical Assistance, including Medicaid, Long Term Care, Medicaid Waiver Programs and CHIP.

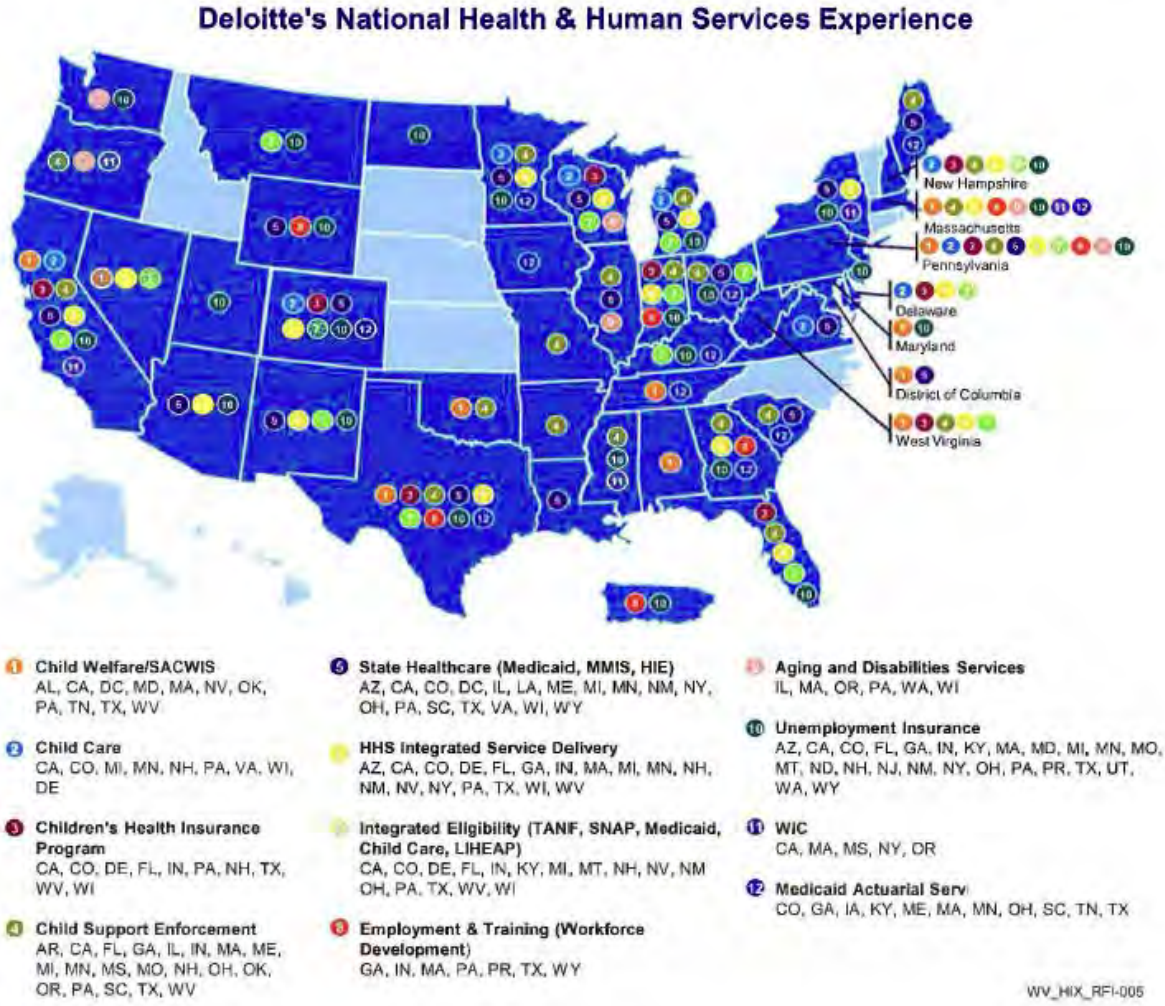


Figure 1. Deloitte's HHS Experience.
Deloitte's nationwide network of HHS professionals has assisted county, state, federal, and local governments successfully implementing, maintaining and enhancing large-scale HHS projects for 40 years and we bring this experience to our HIX solution.

We have a rich legacy in Health and Human Services (HHS) and Health Care transformation. During the past 40 years our firm has continuously served in this space without missing a beat from Medicaid to State Children's Health Insurance Program, from Food Stamps to Supplemental Nutrition Assistance Program, from Aid to Families with Dependent Children to Temporary Assistance for Needy Families. In addition, Deloitte is rated the #1 ranked health care consultancy practice by Kennedy Consulting Research and Advisory.

Deloitte offers West Virginia more than simply a technology solution. We also bring our experience as market leaders in health care consulting, security and privacy, actuarial experience, overall change management, service delivery transformation, operational excellence and systems integration, all of which are critical components to states, health plans, and health providers as they determine how to plan for and implement health insurance exchanges.

1.6 EXETER EXECUTIVE SUMMARY

Exeter Group, Inc. (Exeter) is pleased to respond to the West Virginia Offices of the Insurance Commissioner's (OIC's) Request for Information (RFI) Number INS 12009 for Strategic Planning for the Future Health Insurance Exchange.

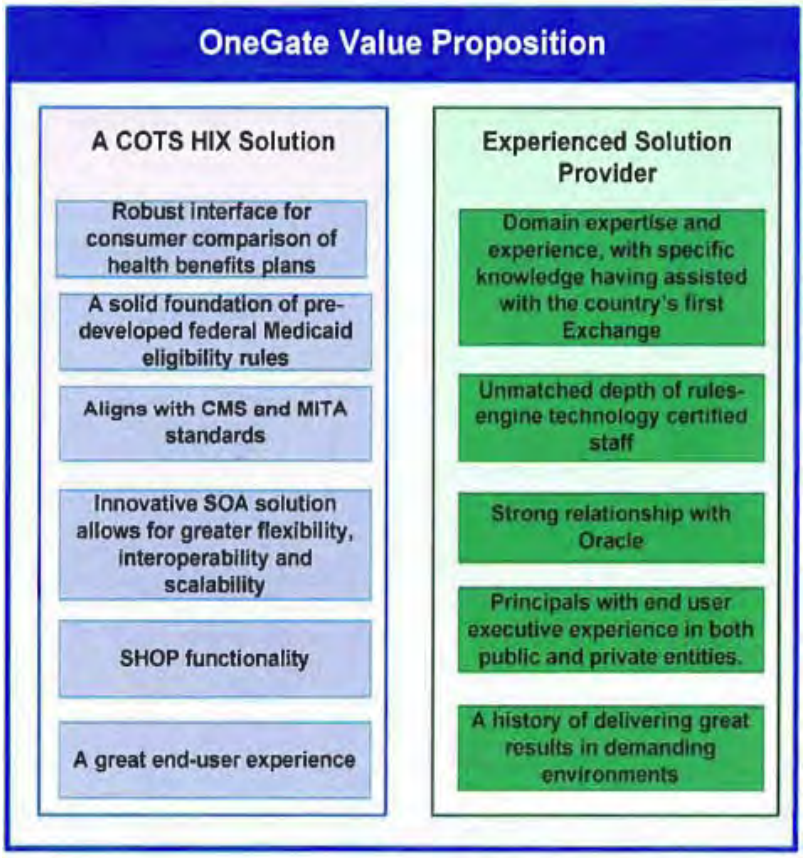
West Virginia, like many other states, is currently in the process of building a Health Insurance Exchange (Exchange) environment to comply with the provisions of the Affordable Care Act (ACA). Challenges associated with meeting federal mandates regarding Exchange functionality include undefined or changing federal requirements, rules or policies for the Exchange; a need to leverage existing state technology resources and/or lessons learned from early innovator states; and to determine how the new Exchange will interact with state eligibility and enrollment systems.

To help states specifically address these challenges, in 2010 Exeter made the strategic decision to invest thousands of man hours and leverage the experience of subject matter experts to develop OneGate™, a modular commercial off-the-shelf (COTS) solution. Designed specifically with the ACA in mind, OneGate has the ability to grow with changing state and federal rules and mandates as well as allows states to leverage existing state technology and/or functionality of early innovator states and provides a lower risk option for states. OneGate is provided to our clients at a fixed price, which includes federal and state-specific rules related to HIX, with functionality delivered within six months of contract signing.

OneGate - A New Approach

OneGate is a licensed, configurable COTS software product that is modular, flexible, scalable, and designed for the Exchange marketplace and ACA requirements. OneGate incorporates third-party COTS components (most prominently the Oracle Policy Automation (OPA) rules engine) in combination with open source components to provide states with a cost effective solution based on proven technologies.

Central to OneGate's design is the use of a natural language rules engine that is populated with federal rules for Exchange eligibility, health insurance premium assistance, Medicaid under ACA guidelines and additional benefits program rules (e.g., SNAP). Using OneGate's standardized starter set of rules, West Virginia will be able to deploy consistent rules and policies across its new Exchange System.



OneGate's rule base provides a framework to integrate additional West Virginia-specific rules and is designed to enable business users to quickly add or modify rules, allowing State staff to effectively maintain rules in the long-term.

OneGate provides four offerings highlighted in the diagram below. States have the opportunity to select one or more modules to implement based on their project objectives or goals:

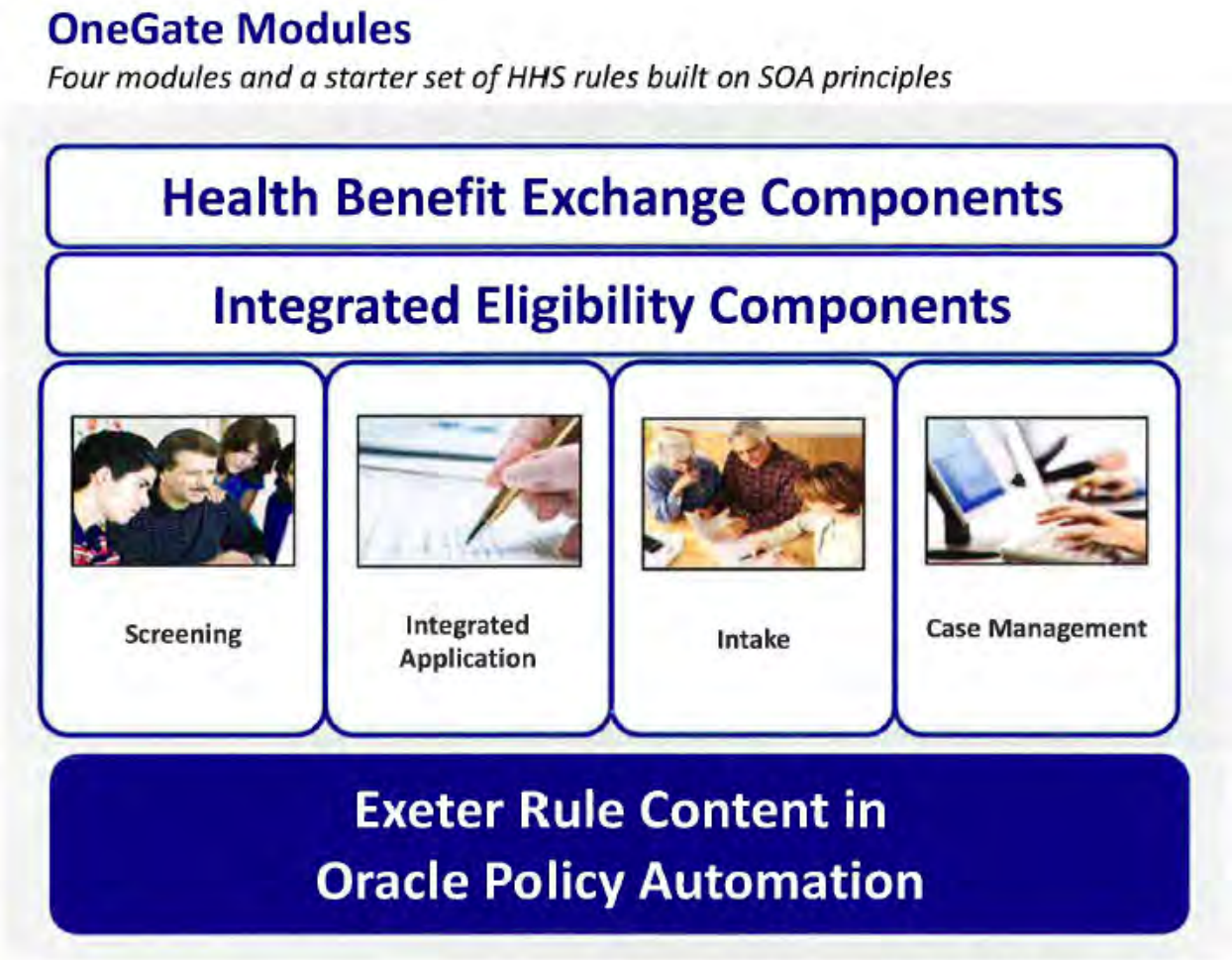


Figure 2: Overview of OneGate Modules

- **OneGate Screening:** Provides a mechanism for customers to access a state's customer portal and self assess potential eligibility for insurance affordability programs such as premium assistance tax credits and cost-sharing reductions, as well as Medicaid and CHIP. OneGate also has the ability to allow users to browse anonymously for health plans that may be available to them based on their situations, including income, household size and location.

- **OneGate Integrated Application:** Is an online application for enrollment in a Qualified Health Plan (QHP) and programs such as premium assistance tax credits, cost-sharing reductions, and MAGI-based Medicaid and CHIP. Federal rules for non-MAGI Medicaid categories are also included in OneGate; an applicant can complete a separate,

supplementary application for these categories. Applications in OneGate are presented as interviews driven by the solution's advanced rules engine, including Exeter's rule content. The interviews provide easy-to-understand questions with help text, asking the minimal necessary information to make a determination of eligibility. When sufficient information has been entered to make a preliminary (or final) determination of eligibility, the applicant is able to compare plans for which he or she is eligible side by side and select one in which to enroll. In this way, OneGate's Integrated Application provides a true online shopping experience that is easy for health insurance applicants to use. This module also includes interfaces to various internal and external data sources, including the eventual federal data hub, which can streamline the application and verification processes for both the applicant and agency staff.

- **OneGate Intake:** OneGate's Intake module provides a My Account Page feature that offers customers the self-service features they expect, thereby helping to reduce staff workloads and increase agency/authority capacity. The module allows users to view the statuses of their applications and benefits, information about their households and enrolled health insurance plans, and messages from the system or agency worker; they can also submit requests, changes of circumstance and surveys via the My Account Page. The module can be integrated with OneGate Case Management or other systems to allow the most up-to-date information to be presented to the user.

- **OneGate Case Management:** Adds a worker-facing case management system that integrates with the portal and applications from the other offerings in order to reduce agency workers' workload and processing times and thus increase agency/authority capacity. Application data is automatically passed from the online application interview to OneGate Case Management, where the worker can see what remaining tasks are necessary to complete the applicants' eligibility determination and enrollment processes.

OneGate improves the user experience, providing West Virginia constituents with an easy-to-use marketplace in which to shop for and compare plans to make informed decisions when choosing a health insurance or benefits package. OneGate was designed with customers and case workers in mind, incorporating a sleek and commercial appearance.

Exeter - The Right Partner for West Virginia

Exeter is a unique firm with a 27-year dedicated practice in providing our clients with great results. As a privately-held company, the principal members of our firm are deeply committed to our clients and their success, and are highly recognized and well-regarded in the healthcare and technology industries.

Exeter understands the trends and issues that state agencies and Exchange authorities face, including ongoing changes with the ACA and other federal and state legislative mandates. Exeter has placed significant emphasis on assisting states to improve services related to Medicaid eligibility and commercial health plans, premium tax credits and cost sharing subsidies, small business tax credits, and health plan quality and value ratings, as well as other consumer decision support tools.

OneGate's design is informed by Exeter's highly experienced public sector practice, which includes subject matter experts and former leaders of state organizations, as well as Oracle Corporation's trusted product line. Exeter and Oracle have a longstanding partnership and have

worked together on many opportunities to provide citizens with improved technologies and services. Most recently, Exeter successfully implemented Oracle Policy Automation (OPA) at the Massachusetts Registry of Motor Vehicles (RMV), and provided direct feedback to Oracle regarding the product that was incorporated into OPA's product road map. Additionally, the original set of open source, natural language federal rules for Medicaid, SNAP and TANF were written by Exeter's OPA-certified consultants, led by our subject matter experts, and in collaboration with Oracle's product team. Exeter's investment in the rules is indicative of the firm's commitment to leveraging the possibilities of advanced rules engine technology in a way that allows states to collaborate and maintain those rules.

Exeter believes that the combination of our OneGate framework, corporate experience and expertise will provide West Virginia with a unique service offering, distinct from other products and services available in today's marketplace.

Conclusion

Over the last two decades, Exeter has achieved an outstanding reputation for delivering high-quality results to public sector clients. Exeter's services are designed to meet each client's unique technology requirements and business needs, and to enable new efficiencies and economies of scale - containing costs, leveraging resources and improving services through cutting-edge IT strategies and solutions. Exeter is confident that OneGate is the right solution for West Virginia.

1.7 GETINSURED.COM EXECUTIVE SUMMARY

Getinsured.com operates a private insurance Exchange and call center that has been operational at-scale for more than 6 years. The infrastructure, web portals, service capabilities and processes we have in place provide health plan quotes, benefit information and over-the-phone consultations to nearly 1 million Americans every year. Our Exchanges enable customers to compare a variety of health insurance plans side-by-side with real-time price quotes and comprehensive customer support processes. Getinsured's services also include a privileged back-office interface that supports administration and customer service, carrier reporting and management, financial accounting, and compliance functions for federal and state regulations. This experience positions Getinsured.com as a leader to easily assist West Virginia in complying with the ACA requirements for the Exchange.

Getinsured is based in Palo Alto, California and Atlanta, Georgia. The company has over a hundred employees comprising technology development, business modeling and exchange operations, governance, marketing and customer support. We are incorporated in the state of Delaware under the corporate name Vimo Inc. (Getinsured.com is a dBA filing of the company in all of its jurisdictions). Getinsured's executive management is primarily based in Palo Alto, CA. The company additionally employs 12-15 senior executives across the country in a consulting capacity who assist the company strategically relating to the public policy, requirements, development and deployment of state health insurance Exchanges. The company also relies on a broad array of health care experts for policy advice. Former Secretary of Health and Human Services and 4-term Governor of Wisconsin Tommy Thompson is a member of Getinsured's Board of Directors. Former Governor of Mississippi, the Honorable Ronnie Musgrove, is also a Senior Advisor for Getinsured. John Noonan, former DHHS staff member in CMS, recently joined the company as the Senior Vice President for State Exchanges. In

October, Getinsured was pleased to retain consulting services of former WV Commissioner Jane Cline to further assist our exchange efforts.

Founder and CEO of Getinsured, Chini Krishnan, has over 20 years experience in the high technology industry. His associate and co-founder of Getinsured, Shankar Srinivasan, has over 18 years experience in the e-commerce world and has had chief responsibility for building a world-class mission critical system, web-site and customer support center that comprises Getinsured.com today.

Getinsured provides its capabilities on either a SaaS fully out-sourced basis, or states may license the Getinsured platform and choose to operate it themselves. Key modules of the Getinsured platform include the following: (a) viewing, comparing, selecting and enrolling in QHPs; (b) MAGI based eligibility determination; (c) Plan management; (d) SHOP; (e) Broker and Navigator Management; (f) Premium Billing and Financial management; and (g) Customer Assistance and Call-center services. Getinsured has the proven capacity to be compliant with the ACA and all subsequent State and Federal rules and proposed regulations. The flexibility of design and nimbleness of the chosen software and hardware incorporated into the Getinsured solution provides administrators with high functionality without costly change orders as the exchange requirements evolve.

1.8 LEXISNEXIS EXECUTIVE SUMMARY

Guarding the Door - Enterprise Identity Management

The passage of the Patient Protection and Affordable Care and American Recovery and Reinvestment Acts represents a myriad of new regulations, requirements, and opportunities for state programs. Anticipated increases in Medicaid enrollment, adoption of electronic medical records and remote enrollment, development of health information and insurance exchanges, and other changes will dramatically change the healthcare landscape. Preparing for these changes will demand innovative thinking and adoption of new technologies and methods by state leadership.

LexisNexis is working in partnership with state programs to address these challenges. The LexisNexis® Health Care Solutions group was created for the purpose of developing information-rich analytic tools that address the key challenges of Health Benefits and Information Exchanges, Fraud, Waste and Abuse, and Identity Management. Leveraging 30+ years of experience in licensing, normalizing and managing expansive sources of digital information, our solutions enhance patient care, improve operational outcomes and proactively reduce fraud and waste across the health care continuum.

One of the key drivers for adoption of any healthcare technology will be the ability for Patients to trust the system to keep their information secure and deliver accurate results. Likewise, those administering Benefits Exchanges must be able to trust that the system is being accessed for legitimate purpose. These elements cannot be met merely through strong encryption, proper protocols, or traditional data matching methods. An enterprise-wide identity management approach is required to protect this private information and to authenticate the identity of Patients on the Exchange.

Experts and leaders in the field of healthcare technology stress the importance of security and integrity of any healthcare network. In May 2007, the authors of the summary report of the National Health Information Network (NHIN) Prototype Architecture Contracts stated:

- Authorization cannot be reliably performed unless identity proofing and authentication has been performed on the user.
- To be meaningful, user authentication depends on the organization that operates the authenticated system to do an effective job of proofing the identity of the users.
- System authentication and user authentication are co-requisite capabilities which are both required to ensure that authorization is meaningful.

These insights demonstrate the complexity of identity and access management within a health benefits exchange as well, and they validate the importance of a robust and comprehensive approach to identity management as a basic requirement of any Exchange.

As the industry leader in matching records across disparate data sets, LexisNexis manages over 585 million unique identities from 10,000 data sources across 34 billion records on a daily basis. Our award-winning data linking technology is used by tens of thousands of State, Local and Federal Agencies across the United States, supporting millions of daily transactions. The power of our technology with an integrated system of business processes and policies provides innovative and secure solutions for stakeholders across developing health information exchanges.

LexisNexis understands that OIC must make sure that the system is:

- Accessed only by legitimate citizens pursuing their own health benefits
- Consistently able to monitor and manage these individuals as they "churn" through the various levels of benefit available to them
- Absolutely secure, in terms of restricting access to patient data

LexisNexis can offer critical components to the Exchange to ensure security and integrity of the system. With this approach, those who are accessing the system for the first time will have their identity verified and authenticated; their credentials evaluated for background events which would preclude them from participation prior to issuance of access controls. With comprehensive identity management, the Exchange can have full confidence in the identity of an individual using the system, while maintaining strict security over access and privacy of personal information, and performing ongoing identity monitoring.

As citizens access the Exchange, LexisNexis solutions can perform the following functions related to comprehensive identity management:

- Determine if the identity used by an individual exists ("Is there a Bob Jones?")
- Determine if the identity used by an individual is actually the individual (“Are YOU Bob Jones?")
- Maintain the identity on an on-going basis ("Have there been critical changes to Bob Jones' status?")

These solutions, delivered securely via XML, use a quiz-based approach leveraging LexisNexis data. Individuals attempting to access the system, request a login, or request a password

change / replacement are presented with a series of configurable questions that determine the identity exists, and the individual owns that identity. These questions are based upon that person's records within the LexisNexis' repository.

Once the identity is verified, the Exchange permits the individual to continue their interaction based on established roles, such as creating/accessing benefits information, reviewing or updating Patient information, or other self-service applications. This approach can serve as a first step to any traditional multi-factor authentication, while providing additional security at various stages of the process. The commonly-used XML format permits flexibility in how LexisNexis services can be deployed and integrated into the overall Exchange environment.

Beyond Verification - The Importance of Authentication

We strongly encourage the OIC to require stringent identity proofing as part of the Exchange. Simple verification (determining "Is there a Bob Jones" - above) simply does not afford adequate safeguards against identity fraud within the Exchange itself. Information that could be obtained through a lost wallet, or a misplaced credit report, for example, could provide those with fraudulent intent everything needed to get access to the Exchange if only verification is involved. We would suggest that the Exchange be protected using true Authentication ("Are YOU Bob Jones" - above). A simple set of quiz questions, based on information not available "in-wallet" can provide that layer of protection. This technology is available, proven, and commonplace in Insurance, Banking, as well as Government applications nationwide.

About Us

LexisNexis is the world leader in identity management and background data aggregation. We have gathered one of the world's most comprehensive and current data collections. We offer one of the largest and fastest growing public records collections in the world with over 34 billion records and information on over 584 million unique consumer identities and one billion unique business contacts drawn from over 10,000 disparate sources.

Our expansive data collection efforts have resulted in the warehousing of 75 million more individuals than our competitors. These records include all manner of information on individuals, corporations and organizations, from current and historical address and phone records to civil and criminal legal histories, driver's license information, professional licenses, real property, Social Security numbers, and much, much more.

The LexisNexis advanced technology, which powers many of our solutions is among the best in the world in data fusion, entity resolution, and entity disambiguation. LexisNexis designed this technology platform, called the "High-Performance Computing Cluster" (HPCC), to leverage our database of over 34 billion diverse and disparate data records to accurately identify individuals and entities, link records which belong to them, and identity relationships, associations, risk factors, and far more with very high levels of accuracy (99.98%). This one-of-a-kind supercomputing analytical provider screening solution enables LexisNexis to determine not just disqualifying or suspicious provider attributes, but data-driven connections between providers, associates, relatives, assets and businesses.

In short, we have the deepest, most thorough, and most reliable access to personal and professional identity available through the most comprehensive sourcing network for primary data, public and private.

1.9 MAXIMUS/CONNECTURE EXECUTIVE SUMMARY

The MAXIMUS/Connecture Strategic Alliance ("Alliance") is pleased to respond to the West Virginia Offices of the Insurance Commissioner's Request for Information (RFI). Together, the Alliance brings complementary health insurance experience and technology applicable to health care reform in general and this RFI in particular. Our combined expertise in commercial health insurance, Medicaid, and the Children's Health Insurance Program (CHIP) form a solid base for navigating the health care challenges ahead. We have facilitated more than 40 million individual and employee commercial enrollments, and supported more than one million employer enrollments. We currently serve approximately two-thirds of all Medicaid managed care and CHIP enrollees in states where these services are outsourced. No company comes close to our combined experience and knowledge directly relevant to the Affordable Care Act's Health

Exhibit 1-1: Benefits of the MAXIMUS and Connecture Alliance. *By combining our respective strengths in the commercial and government-sponsored health insurance markets, the Alliance offers turnkey and modular Exchange solutions tailored to West Virginia's goals and strategic design.*

Insurance Exchange (Exchange) requirements, as summarized in *Exhibit J -J: Benefits of the MAX/MUS and Connecture Alliance.*

The Alliance offers a vision of practical Exchange solutions governed by the operational principles outlined in the Affordable Care Act (ACA) and as further articulated by individual state program designs and pending federal rules. Our ability to transfer Exchange policy into concrete operations by leveraging flexible business processes, commercially deployed and mature technology, and well-trained staff performing parallel functions today are the most immediate and compelling examples of credibility for our solution.

Throughout our response, we offer detailed evidence of our ability to perform specific RFI requirements. We highlight relevant examples from our large portfolio of projects across the country and throughout the national commercial health insurance marketplace.

Solution Overview

The Alliance delivers a complete, fully-functional, and user-friendly Exchange infrastructure for the West Virginia OIC as follows.

- **Technical Solution:** StateAdvantage is the Alliance's flexible, comprehensive, and proven technology platform that supports eligibility determination, insurance shopping, enrollment, premium collection, and administration functionality, With this system as the foundation, West Virginians can access the Exchange via an easy-to-use web portal, through our fully staffed and efficient call center, by fax or by mail. StateAdvantage supports a Small Business Health Options Program (SHOP) and electronically links as needed to Medicaid and CHIP programs for eligibility screening and enrollment. We adhere to proven health literacy guidelines in all customer facing media and publications. We train and mentor our call center representatives to provide relevant and actionable information in a courteous and respectful manner. StateAdvantage provides a multi-lingual, 508 compliant, and extremely user-friendly solution that makes it easy for consumers to obtain information, apply for coverage, and intelligently make a health plan selection suitable to their health care needs, provider history, and budget.

  Our modular approach allows us to seamlessly integrate and leverage new technologies built on webcentric open architecture standards (J2EE). In collaboration with the West Virginia OIC, we establish business rules first, and then apply the best technology to meet business rules requirements. Please refer to *Section 2: General Functional/Technical Specifications* for more details about how StateAdvantage provides a flexible, accessible, and cost-effective Exchange solution to the West Virginia OIC.

- **Privacy and Security:** The Alliance complies with the Health Insurance Portability and Accountability Act (HIPAA) Final Rules and Standards, and other applicable state and federal mandates regarding privacy and confidentiality. We build privacy and security measures into every technical module and are rigorous in our communication via the Internet, call centers, fax, and mail. StateAdvantage applies an application security model that provides user authentication, method-level authorization, and integration with single sign-on solutions. StateAdvantage audits user access to the web portal and collects information regarding user logins, user logouts, failed login attempts and flags unusual activity. Alliance personnel both prepare for and follow up and resolve security concerns. The Alliance complies with all federal and state government security requirements. As Exchange security and privacy requirements evolve, the Alliance implements them in our StateAdvantage solution. Please refer to *Section 3: Privacy/Security* for more details about how StateAdvantage can provide a private and secure Exchange to the West Virginia OIC.

- **Interoperability and Extensibility:** By implementing a modular approach to the Exchange, the Alliance can easily accommodate existing and future federal and state IT requirements. Each module of StateAdvantage is designed around West Virginia business rules and requirements and they operate together as a turn-key solution or independently as part of a multi-vendor approach. The Alliance provides Application Programming Interfaces (API) and Software Development Kits (SDK) that make it easy for third parties to connect and for State administrators to make changes.

We recommend merging the existing West Virginia OIC call centers into the Alliance call center to create a more consistent and unified user experience in which the same excellent customer care is available whether someone is shopping for insurance, applying for coverage, enrolling in Medicaid, or going through annual open enrollment. We recommend that the State keep the current Information Network for Resident Online Access and Delivery of Services (inROADS) portal for non-insurance needs, but migrate Exchange functions to the Alliance web portal. The inROADS portal will have an easily identified link to the Exchange portal and vice versa. Please refer to *Section 4: Interoperability and Extensibility* for more details.

- **Implementation:** There are many variables that affect the implementation schedule including the preferred solution of the West Virginia OIC, evolving state and federal requirements, availability of state and Federal data, connectivity with the Federal Hub, and other factors that may surface as the Exchange is further defined. The Alliance estimates an implementation time between 15 - 18 months (best case) to up to 24 months if particular requirements remain dynamic or continue to evolve (worst case). Implementation includes system testing, usability testing with real customers, training, and support. Please refer to *Section 5: Implementation* for more details regarding implementation schedules.

- **Operations and Maintenance:** The Alliance provides full support for the Exchange. We provide technical support, detailed reports, and customer satisfaction feedback regarding each module of our solution. We collaborate with the West Virginia OIC regarding updates and system upgrades to balance cost and functionality to deliver the right solutions to the State. Please refer to *Section 6: Operations and Maintenance* for more details on our approach to keep the Exchange well managed and cost-effectively sustained for the West Virginia OIC.

- **Financial/Total Cost of Ownership:** To help the state stretch its Exchange investment, we build on existing systems and deploy experienced and knowledgeable personnel to create an optimally efficient and cost-effective result. We apply the best practices we have developed and refined through tens of millions of health insurance consumer interactions to keep costs down while producing high quality customer service. Please refer to *Section 7: Financial/Total Cost of Ownership* for more details on the cost discussion.

- **Performance, Reliability, and Availability:** The Alliance understands the unique geographic and accessibility challenges of operating web-based portals in West Virginia. Our system is designed to reliably accommodate, and our workforce is scaled to, the estimated number of online users (from computers, tablets, and smart phones), callers, and consumers who prefer fax and mail. Please refer to *Section 8: Performance, Reliability, and Availability* for more details on our approach.

- **Project Management:** The Alliance is prepared now to move forward to develop the West Virginia Exchange. We have extensive experience in the public health insurance and commercial insurance industries and understand the essential elements needed to successfully manage the project, including developing a strong relationship with our client partner. West Virginia's Exchange will benefit from our attention to customizing the Exchange solution for ease of use for all West Virginians. For the most expedient

implementation, we look forward to learning how the Exchange will interface with existing state and federal systems and receiving a set of well-defined technical, privacy, and security requirements for the Exchange. Please refer to *Section 9: Project Management* for more details.

Alliance Solution Advantages

- Our suite of public and private sector health insurance solutions enables us to quickly understand, design, test, and implement all necessary Exchange functionality.
- StateAdvantage combines the reliability and stability of a system that has worked well in multiple customer settings with the flexibility and cost-effectiveness that will be needed to adapt it to West Virginia OIC business rules and processes.
- Our system builds upon many years of securely and reliably exchanging and receiving electronic data with health plans, eligibility systems, Medicaid management information systems, and third party databases.
- Full compliance with the Centers for Medicare & Medicaid Services (CMS) Reference Architecture Requirements.
- Electronic and programmatic integration with Medicaid and CHIP based on over 20 million eligibility determinations and enrollments in some of the largest and most diverse programs in the country. For those who are oriented to self-service, our Medicaid, CHIP, and commercial insurance portals enhance consumer convenience, lower the traditional stigma of government assistance programs, and reduce labor-intensive data entry for eligibility workers.
- Our high-tech approach to mail handling, electronic workflow, and task-oriented processing enable us to respond to more traditional consumers in the most efficient and productive manner possible.

Alliance Solution Unique Characteristics

- The Alliance uniquely combines commercial health insurance experience with an unmatched portfolio of Medicaid and CHIP business, an essential attribute for any Exchange that starts with the assumption that all subsidized health insurance programs must be integrated into a single, accessible, multi-channel, and user-friendly application process.
- We combine state-of-the-art virtual tools and website transactional capability with phone-based and mail-based customer service to create a "high tech/high touch" environment that meets the needs of all health insurance consumers.
- The Alliance's active involvement in Exchange work group meetings with the West Virginia OIC, carriers, agents, and consumers over the last year has given us a thorough understanding of the State's requirements and its businesses and people; we know how to deliver the most cost-effective and accessible strategic approach to meet the needs and addresses concerns of all uninsured West Virginians.
- Our corporate focus on, and expertise in, health literacy in all customer interactions and written materials enables us to connect with West Virginians in ways that make it easy and inviting for them to take advantage of the Exchange for their insurance needs.
- StateAdvantage's easy-to-use carrier and state portals to submit, manage, review and approve plan information, make it easy for carriers to provide plan benefit and rate information to the Exchange and for states to qualify the health plans.
- West Virginia's agent community can be confident in their role on and accessibility to the Exchange using State Advantage technology since the Alliance currently provides

50,000 agents with automation technology that minimizes time spent on administrative tasks, allowing for more time to be spent with the customer.

- Our solution reflects thousands of person-hours analyzing ACA and its related federal rules within the context of practical Exchange requirements and needs.

Experience with Exchange or Similar Technology and Services

Since 1975, MAXIMUS has delivered on its corporate mission: "*Helping Government Serve the People®."* We encourage open and collaborative communication between the public and private sectors to create solutions that apply technology and best practices in a cost-effective manner to meet program requirements and consumer needs. MAXIMUS is one of the largest firms working exclusively with federal, state, and local health and human services agencies. We have the corporate capability and capacity to be a high-quality Exchange vendor because of our dominant position providing administrative services to government-sponsored health insurance programs for two-thirds of the nation's CHIP and Medicaid managed care populations among states that contract for these services.

In anticipation of the requirements of a state-level Exchange, MAXIMUS has combined our resources with Connecture, the nation's leading provider of online insurance distribution solutions for the health and benefits industry for 11 years.

Connecture is solely focused on delivering web-based insurance shopping, enrollment, and administrative solutions for health plans and brokers, currently providing service to more than 50,000 brokers across multiple lines of business. Connecture's health plan clients include 12 of the 20 largest health plans in the nation, including 64 percent of total Blues plans and many regional plans.

The Alliance has engaged in extensive discussions with Exchange Early Innovator States including New York, Wisconsin, and Maryland, and has accumulated insurance web portal and call center experience with almost every state in the country plus Puerto Rico. A few of our many success stories include:

- **Texas CHIP Enrollment:** MAXIMUS helped the Texas Health and Human Services Commission (HHSC) meet the challenges associated with increased enrollment by providing innovative technological solutions that provided more timely access and service delivery
- **New York Medicaid CHOICE:** MAXIMUS provides managed care enrollment services to 2.4 million diverse New Yorkers through our call center in New York City and community-based outreach and education throughout the State.
- **California Healthy Families:** In its role as the Single Point of Entry (SPE) for Medicaid, CHIP, and a state-designed program for pregnant women, MAXIMUS screens for Medi-Cal eligibility, makes referrals to county welfare offices, determines eligibility for non-Medi-Cal applicants, collects and processes premiums, and handles annual renewal.
- **Connecticut Business and Industry Association (CBIA):** Connecture provides web-based plan and rate comparison, enrollment, plan management, and broker support to CBIA, which is considered to be one of only three successful private exchanges in the United States.
- **Blue Cross/Blue Shield of Tennessee:** Connecture provides web-based plan and rate comparison, enrollment, plan management, and broker support to Blue Cross/Blue

Shield of Tennessee, only one of the many Blues plans we support - in fact, we support 64% of all Blues plans in the nation.

Active Involvement with West Virginia OIC

Since 2010, the Alliance has followed the progress in West Virginia toward the establishment of a state-level Exchange. WV OIC first began planning for an Exchange-like entity through funding from the State Health Access Program (SHAP) which provided the head-start required to aggressively plan for an ACA-compliant Health Insurance Exchange. We have witnessed and actively participated in the Exchange planning process in West Virginia by providing OIC leadership with our thoughts, design intelligence, and technology and business process considerations. OIC leadership has aggressively worked to pass Exchange-enabling legislation, collect stakeholder input, and apply for additional funding. We met with key stakeholders and leaders in West Virginia to enhance our knowledge of West Virginia's plans and intentions including members of the Carrier, Consumer, and Agent Workgroups that have participated in the Exchange planning process with OIC. We heard the health plans who want to make sure the administrative costs associated with interfacing with the Exchange is minimal. We heard the concerns of the consumer advocates who want to make sure the Exchange is easy-to-use, accessible and the information provided is valuable and easy for all West Virginians to understand. We heard from the agent community who wants to participate in the Exchange and have access to tools that minimize their administrative tasks so they have more time to offer value to their customers. The Alliance listened and has developed StateAdvantage in a way that offers West Virginia a comprehensive and accessible solution that meets the needs of all Exchange users. This preparation and deep insight into West Virginia's needs has fostered a collaboration indicative of the partnership we can achieve with Exchange users and OIC as we develop a customized Exchange solution for West Virginians.

We know that many major operational decisions are yet to be made and we look forward to contributing to the decision-making process as appropriate.

Focus on Health Literacy

The Alliance promotes and cultivates health literacy among the consumers we serve. Health literacy is the ability to find, understand, and use complex information to make educated choices about health care. We take a strategic approach to cultivating optimal communication through our nationally recognized Center for Health Literacy. Established in 2000, the Center is known for designing and producing attractive, clearly written, and easy-to-read educational materials and websites in English, Spanish, and other languages that are predominant for the population groups we serve. The Center specializes in accessible and consumer-friendly online portals and written materials that are linguistically and culturally appropriate and present complex information in a way that is easy to understand. We have direct experience with the populations that are likely to interact with the Exchange in West Virginia. We provide electronic and printed information in simple language using large print. When providing instructions or processes to users, we use simple illustrations that make it easy for people of different education levels and cultures to understand and follow. This health literacy approach empowers the users and gives them confidence that the government truly cares about their health insurance concerns.

Familiarity with ACA and State and Federal Rules

The Alliance has reviewed the federal Exchange requirements as outlined in ACA and fleshed out in the various sets of federal rules published over the past few months. Since the passage of ACA, the Alliance has developed and disseminated a full body of issue papers and briefs covering topics related to ACA's requirements. Our ACA-related knowledge demonstrates how

we have channeled our experience within the CHIP, Medicaid, and commercial markets to provide insights on the many issues facing the West Virginia Exchange.

Based on stakeholder comments and questions, we are certain that some Exchange requirements will change. As the requirements evolve, the Alliance intends to adjust our solution to maintain compliance with all subsequent ACA state and federal rules and regulations.

Familiarity with CMS Reference Architecture Requirements
Earlier this year, CMS released version 2.0 of their Guidance for Exchange and Medicaid Information Technology Systems (IT Guidance). No single IT solution is imposed; rather innovation and flexibility are encouraged to allow states to focus on their key objectives and ensure appropriate support for achieving those.

Through StateAdvantage, the Alliance incorporates all of the CMS guidance and architecture requirements in a flexible, modular solution that easily integrates with legacy Medicaid architectures.

While the Exchange standards represent an evolution that mirrors current technology standards and capabilities, they share many of the same attributes, goals, and processes with long-standing Medicaid and CHIP rules. Because of our extensive experience with Medicaid and CHIP interfaces and technology architecture, we are well positioned to help the West Virginia Exchange implement these requirements.

Conclusion
The StateAdvantage solution is flexible to meet the evolving requirements of ACA. It provides fully tested, user-friendly technical and business process solutions that empower West Virginians to select health insurance options that meet their health and budget needs and preferences. Our modular approach enables easy integration with other state and federal systems. Our national experience, and specific insights into the needs of West Virginians, present a compelling perspective to deliver the West Virginia Exchange.

1.10 ORACLE EXECUTIVE SUMMARY

Oracle's comprehensive solution offers the best choice to West Virginia in meeting the unique requirements for West Virginia's Health Insurance Exchange initiatives. Three key aspects distinguish Oracle's proposal:

- Only Oracle offers a **complete**, enterprise Health and Human Services solution
- Oracle offers the **fastest time to value**, with less **risk**
- Oracle offers a **valuable strategic partnership** of unmatched stability and reliability

MOST COMPLETE ENTERPRISE SOLUTION FOR WEST VIRGINIA'S HEALTH INSURANCE EXCHANGE

Oracle's solution offers the only true Enterprise software that provides a complete platform for integrated program delivery. To meet the ever increasing challenges, state agencies must transform their legacy IT systems into enterprise wide platforms that can support multiple programs, be deployed more rapidly and cost-effectively, and deliver a comprehensive view of the services being provided to clients and their families. Oracle's best-of-breed solution approach will allow West Virginia to leverage its existing infrastructure investments, while providing the ability to move forward on the path to a state-of-the-art architecture and a truly scalable solution. Here are a few of the unique ways in which the Oracle approach helps West Virginia achieve long-term self-sufficiency:

- Comprehensive functionality addresses a broad range of requirements across Health Insurance Exchange - including all 6 of the CMS required business functions of an HIX.
- Oracle's componentized solution can be incorporated into the current technology environment without customization of the core features and functionality on a phased basis, avoiding rip and replace
- Supports key CCIIO and ONC Guidance including modular system integration, open Service Oriented Architecture (SOA), and Isolation of Business Rules

Screening, Provider Management, and Enterprise Case Management reside in a very sophisticated service architecture that has been developed over many years. Our solution's underlying technical architecture has been proven with more than 6,000 customer implementations worldwide, including Health and Human Service agencies to support the licensing, referral, and case management processes in countries like Spain, where 2,000 case workers are deployed on mobile devices to manage more than 350,000 disability cases across a network of thousands of providers. British Columbia, Canada, is implementing our proposed technology to manage benefits across many of their programs including enabling self-service for citizens and a provider portal for thousands of providers. In another example, the Internal Revenue Service uses Oracle Policy Automation in all call center and walk-in centers (256 call centers for 15,000 users) and on its external citizen facing websites.

Key Oracle components of the overall solution span Policy Automation (Business Rules) platforms (OPA)Servers, Case Management (Siebel), Call Center Management, Financial and Human Resource Management, Business Intelligence, Master Data Management, Middleware, SOA Enterprise Integrated Services (ESB), Identity Management, Database Management Systems, Storage, Virtualized Operating Environments, Hardware, and Hosting Services through Oracle On Demand.

SERVICE-ORIENTED ARCHITECTURE

Tying the complete solution together, the Oracle SOA Suite provides a flexible, open, and scalable SOA infrastructure that removes the need for traditional point-to-point integrations. With the SOA Suite, each component of the COTS solution is insulated from other components, both internal and external, allowing components to be upgraded, replaced, or added without impacting the balance of the enterprise solution.

INTEGRATED REPORTING AND ANALYSIS

A key to driving better performance outcomes is the need to understand program status (real time and historical) from both internal and external data sources. Oracle's integrated health and human services solution includes easy to use, comprehensive, Web-based reporting, ranging from online queries to standard reports and ad hoc queries to information on investigation workload, status, and trends that can be accessed through a prebuilt configurable or customizable portal. These capabilities will provide West Virginia with a means to ensure program compliance including monitoring, fraud detection, fraud mitigation, and reporting.

Further, embedded analytics provide closed loop analysis to measure and continuously improve outcomes. Key capabilities include:

- Segmenting and identifying those clients deemed to require special attention
- Monitoring program performance with pre-packaged KPIs and "what if" analysis of policy outcomes
- Identifying and sending real-time alerts regarding barriers to outcome attainment

MANAGE POLICY COMPLEXITY AND PROGRAM CHANGE

Oracle's Policy Automation (OPA) solution determines eligibility in complex legislative environments. Within the context of the proposed solution, OPA offers the ability to manage business rules in a separate, but integrated fashion. For the first time, jurisdictions are able to seamlessly link the creation of policies to eligibility and delivery of service. Unique natural-language authoring capabilities will enable subject matter experts of the State to develop rules directly from complex legislative text, policy documents, and regulations using Microsoft Word, Excel, and Visio. Patented temporal reasoning makes it possible to easily manage both personal circumstances and policy rules that change over time. Comprehensive testing modules enable you to pinpoint the impact of proposed legislation, regulations, and policy changes. By allowing what-if analysis of proposed amendments, West Virginia will be able to analyze the impact of change.

Through Oracle's Policy Automation solution, policy makers will be able to analyze the best policy option and ensure policies are accurately implemented. In combination with Oracles Health and Human Services solution, jurisdictions are able to triage issues as they arise to ensure intended policy outcomes are achieved.

REDUCE RISK AND IMPROVE TIME-TO-VALUE WHILE INCREASING RESPONSIVENESS TO CHANGE

The need for solutions that enable horizontal data sharing, integrate disparate systems, improve efficiency, and reduce program costs has never been greater. Oracle's integrated solution is a highly flexible, scalable, secure, commercial-off-the-shelf (COTS) package that is easily integrated with internal and external systems. Oracle recognizes that Health and Human Services agencies must modernize the manner in which services are being delivered to their clients. Key capabilities include:

- Delivering **one application platform** that can be leveraged across the entire enterprise
- **Reduce costs** and **improve maintainability** and **self-sufficiency** through flexible application configuration
- **Protect your investment** with patented application upgrade technology
- **Lower risk** with a solution foundation proven at over 4,000 enterprises and five million users worldwide, and an equally robust ecosystem of Siebel-trained certified consultants
- Configurable applications and flexible business rules architecture enable you to **leverage and extend your investment** as legislation changes or you need to phase in new programs

Oracle offers you the ability to continually refresh your solution through product upgrades so you can continue to serve your clients effectively. The upgradeability of our solution components has been demonstrated at the majority of our customers globally. We are known for providing smooth transition to new releases for our customers. We would encourage you to scrutinize the upgrade track record of all vendors aspiring to do business with your agency as this ability Significantly impacts the total cost of ownership and longevity of your solution.

STABLE, RELIABLE AND VALUABLE STRATEGIC PARTNERSHIP

Oracle aspires to be West Virginia's strategic business partner and is committed to West Virginia's success. Oracle is financially stable with 2010 revenues of US$26.8 billion. Oracle has been a leading software company for over 30 years and will be here for West Virginia. Oracle spends about US$3.3 billion for in-house Research and Development to ensure innovation and continuous improvement of our solutions. The size and scale of Oracle investment is unmatched in the industry. Oracle currently ranks 10Sth on the U.S. list of Fortune 500 companies. Unlike some of Oracle's competitors, it is highly unlikely that Oracle will be acquired by another company.

THE ORACLE TEAM ADVANTAGE

The Oracle Team approach to West Virginia's HIX implementation is with enterprise COTS software that leverages available and highly configurable functionality. This will help West Virginia to address the various application requirements in the RFP by configuring the Oracle Social Services application while minimizing the need for custom coding. This configuration-based approach will reduce cost and implementation time, and substantially reduce risk for the HIX project.

The Oracle Team is uniquely positioned to provide products, implementation experience, and domain knowledge to HIX:

- The State of Oregon, as an Early Innovator state, has recently selected the Oracle solution to implement the state's Health Insurance Exchange (HIX) system. West Virginia stands to benefit directly on many fronts from Oregon's decision to select Oracle

and the ongoing work that Oracle Consulting will be performing as part of the Oregon HIX implementation. Major benefits include:

  - The Oregon HIX Oracle solution is almost identical to the one we are proposing for West Virginia. This means that another state with very similar requirements for a HIX system will be using the solution we are proposing to West Virginia, which solidifies to the credibility of our architecture and technologies.
  - West Virginia will be able to use the HIX eligibility rules that Oracle Consulting will begin developing for Oregon. This means that West Virginia will leverage a set of HIX eligibility rules that an Early Innovator state will be using rather starting from scratch.
  - West Virginia will also leverage the Enterprise Architecture work currently underway at Oregon for the same solution footprint. Oracle Consulting is currently designing the Business, Application, Data, Integration, Platform and Security Architecture for Oregon HIX, which will be leveraged to satisfy the requirements for the Federal Government Detailed Design Review. This will enable West Virginia to be one step ahead in terms defining its HIX Enterprise Architecture design and preparing for the Detailed Design Review with Centers for Medicare & Medicaid Services (CMS).

- Our state-of-the-art technology, extensive standard functionality and ease of configuration to support specialized functions enable us to address the West Virginia business and technical requirements
- Our time-tested implementation methodology that has been successfully used on thousands of implementations across industries, including a large number of public sector projects, indicates that West Virginia can expect a HIX system implementation approach that minimizes risk and maximizes the benefits derived from leveraging standard COTS functionality
- Our extensive experience with projects of similar scope and complexity makes us uniquely qualified to fully understand the HIX scope and risks, and employ effective mitigation strategies that will provide an on time and budget implementation
- Another key differentiator is our team's deep functional and technical experience in public sector and Social Services specific implementations. We possess a large number of functional and technical consultants with relevant domain experience that can make the difference in leveraging recommended practices that are applicable to West Virginia's business processes
- Our maintenance and support approach integrates personalized and proactive capabilities to reduce unplanned downtime and reduce issues faster to allow West Virginia to maximize the value from the Oracle Team approach
- Our extensive experience in implementations of comparable scope and complexity outline our team's ability to address West Virginia requirements and deliver a technologically sophisticated and highly configurable approach. Our experience goes beyond relevant public sector engagements to include large Social Services implementations such Immerso, British Columbia, California MMIS, and KDOL

SUMMARY

In summary, Oracle offers a strong mix of infrastructure software, COTS software, and customized exchange-specific functionality -- such that States receive a robust, scalable, and feature-rich exchange solution. Moreover, the fact that we have invested 100's of millions of dollars in pre-integrating our product-lines gives the states a tremendous cost-savings due to lower implementation costs, lower ongoing maintenance costs, and higher system agility over

time. For this reason, we believe that Oracle is uniquely positioned to provide the lowest-cost, highest-value solution for insurance exchanges.

1.11 SOFTWARE AG EXECUTIVE SUMMARY

The West Virginia Office of Insurance (WVOIC), through the implementation of the Health Insurance Exchange has undertaken a comprehensive initiative that will improve health status and access to quality, affordable, health insurance coverage for all West Virginians.

A successfully implemented Exchange will be operational by January 1, 2014 and provide a competitive marketplace for individuals and small employers to directly compare available private health insurance options on the basis of price, quality, and other factors. The Exchange will provide one-stop shopping and make purchasing health insurance uncomplicated and understandable by providing descriptions of health plans in "plain language" so that individuals and small employers can make informed decisions. The Exchange will enhance competition in the health insurance market, improve choice of affordable health insurance, and give small businesses the same purchasing clout as large businesses.

Software AG recognizes the tremendous effort undertaken by WVOIC in keeping pace with the ACA provisions, CMS guidance, and coordination of State departments and agencies in the planning and procurement of the Exchange. Health care reform is necessitating dramatic system transformation and the need for technology to keep pace with the changes in business processes has never been more apparent. Although the overarching goals of improving quality of care while reducing operational inefficiencies and costs are clear, the path to success is complex and unproven.

Commensurate with this effort and in response to this RFI, our Software AG team comprised of integration and business process management (BPM) experts worked diligently to:

- Evaluate the functional, technical and standards requirements in the context of the overarching goals of the WVOIC and the West Virginia Insurance Exchange project;
- Construct an RFI response based on proven products and services that are based on market-leading service oriented architecture (SOA) and enterprise integration capabilities to help you along your journey to establishing the Exchange.

Integration
Software AG's proposed Insurance Exchange integration platform, based on the proven software suite webMethods, delivers the State a high level of seamless interoperability across the various, disparate systems, applications, and stakeholders (State agencies, providers, payers, pharmacies, etc). Disparate systems put West Virginia at risk of not being able to deliver a successful Exchange on time. Software AG's integration solution minimizes this risk by providing the right information, to the right people at the right time, every time.

Our integration platform "speaks" every technology, therefore, WVOIC can easily share data stored in existing State systems and new Exchange applications across the entire Exchange enterprise. Software AG's flexible, ready-to-grow, integration platform is secure, auditable and standards-based, enabling automation of processes across the entire Exchange to expedite the development of the Exchange while providing WVOIC transparency into the business.

Software AG's integration solution offers WVOIC the ability to:

- Establish an efficient and scalable integration platform for the Exchange that aligns with provisions in the Affordable Care Act (ACA), CMS guidance, and CMS reference architecture requirements;
- Automate, monitor, and continually improve business processes in the Exchange without hard coding business rules into the functional components of the Exchange;
- Enable process visibility and control so WVOIC operates efficiently and has transparency of business rules and performance;
- Establish a SOA and comprehensive SOA governance to maximize service re-use across the Exchange;
- Extend State IT investments by modernizing existing legacy systems that will interact with the Exchange;
- Measure business performance across the WVOIC enterprise.

Niche and pure-play vendors provide only point-to-point integration and can't scale to multi-site environments that exist in an Exchange. Large suite vendors lack depth of capabilities and seamless integration between suite components. Software AG is different. Our fully integrated, highly scalable suite delivers key capabilities that work across the healthcare continuum, enabling a holistic view of WVOIC operations, a 360-degree view of each citizen, end-to-end process automation and flexible reporting and business intelligence.

Software AG provides the highly-acclaimed and proven robustness, reliability, and scalability required to accommodate the increased demand that the Exchange will experience as it assists more and more citizens and takes on added functional requirements over time. In parallel, Software AG is widely known for its ease-of-use, and alignment with and incorporation of industry standards.

Modernization

The ACA expands Medicaid eligibility and establishes the creation of voucher- and tax credit-based subsidies to defray costs of insurance for low income families. These new programs will extend health coverage to millions who do not currently have access. West Virginia's legacy, siloed systems environment for Medicaid eligibility and enrollment and other health and human services applications pose integration challenges and cannot scale to meet the demands of the increased volume. Furthermore, the ACA mandates simplified and streamlined processes for determining Medicaid eligibility, however, legacy applications do not allow for incorporation of these new business processes without significant redesign and coding.

Overall, meeting Federal Exchange initiatives, modernizing healthcare services, and overhauling healthcare administration present a myriad of challenges to States. As many health functions have become automated over time, often they were added as separate systems with point-to-point integrations with other mission-critical applications, such as MMIS or Eligibility systems; and in many cases, with hard-coded business logic and rules, which are hard to extract and change when regulations change. Each separate platform might also have its own unique and usually proprietary architecture, data standards, update cycles, and workflow requirements.

These challenges however also provide unprecedented opportunities for transformation. Health Insurance Exchange (HIX) leaders have a choice: lead the charge or get left behind in architecture planning. To provide a better experience for citizens, improved healthcare

outcomes with reduced errors, and more efficient cost-saving management for agencies, government is looking for solutions that will allow it to combine and integrate services provided by different agencies and programs in the Exchange. It is looking for flexibility in information architecture and the ability to decouple business functions from hard-wired, monolithic legacy applications. In short, States are calling for enabling technology such as Service Oriented Architecture (SOA) and the selection of the underlying enterprise infrastructure is becoming a critical part of Exchange initiatives.

Software AG's fully integrated software suite is also able to support the modernization of the Medicaid eligibility and enrollment processes and other legacy health and human services applications by employing a process-centric modernization approach. A process-centric modernization approach will allow West Virginia to implement the new streamlined processes for determining eligibility and extend the State's investment in existing systems. An incremental, modernization approach will mitigate the risk of a time intensive and costly "rip and replace" by providing transparency of process that brings real-time indications of workflow. This visibility into the legacy enterprise systems will allow the State to model policy changes and deliver on goals in a prioritized, low-risk environment. Access to meaningful metrics, will allow the State to make informed decisions for change, manage the modernization initiative, and show progress.

By embarking on a process-centric modernization, West Virginia will successfully achieve an enterprise solution for Medicaid eligibility and enrollment that:

- Supports a highly modularized approach to development and implementation.
- Enables State workers, partners, and other users to navigate through many systems with a unified view without having to log into distinct silo-style systems manually.
- Enables interoperability among functions by using a service oriented solution architecture.
- Improves the efficiency of State workers by providing efficient access to services across different functions, without worker's awareness of the presence of multiple functions.
- Provides a flexible architecture that will benefit the constituents of the State of West Virginia by increasing productivity of the program workers.
- Provides strong support for outcome and performance measurement
- Provides an extensible environment that allows rapid introduction of new services, processes as legislative changes introduce new requirements.
- Meets Medicaid Information Technology Architecture (MITA) standards for Business Process Management (BPM), Enterprise Service Bus (ESB), SOA Governance, Business Activity Monitoring (BAM), and BRMS (Business Rule Management Systems).

Collaborative Partnership

Software AG stands ready to develop a collaborative partnership with WVOIC and State and Federal agencies to ensure effective and efficient data exchange. We understand the demanding timelines for the establishment of the Exchange. Our software will enable WVOIC to deliver early wins in the project and develop a solution that has the flexibility to integrate new components as they become available. We believe that WVOIC will benefit from a strategic, forward-thinking partner who will remain committed to the initiative for the long term. We welcome the opportunity to discuss our proposed software and qualifications with WVOIC.

1.12 SPERIDIAN EXECUTIVE SUMMARY

Proprietary response provided.

2.0 General Functional/Technical Specifications

2.1 EXCHANGE FUNCTIONALITY

The future Exchange business environment, as it is known at this point in time based on the federal laws, regulations and guidance available, is described by the following six core business areas and their key business functions:

- **eligibility and enrollment**
- **plan management**
- **financial management**
- **customer service**
- **communications**
- **oversight**

Using these six business areas and the additional functional details provided in Attachment A, describe which Exchange functionality your solution provides. What are its components/modules? Are any optional? If your solution does not cover all functionality required by the six areas, do you have a recommendation for how the State could develop a fully compliant Exchange that delivers complete functionality while still incorporating your solution's IT components (e.g., does your company serve as a systems integrator or do you have other relationships that may be leveraged)? Please clarify what components/work would be provided by your company versus being contracted out to other vendors.

2.1.1 ACS

The Exchange provides the opportunity to reach the uninsured and provide an easy to use, unified process for obtaining health insurance. The ACS Team has the experience and tools to make insurance selection and enrollment easy and simple for individuals and small business employers.

Our HIX Solution Suite provides the comprehensive resources, systems, and services to meet the operational requirements of the West Virginia Exchange

While the ACA and subsequent federal guidance seeks to provide structure for the Exchange, there are many choices the Offices of the Insurance Commissioner (OIC) needs to make in order to bring the Exchange into reality and ensure the infrastructure for supporting the Exchange is in place. We recognize that all states are unique and we appreciate that the State has specific cultural, demographic, and business dynamics that require a West Virginia-specific exchange solution. From outreach and communication to distribution, enrollment and customer service, the ACS Team brings an unparalleled track record of administrative excellence and innovative tools to the West Virginia Exchange.

The ACS Health Insurance Exchange (HIX) Solution Suite is an integrated solution of components, enabled by modern technology platforms, to provide the State with a complete product, comprised of core functional and operational components required for an ACA-compliant exchange.

Our HIX Solution Suite offers a robust set of capabilities as shown in Exhibit 2-1, Exchange Features. We provide a full exchange solution that attracts, manages, and retains members throughout the entire lifecyc1e of benefits. Whether an individual moves from coverage under Medicaid, to employer-sponsored insurance, or to individual coverage, they retain their account information within the user-friendly Exchange.

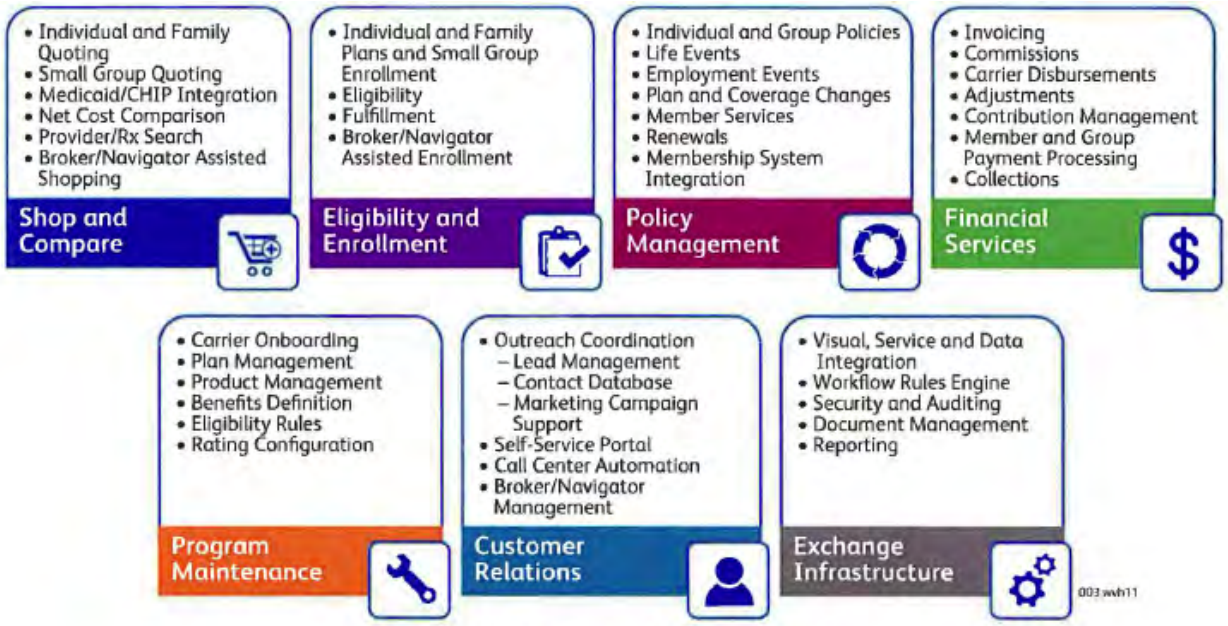


Exhibit 2-1. Exchange Key Components

Our HIX Solution Suite offers integrated functions to help the State realize an ACA-compliant Exchange.

Each of the components shown in Exhibit 2-1 is critical to implementing and maintaining a successful Exchange. All of these components, which correspond to the Exchange Core Business Areas/Functions listed in Attachment A of the RFI, are offered in our HIX Solution Suite. In Table 2-1 we provide information on specific Exchange components and the ACS Team solution.

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
Eligibility and Enrollment	
Small Business Health Options Program (SHOP)	The components of our HIX Solution Suite that support the Small Business Health Options Program (SHOP) experience are some of the most robust in the marketplace today. More than 37 of the largest carriers in the country provide benefit administration services to individuals, families and small group customers under a private label of our solution component. Our solution provides:

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	• SHOP enrollment and administration • Employer defined contribution capability • Premium aggregation and employee list billing • Employer "benchmark" plan selection and administration • Broker and Navigator training in SHOP environment • Tax calculator for eligible small business employers • Outreach and marketing services to small business employers Our HIX Solution Suite is also enhanced by the proven experience and business process from the five operational private exchanges we operate to serve small businesses today. Additional information on our SHOP functionality can be found in Response Section 2.e, SHOP Functionality.
Certificates of exemption	All users of the Exchange will have easy-to-use exemption request functionality available through the Web portal or by calling the toll-free hotline. We provide: • Certificates of exemption • Individual responsibility determination. This functionality walks the user through a series of questions to determine if they a have a legitimate claim and assists them in preparing their request. During the exemption eligibility screening process our solution would review factors such as hardship, household income, employment status and availability of affordable qualified health, to determine exemption. Based on State approved processes, we issue a certificate of exemption as appropriate and report individual names and taxpayer identification information to the U.S. Secretary of the Treasury as directed by the ACA.
Eligibility determination	One of the major components inherent in the ACA is the concept of streamlining eligibility and enrollment processes for both commercial and government health insurance to gain efficiency and improve customer experience for applicants. Within our HIX Solution Suite we provide eligibility determination for: • Exchange participation • Advanced and refundable premium tax subsidies

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	• Cost sharing subsidies • Medicaid/CHIP Simple screening tools allow the individual to enter information about themselves and/or their family using the CMS standard application to determine their likelihood for eligibility for different insurance coverage groups. These screening tools are available through our Web portal or the call center, and are used in processing paper documents. Once the individual has been screened for eligibility and it appears they are eligible for publicly subsidized coverage, we perform one of two processes to complete eligibility determination: 1) transmit data to a current State eligibility system using an API or through EDI 2) complete full eligibility determination within the Exchange based on MAGI standards from the federal government. Our solution assumes the timely definition and completion of appropriate interfaces to the CCIIO Information Hub and to other federal or state agencies.
Appeals of individual eligibility	While the business rules for eligibility determination decisions are based on those provided by federal, state, and plan regulations, there may be exceptions to these rules for individual participants. Whether the participant feels that information used to determine eligibility is in error or there are special circumstances that should be considered in their eligibility screening, the Exchange must provide a mechanism for appeal of the automated eligibility outcomes. Our HIX Solution Suite can accommodate the complete management of the appeals process including recording, tracking, and communication.
Enrollment of qualified individuals into QHPs	The HIX Solution Suite provides enrollees with a consumer-oriented marketplace to evaluate benefit options, compare plans, and enroll. The member self-service role allows individuals to enroll in all benefits online, anytime with access to: • Plan comparison tools, • Multilingual support, • Personalized benefits information • Educational videos to assist users in making an informed choice. The enrollment experience is designed as a one-thought-per-screen, guided interview process. This makes the enrollment process easy and convenient for users of varying technology familiarity. Our solution enforces State and federal business rules and the rules of the QHPs for open and initial enrollments, new hires, terminations, and member life

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	events that occur throughout the year. Consumers can only view the benefits for which they are eligible. Because all business and eligibility rules are automatically enforced through our solution, the State does not have to worry about retroactively correcting errors.
Single streamlined application for QHPs, advance payments of the premium tax credit, cost sharing reductions, and Medicaid, CHIP or the BHP where applicable	As CMS continues to define the format for the single, universal application that state Exchanges must use, the ACS Team has already planned our solution to accommodate a Single streamlined application. We provide administrative support for: • Advance premium tax credits • Refunded premium tax credits • Cost sharing reductions and subsidies • Medicaid/CHIP enrollment and facilitation to other state programs • Basic Health Plan enrollment, should West Virginia choose to implement These services assume the timely completion of enrollment connectivity and processes by CCIIO.
Provide the tools to allow for applicant to file an application via an Internet portal, by telephone through a call center, by mail, and in person	While the Web offers a myriad of opportunities to reach the uninsured, not all potential applicants will access these online tools. The ACS Team solution provides access to apply for coverage through the Exchange through the internet, via our call center and by mail. Our solution is also available for use by county workers, Navigators and brokers to assist applicants with applying for coverage in person. The ACS Team has the experience to establish robust outreach programs, to assist individuals with applying for and enrolling through the Exchange.
Plan Management	
Plan certification, recertification, and decertification	While only a State authorized entity can officially certify, recertify and decertify Qualified Health Plans, the ACS Team can assist the State with the processes behind certification. Our HIX Solution Suite offers a process for certifying, recertifying, and decertifying QHPs. Consistent with the proposed regulations from CMS issued in July 2011, we assist state exchanges to ensure that health plans meet two basic requirements to receive certification as a QHP: 1) demonstration of compliance with minimum state certification requirements; and 2) determination that offering the health plan is in the interest of eligible individuals and employers. We are also able to assist the State in assessing its options for provider

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	adequacy standards. Given state flexibility provided by CMS, there are several options and considerations the State may evaluate when reviewing a QHP for network adequacy, such as the standards established by the NAIC.
Plan monitoring and review	The ACS Team can assist with plan monitoring and review by tracking consumer feedback on plans, conducting reviews of provider network adequacy, monitoring benefit and rate design comparisons, and conducting quality *reviews* of plan services.
Plan quality rating	Our HIX Solution Suite can assist in plan quality rating using NCOA provided basic health plan quality rating, Should West Virginia desire more detailed quality and value ratings, the ACS Team can provide further insight based on the six CMS criteria.
Financial Management	
Plan assessment, reinsurance, risk adjustment and risk corridors	The ACS Team facilitates a broad range of actuarial services to support and implement a transitional reinsurance program from 2014 through 2016. This facilitation, made through access to a nationally recognized actuarial firm, helps the Exchange stabilize premiums in the Individual and Family Plan (IFP) market and protect health plans from *adverse* selection. These services include: • Working with QHPs in determining the appropriate financial contributions they must make to the non-profit entity administering the transitional reinsurance program • Helping the Exchange determine the validity of carrier reimbursement requests • Supporting the State in establishing a risk adjustment program • Assisting in the collection of information to determine carrier-specific risk scores • Helping create and implement security and privacy standards for individually identifiable information, • Assisting the state in establishing a financial management "dash board" of key revenue and expense categories to monitor Exchange financial sustainability
Reconciliation of reductions in enrollee out-of-pocket costs	The financial management component of our HIX Solution Suite provides automated billing, payment and cost reduction mechanisms that allow consumers to visually understand their out-of-pocket costs and for the State to ensure accurate application of subsidies, premiums and cost-share reductions.
Determination of	One of the components in operation today in our *five* private exchanges is our ability to accurately disburse payments to carriers, brokers, and

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
issuer credits	other vendors through our financial management module. Based on the premiums, employer payments, subsidies and other non-premium funding streams, we aggregate all incoming funds and disburse payments and credits to carriers based on enrollment information and risk factors approved by the state.
Premium tax credit and cost-sharing reduction administration	When quoting health plans, it is important that shoppers understand their out-of-pocket costs clearly, Our quoting system integrates tax credit subsidy, contribution, and other financial factors into rate quotes to ensure enrollees are clearly able to identify what the state or employer is paying for, what tax credits are available; what an employer is contributing; and, most importantly, what will be their out-of-pocket expense for the health plan being considered, Our HIX Solution Suite will administer *advanced* and refundable premium tax credit and cost sharing reductions as CMS determines the protocols to administer these credits.
Customer Service	
Call Center	We understand that not every participant in the Exchange will have access to or is comfortable using the Web portal. We envision a toll-free telephone hotline and call center infrastructure that allows stakeholders (e.g., participants, providers, employers, health plans) to access a rapid response to their questions, receive assistance solving their problems, gain access to helpful program information, and perform critical functions related to Exchange participation. Our Exchange solution offers an integrated approach that provides centralized access to all information and documentation related to a request for assistance regardless of how the request was received from the stakeholder: through the Web portal, the mail, or the call center. Key to our successful centralized call center are the technologies we deploy to aid the caller and the call center staff in finding the right answer quickly and track the information effectively. These technologies include Interactive Voice Response (IVR) with automated application, enrollment and bill payment; Customer Relationship Management system (CRM); membership system; Electronic Document Management System (EDMS); Web portal and Web chat; and automated customer surveys.
Internet Website	Our Web portal is supported by a combination of robust business rules, consumer-friendly language, scalable decision-support tools, and proven retail-shopping patterns to create a positive user experience. The experience is designed with strategically placed video and educational content for an easy user experience.

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	An important differentiator for our Web solution is its ability to manage all benefit types. Our solution can effectively manage over 100 benefit types-from basic medical plans and medical savings accounts to newer benefit types like pre-paid parking and pet insurance, which may be a value added benefit for employers. The HIX Solution Suite is offered in a Software as a Service (SaaS) delivery model so that improvements implemented for one state or commercial carrier benefits all users on the platform. The list of benefit types grows with each release, creating a flexible and adaptable platform to grow with the needs of the State.
Provides standardized comparative information on each available QHP	The direct-to-consumer capabilities of our HIX Solution Suite provide consumers with a standardized and comparative format to review benefits coverage from multiple health plans. As shown in the Exhibit 2-2, Consumer Plan Selection, consumers have key information to compare plans. At this point in the process the solution already knows the coverage level the consumer is shopping for, so the tool can display the "you pay" amount for comparison and help consumers avoid the frustration of misunderstanding the out-of-pocket liability of their selection. **Exhibit 2-2 Consumer Plan Selection** *We present the user with clear information, such as "You Pay" amounts.* In the consumer shopping experience, the HIX Solution Suite offers an innovative plan comparison tool called the Plan Shopping App. The Plan Shopping App, described in Response Section 2.d, Modern Consumer Experience, enables individuals to view the actual annualized cost of their benefits based on

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	typical usage. This allows users, maybe for the first time, to associate the cost of their benefits with personal behaviors.
Is accessible to people with disabilities	Accessibility is more than just a mandate; it is an opportunity to help more uninsured citizens gain access to quality healthcare through the Exchange. We provide a system and processes that adhere to applicable requirements of the Americans with Disabilities Act (ADA) Section 504 and to Rehabilitation Act Section 508. When implementing our Web interface we followed the relevant guidelines contained in the W3C Web Content Accessibility Guidelines 2.0 (WCAG 2.0). Our software has been designed to ensure that information is available, our system is easy to operate, and our information is understandable.
Publishes [certain] financial information	Based on CMS guidelines and the State's approval, our Web portal can provide appropriate financial information to the individual, employer, or employee, based on role-based security, which assists them in choosing the plan to meet their needs.
Provides information about Navigators, etc.	Both our Web portal and call center can provide information to applicants about available Navigators, brokers, and/or county assistance offices available to help complete applications for health insurance coverage through the Exchange.
Allows for an eligibility determination	Our HIX Solution Suite intakes all application information necessary to complete an eligibility assessment for the applicant. Depending on the applicant's eligibility, we can either complete the eligibility determination within our solution or link to an existing West Virginia eligibility solution for complete eligibility determination.
Allows for an enrollment in coverage	Our HIX Solution Suite provides robust tools for decision support and allows consumers to enroll into their selected health plan through the Web portal. Our call center can assist with enrollment over the phone, through the mail, or via fax.
Exchange calculator	The Cost-Sharing Calculator helps individuals choose the right plan for their needs. The tools allow users to compare plans based on detailed coverage, health care usage and cost information and are designed to show the true out-of-pocket costs for each benefit plan, including any applicable tax premiums or subsidies. In addition, the tools help enrollees understand complex terminology-such as deductibles, coinsurance and out-of-pocket maximums-and quickly shows them how these concepts affect their annual benefit costs. As an individual evaluates the many plans offered in the HIX Solutions Suite, they have the opportunity to compare up to four products at a time. When a user

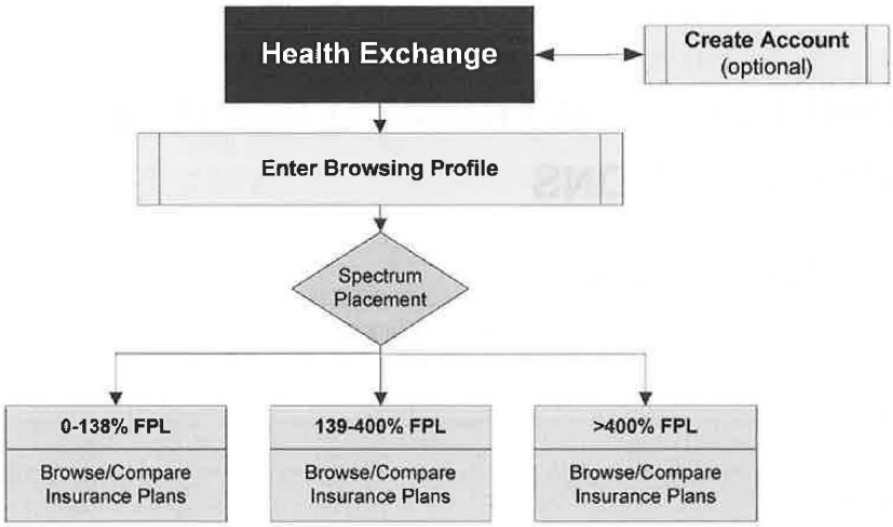
Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	selects the *Compare Plans* button, the Cost-Sharing Calculator is launched.
Consumer Assistance including the Navigator program	Along with consumer assistance through our call centers, Navigators and community advocates will play a critical role in serving the objectives of health reform. A strong recruiting and training process can position Navigators in otherwise underserved rural, urban and ethnic communities. People with existing community ties are logical navigator candidates and these can include school personnel, faith-based organizations, hospital and medical provider staff, community support organizations and others similarly able to help. Special sensitivity needs to be paid to the unique needs and challenges of Navigators and their access needs. We envision Navigators conducting business and enrollment meetings taking place in school gyms, church basements, post offices, libraries and even less formal locations. In addition to specialized web tools, Navigators will benefit from our plan for arranging PDAs, laptops and/or similar iPad type Web-enabled devices specially programmed for Exchange enrollments. This approach will empower a strong grassroots Navigator and broker enrollment effort targeted to the potentially hardest to reach populations with uniform and accurate enrollment guidance. Our HIX Solution Suite includes training modules for Navigators and consumer advocates in the basics of health reform and the administration and enrollment processes of our services.
Communications	
Outreach and education	The ACS Team uses our experience in creating and implementing successful outreach and communication plans for both private and public sector health insurance programs to help the State implement five key elements to a successful outreach campaign: • Define goals and key success factors • Identify key stakeholders and influencers • Conduct actionable market research of eligible enrollees and employers • Define accountable roles and responsibilities • Create a strategic marketing plan We are uniquely experienced and qualified to establish an actionable strategic outreach and communication plan for West Virginia. We serve on several state outreach and communication workgroups and would

Table 2-1. Exchange Core Business Areas/Functions	
Future Exchange Business Environments	**ACS Solution**
	be pleased to do the same for West Virginia.
Applications and notices	The ACS Team has decades of experience working with state agencies to create application formats, program collateral materials, and easy-to-understand letters to recipients. Additionally our document management solution can perform full application and notice disbursement to applicants, enrollees, and marketing lists.
Measurement/ reporting of communication effectiveness	To measure the success of the outreach and education program of the Exchange, we employ a variety of metrics and reports. These include: • Enrollment statistics • Quotes and "close" ratios • Market share of newly insured in commercial market • Web traffic and "hits" • Attitude and awareness surveying • Digital marketing and search engine optimization • Monitoring of social network and blog activity These metrics are summarized in a monthly dashboard report.
Oversight	
Oversight and financial integrity	Our HIX Solution Suite assists with both oversight and ensuring financial integrity through transparency in reporting, partnership approach to operational decisions, and by providing clear lines of accountability within our organization.
Quality activities	Our project management approach integrates specific tasks and measures to promote ongoing quality assurance monitoring and compliance in accordance with overall and partner-specific requirements. These steps include, but are not limited to: • Establishing appropriate agreements with selected partners • Inclusion of partners in planning discussions about quality expectations • Monitoring partner activities through deliverable/service level agreements • Evaluating partner deliverables for satisfaction of established criteria Ongoing quality monitoring of activities helps ensure our partners maintain a high level of quality in their delivery.

2.1.2 CGI

CGI's Health Insurance Exchange360™ offers the functionality needed to operate West Virginia's exchange and provide a flexible framework to address West Virginia's future needs over time. Given its modularity, specific individual functions can operate independently or as a part of an end-to-end platform.

Eligibility and Enrollment
Our solution provides a solid foundation that can be adapted to individual state needs. As consumers visit the State Health Exchange, they can browse and compare healthcare plans, determine eligibility for a spectrum of subsidies, and enroll in healthcare plans. The solution offers the individual the flexibility to browse the exchange anonymously to investigate healthcare plans and their costs. The individual can then provide the exchange with enough information to allow it to determine the individual's approximate eligibility level and health care plans that are available within their coverage area. The plans that are displayed will include approximate prices that will enable the user to compare plan services and benefit fees. The primary flow through the anonymous browsing of health care plans is below:



When an individual comes to the State Health Exchange to learn about healthcare plans, their initial goal may be to simply find out what plans are available to them. Our State Health Exchange is designed to allow anonymous browsing of health care plans to allow users to browse without providing personal identifying information until they are ready to confirm and enroll. Anonymous browsing of health care plans allows the individual to:

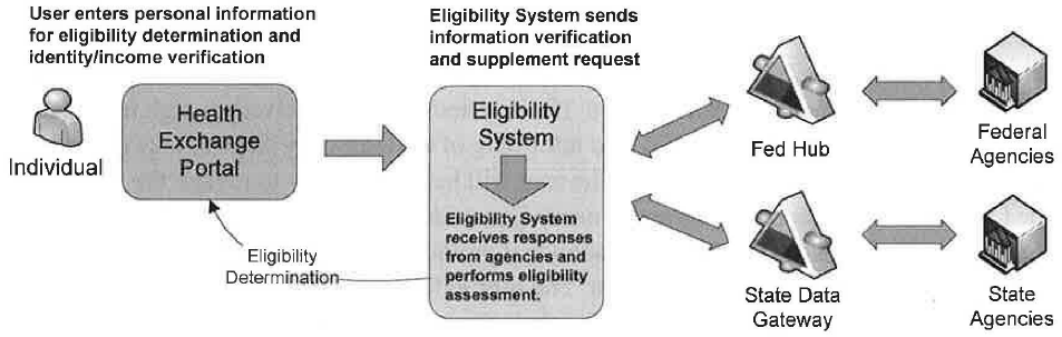
- Discover healthcare plans in their coverage area
- Find primary care physicians and the physician's healthcare plan participation
- Determine approximate cost of health plan premium

The individual can create a user account at any time. A user account is necessary to participate in the State Health Exchange eligibility determination process and health plan enrollment. Once a user has created an account, a user will be able to save their progress in any exchange

application forms and receive notifications from the exchange regarding eligibility determinations, invoices, enrollment renewals, etc.

Eligibility Screening and Verification

One of main tenets of the ACA is to streamline eligibility determination process through automation of existing processes as well as leveraging data received from Federal Data Services Hub. In addition, State data will provide input for verifications through a State Data Gateway. By utilizing these data sources, the process should be able to be performed during the online session as one of the steps in obtaining a healthcare plan from the exchange.



The primary process for this functional area is to determine eligibility status. This process involves determining data sources, utilizing data, and validating multiple factors such as income, citizenship, residency which is used in calculating advance premium tax credits, health plan costs, and/or availability of other additional benefit programs.

During this process, a user completes an initial set of questions through a questionnaire or online application. This information will provide the exchange with key information elements to use to perform an eligibility determination. When the user enters in key elements in the application form, if the response causes additional information to be needed to be supplied, appropriate fields will be displayed within the form. For instance, if the individual indicates that they are female, a field that would allow the individual to indicate pregnancy status would be shown.

Upon completion of the questions the exchange submits content to various Federal and State agencies via the Federal Data Services Hub and the State Data Gateway. CGI's Health Insurance Exchange360 will contain will evaluate input and if enough information has been gathered and f the individual is eligible to participate in the State Health Exchange and what values to apply for premium tax credits. In the event that the information gathered does not allow for a successful completion of the assessment, the user will be prompted to supply additional content via the electronic document management (EDM) component. An example of content that could be provided would be a copy of a utility bill to prove state residency (the rules for states are configurable). The individual may need to go to the customer support center or a provider location to upload or fax appropriate documentation. The uploaded content will be visually verified as part of the document management process for all exchange members.

There will be circumstances in which a determination cannot be completed automatically. In those instances, the individual's application will need to be manually reviewed. The application will be turned into a work task item for customer support to facilitate. This process will need to

be performed by a staff worker certified to make eligibility determinations. When the Exchange sets the application to manual review status, the consumer will be notified during the session and upon completion of the manual review.

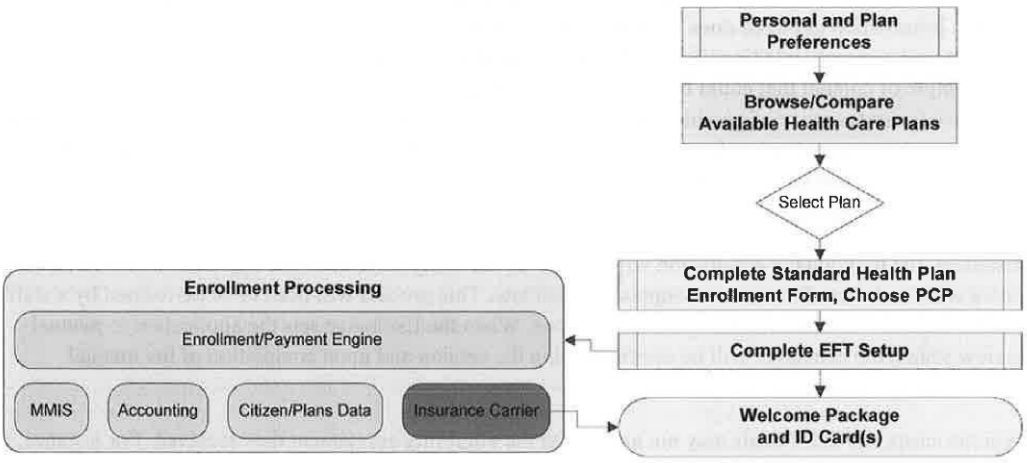
In some cases, the individuals may not agree with the eligibility assessment they received. For instance, they may have been turned down for participation in the exchange or they may have been determined to receive no tax credits. CGI's Health Insurance Exchange360 provides an appeal process which they can pursue to resolve (see section 4.2 additional details).

Throughout the process, the State Health Exchange will utilize defined, state-specific rules to determine if appropriate levels of information have been received. If the system has not received enough information, the user will be presented with an onscreen message informing of the necessary steps to take to provide additional information. During this initial process, the user will have the ability to review the information that is provided by Federal and state sources and if needed, provide self attested input that will override the data source values. In the instances where the individual provides self attested information, they may also need to provide additional proof documentation. The user will have the ability to save their place in the entry of the overall process if they need to suspend their session for any reason.

When the user has been presented with the outcome of the eligibility determination, they will be informed of their eligibility to participate in the exchange and to what degree they will receive financial assistance. There are three primary levels of determination: full subsidy (Medicaid/CHIP), partial subsidy (advance premium tax credits/CHIP), and no subsidy. When the user reviews their determination, they may choose to browse available healthcare plans or to appeal the results continue on.

Browsing, Enrolling, and Purchasing

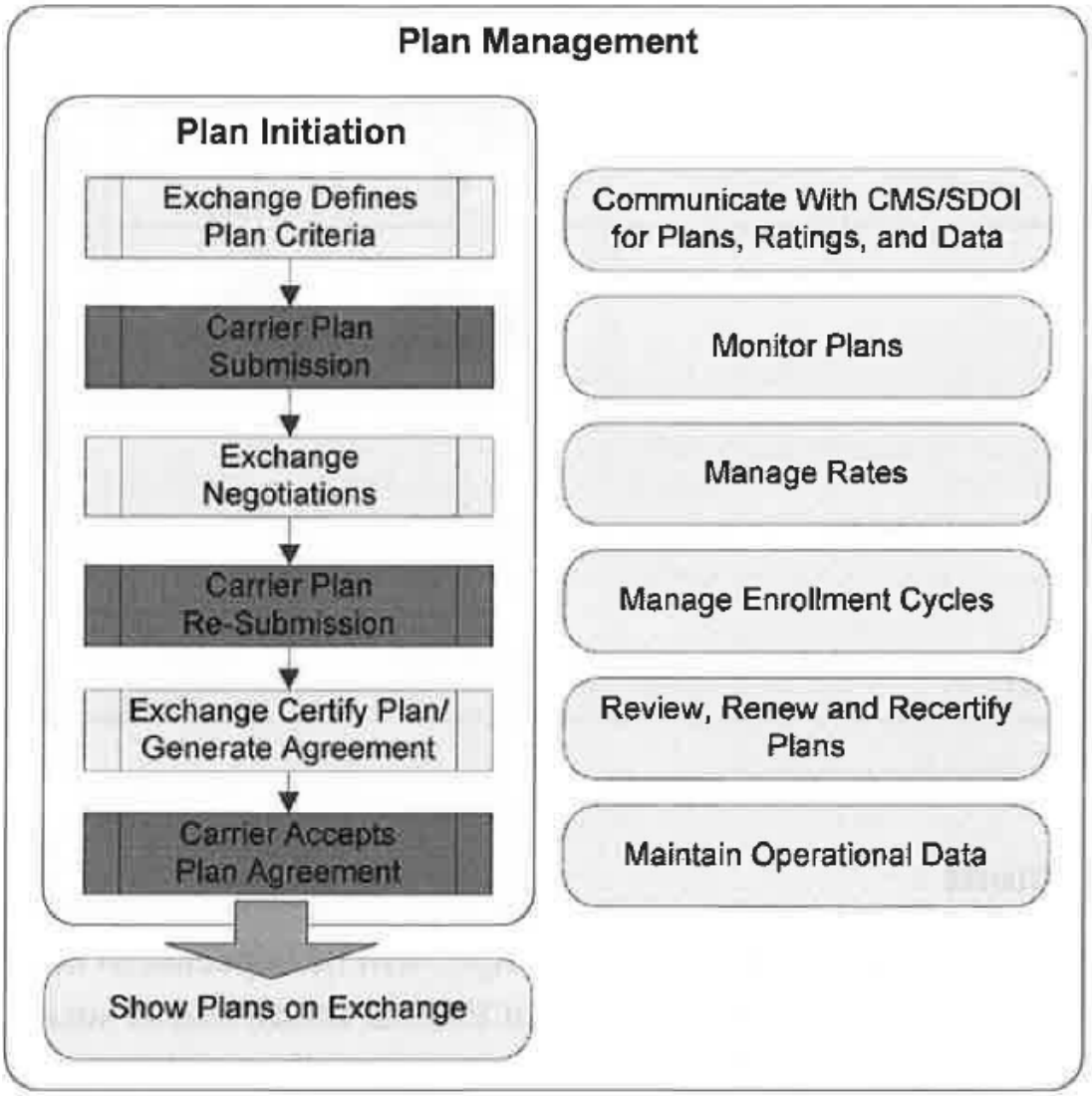
When the user chooses to enroll in a healthcare plan, they will need to enter preferences to refine the available plans to browse and select from. Once a plan is selected the user will enroll in the plan by completing the uniform health plan enrollment form, selecting a primary healthcare provider, and setting up a payment method, such as an electronic funds transfer (EFT) method. After initial enrollment the user will need to renew their enrollment annually. They will also have the option to disenroll. The primary flow through enrollment is below:



Plan Management

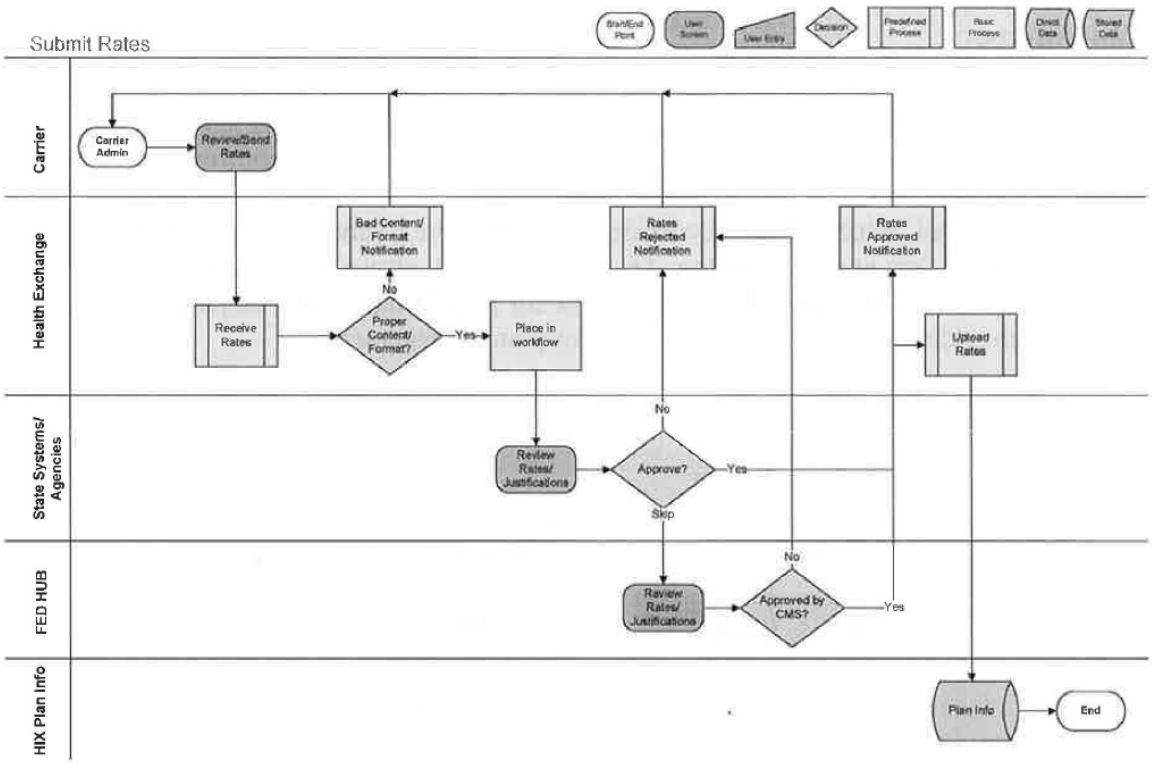
To have a healthcare plan on the Exchange, there needs to be negotiations between the Exchange and the Carriers. After negotiations have completed, the plans will be loaded into the Exchange.

Plan rates changes will be loaded monthly into the Exchange after review/approval. Re - certification and de-certification of plans will be done manually by the Exchange personnel as part of the procurement process. Plans are loaded annually. The Exchange will communicate with Carriers on plan data and information. The Exchange will also communicate with CMS about plan and Issuer information. The primary flow for plan initiation and display is show below along with additional supporting activities for plan management:



Submit Rates

Carriers will submit rate updates on a monthly basis. The rate changes will need to be checked for format and also may be reviewed by State Agencies or by CMS if the State Health Exchange chooses. Once the rates are approved they can be uploaded to the Exchange.



Financial Management

There are a range of financial requirements that Exchanges will be expected to meet. Exchanges will be responsible for the management of consumer, state and Federal funds, and as such will need to meet the highest levels of accountability. The CGI solution draws on core financial system functionality, while at the same time supporting the integration with existing state systems, such as a data warehouse. As noted below we provide an end-to end solution for premium collection and processing.

Our team strongly believes that the higher degree of data integration that Exchange can achieve with the state the better overall outcomes will be. To that end, we support (through either a direct interface or file transfer) data sharing with external systems. For example, the integration of eligibility, enrollment, and premium payment data would provide both the Exchange and state will valuable insights into whether or not members maintain coverage when their premiums change, providing important information for both the risk management and outreach.

Key to achieving transparency, and the confidence of State Health Insurance Exchange stakeholders that is so critical to success, is the ability to access a full range of financial, operational and programmatic data. The Exchange will create vast amounts of data, however, and it is essential that it can be managed and processed in an efficient and practical manner. Finally, in order to achieve the full value of the data available, drawing on and integrating with other information sources will be imperative. The CGI Team solution provides states with a flexible and powerful platform to manage data, while at the same time giving internal and external users multiple access points and options.

As noted above, our powerful CRM solution not only holds vast amounts of data, but can present it in multiple ways. The customer service representative has access to the same

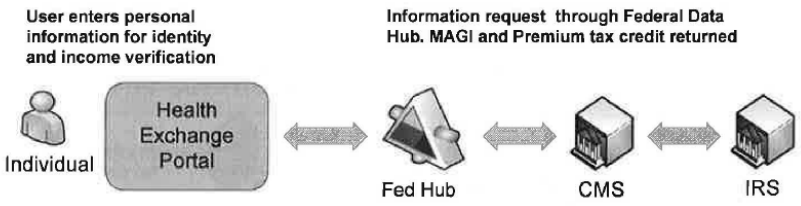
information that the member does, and should the state chose, we can leverage our security model to share appropriate information with Brokers/Navigators and carriers.

We believe that the member can play an important role in managing their own data, not only improving the overall experience, but reducing administrative burdens on the state. Our solution allows for members to gain full access to their premium payment history, and download this information to an external program, such as Microsoft Excel. In many cases, this will deflect what would have been a call made to a CSR to request the same information.

The exchange will be responsible for showing the individual their projected healthcare plan costs which may include an advance premium tax credit as well as allowing the user to view their premium payment invoices and history. The Exchange will track a consumer's payments and send them notifications when a payment is due. The Exchange will be able to facilitate payment to the issuers if a State chooses.

Integration is a key for premium and tax credit processing. Below, we outline the processes between the State Exchange, Federal Government and the carriers.

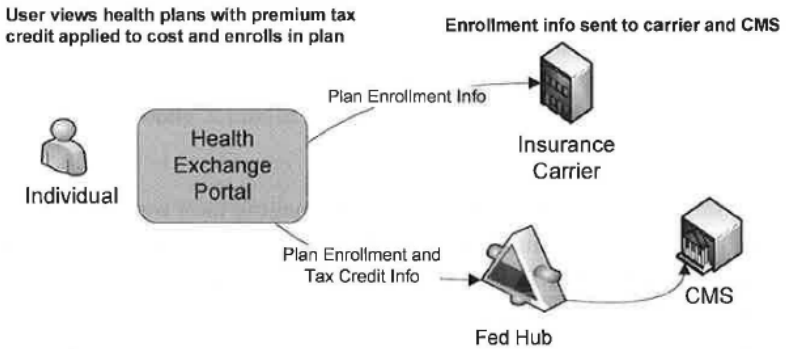
Initial Premium Tax Credit and MAGI Calculation



During the initial eligibility and enrollment process, the user will enter information that will allow the exchange to communicate with federal data sources via the Federal Data Services Hub to obtain the individual's modified adjusted gross income (MAGI) value. These values will be used by the exchange to process premium costs for health plan display and enrollment.

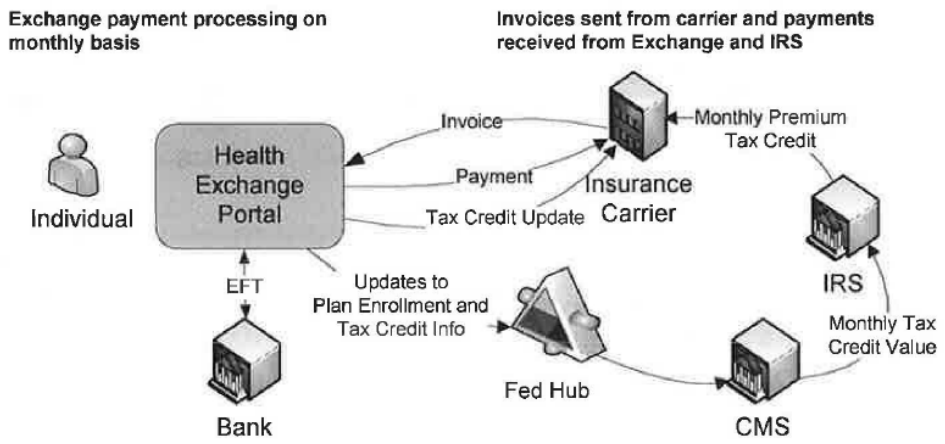
When an individual has a change to their personal information, some of the updates (for example, income change or adding a family member) will create a need for the system to re-perform the eligibility verification along with MAGI and premium tax credit value calculations. The outcome of the review process is discussed below in Invoicing and Premium Tax Credit Adjustments.

Plan Enrollment and Invoice/Tax Credit Communication



As the individual is browsing available healthcare plans, the exchange is applying the premium tax credit values to the total plan premium cost to display the actual premium that the individual would be invoiced. When the individual enrolls in a healthcare plan, the exchange transmits their enrollment information to the insurance carrier. This information will also include the premium tax credit that the enrollee receives. The Exchange will also transmit the plan enrollment information to CMS which will inform IRS of the individual's advance premium tax credit value.

Invoicing and Premium Tax Credit Adjustments



Depending on State preferences, the carrier may invoice directly or it can be completed through the exchange which processes the invoice through the member's account via electronic funds transfer (EFT) or other secure payment method. Other forms of payment can also be coordinated. The exchange then provides a batch payment monthly to the carrier. The carrier also receives an advanced premium tax credit on behalf of the covered individual from the IRS when applicable. The exchange will perform invoice adjustments based on change events which have triggered a new eligibility determination. Actions which may cause an invoice adjustment such as income change can be entered in as Life Change or Change of Circumstance event and will be used by the eligibility process to determine new premium tax credit and cost sharing values for the individual. Along with user entered changes which may trigger the eligibility process determination, there may also be events in which information reported from other sources (for example, a state's department of revenue) causes the individual to have an invoice adjustment or a need to visit the exchange and edit or verify their personal information.

The results of the determination will then need to be applied to the individual's current plan and invoicing to determine if the individual can maintain enrollment in their current health plan and if their invoice needs to be adjusted. The Exchange will forward these updates to the carrier and CMS which in turn will set a new premium tax credit value for the individual. The new premium tax credit value will be applied to the invoice to offset advance premium tax credit payments made by IRS to the insurance carrier. The individual will also receive a notification of the invoice change. In instances when the individual must enroll in a new plan, notification will be sent to the individual informing them of the outcome of the determination and what actions they should take. If the individual must enroll in a new plan, the carrier will be sent a plan disenroll message.

Customer Service

As noted, while the ACA contemplates the majority of applicants will leverage the Exchange Web Portal and complete their transaction on a self-directed basis, a robust customer contact center staffed with service representatives and incorporating a data entry/document management capability is a recommended approach. This customer contact center represents the nexus of the "back office" environment.

- Customer Service Representatives: while IVR, Chat, email, and other indirect forms of customer communication will stem the flow of calls to those customer questions needing an attendant, attended call center representatives should be available to handle information, triage and referral.
- Data Entry Operators: reducing the flow of paper applications will be a key efficiency built into the technology platform, the need to enter and associate paper-based data to the electronic application/account record will be necessary.

A key tool that should be incorporated within the contact center is an electronic document management system; a technology service that allows for the tracking, imaging, storage and retrieval of erstwhile paper documents in electronic form which can be converted via optical character recognition (OCR). This will improve efficiency and searchability for the system and its users.

Effective, efficient, and timely communication is a hallmark of CGI's Governance, Project Management and implementation strategies. The overall goal of communication is to provide easy to understand, positively delivered multi-media information to State Exchange stakeholders, individuals, small businesses and insurance providers in an effort to facilitate acceptance of the State Exchange. Once the mission statement, principles and goals of the State Exchange are formalized they will be articulated and communicated. CGI has developed processes and procedures for multi-level communication and will work with the State to devise a collective strategy.

The interactions and communication will be focused on topics such as:

- Eligibility and enrollment - "no wrong door" policy statewide
- Potential elements of program integration health plan oversight
- Clarify roles and responsibilities of the Exchange and the State's Department of Insurance and any other relevant State agencies regarding standards and oversight of qualified health plans
- Communication with regulators to monitor implementation of health insurance market reforms and the impact on the Exchange programs and operations
- Develop strategies in concert with insurance regulators to implement strategies intended to reduce adverse selection between the Exchange and the outside market
- Discuss simplification and integration of customer interaction with diverse eligibility and healthcare related programs such as:
    - Medicaid
    - SCHIP

Creating a strong and inclusive Governance process supported by clear communication promoting collaboration will help ensure the entities' involvement and cooperation with the State Exchange. The principles and procedures for communication with any entity must be a consistent message across all entity types. The variation is not the messages, but how the messages may be delivered.

Oversight
Either a business process outsourced solution, or a solution staffed and managed with State/Exchange personnel will require a management structure, enabled by a dashboard reporting function incorporated within the technology platform. In large measure, the management structure can be relatively lean with a technology-enabled business process outsourcing service delivery approach when compared to other alternatives. This is achieved with the use of standard, best-practices based operational procedures proven effective in practice delivering State health insurance exchange programs. Oversight will be served by a series of automated and systematic processes as well as governance that establishes additional checks and balances through management and staff review. CGI, through its other work in financial systems, as well as Medicare and Medicaid audits, will consult with West Virginia on the steps necessary to confirm program integrity.

2.1.3 Cognosante

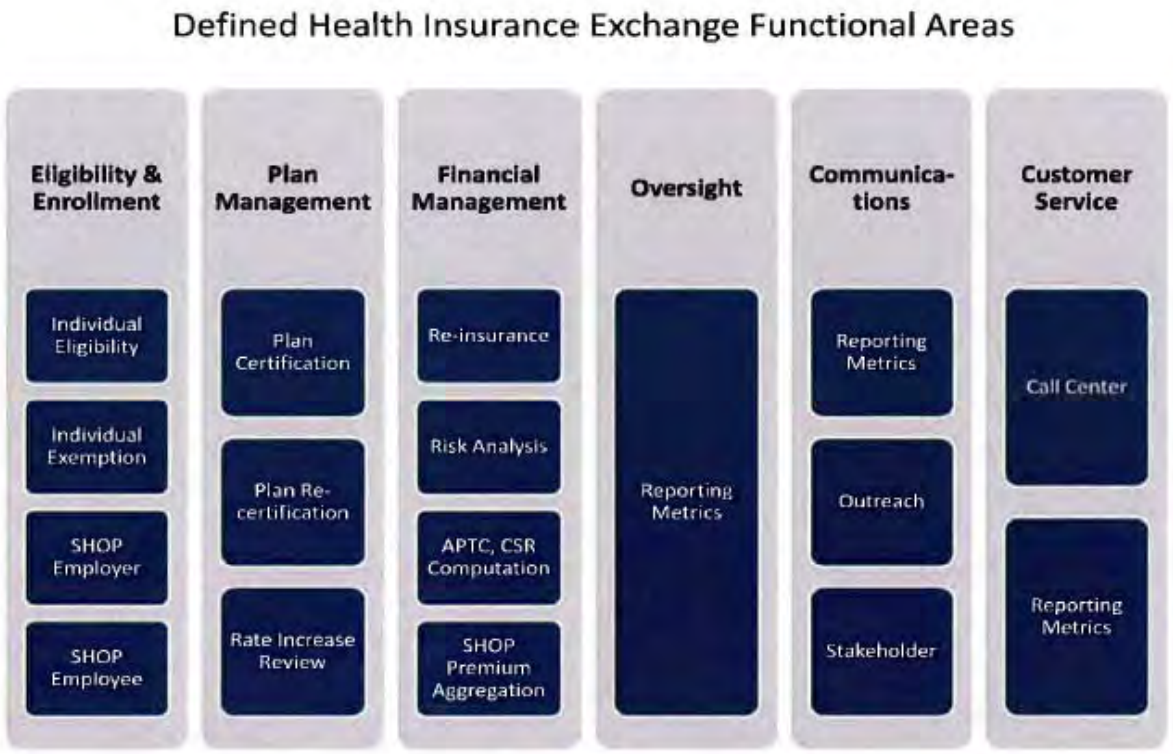
Prior to proposing a solution for a state, Cognosante believes our role as the Systems Integrator demands review of existing infrastructure, capabilities, and near term plans. Armed with an understanding of West Virginia's strategic HIX plans, we would provide and configure a solution that matches West Virginia's unique needs and complies with all State and federal requirements in each of the six business areas.

In addition, Cognosante has expertise in selecting "best-of-breed" components that are truly independent and interoperable. Historically, Cognosante has extensive experience with eligibility and enrollment, primarily with Medicaid and CHIP. As Exchange requirements include simplicity and customer experience requirements, West Virginia would be well advised to partner with an SI with extensive experience with eligibility and enrollment, as well as understanding and compliance with CMS's *Eligibility and Enrollment Blueprint – Exchange Business Architecture Supplement,* Version 1.0. This document identifies and defines major Eligibility & Enrollment business functions, processes, and services in support of individual eligibility for and enrollment in a qualified health plan (QHP), advance premium tax credits (APTC), cost-sharing reductions (CSR), and Medicaid, the Children's Health Insurance Program (CHIP), and the Basic Health Program (BHP).

In terms of the customer experience, each of the six core functional areas impact different aspects of that experience. Outreach might be the initial contact with customers, getting them to the Exchange. Anonymous pre-screening for determining individual eligibility is an important contact, as it will identify assistance available to the specific customer and launch the single streamlined application for coverage. Browsing through plans and comparing benefits and costs is an important service for individuals and employees in determining the best coverage fit. Oversight and communications allows the Exchange to respond to market and usage trends, a critical sustainability, policy, and customer experience service. Smooth customer service in all areas of the Exchange requires a service aspect in each functional area, not just the call center.

Figure 1 shows the defined HIX functional areas required by the blueprint.

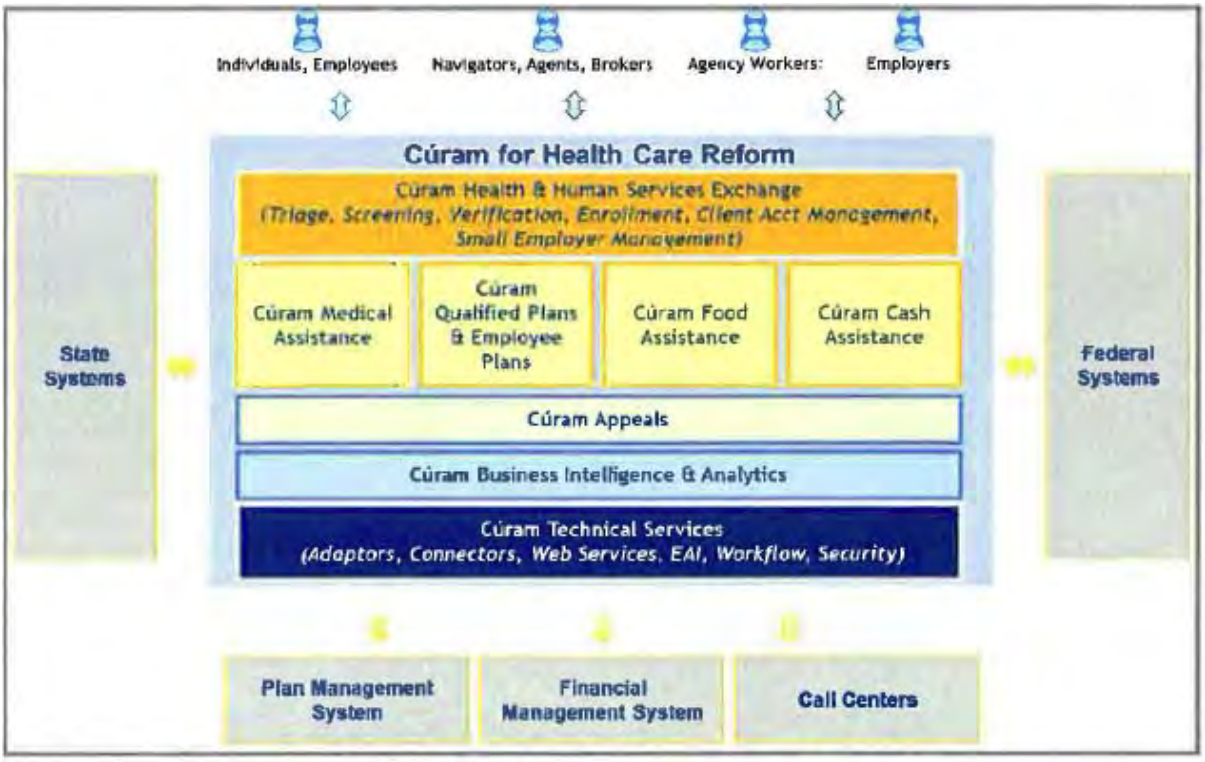
Figure 1 – HIX Functional Area



2.1.4 Cúram Software

Solution Overview

Cúram for Health Care Reform is a comprehensive, modular COTS solution designed to meet the requirements of the Affordable Care Act (ACA) while providing a platform for the future. The solution uses existing and proven Cúram functionality along with new ACA-specific functionality. It offers out-of-the-box program support, a common system of record for eligibility, plan selection, and enrollment. From the technical side, it offers integration with leading exchange and financial management vendors, and a Service Oriented Architecture (SOA) capable of communicating with external and legacy systems. Through the use of client portals and integration with call centers, it also enables the implementation of a "no wrong door" approach to eligibility and enrollment that complies with the ACA. Cúram for Health Care Reform (HCR) is a full-featured solution that provides end-to-end coverage of the integrated service delivery functions illustrated in the following graphic.



Cúram for Health Care Reform Overview

The Cúram HCR approach provides a clear roadmap for addressing the specific mandates and recommendations of the ACA, while supporting overall modernization efforts. Its inherent flexibility and configurability will enable the West Virginia OIC to make and implement changes that are likely to arise, given the fluidity of the ACA legislation.

Cúram HCR addresses the six core business areas and their key business functions identified in your Request for Information as follows:

Eligibility and Enrollment

Cúram HCR provides the functionality to manage consumers from the enrollment process, to eligibility determination, to change in circumstance processing, and the possible appeal of an eligibility decision. Our solution is built on a foundational layer called the Cúram Enterprise Framework™ (CEF) and utilizes additional Cúram modules to deliver the breadth of services required for a Health Insurance Exchange (Exchange). The CEF has been designed from the ground up to support health and human services programs and contains the infrastructure, data model, and business processes that are specific to such programs.

Streamlining eligibility and enrollment are at the heart of the ACA requirements. Improvements to eligibility and enrollment provide the greatest opportunity for improving the consumer experience by making it seamless, real-time, and paperless. Cúram HCR provides user portals, pre-built rules, processes, and interfaces to support the integration between eligibility and plan enrollment within the Exchange.

The Cúram HCR solution leverages the Cúram Citizen Self Service™ (CSS) module. CSS is a web based portal that allows external parties, such as consumers or assisted service

representatives to access triage, screening, application, informational pages, and account functions online.

Enrollment information is gathered using configurable question scripts that are created using Cúram Intelligent Evidence Gathering™ (IEG) module. IEG allows system administrators to create question and answer scripts using a graphical editor. These question and answer scripts include branching logic so that citizens are asked only appropriate questions. The information that is captured is evaluated against program rules by the Cúram rules engine to determine program eligibility. A common system of record for eligibility assists families and individuals in enrolling in coverage for public medical assistance programs, Qualified Health Plans in the Exchange, and other public medical assistance programs (Medicaid, CHIP, and State Basic Health Plan). The sophisticated eligibility engine is capable of determining premium tax credits and cost-sharing reductions as well as determining eligibility for "split families" (a family that may be eligible for Federal subsidies with children eligible for CHIP, or a family may include an aged or disabled member whose eligibility is determined in a more traditional way). The rules that determine eligibility can be configured through the Cúram Administration Suite™. Like many artifacts in Cúram, they are effective dated so changes can be tracked over time.

Enrollment is further streamlined through the use of interfaces to pre-populate and verify data obtained during the application process. This integration occurs directly from the IEG scripts and data retrieved is displayed as the consumer works through the questionnaire. Possible sources of data integration include:

- Identity and Citizenship: Homeland Security, Vital Records or DMV;
- Wage/Tax Information: IRS and State Tax Agency interfaces;
- Other Income Sources: Unemployment Compensation, Child Support and Social Security (SSA, SSI, SSDI and Medicare Part D);
- Household Information: Other Health and Human Services Systems, Child Support and IRS/Tax;
- Current Insurance Coverage: IRS (W-2) or State Insurance Agency.

Our solution is also designed to interface with the Federal data services hub to verify consumer data. For items that are not verified electronically, the Cúram Verification ™ module facilitates the capture of supporting documentation that is needed to verify the information collected during enrollment.

The collection and processing of consumer information does not stop once enrollment has happened. Our solution supports on-going case management to handle the changes in consumer circumstances over time. After enrollment, the consumer is provided with a user account on the Exchange which they may use to check their enrollment status in all health plans and programs, as well as manage their life events. As consumer circumstances change over time, these changes are captured and program eligibility can be recalculated.

In some cases, the consumer may choose to appeal a decision. This is supported in our solution by the Cúram Appeals™ module. Filing of an appeal starts a workflow for the adjudicators to review the circumstances of the appeal. Cúram Appeals provides functionality for initial filing of appeals, the workflow around appeals resolution, and the process of appeal escalation up to the court levels. The data model supports linkage of the decision being appealed and the appeal case(s) created for that decision, providing full traceability.

Plan Management
In developing the Cúram HCR solution, Cúram Software has established partnerships with leading vendors delivering aspects of a complete end-to-end Exchange solution including health plan management. Our preferred partners have extensive experience of carrier plan data collection and content management around the loading of health plans for sale in their shop and compare websites. We are currently in the product development stage of utilizing a SOA approach to sharing data with leading shop and compare vendors to provide seamless user experience from eligibility to enrollment in qualified health plans. Additionally, by utilizing a SOA approach to the shop and compare portion of the Exchange, we are open to interfacing with other preferred partners to provide shopping and plan management functionality for the State. The Cúram Exchange Adaptor™ is built to support bi-directional communication with service-enabled plan management systems. It sends information related to the household, address, program, subsidy and/or tax credit amounts and receives information from the plan management vendor including the plan name, plan type, provider, initial payment amount and on-going payment amounts.

Financial Management
Cúram Software has established relationships with leading vendors whose core business is in the area of health care financial services and health insurance premium remittance. Our partners include recognized names in health care financial services and third-party administrators (TPAs) that have the experience in distributing premium payments as well as dealing with the issues of tax-advantaged health care account reporting. Our focus is on delivering the core platform from which end users can access content from integrated partners who excel in delivering health care financial services which are essential to financial management and reporting. By utilizing this approach of allowing each vendor to focus on their core services and solutions, we will, together with our partners, be able to deliver an end-to-end solution in a manner that is efficient, effective and timely under an aggressive schedule by which all states are trying to abide.

Customer Service
Facilities such as Cúram Citizen Self-Service (CSS) provide various stakeholders with account functionality tailored to their particular information and activity needs. CSS functionality currently supports a wide range of consumer-driven account activities and is being enhanced to provide unique functionality needed by Navigators/Brokers to manage accounts specific to the people they assist. In our solution, we use the term "Assisted Service" to describe the features which allow these additional stakeholders to perform such functions through an online portal. Assisted Service portals will allow different types of organizations such as Navigators, Brokers/Agents and Community Based Organizations (CBOs), to perform functions on behalf of small employers, employees and/or individuals. Through the Customer Service and Account Administration component, the functionality of the portals can be configured to provide various stakeholders with account functionality that meets their needs. Cúram protects and tracks access to sensitive information through comprehensive security and auditing protocols. Account functionality also facilitates secure communications, notifications, and reconciliation among and between stakeholders.

Types of Assisted Service Entities

There are three primary types of Assisted Service Entities that will be supported by Cúram HCR: Brokers/Agents, Navigators, and Community Based Organizations (CBOs).

Brokers/Agents
The primary role of Broker or an Insurance Agent is to assist in the selling of insurance products to small employers, their employees and individuals through the health insurance exchange as well as the traditional insurance market outside of the exchange.

Navigators
A Navigator is an external entity whose role is to provide impartial guidance and counseling on a broad range of topics across the entire assistance and insurance spectrum. In Cúram, an external entity will have the ability to come to the Exchange and apply for status as a Navigator. This application will be reviewed and once approved, the Navigator will be issued login credentials and will have the ability to add additional Navigator users within their organization.
The Navigator User will have the ability to perform all the same functions as are available directly to the citizens or employers that they are supporting through their portal pages.

Community-Based Organizations (CBOs)
Community Based Organizations are typically non-profit organizations that assist citizens to obtain assistance and benefits from government agencies. They have similar features and functions to Navigators, except that they do not have to meet the federal standards and performance criteria.

Call Centers
Cúram readily integrates with telephony systems in call centers to assist agents in quickly and effectively providing the required assistance to the caller. To enable the telephony system to route the calls to the most appropriate team or individual, Cúram interfaces provide information such as the organization structure and the individual's skills including program specialty, licensure, and language to the telephony system so that the call can be routed to the team or agent who would be best qualified in providing call resolution. Cúram can also interoperate with Computer Telephony Interface (CTI) technology to reduce data entry via a "screen pop" function based on the user input, allowing the agent to focus on assisting the caller.

Communications
Through the use of the portals, Cúram HCR allows consumers and stakeholders to enter and share information related to cases. In addition, Cúram incorporates extensive functionality to address the correspondence and notices requirements of the Exchange. Cúram communications functionality enables organizations to manage and record the various forms of correspondence that occur between the organization and external stakeholders such as state agencies, including Medicaid/CHIP, health plans, broker/navigators, employers, individuals and the federal government.

The categories of communications that can be managed within Cúram include email, pro forma, MS Word and recorded. The email, pro forma, and MS Word categories are used to issue communications from within Cúram. The recorded category is used to capture information about communications issued outside the system or received by the organization. A history of all communications sent and received is maintained along with relevant details of each communication and any associated attachments. The Cúram Account Administration functionality also provides communication and notifications related to eligibility and enrollment, payments, and upcoming activities (such as renewals, open enrollment and terminations).

Oversight
Cúram HCR uses the Cúram Business Intelligence and Analytics™ module to provide robust enterprise reporting capabilities and key performance indicators (KPIs) built specifically for

health and human services enterprises. This module offers a configurable business intelligence (BI) solution, scalable from program to enterprise, consisting of embedded analytics, domain specific dash boards, a complete ETL framework and tool independent, pre-defined domain specific data marts. It also offers the flexibility to use a range of reporting tool of choice - for example, Actuate, Cognos®, Crystal Reports® and various other products including open-source products).

Cúram Business Intelligence and Analytics provides the foundation for the production of standard and ad-hoc reports, trend analysis, and tracking of KPIs in support of effective benefit and service delivery for citizens. KPI analytics are supported in two formats - one in real-time dashboards, and the other in historical reports. Real-time dashboards are graphics and tables of information that reflect operational metrics for workers and managers to visualize and manage ongoing activities. A sample of how the information can be displayed is shown in the dashboard screen below:

Sample Screen Showing Embedded Dashboards

Enrollment data, including the plan, carrier, subsidy, and enrollee details will be maintained and available for reporting. The report interface will be provided by the State's preferred report generation tool. Interface to the IRS will be potentially via Federal Data Service hub.

Implementation

Cúram Software participates in a number of different engagement models on implementation projects. This includes working as prime contractor; working as sub-contractor with the customer as prime; working as sub-contractor with the customer's preferred systems integrator as prime or; working as a participant in a combination of models.

Our Global Services division employs business and technical professionals including business consultants, technical consultants, project managers and development personnel who support implementation projects through all phases of the project. Each Cúram professional has extensive knowledge and a deep understanding of the Cúram product suite, has achieved Cúram certification, keeps their knowledge of the software and leading implementation practices up-to-date through ongoing training, and has hands-on experience implementing, including configuring and developing Cúram solutions.

We also work closely with leading system integrators and technology partners who have major practices in health and human services. Through the Cúram Software Partner Program, worldwide social enterprises have access to a competitive array of experienced and certified Cúram practitioners.

2.1.5 Deloitte

Proprietary response provided.

2.1.6 Exeter

OneGate is a configurable commercial off-the-shelf (COTS) product that is modular, flexible, scalable, and designed for the Exchange marketplace. Central to OneGate's design is the use of a natural language rule base that is populated with a starter set of rules for determining Exchange and premium assistance eligibility as well as federal rules for Medicaid and other benefits programs. Using the standardized starter set of rules, the State will be able to deploy consistent rules and policies across its Exchange.

Two essential aspects of OneGate's design include the following:

- **Service-oriented architecture (SOA):** OneGate is built around SOA principles, allowing business rules to be maintained from a central repository and called via web services from various channels. This feature, in turn, helps ensure consistency in rule application across those channels and allows for easier maintenance of the rules when policy changes arise. OneGate was designed by people who understand the importance of applications that allow fast starts, and iterative functional implementation, while supporting growth to statewide production scale.

- **Advanced rules engine:** At the core of OneGate is an advanced rules engine that permits states to automate health benefit exchange policy in a manner that allows for maximum maintainability and streamlines the application and determination process.

Key Aspects of OneGate
OneGate is specifically designed to help agencies and organizations like West Virginia effectively address their Exchange-related needs and improve citizen services. Integral aspects of OneGate's design include the following:

- **Focus on providing results:** The focus of OneGate is to deliver business results - technology is only used as a tool to reach that goal. OneGate accounts for complex processes and policies in addition to state and federal regulation changes that will occur over time. Exeter understands that West Virginia has unique processes and policies, thus

can configure OneGate to meet those specific requirements without an arduous commitment of time or effort by caseworkers.

In addition, OneGate is aligned with Centers for Medicare and Medicaid (CMS) standards and the Medicare Information Technology Architecture (MITA), which allows states to meet requirements for federal financial participation.

Figure 3: Benefits of OneGate

- **Starter rules set:** OneGate incorporates a natural language rule base that is populated with federal insurance affordability, Medicaid, CHIP and other benefits program (e.g., SNAP) rules. This standardized starter set of rules allows for rapid deployment of consistent rules and policies for the new Exchange.

- **Improved self-service:** OneGate improves the citizen and case worker experience, empowering users with self-service and real-time transactions. OneGate incorporates an intuitive, user-friendly self-service customer portal and mobile access features, which allow a user to manage his or her application(s) and view detailed benefit enrollment information, report change of circumstances and create service requests.

- **Modular:** OneGate's modular design will allow West Virginia to address its Exchange and public health insurance program needs and, if desired, to later implement other public assistance programs. Further, the modular design will allow West Virginia to effectively improve constituent services by providing citizens with 21st century customer support and realizing process efficiencies at a rate that is in line with the State's readiness for change and budgetary constraints. A robust rules engine is included in all the offerings and provides policy automation functionality that is separate from the application code.

- **Supports key provisions of the ACA and related guidelines:** OneGate currently incorporates ACA-related requirements for Medicaid, including the expanded Medicaid category for people with incomes up to 133 percent of the Federal Poverty Level (FPL) and Medicaid category simplification; rules for premium assistance tax credits and cost-sharing reductions are also included. West Virginia can configure OneGate's programming policy to define state-specific rules, and define the effective date for this policy. OneGate's Health Benefit Exchanges (HBEs) functionality includes an integrated enrollment application for health insurance, Medicaid and CHIP; Small Business Health Options Program (SHOP) functionality; and a premium assistance calculator that supports

premium assistance tax credit calculation. In addition, state-specific requirements and business rules for premium collection, payment processing and health plan enrollment functionality can be added or updated quickly.

- **Reusable:** OneGate's modular approach to system design allows for components to be leveraged, where appropriate. For example, the rules engine and related services can be re-used for additional programs and/or systems. OneGate provides various connectors to modules and services, but also has the ability to expose core functionality as a service, where needed.

- **Interoperable:** OneGate's service-oriented design allows it to interoperate with external (and/or internal) systems and services. OneGate provides integration services that allow for automated verifications using call outs to external systems. In addition, OneGate offers health insurance exchange components that integrate with eligibility determination functionality and allow citizens to shop for subsidized individual and family health plans.

- **Flexible:** OneGate is designed to integrate with West Virginia's existing web sites, offering a seamless experience for both case workers and citizens. In addition, OneGate's rules engine greatly improves the process of maintaining and updating rules in response to changes in legislation or other policies. OneGate can be flexibly configured to manage West Virginia-specific rules, procedures and user interface standards.

OneGate Offerings Overview

OneGate provides four offerings to states based on their modernization efforts/needs, which are shown in the diagram and described in further detail below:

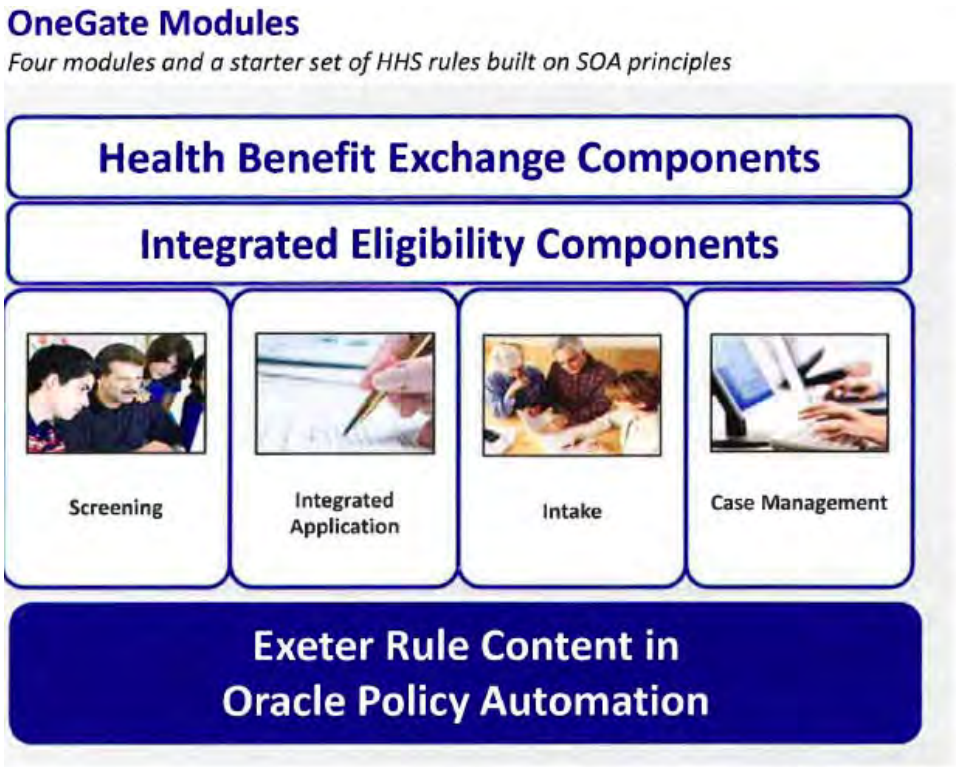


Figure 4: Overview of OneGate Modules

- **OneGate Screening:** Provides a mechanism for customers to access a state's customer portal and self-assess potential eligibility for insurance affordability programs such as premium assistance tax credits and cost-sharing reductions, as well as Medicaid and CHIP. OneGate also has the ability to allow users to browse anonymously for health plans that may be available to them based on their situations, including income, household size and location.
- **OneGate Integrated Application:** Is an online application for enrollment in a Qualified Health Plan (QHP) and programs such as premium assistance tax credits, cost-sharing reductions, and MAGI-based Medicaid and CHIP. Federal rules for non-MAGI Medicaid categories are also included in OneGate; an applicant can complete a separate, supplementary application for these categories. Applications in OneGate are presented as interviews driven by the solution's advanced rules engine, including Exeter's rule content. The interviews provide easy-to-understand questions with help text, asking the minimal necessary information to make a determination of eligibility. When sufficient information has been entered to make a preliminary (or final) determination of eligibility, the applicant is able to compare plans for which he or she is eligible side by side and select one in which to enroll. In this way, OneGate's Integrated Application provides a true online shopping experience that is easy for health insurance applicants to use. This module also includes interfaces to various internal and external data sources, including the eventual federal data hub, which can streamline the application and verification processes for both the applicant and agency staff.
- **OneGate Intake:** OneGate's Intake module provides a My Account Page feature that offers customers the self-service features they expect, thereby helping to reduce staff workloads and increase agency/authority capacity. The module allows users to view the statuses of their applications and benefits, information about their households and enrolled health insurance plans, and messages from the system or agency worker; they can also submit requests, changes of circumstance, and surveys via the My Account Page. The module can be integrated with OneGate Case Management or other systems to allow the most up-to-date information to be presented to the user.
- **OneGate Case Management:** Adds a worker-facing case management system that integrates with the portal and applications from the other offerings in order to reduce agency workers' workload and processing times and thus increase agency/authority capacity. Application data is automatically passed from the online application interview to OneGate Case Management, where the worker can see what remaining tasks are necessary to complete the applicants' eligibility determination and enrollment processes.

HIX/HBE Solution Features

OneGate is specifically designed to help states like West Virginia quickly and efficiently create a dynamic, cost-effective solution that is ACA compliant and best fits the needs of the State Exchange. OneGate's customer portal provides rich self-service functionality, including the ability for customers to communicate with agency staff and in order to review and maintain the most up-to-date information stored in the member management system for the household. OneGate also delivers improved customer service through an easy-to-use online health insurance shopping experience that allows consumers to shop for plans and compare them side-by-side.

In addition, plans are maintained and managed in a repository that allows the plans to be quickly configured, added, updated and removed. Additional plan management features are also available.

OneGate Functionality

OneGate's SOA-based framework allows for integration and interfaces to a variety of internal and external systems, allowing existing technology investments to be leveraged in the completed solution and minimizing the impact a change in one component has on the operations of another component.

Exeter's OneGate product investments provide a significant advantage to states faced with near-term compliance deadlines, and a desire to provide great usability features to the general public. The table below provides a high-level overview of OneGate's functionality as it relates to the six core business areas and business functions identified in the RFI.

Business Area	Future Exchange Function	OneGate Function Readiness
Eligibility and Enrollment	SHOP	OneGate SHOP functionality is in development by Exeter. SHOP functionality will re-use components already configured for the individual Exchange, including the customer web portal through case management. This will allow West Virginia to maintain a consistent view of a customer's enrollment within and out of the Individual Exchange, SHOP Exchange and other benefit programs.
	Certificates of Exemption	
	Eligibility determinations	OneGate HBE and Screening, Application, Intake and Case Management modules are fully developed to perform integrated eligibility determinations for Medicaid/CHIP/BHP, enrollment, appeal submission, premium tax credit, and cost-sharing reduction calculations.
	Appeals of individual eligibility	
	Enrollment of qualified individuals into QHPs	
	Single streamlined applications for premium tax credit, cost-sharing reductions, and Medicaid/ CHIP/BHP	
Plan Management	Plan certification, recertification, and decertification	OneGate is fully developed to maintain detailed insurance plan information, including related physician and hospital/clinic network information through integrated bulk import and plan data management functionality. OneGate's SOA architecture is capable of supporting additional plan management processes.
	Plan monitoring and review	
	Plan quality rating	
Financial	Plan assessment, reinsurance, risk	OneGate's SOA architecture is capable of supporting the integration of external financial

Business Area	Future Exchange Function	OneGate Function Readiness
Management	adjustment, and risk corridors	management processes.
	Reconciliation of reductions in enrollee out-of-pocket costs	
	Determination of issuer credits	
	Premium tax credit and cost-sharing reduction administration	
Customer Service	Call Center	OneGate's Internet web portal is fully developed and integrated with OneGate HBE and Screening, Intake, and Application modules. Call center and consumer assistance capabilities are optional features that can be extended in the OneGate Case Management module.
	Internet website – comparative search function, accessible, eligibility determination, enrollment	
	Exchange calculator	
	Consumer assistance including the Navigator program.	
Communications	Outreach and education	OneGate has a fully developed application, notification, and reporting functionality. OneGate provides real-time, automated notification and reporting of system and application information.
	Applications and notices	
	Measurement/Reporting of communication effectiveness	
Oversight	Oversight and financial integrity	OneGate's fully developed reporting function is capable of supporting advanced dashboard reporting for effective oversight and analytics review.

Should gaps exist between OneGate and the full Exchange solution, including regarding state-specific policies, Exeter can provide services to add the necessary functionality. OneGate's modular, flexible, SOA-based design allows components to be added and configured quickly for State requirements and also allows implementation activities to run in parallel, reducing implementation time for a fully compliant Exchange.

2.1.7 Getinsured.com

This section responds to the requirements expressed in the RFI, section C -2 on page 4. Each section is described according to the requirements expressed in the EXCHANGE CORE BUSINESS AREAS/FUNCTIONs on page 14 of the RFI.

Eligibility and Enrollment

SHOP-CFR 155 Subpart H
Employer Eligibility: Getinsured.com is developing a SHOP portal that collects and verifies information, ascertaining the eligibility of the business to participate in the SHOP exchange. Once the Federal HUB is operational, this portal will link to it to confirm the legitimacy of the employer and link the EIN to the list of employees downloaded into the employer's account. Qualified employers can download their employee list using an Excel spreadsheet or by inputting the information individually. Once registered and verified, the employer is directed to a shopping page to select QHPs to offer their employees. The employer can also designate as a "company representative" a broker licensed by the state to assist the employer in the enrollment process.

As an option, the Getinsured.com SHOP portal design allows the employer to select a defined contribution amount to provide each employee towards his or her purchase of health care coverage. (The backroom calculator will deduct this amount from the monthly premium of plans displayed on the "show plans" page and designate such as the "company contribution" as the qualified employee shops for coverage.)

After the registration process is completed, the SHOP will confirm that the employer is now registered with the SHOP exchange and provides the employer with a unique SHOP identification number to provide each eligible employee. The SHOP exchange will also produce "application information sheets" the employer can share with his or her employees, giving instructions on the various ways an employee can proceed to apply for ESI coverage, including the time period during which the application process must be completed and the first date that coverage will begin.

Employee Eligibility: A qualified employee, following the instructions provided by the SHOP to his or her employer, begins the application process by entering the SHOP exchange using the Employer SHOP identification number, along with a user name and password. Once on the exchange, the exchange runs a verification of the identity of the employee before they proceed to complete personal and family health information. This verification process is a check against the listing of employees provided by the employer, their social security numbers and reconciles any name differences that are required before the employee can proceed. When the employer has opted to provide a defined contribution, the SHOP exchange will notify employees of their employer's decision, indicate the amount per month that is being provided, and automatically direct the qualified employee to the Exchange for plan shopping.

In some circumstances, the plan selected by the Employer may not be "affordable "or "offer value" for a qualified employee. This will happen when the SHOP exchange verifies the plan or plans offered by the Employer against the individual's reported income available through the federal HUB (IRS). The SHOP will then provide the Employee with a decision screen to either take advantage of cost sharing and premium tax credits through enrollment in coverage via the Individual Exchange or continue shopping using the plan(s) being offered by the employer. If the

employee chooses to seek a premium tax credit and/or cost sharing, the employee will be transferred by the SHOP exchange to the individual exchange where they will see the premium reduced by the potential premium tax amount, as well as a calculation of the expected reduction in cost sharing for the average amount of cost sharing for the plan(s) they view.

Once enrollment is complete, the exchange then transmits the application information to the selected carrier and completion of the application process is verified back to the qualified employee through the Exchange. The employee will be told the amount of deduction from their paycheck and when that amount will begin. If the application was completed in the individual exchange, the employee will be directed to the various methods for payment. The SHOP exchange will also notify the employer of the plan selected by the employee and the amount of premium to be deducted, aggregated with other payments from employees enrolled with the same carrier and forwarded to the carrier.

Administrative Notices: The SHOP exchange handles all the administrative notices required during the plan year, including disenrollment by employees, termination of plans by carriers, insufficient payments by employers, etc. The administrator of the SHOP exchange will have access to reporting functions that can be extracted using various filters, such as a list of employers participating in SHOP exchange, number of enrolled employees per employer, number of QHPs being offered by each carrier, current open enrollment period for each employer, etc. Overall, the SHOP exchange has a very complex set of functional requirements, some of which are awaiting some decisions from the state and or federal policymakers. Getinsured.com is in the best position to translate these decisions into functional business rules and work flow to stand up the SHOP exchange in advance of the October 2013 deadline.

Certificates of Exemption-45 CFR.200 (b)
ACA §1501 creates an individual responsibility requirement that all Americans maintain minimum essential health coverage. However, the law also outlines various exemptions to the insurance mandate that Exchanges should keep in mind. Religious exemptions include a *religious conscience* exemption, which some states are concerned can be misused, and an exemption for being in a health care sharing ministry. One can also receive an exemption for those not lawfully present in the United States. This means the individual is exempted for the months that the individual was not a citizen or a national of the United States. Incarcerated individuals are also exempt, along with members of Indian tribes.
There are also exemptions for financial reasons. To qualify because you cannot afford coverage6, your required contribution must exceed 8 percent of your household income (determined annually). You can also receive an exemption if your income is below the taxpayer filing threshold. Lastly, there is a general hardship exemption, which is granted at the HHS Secretary's discretion.

Eligibility for Exemptions from the Health Insurance Mandate: The Getinsured design includes a coverage exemption process in which an individual can claim according to ACA criteria and provide supporting evidence based on forthcoming decisions of the WV Exchange Board. Although some exemption requests such as ones based on financial hardship may be handled online via the Federal Data Services Hub, other requests may require original documents or other verification. It is understood that Native Americans will provide some sort of identification that the exchange will link to a federal registry of members of their tribe for certification. If there is a legitimate database that lists all Native American tribe members at the state level, integrating this system with the Exchange's Exemption Module will also be possible.

Other exemption requests may require uploading documentation for review by exchange administrators. The process will utilize business rules and work flow engines to queue the back office processes to provide a timely execution for determination. The Exchange will subsequently verify the data offline and respond to the individual in a timely manner.

If the information submitted is inaccurate or cannot be verified after the verification period, the Exchange will automatically notify the applicant and queue the administrator to take further action to resolve the issue. In all such cases, the procedure to appeal the decision will be provided to the applicant with an on-line link and transfer to the appeal authority. In addition, the exchange will provide notices to navigators, brokers, and employers associated with the account of the applicant that has been suspended or terminated due to lack of sufficient information.

The exchange solution provided by Getinsured will link to the federal HUB and any state specific data bases to both receive and transmit various information concerning exemptions from personal responsibility to obtain health insurance coverage. Some exemption decisions must be made by the state exchange. Those concerning religious conscience will most likely be made by state exchange boards. However, those seeking exemption as a member of a health care sharing ministry will need to be verified with the status of the organization's exemption with the IRS. Others will require confirmation of status with the Department of Homeland Security database. Decisions involving income or MAGI will require linkages to the IRS through the federal HUB. Interfunctionality between data bases will be key to a smooth exemption verification and certification process. Getsinured.com is committed to providing such a solution.

Eligibility Determination 45 CFR 155.200 (e)
Under ACA §1413, the Exchange is expected to develop a streamlined eligibility process that determines the programs an individual is eligible for and thereafter, his or her premium tax credits and cost sharing reductions.

Verifying Submitted Eligibility Data: In order to administer multiple eligibility determinations from one integrated portal, the West Virginia Exchange needs a data verification center that interfaces with federal, state and private systems to verify and record data. Only after this verification is completed can consumers enroll in state health care programs or make purchases from the Exchange with subsidies and tax credits. Getinsured understands that the state has a Rapid Automatic Payment Information Data System (RAPID) that provides an automated facility for administration and management of many of the public assistance programs in the state. Getinsured also understands that the eRAPIDS program is in the process of providing an incremental web modernization of this system to improve a better front end for users. The potential to link or interface with this system will require exploration although the state should be cautious in being overwhelmed with such that might bog down the exchange development.

Federal requirements for interoperability of the exchange are already considered a difficult challenge. Whether or not West Virginia can forego some of these interfaces through the existing RAPID is unknown by this vendor. However, we would welcome the opportunity to review such opportunities with the state while assuring compliance with federal exchange timelines would need to be met.

West Virginia has expressed the need to transition some state-specific government health care programs into the Exchange. Getinsured understands these programs are not currently part of RAPIDS. Putting all government health care programs under one Exchange roof may further ACA goals because it will likely increase efficiency in access to coverage.

Also, some of these programs will no longer be necessary in 2014. However, these are more than just programs. They represent approximately 20,000 citizens whose path to health care needs to continue. Getinsured will work with state health program administrators to design a customized solution if necessary for transitioning persons now covered by AccessWV, the SHAP Demonstration for the Uninsured, the Small Business Plan and the WV Preventative and Primary Care Pilot to obtain coverage through the Exchange. Utilizing the design for outreach and education as proposed by the West Virginia staff, a Getinsured.com solution will provide the nearly 200,000 citizens who currently receive care through the Free Clinics in State with information and assistance for enrollment.

Streamlining Eligibility Determinations and Coverage Enrollment: Getinsured proposes a 3-tiered eligibility determination process. The first tier is straightforward in that it allows Exchange users to opt out of Eligibility Determination and start shopping. This will apply to higher income enrollees who know they will not be eligible for any government assistance for their coverage. The second tier allows for a quick preliminary eligibility determination based on high level information supplied by the user. After input, the Exchange will interface with the Federal HUB and those state designated databases to confirm identity and make a preliminary determination using MAGI of eligibility for Medicaid or federal tax subsidies and cost sharing. For those determined to be Medicaid eligible, they will then be routed to a more detailed questionnaire (if necessary) on the state Medicaid site for application and enrollment. Other specific state programs that request original documents or specialized information may require a third tier of screening, possibly including paper applications and in-person interviews. Getinsured understands that such screening processes are highly inefficient and, at the request of the state, will digitize and integrate them into the Exchange. All Getinsured Eligibility Modules will be rule based and flexible, so that the Exchange can accommodate such workflows.

Upon completion of the application and verification with electronic linkages to the federal HUB and other state data systems, the consumer will go to the shopping page where they will see an array of plans available in their geographic region. Below is an example of a screen shot showing eligibility for tax credits and reduced cost sharing.

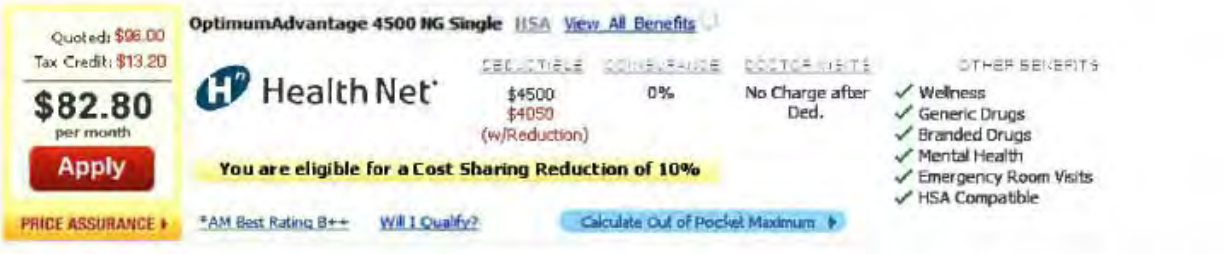


Figure 1.1-1: Consumer Plan Option Adjusted for Tax Credit and Cost Subsidies

Results from Getinsured's Eligibility module will include all government and commercials plans each family member is eligible for, any premium support and cost sharing reductions available to each member, and any exemptions from coverage, if applicable. Such results will also be updated in customer-facing accounts and recorded for administrator auditing and reporting protocols. The Getinsured.com solution will also notify federal entities with appropriate information to process exemptions so taxpayers are not wrongly assessed tax penalties or employers wrongly penalized.

Appeals of Individual Eligibility 45 CFR 155.200 (d)

A Getinsured solution will allow users to notify the Exchange of their decision to appeal an eligibility determination and then interface with the Consumer Services Division (CSD) of the West Virginia Office of the Insurance Commissioner via an electronic notification and response system. Believing that sufficient expertise resides in this Division and perhaps through the addition of more employees, the Getinsured solution would partner with CSD to establish a two-tiered process for appeals. The CSD would serve as an initial reviewer and preliminary decision maker on the appeal. Using business flow rules, when the user is notified on-line that an eligibility determination has been made that excludes him or her from completing the process, the system provides a same screen opportunity to begin the appeal process by a click of the mouse. Modes of notification will include email, automated outbound calls and messages, as well as notices sent via postal mail.

The system will acknowledge the desire for an appeal and will give state specific information on the process and timing of a response. In the back-office administration of the appeal, the user's contact and application information will be shared electronically to a CSD employee account to review and make a preliminary determination of the appeal. If additional documentation is required from the user, the CSD employee can easily communicate with the user via email or USPS. The entire process will be standardized for the state to assure compliance with federal and state laws and regulations concerning administrative review and appeals. Some determinations may need to be made at the federal level or sent forward in the formalized appeal process of the state. The Getinsured solution would pass those through the CSD first before transmitting through the federal appeals process or state appeals to reduce the number that may only need clarification or require more information before resubmitting for redetermination of eligibility. Again, a specific timeline and process would be sent to the user concerning the state or federal determination that must be made, including instructions concerning additional documentation and how that documentation may be made available to the exchange, either in pdf format through an upload or by USPS to a provided address and associated case number tracking. Getinsured will coordinate this component with OIC to include current practices of higher level appeals to circuit court and ultimately the state supreme court. Time periods permitted by state laws and regulations can be built into the business rules engine to provide notifications to queue reviews and actions to complete the process while keeping the user informed as the appeal is processed.

Conditional Approval: In the early stages of the exchange, eligibility determination and dispensation of appeals may sometimes be asynchronous (i.e. ., not instantaneous). Getinsured is committed to build a robust notification system that will be shared with the eligibility and exemption modules. However, we also propose the West Virginia allow for offline, batch oriented determination of eligibility for some public assistance programs and appeal reviews. In such cases, the Exchange will permit conditional review and selection of plans (with subsidies adjustment), with email or telephonic notification of consumers when eligibility processing is completed.

Enrollment of Qualified Individuals into QHPs 45 CFR 155.400
Uniform Enrollment Application: Getinsured will incorporate any common application forms that West Virginia requests into the Exchange project. This includes uniform enrollment and application forms that the ACA requires HHS to develop under §1311(c)(l)(F) (for QHPs), §1413 (for subsidy programs), or any state derivations.

Currently, HHS and the Consumer Information Subgroup of the NAIC are working together to define the field and standards of a common application form that states have the option to

incorporate into their Exchanges. Getinsured will continue to monitor these developments and leverage emerging application standards as they become adopted. The expectation is to create a common application form across all carriers and plans on the Exchange-public or private.

Enrollment Options: Many individuals who are seeking to enroll in health insurance lack ready access to the Internet, and many others prefer to talk to a knowledgeable, licensed customer service agent in order to select and enroll in a health plan. Getinsured has worked with most major carriers around the country to enable applications to be taken over the phone, and to either record a voice signature or request the user to provide an e-signature when they have online access. We anticipate that these technologies and processes will be directly applicable to users on the West Virginia Exchange.

Getinsured will install Medicaid and other state programs and plans on the Exchange. Access can be based on eligibility criteria such as income and citizenship, as well as age, zip code and other factors. Applications for these programs can utilize a common application with commercial programs, or can be specialized for each public program. Alternatively, if West Virginia chooses to leverage existing enrollment methods for Medicaid and other West Virginia health care programs, these users can be directed to existing online or printable forms or phone numbers as needed.

Enrollment Follow Up: Since health insurance carriers have differing levels of electronic transaction capability and different formats, frequencies and methods to communicate enrollments statuses back to the Exchange, Getinsured will utilize its existing, production tested ability to interface with thousands of health plans for exchange status information.

We will repurpose our current processes and work queues to enable follow up with consumers for corrections or additional information, notification of successful enrollment, renewal reminders, provisions for information updates due to the occurrence of qualified events, etc.

Getinsured Exchanges will assist Exchange Administrators in setting Open Enrollment windows for West Virginians to apply for coverage. Additionally, life or qualifying events such as changes in employment, income or family could enable changes in coverage outside of Open Enrollment periods. Such user-inputted life events will be validated as qualifying through the Eligibility Module with changes in enrollment either online or over the phone and notifications automatically generated through triggers designed into the work flow engine.

[Figure 1.1-2 is considered proprietary to Getinsured.com and therefore is not included in this document.]

Single Streamlined Application 45 CFR 155.405(a)
Applications currently differ from carrier to carrier. The Department of Insurance processes for approval in each state also vary. Under the ACA, it is expected that applications will become less complex and more similar to each other (if not completely standardized).

Workflow and Typical Tasks: Many of Getinsured's Enrollment components meet health reform requirements and expectations out-of-the-box. For the West Virginia Exchange, Getinsured plans to leverage its commercial marketplace, experience with design and user flows to create intuitive, easy-to-use plan selection capabilities that include current plan comparison capabilities, including quality ratings for each product.

[Figure 1.1-3 is considered proprietary to Getinsured.com and therefore is not included in this document.]

Rollover Definitions: In order to have an efficient Exchange, users cannot be confused or misled by health insurance terms and concepts that may not be meaningful to a person purchasing health insurance for the first time. Some West Virginia citizens may find the entire process of purchasing health care coverage overwhelming. Getinsured understands this and has experience with building intuitive user interfaces and helpful content to assist users with their health insurance purchase decisions. We will actively work with West Virginia 001 and the consultants working on healthcare literacy to standardize all terms and definitions across all health insurance policies available on your Exchange. The definitions for complex terms can be universally accessed with a simple mouse click. We consider Plan Normalization and the ability to compare plans side-by-side to be a priority not only for user clarity, but also for potential integration with other state systems. The following figure is one illustration of how Getinsured uses mouse hovers to display definitions of health insurance terms in-place on its screens.

[Figure 1.1-4 is considered proprietary to Getinsured.com and therefore is not included in this document.]

The Enrollment module that Getinsured develops for West Virginia will interface with the Exchange's Provider Display function to enable consumers to review and select the health care provider network of a displayed plan. While Getinsured hosts one of the most comprehensive directories of physicians in the nation today, the association of providers with health plan enrollments is an enhancement that Getinsured stands ready to implement as part of the pioneering efforts to improve quality of care in West Virginia. As more citizens are provided coverage, many may seek enrollment by first naming a medical home or primary care provider (either from prior use or recommendation of a trusted friend). Maintaining accurate information in the provider directory that then links to health care plans available on the Exchange will also reduce churning as people move from various government subsidized plans in place now and in the future. For the end user who will still see the same provider or be covered by the same medical home, the experience will appear seamless.

Provision of Tools to Consumers for Multiple Means of Access 45 CFR 155.405(c)(2)
Getinsured's experience suggests that over 60% of the West Virginia Exchange's target population will require interactive (phone, chat) assistance in the course of plan selection and enrollment. Therefore, it is essential that the Exchange integrate a comprehensive customer support center and administrative back-office to complement its enrollment processes. Getinsured can provide these tools because all of our services are industry tested at-scale.

Customer Support Center: Getinsured complements the online shopping and electronic application process with an easy-to-access Customer Service Hotline, which West Virginians can connect to on every page of the Plan Selection and Enrollment Suite. West Virginians have chat interface or toll-free over the telephone. Our customer advisors are trained in providing eligibility determinations, comparing plans, conducting application enrollment and providing support in general to West Virginians without Internet access.

Getinsured can also configure our Customer Service Center to accommodate the multiple ways that West Virginians may enroll in health insurance through the Exchange, including the following:

- Contacting a local navigator for assistance

- Calling a call center number
- Warm transfers from and to OIC/CSD for assistance
- Linking to the CompareCare portal and interoperation with the CompareCare Portal, allowing consumers to search for providers and health plans in an integrated fashion.
- Through tablets placed in primary care centers or travelling exhibitions, or
- Utilizing a kiosk located where users can be found.

Each of these points of contact will be coordinated to ensure that telephony call flows are easy to follow, DNIS information is shared between IVR systems and telephony carriers (if applicable), and participant-specific information entered into IVR telephony self-service menus is entered once and shared with customer service representatives.

Plan Management

Plan Certification, Recertification and Decertification 45 CRD 155 Subpart K
This module encompasses all Exchange functions related to the certification and display of individual and group insurers/health benefit plans. Through this module, information is submitted by insurers and brokers, obtained from federal and state regulatory agencies, and retrieved from third party data sources such as actuarial analysis and rating agencies. Based on this information, insurers and qualified health plans are certified to participate in the Exchange in conformance with federal requirements and West Virginia Exchange Board regulations. The module must allow for review and approval workflows by the Exchange operators and/or State regulators.

The criteria for participation by insurers/health benefit plans in the Exchange typically include the following:

- The availability of qualified health plans (a carrier must have at least one Silver and one Gold plan available and certified).
- The health insurance plan's provider network must have an adequate number of primary care providers, specialists, emergency and urgent care centers, hospitals and diagnostic facilities available in each geography in which the insurer wishes to offer a plan.
- Providers and institutions in the carrier's network must be properly accredited, and must meet minimum standards of quality and cost effectiveness as defined by West Virginia regulations on quality and cost, and conformant with emerging guidance and data from HHS on quality measures for providers.
- Carriers must meet emerging standards for plan quality based on performance in claims payment, enrollment and persistency measures, customer satisfaction scores, financial stability, and other key metrics.
- The Exchange will interface with the All Payer Claims Database in West Virginia to establish baseline data for risk corridors, the reinsurance program and risk adjustment as established by the board in the future.
- Additionally, to continue West Virginia's long-term effort to improve the health care quality for residents, the Exchange can link with national quality measures such as NCQA Hedis, AMBest and CMS STARS to link quality to display quality scores for health plan providers and health care entities.

Getinsured has substantial experience with the capture and normalization of plan data across carriers, and the implementation of algorithms to evaluate group plans, make plan recommendations, and provide estimations of the true cost of health plans for an individual. This

experience will be leveraged in the display and building of calculators as desired by the State of West Virginia.

Insurers seeking plan certification are required to submit the following information to the Exchange, the Secretary and the state health insurance regulatory entity: (i) Claims payment policies and practice; (ii) Periodic financial disclosures; (iii) Data on enrollment; (iv) Data on disenrollment; (v) Data on the number of claims that are denied; (vi) Data on rating practices; (vii) Information on cost-sharing and payments with respect to any out-of-network coverage; (viii) Information on enrollee and participant rights; and (ix) Other information as determined appropriate by the Secretary. This information must be provided "in plain language," as specified in the ACA.

The Exchange takes this information into consideration, along with the information and recommendations provided to the Exchange by the State, when determining whether to make the submitted health plan available through the Exchange. The Exchange takes into account any excess of premium growth outside the Exchange as compared to the rate of such growth inside the Exchange.

The Exchange must support QHPs that provide, at least, the "essential health benefits package," as specified in the ACA, and categorize QHPs as either the bronze, silver, gold, or platinum level of coverage, also as specified in ACA. The Exchange shall also provide a system for rating QHPs in each benefits level on the basis of the relative quality and price.

In addition to the initial certification process for health plans, the Affordable Care Act also requires Exchanges to support the process of review and approval of rate increases, and to make such information available to the public. Exchanges require issuers of QHPs to submit a justification for any premium increase prior to its implementation, which will be posted on the plan's website.

Plan Certification Technology in Production

Getinsured proposes to leverage the plan certification screens and technology that has been developed and is in use today to determine which carriers and plans will be displayed in its commercial exchange. Figure 1.2-1 below, is an example one such screen.

[Figure 1.2-1 is considered proprietary to Getinsured.com and therefore is not included in this document.]

We recognize that the criteria used to determine whether a plan is displayed in a particular geography in the existing commercial Exchange are different from that specified by the ACA, and that the precise criteria for a issuer, plan or broker to be certified for participation in the Exchange have not yet been determined. Getinsured's decisions are currently based on the plan's market share and competitiveness in relation to other carriers and plans on offer in a state, the financial stability of the carrier as determined by AMBest, on the appointment of Getinsured as an agent of the carrier in question, the approval of the Getinsured online presentation of plans by the compliance division within the carrier, and the availability of application submission and status update interfaces at the carrier site.

The Getinsured system will be enhanced to include the data needed for certification of carriers or plans by the Exchange operator or state regulators, and to implement the negotiation and approval workflows between insurers or brokers and the Exchange or state regulators.

Additionally, portals will be developed for representatives of the carriers and state OIC to log into the Exchange and perform the upload of necessary information.

With regards to the provisioning benefit information, the normalization of plan data, and the capture of information that will enable the estimation of true health plan costs for the consumer, Getinsured will modify the plan management and provisioning tools that are in use in the commercial Exchange, and will enhance these tools to encompass premium subsidy and cost sharing data in conjunction with the Eligibility module. Figure 1.2-2 below shows a screen capture of an existing Getinsured screen that is used to manage, review and update key benefit and plan family data for thousands of plans today.

[Figure 1.2-2 is considered proprietary to Getinsured.com and therefore is not included in this document.]

This data is in turn used on the commercial Getinsured exchange to enable filtering of plans based on key benefits, side by side plan comparisons, and to generate recommendations based on user demographics and preferences. The following figure illustrates how benefit information about plans can be displayed in a "layered" manner based on information that is stored and managed in the Plan Management module described here.

[Figure 1.2-3 is considered proprietary to Getinsured.com and therefore is not included in this document.]

Key Modules

The Application for Plan Certification consists of a three-layer architecture in which the presentation, business object and data services layers perform the following functions:

The Presentation Layer encompasses the portals for the various constituents of the Exchange. This includes an Insurance Carrier Portal to enable carriers to provision plan data and provide supporting information for the certification process and rate increases, a portal that enables regulators at the state's Department of Insurance to review and certify the plan submissions and rate increases, and a portal for CMS to submit additional information about the issuer.

Additionally, a Reporting portal will enable the Exchange operator to extract key metrics and reports that are necessary for ongoing operations, and to support the recertification process. With partners, we are developing a Risk Management tool that identifies potential actuarial risks of specific plans by time, network and other categories as identified by the state. This is an area of emerging development that Getinsured would work closely with the state to provide a solution that fits the needs of the state in the exchange.

The Business Services Layer encapsulates the core and supporting business services provided by the Plan Management Application. This includes services to:

- Establish Issuer and Plan Initial Certification and Agreement
- Monitor Issuer and Plan Certification Compliance
- Establish Issuer and Plan Renewal and Recertification
- Maintain Operational Data
- Process Changes in Plan Availability and Enrollment
- Review Rate Increase Justifications

The Data Services Layer abstracts the data that underlies the application. It includes the database that stores detailed information about the plans as well as all ongoing operational data associated with the plans. The Data Services Layer will also house information selected by the state for purposes of conducting risk adjustments in the individual and small group marketplace.

The Data Exchange Interfaces infrastructure includes exchanges with CMS and other third party sources such as AMBest or NCQA for plan quality data such as financial stability, claims experience, provider network adequacy or health care best practices for specific conditions and procedures.

[Figure 1.2-4 is considered proprietary to Getinsured.com and therefore is not included in this document.]

Plan Monitoring and Review
Getinsured is fully prepared and field-tested to provide and train various levels of administrators to run the Business Operations Dashboard for purposes of plan monitoring and review. We have the experience and resources to train state employees in Getinsured back-office expertise. All training and support is comprehensive, meaning that we address practical troubleshooting issues that back-office operators will face in managing an Exchange's various stakeholders and data matching arrangements.

However, not all Exchange administrators should have the same roles, rights and privileges in the Exchange's back office. For example, a customer support specialist should not have the ability to certify submissions for Qualified Health Plans.

Getinsured therefore proposes the tiered-training program for Exchange administrators, providing different levels of interaction with data on the Exchange.

The *Super Administrator* has the highest level of roles, rights and privileges on the Exchange. In addition to a thorough understanding of all aspects of Exchange software, the Super Administrator is tasked with assigning limited rights to new Exchange employees, brokers and other third parties (if necessary).

After the Super Administrator, WV will have broad discretion on how to limit the rights and privileges of its other Exchange employees for plan review and monitoring. Potential bases for training administrators and limiting their back office rights include:

Plan Certification Administrators: responsible for certifying a health plan according to ACA and WV insurance requirements

Oversight and Governance Administrators: responsible for monitoring and reporting data to government organizations for verification and compliance analysis, certification, recertification and decertification of plans

Rule Engine Administrators: responsible for changing Exchange business rules and enrollment based on changes made by policymakers.

Financial and Accounting Administrators: responsible for monitoring financials such as broker payments, carrier payments, government subsidies and tax credits

Currently, Getinsured requires brokers and Exchange administrators to complete online and in-person training courses that are based on curriculum specific to their desired role on the

Exchange. Upon completion, they must also pass an examination that is tailored toward their specific Exchange role (>85 percent correct is passing). To account for future innovations to Exchange software and technology, we also conduct periodic continuing education classes and reexaminations.

Another important aspect of plan review and monitoring will involve collection of uptake information, patient claims data, level of health of various populations of QHPs, and other information yet to be determined for purposes of reinsurance, risk adjustment and risk corridors. Getinsured has experience with collection of matching costs and quality information with carriers and providers and stands prepared to work closely with the OIC and the WV Exchange to provide appropriate plan review and monitoring to comply with the ACA.

Plan Quality Ratings
It is important that West Virginians be fully aware of a carrier's reputation before making difficult healthcare decisions.
The commercial exchange operated by Getinsured.com is the only exchange providing NCQA ratings in the commercial marketplace. It provides customers with meaningful quality ratings about an insurer's financial strength, provider network, coverage of chronic conditions, and plan structure and benefits. As the ACA requires under §1311(c)(3)-(4),

Getinsured will incorporate HHS-developed plan rating and enrollee satisfaction systems into the Exchange consumer interface. Quality metrics developed by the state will also be incorporated into the plan selection and enrollment process, so users have access to a comprehensive set of quality information during the decision making process.

[Figure 1.2-5 is considered proprietary to Getinsured.com and therefore is not included in this document.]

In our administrator back-office, West Virginia Exchange administrators can manage and update the quality ratings that consumers will see. Exchange operators have the option to display the plan quality ratings of any number of reporting entities, whether they are from government-rating entities such as the Department of Insurance or HHS, independent watchdogs such as AM Best or NCQA, or user-generated ratings. Aside from HHS ratings, the number and type of quality ratings that the Exchange displays are the discretion of the state.

Financial Management

Plan assessment, Reinsurance, Risk Adjustment, and Risk Corridors 45 CFR Part 153
When Risk Management comes online, data elements identified by the state will need to be collected concerning certain population health factors for purposes of risk adjustment. While gender rating will not be allowed and age rating will be somewhat limited, rating adjustment for smoking will be allowed under ACA. Other health status adjustments are not allowed. Yet, health conditions will need to be collected in the data sets for the plans in order to accomplish the risk adjustment task (i.e., to adjust payment to health plans based on differences in expected costs due to differences in measured morbidity). Getinsured has over six years of experience working with insurance carriers and can easily establish the necessary framework as determined by HHS or the state exchange to capture and analyze claims information and pool census data to be used in risk adjustment. Since much of the required information will only be collected following enrollment in the Exchange, the Exchange will need to collect this data from the carriers based on claims information. States, such as West Virginia, seeking to monitor uptake within various vulnerable populations, will also need access to other information

collected by the carrier and in the Exchange. Getinsured will work closely with OIC and other WV agencies to develop an Exchange that will monitor health disparities and unfavorable outcomes in health care for the state in an effort to reduce the high expenditures associated with these occurrences. West Virginia is ahead of the game with its All Claims Payer Database in collecting valuable information to assist in this process of associating quality care with provider and plan selection. This will be seen as a possible strategy in eliminating adverse selection.

This module also needs to enable the storage and display of benefit information for QHPs in a normalized and standardized manner, such that consumers or employers can compare plans side-by-side in an intuitive and easily understandable fashion. Information captured about health plans must include the data required to support a calculator, so the Exchange can estimate the cost of a plan to an individual and employer, after subsidies, cost sharing reductions and employer contributions. Plan assessment, reinsurance, risk adjustment and risk corridors (a federal program yet to have regulations promulgated) design is a function of the Exchange staff. Getinsured.com will work closely to incorporate this into the exchange data system and develop reporting tools using Business Engines, Crystal Reports and Work Flows that serve the needs of the state. A close interaction with the contractor on the APCD will be sought to maximize information sharing to assist in the development of consumer tools like the WV CompareCare as well as administrator facing functions for quality analysis and risk adjustment.

Reconciliation of Reductions in Enrollee Out-of-Pocket Costs

At the time of the submission of the West Virginia plan narrative for Level II funding, few decisions had been made concerning the exchange calculator and reductions in enrollee costs. Getinsured.com solution has worked closely with other entities working on state exchanges to understand and implement appropriate technical design to display reductions in the premium costs during the shopping experience. This requires interface with the highly anticipated but yet produced federal HUB to verify income information for calculation of MAGI and various calculations concerning premium tax credits and employer contributions in the SHOP exchange. As provided in the ACA, the contributions for enrollee out-of-pocket costs increase the actuarial value of the policy but little is available on the payment flows and business rules and processes that would support such increase in actuarial value.

In the current health care marketplace, the patient pays some initial co-payor pays costs then applied against the deductible directly to the medical provider. The medical provider then submits charges to the insurance carrier or government program for payment. Often the allowable payments result in payment discounts. These are then reconciled and the patient receives a "balance due" for payment to the medical provider. The process for payment of the "reduction owed" the patient towards out-of-pocket costs is yet undetermined. However, as set forth below, Getinsured has vast experience with complex sifting and sorting of payment information, collection, aggregation and disbursement. A Getinsured solution would draw on this expertise to assure compliance with federal and state regulations in this area. Getinsured eagerly awaits the notices of proposed rulemaking on this area with the understanding that the payments to supplement "out-of-pocket" costs for a qualified individual will be aggregated in some way and paid in a manner to be most expedient for this approach to consumer assistance.

Determination of Issuer Credits

Another important exchange functionality but in the "yet to be determined "category as far as information and proposed rules is the determination of credits for carriers during the risk adjustment process and, more importantly those that will be paid or due in the risk corridor

process. Getinsured.com will develop a compliant solution to this area and looks forward to the design challenge once more information is made available.

Premium Tax Credit and Cost-Sharing Reduction Administration
Following the public program screening, the next important aspect of eligibility is the amount of subsidy and cost-sharing reduction for each individual. Information concerning these two subsidies is still emerging. For the novice, there may be some uncertainty and difficulty distinguishing between Premium Tax Credits and Cost-Sharing Reduction subsidies on the Exchange. While both are based on median-adjusted gross income, tax credits apply to premiums, whereas cost-sharing reductions apply to out-of-pocket spending (co payments, co-insurance, and deductibles). In any case, for eligible enrollees, the exchange will need to be able to access both tax credits and cost sharing reductions (ACA §1401 and 1402).

The standards for determining the amount of premium assistance have been set by HHS based on the percentage of income the cost of the premium represents (sliding scale between 133%-400% FPL). After eligibility is determined, Exchanges will calculate premium tax credits available to the consumer as they shop for their health care plan (§1412).

In cases where premium tax credits are paid based on misstated incomes, the Exchange needs to recoup funds – also called repayment scenarios.

Regarding cost sharing reductions, for individuals with income between 100 and 200 percent of the poverty line, costs are reduced by two-thirds. For individuals with income between 200 and 300 percent of the poverty line, costs are reduced by one-half. For individuals with income between 300 and 400 percent of the poverty line, costs are reduced by one-third. [9] [10]

There are many unknowns at this time on how these payments will be made and to whom. Normally, cost sharing is part of out-of-pocket expenses paid by the patient to the medical provider. How these payments will be reduced appropriately and the balance paid to the provider is not yet clear. However, Getinsured.com's vast experience with payment processing will provide the state with an early start on implementation when these answers are provided.

Tax Credit Administration: The Tax Credit Administration modules of the Getinsured solution will allow administrators to manage the Premium Tax Credit eligibility and administration process. The module interfaces with federal and state data matching arrangements to verify incomes and when appropriate, provide payment information to the United States Treasury to supplement premium payments to insurance carriers in compliance with ACA design.

Customer Service

Call Center 45 CFR 155.205(a)
Getinsured.com currently operates a call center from its location in Atlanta, Georgia, that services over one million customers on the commercial exchange annually. A Getinsured solution can be to equip that call center with state specific scripts where the user who calls is

[9] Health care reform: Tax credits and cost-sharing reductions, Mary Ann Heath, Daily Press, 2/28/11. http://www.dailypress.net/page/blogs.detail/dlsplay/100/Health -care-reform-Tax-credits-and-cost-sharingreductions.html#membercmts100

[10] Premium Tax Credits and Costs Sharing Reductions, Health Reform Issue Briefs, Office of Health Reform Integration, Amerigroup
Real Solutions in Healthcare, Volume 1 Issue 16, 11/2010. http ://hcr.amerigroupcorp.com/wp-content!uploads/2011/ 02/Vol-l Issue-16.pdf

guided through the highly scripted process of plan selection. If the state determines to utilize an existing call center, Getinsured's experience with customer interface can assist in training call center operators in West Virginia in the nuances of the commercial market. In addition, the Getinsured Center can augment service support, provide overflow support for, or simply connect with other existing call centers in the state.

Caller information is shared through automated screen pops when back-end systems are integrated to the exchange. A non-licensed Medicaid service representative, for example, may have read-only access to a caller's contact record that will be automatically available in the exchange when a call is received, in order to provide status for their application.

Getinsured can provide extended hours of operation (e.g. Saturday hours), overflow call support when call volume is high to prevent high call hold times, or receive all participant calls ourselves for the Exchange program. All calls will be recorded, and the recordings will be available to authorized personnel through a single click in the administrative interface for training, compliance or regulatory needs. We will work with the West Virginia exchange to develop a customer service model that best unifies any existing and potentially expanded call centers now operated by the state.

A call center is one area where the Exchange Board might pursue some shared costs by seeking a regional approach and offering call center services to surrounding states. Although housed in West Virginia, a regional call center could serve as an economic booster by providing employment opportunities to West Virginians that could be trained to provide customized call center services, very similar to the operators now employed by Getinsured in Atlanta who handle over 6000 health care policy products in the commercial market. West Virginia has already indicated the need to use means other than internet to reach the rural areas of the state. Likewise, a regional call center, using state specific scripts and linking incoming calls to zip codes, could easily guide a consumer through the health care purchasing process, offering explanations when necessary to further clarify any terms not understood by the caller. Call center operators could also provide soft transfers to state specific programs once eligibility is initially determined during the call, keeping the customer on the line to continue the application process. Using the Getinsured experience as a model, we believe callers prefer to connect with a real person without having to input several numbers on a computerized answering service. Getinsured can explore this possibility of setting up a regional call center to serve other contiguous states at the request of the Exchange Board.

Internet Web Site 45 CFR 155.205(b)

1. Provide standardized comparative information on each available QHP

As stated earlier, the determinants of QHPs are mostly still unknown. Getinsured's current commercial exchange provides for comparative shopping of various plan offerings. Such information allows the shopper to see additional information concerning quality ranking provided by NCQA and the ability to clarify terms using a roll-over feature of the screen for "terms of art" in the insurance industry. With this experience, Getinsured stands ahead of most others in ability to provide consumers with a first class shopping experience out-of-the box. Most of the details will take place in the back-office operations of the exchange using input from the Exchange Board and carriers to build the plan display that will best serve the state. Getinsured has already developed the software processes to off-set premium costs with the various contributions for which the enrollee is determined eligible so the consumer see these and the final costs to be paid by the consumer. Final costs to the consumer are the stated preference of the federal government in both the individual and SHOP exchanges. Getinsured agrees and will

act swiftly once details of QHPs are finalized to implement these into the exchange "show plans" system for customer shopping.

2. Accessible to people with disabilities

Section 508 seeks to set the minimum level of accessibility for users with disabilities (vision impaired, deaf, limited motor control or dexterity). Internet pages and web-based services must focus on the W3C guidelines for accessibility.

The guidelines translate into the following development practices that will be employed in the implementation of the West Virginia exchange:

- Inclusion of ALT text for all graphics.
- Comprehensive use of image maps.
- Inclusion of link text that is meaningful to end users.
- Attention to keyboard navigation as an alternative to the mouse. For instance:
    - Use TABINDEX attribute to specify proper keyboard navigation order
    - Use ACCESSKEY attribute to provide access keys for all controls and for links that act like controls.
- Provide alternative text, images or pages to all controls and applets that may not render in text devices or browsers.
- Avoid the use of frames, and provide alternate pages if frames are used.
- Construct semantically structured tables that can be navigated by text browsers.
- Support the reader's formatting options so as to allow font size and style changes based on the user's preferences.
- Do not require the use of style sheets - pages must be readable and render correctly if the device or browser does not support style sheets.
- Avoid scrolling marquees, and other applications and formats that may not be supported.
- Provide titles for most objects

The development process will leverage accessibility support and controls provided in Visual Studio 2008 and ASP.NET to comply with these standards. Design-time accessibility validation will be performed with Visual Studio tools. Rendered HTML pages can be tested with appropriate validation tools (http://www.w3.org/WAI/ER/tools/complete.html) to identify and address potential issues with accessibility.

Before delivery the final pages will undergo testing on screen readers like JAWS, and test-only browsers like Lynx & Links. Some testing with these tools will also be done at the design/prototyping phase to validate design decisions for ensuring maximum compliance.

3. Publishes [certain] financial information

Getinsured proposes to leverage the experience we have gained from handling payments and notifications for consumers and insurers for a variety of health insurance products, and enhance the robust and HIPAA, PCI and GLB compliant payment platform that is in place to address the needs of the Exchange.

The existing Getinsured system includes:

- The ability to schedule payments and transfers based on insurer requirements and consumer preferences. For example some insurers require premium payment upon

application while others request payment on the effective date of coverage. These preferences are stored in the system and are used in processing payments.

- The payment model interfaces to payment gateways to enable multiple modes of payment, and with insurers to transfer aggregate payments and disbursements between associations and multiple insurers on "bundled" insurance products that consist of multiple types of coverage.
- A comprehensive alert and notification system, and work queues that are essential for Exchange administrators to process confirmations, and handle exceptions such as payment failures (NSFs), expiring credit cards, and invalid accounts.
- A notification and communication system that will be used to generate invoices and notifications, and contact consumers or financial services agencies as needed.

The following figure is a screenshot of the payment screen that helps in tracking each payment initiated through the Exchange. This screen would be used by back office administrators to manage the workflow of individual applications based on the payment status.

[Figure 1.4-1 is considered proprietary to Getinsured.com and therefore is not included in this document.]

A web based form is available for capturing financial/payment information from the consumer. Real-time validation of the financial information is performed upon the submission of this form. After successful validation, data is encrypted and stored in a PC! compliant database. The following is a screenshot of a form that captures payment information.

[Figure 1.4-2 is considered proprietary to Getinsured.com and therefore is not included in this document.]

The system is also configured to alert consumers in an automated fashion 2, 4 and 6 weeks before expiry of a credit card on file. These email alerts include a self service link that enables the user the authenticate themselves and provide updated financial information. New financial information provided by the user is validated in real time, and the necessary changes to recurring payments are made automatically so billing transitions from the old account to the new account provided by the user.

4. Provides information about Navigators, etc

The Affordable Care Act requires Exchanges to establish a Navigator program in Sections 1311(d)(4)(K) and 1311(i). Navigators will provide fair and impartial, culturally and linguistically appropriate information and facilitate enrollment in QHPs and subsidy programs. Information about the work of the Exchange staff in West Virginia indicates that navigators will be required to be licensed and have a working knowledge of the insurance market as well as government subsidized programs before they can provide services on the exchange. Getinsured will work closely with the Exchange Board or whatever entity ultimately is responsible for this licensure program to keep real time records of all navigators and their credentials.

Getinsured has a proven capability to work with third party insurance agents, and will bring that experience and technology to bear in enabling Navigators to provide assistance in plan selection and possible enrollment to individuals, employers and employees. This capability will leverage an existing agent portal that enables navigators to review their client data, and to generate reports to track and manage clients. In health reform news, there has been concern regarding what the Navigator program means for traditional health insurance brokers.

Exchanges that do not provide for them are susceptible to backlash from the broker community in their states. Getinsured understands this reality and will work with OIC, the West Virginia Exchange Board, the stakeholder groups and working groups as policies are refined concerning the role of the Navigator. Some states are considering limiting the navigator role to that of assistance in selection but prohibiting enrollment activities. These would be reserved for plan brokers or other exchange personnel. Again, as more structure is developed by West Virginia, Getinsured stands ready with a viable program that can be adapted to meet those requirements.

A perhaps logical responsibility of Navigators is ACA provision §2201, which requires West Virginia to set up procedures for conducting community outreach and facilitating enrollment assistance to underserved and vulnerable populations who may be eligible for Medicaid and CHIP. Again, placing the SHAP tablets in the hands of Navigators, Getinsured understands that West Virginia plans to provide virtual agents for enrollment. Linking Navigators, their contact information and these tablets to the Exchange for outreach purposes will bear fruit on increasing enrollment for health care coverage.

The Navigator management engine is part of the Business Operations Component exclusively for management of the state's Navigator program. From the back-office interface, administrators can review Navigator activity and enrollment efforts. They can access and edit automated emails, work queues and Navigator profiles. The module also facilitates Navigator sign up and provides useful analytics in distinguishing effective and ineffective Navigator practices. The virtual enrollment agents, or tablets, can provide a link to the navigator if additional information is needed. Any compensation for navigator assisting with plan selection can also be disbursed through the exchange based on input from the navigator. Measures will be taken to be sure to limit fraud and abuse.

Some states are pursuing various means of compensating navigators that is performance based although not directly linked to plan enrollment. Past experience has shown that workers who are paid regardless of their performance tend to perform poorly. Workers whose pay is dependent on meeting certain benchmarks will achieve more favorable results. For this reason, analysis of performance indicators attributable to isolated or rural areas will serve the administrator well in seeing areas where access to coverage is lagging. Navigators can then be commissioned to that area (if it is geographic) or subgroup (if it is population specific) to push for increased enrollments. Reducing health disparities through maximizing the utilities of the navigator system will serve to improve the over-all risk pools for West Virginians, and lower health care costs for the state.

The Navigator/Broker Managements System consists of the following functions:

- Account Creation and Setup
- Financial Data Management
- Broker/Navigator Account Management Analytics
- Broker/Navigator Authorization and Eligibility

The diagram below illustrates the work flow of Broker/Navigators in the Account Administration database. Getinsured looks forward to demonstrating the Exchange functionality for this system to the state.

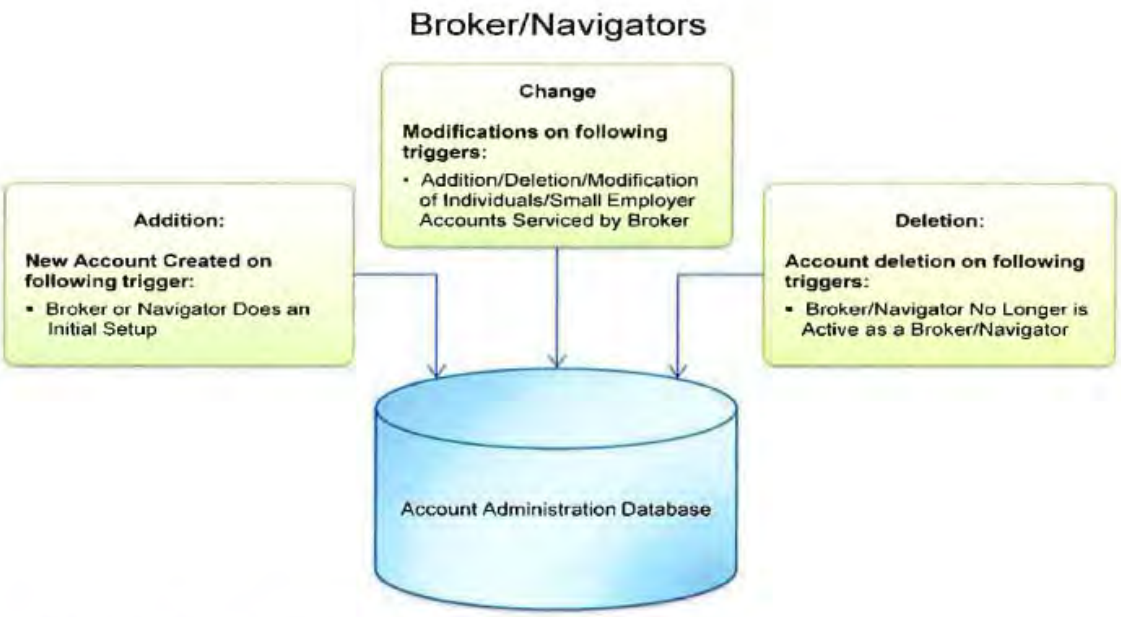


Figure 1.4-3 Broker/Navigator Work Flow

5. Allows for an eligibility determination

Given that increased access to healthcare is one of the key objectives of the ACA, the functionality associated with the West Virginia Exchange's Eligibility services is critical to the user experience and ultimate participation in the West Virginia Exchange. The expansion of Medicaid, availability of federal subsidies for individuals and households, and the new standardized definitions of income (MAGI) and household size will transform the healthcare landscape in the United States. With Getinsured, West Virginia users will determine their public programs and subsidized health insurance coverage from a single streamlined interface. Users will also provide a broad range of information to the Exchange, which will be securely verified, processed through business rules and communicated back to the customer in a timely manner.

Public v. Subsidized Commercial Health Insurance: Before the user can view their options for commercial insurance and potential subsidies, the Exchange should first screen the applicant for public programs such as Medicaid or CHIP. The ACA requires Exchanges to conduct such determinations on the basis of MAGI. The CBO estimates that nationwide enrollment in Medicaid will increase by 16 million members by 2019 as a result of health reform. Although West Virginia has done an excellent job in enrolling children in Medicaid and CHIP, for the first time, nonelderly adults will be eligible for Medicaid assistance. West Virginia should be congratulated on the RAPID that currently interfaces with several public programs and determines eligibility and benefits. Getinsured awaits a decision on the level of interoperability that this system will have with the exchange. The state has openly acknowledged the low literacy rate and low health care literacy of the state. Because over 60% of the current uninsured, nonelderly population in the state have some connection to work, the development of a robust enrollment process to serve small employers through SHOP will be key. However, many employees may seek tax credits and cost sharing through the West Virginia exchange. The single portal solution, sometimes called "no wrong door" provided by Getinsured.com will be vital to the success of the West Virginia exchange. Whether through the SHOP Exchange or

the Individual Exchange, the West Virginia Exchange program needs to be prepared for a significant increase in the number of people served.

Getinsured proposes a 3-tiered eligibility determination process. The first tier is straightforward in that it allows Exchange users to opt out of Eligibility Determination and start shopping. This will apply to enrollees whose income exceeds 400% FPL. The second tier allows for a quick preliminary eligibility determination based on high level information supplied by the user. Users will then be routed to a more detailed questionnaire if their preliminary information shows that they are eligible for public program coverage, mandate exemptions or income-based subsidies. Specific state programs that request original documents or specialized information may require a third tier of screening, possibly including paper applications and in-person interviews. Getinsured understands that such screening processes are currently cumbersome and highly inefficient and will work with the state to digitize and integrate them into the Exchange. All Getinsured Eligibility Modules will be rule based and flexible, so that the Exchange can accommodate such workflows. As additional programs come "on-line," Getinsured will work with state agencies such as SNAP and TANF to fully integrate the eligibility determination processes into the Exchange.

Eligibility determination is one of the key exchange functions. For this reason, Getinsured has invested considerable resources in developing this module for the Exchange. Figure 1.4-4 below provides a high level design overview for how eligibility determination works. In summary, eligibility determination consists of the following steps:

Intake of data elements needed to make the determination. This is accomplished by the eligibility module by accessing the account database for the family in question. This process is also seeded by the Exchange portal (a) which invokes the eligibility module (b) with the inputs specific to this user.

Verification of data-elements. This is accomplished by the eligibility determination module by accessing critical third party data-bases such as the Federal Data Services Hub and other state labor databases (g). Identity and uniqueness need to be confirmed prior to input of additional information. If the Exchange finds the same name and social security number already in the Exchange, an error message is generated on screen for resolution by the enrollee.

Running the business rules to make a determination. This is accomplished by the eligibility module by running the verified data through a business-rules engine (e). The outputs of this determination process would include: (a) the program(s) the individual is eligible for; (b) the subsidies if any the individual is eligible for; and, (c) the exemptions if any that the individual is eligible for.

Communicating the eligibility information back to the user. This is accomplished through a notification engine, which consists of a web user interface and other auxiliary communication mechanisms (which may include email, phone, or letter-based notifications).

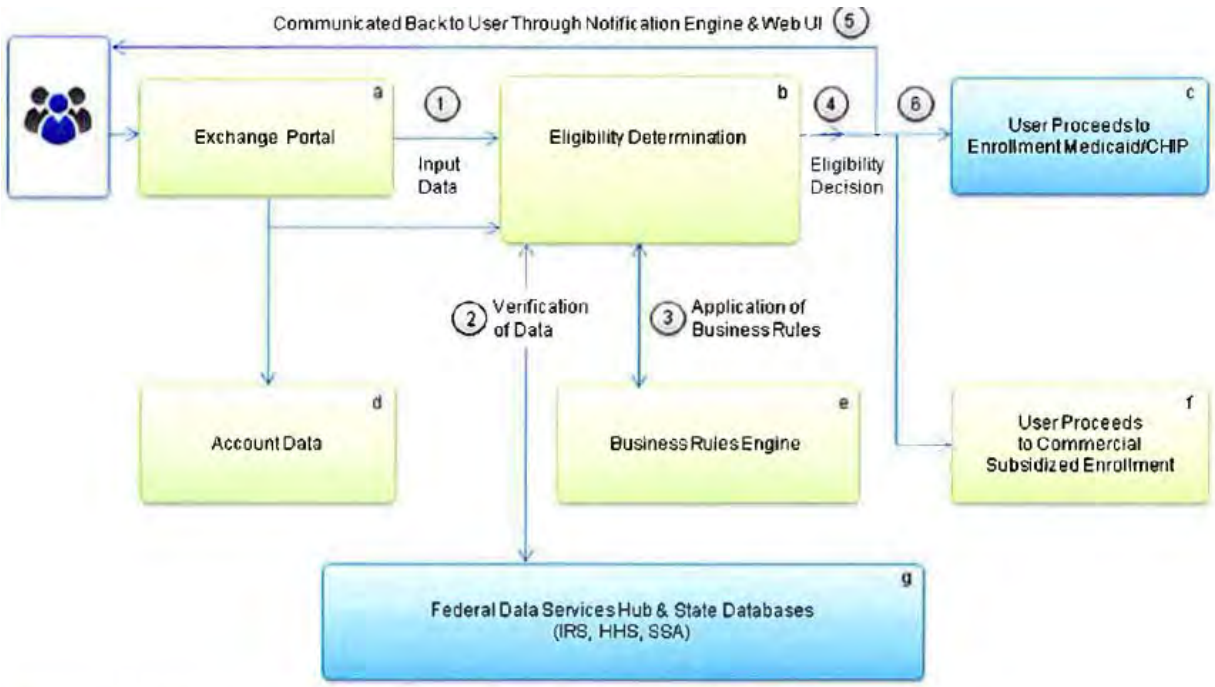


Figure 1.4-4 High Level Diagram of Eligibility Determination Process

6. Allows for enrollment in coverage

Passing the user along to the enrollment process, or returning eligibility results to enrollment upon request. Once the user has determined what programs he or she is eligible for, the next step in the process is to engage in plan selection and enrollment.

Multi-Channel Support

The Getinsured Exchange platform seamlessly unifies multiple modes of interaction with West Virginia residents seeking to enroll in health insurance coverage. These include:

- Online - Users can choose to interact with the Getinsured Exchange - select a plan, complete enrollment, and receive confirmation and enrollment materials exclusively online.
- Telephonic - toll free numbers are made available on every page so users who have questions or require assistance navigating the wide array of choices available online can call a licensed agent. Residents can also fax eligibility and enrollment materials directly to the Exchange's fax line.
- Chat - West Virginians can interact with licensed agents or customer service representatives via online chat capabilities, and at any point in their interaction they can choose to resume their online shopping or call our agents to complete their transaction. The chat interface can be triggered by time on site, time spent idle, or during a specific business process such as eligibility determination or enrollment.
- Email - Clients can request recommended plans or proposals to be emailed to them, and can interact with Get insured.com Proposal: West Virginia Health Insurance Exchange, RFI# INS12009 19 their representatives through an email ticketing system. These emails become a permanent part of the caller's contact record and can easily be referenced over

time for historical purposes. Additionally, customers receive both custom and automated emails regarding account status issues and updates. Exchange brokers and administrators have access to the email templates in their account interfaces.

All calls to our Getinsured help center are recorded, emails and online interactions are saved, and a longitudinal customer service record is made available that documents all interactions with the client. Additionally, the Exchange can condition notifications to West Virginia residents on the basis of determinations made by the business rules or workflow engines. For example, after an Exchange produces eligibility determination quotes for a resident, the Exchange can automatically email those same coverage quotes to the resident.

Figure 1.4-5 Online Chat Capability

In addition to the above, our company also has the capability to support expanded ways to interact with West Virginia residents that may include:

- Mobile: Getinsured supports applications that allow consumers to access our Exchange through smart phone (iPhone and Android) platforms.
- Local Offices: Getinsured has the capability to partner with West Virginia Social Services or other agencies to enable walk-in users in local offices to get assistance with plan selection and enrollment.
- Kiosks: Getinsured can work with the state to make kiosks available in community centers to populations who don't have online access or connectivity in their homes.
- Click-to-Call: West Virginians can also request that a licensed agent call them directly. This program capability would be particularly useful for users who do not have access to a local office and are interacting with a kiosk located in a remote location.
- MMS/Text Messaging: Getinsured agents have the capability to share status, alerts, or other messages to West Virginians through MMS/Text Messaging.

Getinsured will ensure that all of these messaging capabilities are compliant with state, federal, and agency security and regulatory policies. While we do not recommend launching all of these channels in an initial pilot launch, the capabilities are available for introduction as the Exchange program expands over time in participation and sophistication.

Exchange calculator 45 CFR 155.205(c)
The application of federal premium tax credits and the estimate of average cost-sharing amounts will be developed through the use of the Exchange calculator. The calculator will be key to providing net premium costs to consumers in the exchange. Some states have expressed an interest in also providing access to the calculator to those who bypass an eligibility determination. This would allow a person to quickly estimate if they qualify for any reductions as they shop for their health plans. After January 2014, some eligibility will be simplified since the assets-test drop off Medicaid programs. However, many states, including West Virginia, have additional programs through waivers where eligibility requirements vary. Getinsured.com will work closely with the state to input benefit plans and eligibility requirements for the various state programs that will continue beyond January 2014.

At present, the Getinsured solution can easily incorporate business rules that adjust premium tax credit amounts based on MAGI information obtained from the federal hub when it becomes operational. The more difficult calculation will be in offering an estimate of the cost-sharing amounts based on the MAGI information and average medical care utilization. Getinsured.com understands the over-all impact of the design for low income consumers to benefit from cost sharing. However, the fine details are still unknown. For example, when a consumer with extremely low income purchases a Silver plan on the exchange, it effectively becomes a Platinum plan by shifting the actuarial value from 70% to 94% due to the assistance they will receive on total out-of-pocket costs. In today's world, the consumer usually pays the deductible(part of the out-of-pocket calculation), the provider then bills the carrier, the carrier determines the amount to be paid under the plan and pays the provider, and the provider bills the consumer for the balance due (the balance of the out-of-pocket). Under ACA, somehow the consumer will be relieved of a portion of the out-of-pocket but it is unclear how the provider will be compensated and who will pay such.

Below is a screen shot of a user shopping experience prepared for a demonstration for the Nebraska Exchange. The amount of employer contribution is subtracted from the premium amount to show the net premium due from the user.

Figure 1.4-6 Shopping screen shot on state exchange web-portal.

Consumer Assistance including the Navigator program 45 CFR 155.205(d)

[Figure 1.4-7 is considered proprietary to Getinsured.com and therefore is not included in this document.]

The above graphic demonstrates some key similarities and differences between navigators as conceived in ACA and brokers. Many states are agreeing that navigators must have a minimal level of expertise that will be licensed or certified by the state for them to interact with the exchange on behalf of others. All seem to agree that they will be prohibited from directing consumers to selection of commercial health plans. Yet to be determined is a means of compensating and incentivizing navigators to serve the system so enrollment is maximized for exchange sustainability after January 2015. Below are some preliminary thoughts concerning the interface of the exchange with Navigators:

- The Exchange could recruit and work with brokers and Navigators in the manner of a managing general agent in the commercial health insurance market-place. A managing general agent today manages premiums, plans, rates, enrollments and payments to licensed brokers on behalf of a plan or set of plans. This function is not too dissimilar from how the Exchange will need to manage brokers and navigators.
- Expanding on the model above, unlicensed navigators could also serve all administrative and eligibility functions of the Exchange outside of plan selection.

- Exchange business models must support both brokers and Navigators. While brokers can be compensated on a per-policy basis, Navigators cannot. Therefore Navigators will need to be managed through service and enrollment goals.

The Consumer Assistance Program (CAP) within OIC currently provides West Virginians with assistance for complaint inquiries and filing complaints during the internal and external appeals process. West Virginia may decide this program office will be the logical place to house or train navigators to serve throughout the state. If Navigators are positioned throughout the state as a "lay" enrollment worker, then CAP staff could be expanded to provide call center assistance to both Navigators and consumers seeking clarification during the enrollment process. To provide a world-class calling experience for consumers, it will be necessary for a more robust automated system of appeal processing to be designed to handle the anticipated influx of cases for the state.

Some consumers seeking coverage through the web-portal may wish to register to have a Navigator contact them over the telephone at a pre-arranged time to discuss their plan options. Thus, a pathway that assigns or allows them to select a navigator for follow-up will be important. This navigator may be a member of a CBO that has partnered with CAP to provide this service for a particular geographic area of the state. As the system matures, this may also mean routing to additional services provided, including Temporary Assistance for Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP), based on verified income information. Another pathway could directly link families appropriately to human services workers for assistance with enrollment in TANF and SNAP.

Finally, Getinsured also believes that there is the potential for rural states like West Virginia to lead the national charge in creating special purpose capabilities for rural residents nation-wide.

Communications 45 CFR 155.205(e)

A Getinsured solution can provide the state of West Virginia with the early ability to show-case the voluntary Exchange at the state fairs, at kiosks during various conventions and conferences and easily over the Internet. A feed-back loop can be designed to receive consumer input and help reconfigure the Exchange in a more consumer friendly manner prior to the actual launch in October 2013. A Getinsured solution has multiple points of entry that all lead to a single front door, thus offering West Virginia resident the capability to access health care coverage, many, perhaps, for the first time.

Outreach and Education

A Getinsured solution will work closely with the consultant group working to provide outreach and education to increase awareness of the availability of affordable health care coverage in the state. The state is making great strides to learn what limitations and barriers exist to accomplishing this goal. Wisely, the Exchange has made some preliminary decisions that messaging should orient around cost- savings and use language about affordability and the importance of health care coverage. This messaging will be key to increasing enrollment since, for many, health care coverage has been perceived as a luxury in the past. The idea of a soft roll-out, using long-standing and best-known events to build credibility of the exchange with West Virginians mirrors the strategies utilized in Massachusetts for roll-out for the Connector.

A Getinsured.com solution will be available early to participate in the soft roll-out activities. Because the exchange is built on a web-portal, it can be easily demonstrated and showcased during multi-day events such as Festival-All, Mountain State Arts and Crafts Fair, Mountainfest,

The West Virginia State Fair, Bridge Day and any others identified as "tops-down" events. Likewise, because the Getinsured.com solution is available today in the commercial market, a state-specific prototype can be available for smaller bottoms-up association sponsored events in the state's more intimate and regionalized events, perhaps at the county or city level.

Applications and Notices
Key functions of the Exchange will be the ability to provide both on-line and off-line applications, status updates, important coverage notices and other information associated with processing and maintaining health care coverage.
The current Getinsured.com exchange allows customers to receive information through their e-mail account or via USPS. It also provides the opportunity to download various documents, fill them out and then upload or mail them for processing. For some rural residents, their connection to the Exchange may only be accomplished via telephony due to lack of access to broad band wide throughout the state. Getinsured stands ready to supply well trained operators for the state or to assist in training state employees hired to man a state run call center to meet these needs. Most call center operations know that transactions must be completed within a very short time frame or you lose the caller.

Getinsured can help the state develop streamlined processes that receive on-screen information to reduce the length of these calls.

In the back office operations, Getinsured maintains a vast array of e-mail notices that can be queued off the business rules engine to keep consumers, navigators, brokers, carriers and administrators informed about health insurance policies and programs. For example, Getinsured.com currently provides the customer with a thirty-day notice via their e-mail account when the credit card used to pay their premiums is about to expire, thus avoiding lapses in payment and potential termination of coverage.

Measurement/Reporting of Communication Effectiveness
In building a commercial exchange in the past, Getinsured.com has developed all materials to reach consumers with an average sixth grade education level.
Recognizing that the business of health care coverage is replete with many "terms of art," the Exchange web-site provides a roll-over feature that allows users to see on-screen explanations of many such terms in the context of their use. A real-time "chat line" is made available on every screen of the exchange as well as a toll-free call center number.

Having operated a nationwide exchange for the past six years, Getinsured.com understands that call centers are the expensive way of dealing with insurance enrollment. The easier the user interface, the more likely the application will be accomplished without call center assistance. For this reason, Getinsured.com monitors the percentage of transactions that result in call center interfaces. Information is collected to determine what triggers the need to seek assistance and remedial efforts are implemented to provide additional assistance on screen to divert such calls. We believe that constant monitoring for quality assurance results in improved program efficiencies. Getinsured is prepared to provide the state of West Virginia with a similar performance monitoring to assure ease of communications in the operation of the exchange.

Oversight

Oversight and financial integrity 45 CFR 155.200(e)
The West Virginia Exchange will be housed in the OIC and subject to the statutory and regulatory requirements of the state to ensure appropriate financial management. At present,

oversight and development of the funding structure for the sustainability of the exchange are in the category of "No business process has been determined. No policy decision has been made."

Once decisions have been made, Getinsured.com is prepared to incorporate customized reports into the exchange data systems for use by the Exchange Board or other oversight entities. Having operated a commercial exchange overseen by the board of directors, Getinsured.com is familiar with the information needs to assure sufficient oversight of a board responsible for the overall success of the exchange. In addition, it is anticipated that federal regulations will be developed to prevent fraud and provide additional oversight. Samples of such reports are available to the state during a private demonstration but would be considered proprietary information and are not included in this response.

Briefly, we believe that oversight and financial integrity would involve keeping a tight rein on the following functions:

- Member management.
- Exemption management.
- Churn management.
- Assessment fee management and reconciliation with members.
- Plan and benefit structure management and review.
- Provider network management.
- Competitiveness review and consumer advocacy overall.

Quality activities 45 CFR 155.200(f)
Getinsured.com has an extensive monitoring and reporting system to assure high quality interactions with the exchange Quality assurance will be important to provide West Virginians with a purchase experience that will increase health care coverage. To assist in the process, Getinsured has developed an operational dashboard to display activities of the exchange.

Combined Operational Dashboard

This operational dashboard provides a complete view of the business from sourcing of leads/calls to sales on those leads/calls. This dashboard provides two views - one based on web traffic and the other based on calls. Statistics can be tracked for both of these types of traffic individually and also in a combined fashion for each lead source.

The Combined Dashboard aggregates and transforms the following sources of data to generate an on-demand, filtered view of the business:

- Click data from web traffic
- Quotes generated from calls
- Quotes generated from web traffic
- Sales data
- Incoming and Outgoing calls to consumer

The aggregated data is presented in the following two views:

- Graphical form (X and V axis are parameterized)
- Tabular form (Metrics/summarized data for each source)

This dashboard also provides various filters to enable reporting based on various views such as date ranges, type of source (calls, email campaigns, search advertising, etc.), product type (major medical, short term plans, etc,. The dashboard operates against a replicated database and data warehouse schema that is dedicated for reporting purposes. Running the dashboard on the replicated database helps in minimizing the server load on the master database.

2.1.8 LexisNexis

Two Categories -Eligibility and Enrollment and Oversight: OIC should consider best practices from Government, Insurance, and Banking to integrate true Authentication as part of the Eligibility and Enrollment process. By determining not only that the applicant's identity exists, but that the person accessing the Exchange truly is the identity involved, OIC can maintain strong security oversight and protect the integrity of the health system as a whole.

2.1.9 MAXIMUS/Connecture

Our response to your general functional and technical specifications reflects our knowledge of how West Virginia has strategically approached its Exchange planning work. More than most states, West Virginia has sought to build on the opportunities and responsibilities arising from ACA through well-planned strategic meetings involving a range of critical stakeholders including providers, health plans, consumers, and agents. The Alliance has been represented at these meetings during which the six core business areas have been discussed in depth with the facilitation of BerryDunn.

These six core business areas align well with our overall approach from the complementary perspectives of technology and more traditional customer service. Given West Virginia's barriers to communication channels that are more widely used in states with less challenging physical terrains, we appreciate your need for a balanced solution that accommodates consumers who prefer a personal, offline approach as well as those with a self-service orientation and reliable access to electronic communication channels.

The Alliance has reviewed the federal Exchange requirements as outlined in ACA and developed an Exchange solution that is compliant with the current requirements. We offer a fully modular system, StateAdvantage, which incorporates and delivers every function listed in Attachment A: Exchange Core Business Areas/Functions. StateAdvantage supports online delivery of each consumer-facing activity or deliverable and it also provides the backbone for mail intake, imaging, electronic workflow and task queues, and account maintenance. It also supports and documents personal interaction with customers through our call center Customer Relation Management (CRM) module. Our solution is fully modeled and currently in demonstration mode. Our system is built on the foundation of technology already in use by 12 of the 20 largest health plans in the nation including two-thirds of the Blues plans.

While StateAdvantage fully supports and enables a self-service environment, it also recognizes that some West Virginians will prefer offline and more traditional means of interacting with the Exchange. *Exhibit* 2-1: *The Alliance Services and Responsibilities* illustrates how MAXIMUS and Connecture combine their respective strengths and experience to deliver a "best-of both-worlds" approach to the West Virginia Exchange. In our experience, a comprehensive, integrated solution across all Exchange functions is preferable to one involving separate contracts for each component of the technology and business process solution. In a practical

sense, this means the company that provides the in-person customer service through a call center, support to Navigators and brokers, and the processing of mail-based applications is also the company that provides the website, premium and tax credit processing, and technology linkages to other programs.

Exhibit 2-1: The Alliance's Services and Responsibilities. *MAXIMUS and Connecture work together to provide a complete Exchange solution to West Virginia.*

The Alliance offers all of the resources needed to implement an Exchange solution cost effectively and on schedule. We understand what is needed to implement a complex eligibility and enrollment operation, having more than 40 years of combined experience performing this type of work.

Eligibility and Enrollment

Eligibility and enrollment are two functions that, while related, are fundamentally different. Before a person can enroll, eligibility must be assessed and confirmed. The application process is rigorous and driven by rules that an applicant must comply with in totality. Enrollment, by contrast, is largely driven by consumer choice in response to a range of benefit, health plan, and pricing options.

We offer our perspective on the way that our StateAdvantage solution addresses each eligibility and enrollment exchange business requirement.

Functionality Met?	Programmatic Benefit(s) of our Solution
Exchange Functions: Small Business Health Option	• Reference Section 2.E for more information regarding the SHOP Exchange • Assessment of whether an employer is offering affordable health insurance to Program (SHOP) its employees by calculating the percentage of an employee's health insurance premium against the employee's income

Functionality Met?	Programmatic Benefit(s) of our Solution
Certificates of exemption	• Built-in workflow to accept, process and convey the results of exemption status • Attach supporting documentation for exemptions • Collection, validation and reporting of necessary data for Exemption
Eligibility determinations	• Anonymous preliminary eligibility check based on several high level questions about income and household size • Integration to 3rd party data sources for online assessment of eligibility for all health programs within the Exchange scope (as well as human services eligibility screening if the Exchange chooses that enhancement) • Verification of customer data that are required for an eligibility assessment • Calculation of income and household size relative to the federal poverty level
Appeals of individual eligibility	• StateAdvantage supports the workflow for data entry of an appeal for individual eligibility
Enrollment of qualified individuals in QHPs	• Real-time linkages between eligibility findings and health benefit plan • An expedited and streamlined process for those individuals who want health insurance through the Exchange • Passes the relevant data on to the health plan as well as the federal agency involved with the payment of tax credits and cost-sharing reductions
Single streamlined application for QHPs, advance payments of the premium tax credit, cost- sharing reductions, and Medicaid, CHIP or the BHP where applicable	• Switching health plans without a gap in coverage when an enrollee's eligibility, changes from one program to another (for example, from Medicaid to the individual Exchange because of a pay increase) • Changes in family income that affect the tax credit and cost-sharing reductions (including a reduction in income that could move a family from unsubsidized to subsidized status) • "Split families" (where different family members qualify for different programs) in a way that does not confuse or discourage users
Provide the tools to allow for application via an Internet portal; by telephone through a call center; by mail and in person	• Accommodation of applications submitted online, through a call center, or by mail or fax

Eligibility Determinations
Eligibility assessment within an Exchange environment is complex and multi-faceted. At the most rudimentary level, there are eligibility factors such as residency, citizenship, insurance status, and whether a company meets the definition of a "small employer." From there, income and household size open up a range of tax credit and cost-sharing subsidies as well as possible qualification for other government health insurance programs. An additional complication is whether the eligibility rules for every applicable program will reside in a single system or in multiple systems that are linked together and unified through a single application entry point.

Individuals are eligible to participate in the Exchange if they meet certain criteria. Further, the Exchange must screen all applicants for possible eligibility in Medicaid and CHIP and Exchange-eligible consumers must be further assessed for premium tax credits and reduced cost-sharing. The question that each state needs to address in relation to this requirement is what system will house the eligibility rules for each program: will you enhance or replace your current eligibility system, incorporate eligibility determination into the Exchange, or implement a hybrid approach?

The subsidized Exchange population, a portion of the Medicaid beneficiaries (income below 138 percent for adults), and CHIP beneficiaries will qualify for their programs using the new Modified Adjusted Gross Income (MAGI) rules. Excluded from MAGI are the Aged, Blind, and Disabled (ABD) Medicaid, Long Term Care (LTC) Medicaid, TANF, and SNAP programs, which will continue to use the same rules they have in place now. StateAdvantage would transfer the eligibility information for the excluded groups who are potentially eligible for these other programs to the appropriate system. StateAdvantage's flexible platform can be adapted to accommodate the State's vision of how the Exchange will work with current eligibility systems.

Design Element 1 - Limit the eligibility process only to those criteria that pertain to each applicant:

Within an Exchange environment that is fully integrated with other government-sponsored health insurance programs, there are two key eligibility considerations:

- Mandatory requirements for applicants (including citizenship/immigration status and residency)
- Guidelines that pertain only to applicants seeking a subsidy

Design Element 2 *- Create a single application process for all public health insurance programs:*

Because coverage across Medicaid, CHIP, and the Exchange (as well as the Basic Health Plan, if that option is implemented) is a continuum driven by income, age, and pregnancy status (persons with disabilities are also included, but they require additional screening), it is essential that a single application portal collects and screens for all programs simultaneously. A single application is essential not only because it promotes a consumer-friendly process and minimizes the burden on applicant families, but also because it enables coverage for members that qualify for Medicaid or CHIP. Without a single application, family members risk "falling through the cracks" at initial application, at renewal, or when circumstances change. Regardless of whether all eligibility determinations are made within this module or information is passed on to a separate system for final approval, our solution has the necessary customizable functionality and security.

Design Element 3 *- Maximize productivity* and *minimize incomplete or inaccurate applications:*

Electronic application portals paired with data matching greatly minimize the chance of human error or incomplete applications, reduce the incremental costs of receiving and processing an application, and improve program integrity. Our solution incorporates functionality to support a paperless approach to eligibility verification and determination, providing a platform upon which eligibility workers can perform tasks at an optimum level of efficiency and accountability, These benefits carry over to the other modules because the initial application process is the point at which much of the information that drives other modules is collected, verified, and documented within the system.

Coordination of Exchange eligibility with Medicaid and CHIP is one of the most significant challenges facing states under ACA. The simplest way to demonstrate this is through two hypothetical West Virginia families in 2014 that face challenges that may arise as the Exchange is implemented, the Medicaid expansion goes into effect, and consumers begin to move among the principal coverage options.

Scenario #1: Father works for a commercial construction business that does not offer insurance coverage. Family includes a pregnant non-working mother and child age eight, income at 130 percent FPL:

- At initial application, all family members are eligible for Medicaid (applying through the Exchange)
- Several months later, the father receives a significant pay raise that boosts their income to 160 percent FPL, making him eligible for the Exchange with a tax credit subsidy. The mother remains eligible for Medicaid while the child transfers to CHIP
- When the mother has her baby, she also becomes eligible for subsidized coverage in the Exchange, and the baby is automatically eligible for Medicaid

Scenario #2: Self-employed accountant with a husband who had a job as a web designer but lost it at the start of the recession and has been unable to find work, trying to conceive a child, current income is 225 percent FPL (down from 450 percent FPL when the husband was working):

- Both qualify for tax credit subsidy through the Exchange
- If they have a baby, the infant will be eligible for CHIP
- If their income rises slightly, the child will join his parents on the Exchange
- If the husband finds work comparable to his old position, their income will dramatically rise and they may no longer qualify for tax credit subsidy

These scenarios illustrate several crucial features that become the basis for a successful eligibility strategy.

- The application process must not force families to understand the eligibility rules and income standards that crisscross between the principal coverage options
- The complexity of the relationship between the primary coverage options should be invisible to applicants and member families
- Transfers between programs should occur seamlessly and without a temporary gap in coverage

While the MAGI requirement is meant to promote a uniform approach to eligibility determination across programs, putting it into practice will be neither simple nor straightforward. A gap

analysis is needed to help make decisions based on the capacity of legacy systems to be modified, the level of integration sought between the Exchange and the Medicaid agency, and whether to incorporate other human services programs such as TANF and SNAP into an integrated eligibility approach.

Our system and operational strategy hides the complexity from applicants and consumers. We enable West Virginians to apply for benefits under ACA through multiple online and offline channels that provide a respectful and inviting experience. We are heavily focused on how the Exchange enables a consumer to arrive at the program for which he or she qualifies regardless of how the application is submitted. StateAdvantage facilitates a "smart" application which only asks relevant questions based on information already entered by the consumer or pulled from electronic data sources (Federal Hub, state agencies, and third-party databases). The information collected through this application is applied to all government-sponsored health insurance programs.

Several operational examples show the flexibility of our approach. When a consumer calls the Exchange Customer Service Center, the individual can use some of the automated functionality built into our Integrated Voice Response (IVR) system or connect to a customer service representative (CSR) who will collect and enter the necessary information to determine eligibility or exemption from the individual mandate.

Another consumer who wants to apply without assistance can log on to the StateAdvantage website and navigate through an interactive interview to establish eligibility, make a health plan selection, and submit any required payments.

A person who prefers the traditional paper and pen option can fax or mail a completed application to the Exchange Customer Service Center (Call Center) where the material is imaged, electronically assigned to a work queue, and data entered into StateAdvantage by an eligibility worker. If necessary, an outbound phone call or mailing is initiated if additional information is required.

Relevant StateAdvantage eligibility determination functionality includes:

- Accommodation of applications submitted online, through a call center, or by mail or fax
- Anonymous preliminary eligibility check based on several high level questions about income and household size
- Graphical user interface for individuals to provide all required supporting documents
- Online assessment of eligibility for all health programs within the Exchange scope (as well as human services eligibility screening if the Exchange chooses that enhancement)
- Verification of customer data that are required for an eligibility assessment
- Calculation of income and household size relative to the federal poverty level
- Assessment of whether an employer is offering affordable health insurance to its employees by calculating the percentage of an employee's health insurance premium against the employee's income
- Document imaging and electronic document repository for fax and mail-based applications
- Real-time eligibility application workflow:
    - MITA-compliant architecture to create and maintain standardized real-time interfaces with other eligibility or enrollment systems
    - System logic that requires only the data elements that are relevant to a particular family

    - Edits to reduce the likelihood of an incomplete or inaccurate application
    - Real-time and secure integration with all available state and federal data verification sources
    - Real-time per-person eligibility finding for all applicable state health insurance programs, premium tax credits, and cost-sharing reductions
- Exception handling for families whose changed circumstances are not reflected in current federal and state databases
- In accordance with Exchange policies, initiate periodic eligibility re-determination beginning with information previously collected
- Real-time linkages between eligibility findings and health benefit plan availability based on geography, program status, or state-defined criteria
- An expedited and streamlined application process for those individuals who want unsubsidized commercial health insurance through the Exchange
- Interface with Medicaid agency system based on State requirements and technology capabilities, including real-time data exchange and batch processes

Enrollment

We believe the most promising and efficient model is one in which the Alliance provides the full complement of enrollment, re-enrollment, open enrollment, and enrollment termination business processes through an approach that integrates with the other primary consumer-facing functions. To minimize the risks of consumer confusion, or an enrollment that fails because of a break-down among the affected systems or support personnel, we offer a turnkey outsourced solution that encompasses all of the functional components contemplated for use in the Exchange.

The enrollment functions involve a real-time process that smoothly flows from information gathering to preliminary decision-making to the final enrollment choices and actions. Our customer-friendly approach to plan shopping and enrollment combines online and offline materials and health plan comparison tools with an enrollment system and customer service protocols to create an overall environment that prevents or minimizes the chances of a failed or delayed enrollment. The decision support tools offered in our solution allow applicants to narrow their search to accommodate personal preferences, provide side-by-side comparison of plans, sort plan selection by user-defined criteria, link to health plan web sites for additional information, and take information offline with easy return online when plan selection occurs.

The mechanics of the enrollment process are simple in concept but can become relatively complicated in practice, depending on an Exchange's policies for when a health plan selection can occur, the circumstances under which it can be changed, and the way in which third parties such as Navigators or agents are involved. Our solution is flexible to accommodate West Virginia's decision as to whether the chosen solution facilitates the enrollment into Medicaid/CHIP plans or relies upon existing State systems for this functionality.

Online enrollment portals are most effective when designed to immediately react to consumer responses as they are entered. Using this type of dynamic screen behavior, our enrollment information and transactional capabilities simultaneously simplify complex information and help consumers avoid mistakes. For example, based on prior consumer entries, our portal filters drop-down selection lists to include only valid options given a family's specific situation. The portal can also hide or "grey-out" sections that are no longer relevant and offer intelligent default values as appropriate.

To address the full spectrum of potential self-service Exchange consumers, all of our modules offer Section 508 compliant interface options for persons with disabilities. They also incorporate design features appropriate for clients with low-literacy needs.

Our approach to developing and iteratively modifying our enrollment portal, based on user patterns and empirically driven best practices, includes:

- Authentication of eligible consumers
- Automated back-end processes to detect current enrollment in another program (such as current Medicaid recipients who are trying to obtain health insurance through the Exchange)
- Intelligent design regarding what information should be pre-populated during initial and open enrollment as well as in relation to a "qualifying event"
- The ability to integrate with the financial management module (specifically, fund aggregation) to present adjusted premiums to the individual when a change is made to the individual's enrollment application that would affect the selected plan's premium such as adding a dependent or modifying zip code
- Site navigation and design principles geared to website visitors with limited literacy skills
- Usability testing prior to site deployment
- Ongoing analysis of user statistics to identify opportunities for quality improvement and enhanced usability

StateAdvantage combines informational and interactive capabilities to give each individual consumer, small employer, and employee the ability to make informed enrollment decisions and perform a complete transaction. The following is some of the enrollment transaction functionality that will be particularly relevant for the Exchange:

- Switching health plans without a gap in coverage when an enrollee's eligibility changes from one program to another (for example, from Medicaid to the individual Exchange because of a pay increase)
- Changes in family income that affect the tax credit and cost-sharing reductions (including a reduction in income that could move a family from unsubsidized to subsidized status)
- An employer's decision to begin or end defined contributions
- Assisting with the transfer of consumers between plans outside of open enrollment, particularly where pre-authorization for critical medications or procedures is involved
- "Split families" (where different family members qualify for different programs) in a way that does not confuse or discourage users
- Real-time health benefit plan availability tied to a consumer's eligibility status, location, or other Exchange-defined enrollment criteria
- Document imaging and electronic document repository for faxed and mailed enrollment forms
- Real-time enrollment processing workflow:
    - MITA-compliant architecture to create and maintain standardized real-time interfaces with other functional components
    - System logic that requires only the data elements that are relevant to a particular family
    - Edits to reduce the likelihood of an incomplete or improper enrollment
    - Real-time per-person enrollment that facilitates family members' sharing of health plans and providers where possible

- Electronic workflows to enable enrollees and authenticated individuals acting on their behalf to request disenrollment and termination transactions
- Configurable specification of renewal and open enrollment periods
- Role-based security profiles that give Exchange Administrators the permission to override enrollment rules that meet a triggering criterion
- Communication configurability to provide email notification, text messages, and mobile device notification
- Generating and distributing notices regarding open enrollment timeframes and enrollee opportunities and/or responsibilities
- Ongoing analysis of user statistics to identify opportunities for quality improvement and enhanced online portal usability

Plan Management

The enrollment experience is predicated on accurate and comprehensive information about each qualified health plan. The Alliance provides a complete plan management strategy that includes all required components:

Functionality Met?	Programmatic Benefit(s) of our Solution
Plan certification, recertification, and decertification	• Built-in workflows for carriers and state employees for certification, recertification and decertification • Ability to view all necessary documentation to decision regarding certification
Plan monitoring and review	• Built-in notifications for state employees regarding monitoring
Plan quality rating	• Integration points for carrier to upload quality ratings from HHS into StateAdvantage • Built-in workflow for approval

There are three principal tasks involved in certifying qualified health plans (QHPs): collecting the necessary information, screening for the criteria related to a QHP, and making the certified plans available through the Exchange. The Alliance solution handles all three through technology that is in current use across a range of insurers and group markets. The system also accommodates different approaches to the final certification decision. Regardless of the level of automation, ranging from a turnkey system algorithm to a review conducted by a person relying on information collected and documented within the system, our solution generates a certification as the end result. Depending on the level of transparency the Exchange chooses to implement, the insurer certification information stored within our system can be displayed back to a consumer and/or employee group during plan selection.

The Alliance's health plan administration tools enable easy and efficient maintenance and updating of Exchange plan, rate, network, and provider information. Given the dynamic nature of the health insurance market, particularly if the Exchange assembles rather than selectively procures the coverage, it will be essential to have a mechanism by which health plans can make changes through an automated process using secure web-based tools.

StateAdvantage offers that functionality within an online environment that currently handles real-time product and rate information revisions for more than 100 health plans across multiple insurance types. No advanced technical skills are needed to configure the initial parameters,

change content, or adjust the plan and rating rules. This user-friendly feature allows actuarial and product personnel to update and maintain complicated and unique rate and product plan information for multiple market segments, lines of insurance, and products. The simplicity and accessibility of our solution drives down administrative costs for both the health plans and the Exchange.

The Alliance participates with the NAIC SERFF team to discuss how our two systems can work together to offer states a full health plan management tool that addresses the regulatory need for oversight while supplying the Exchange with the plan and rate information needed in order to compare plans and calculate rates.

The Alliance designed StateAdvantage to make it easy for health plans to upload the necessary information for disclosure purposes as well as quality rating and network information for plan comparison purposes on the Exchange.

StateAdvantage allows issuers to upload information to support QHP certification such as:

- Proof of provider network adequacy
- A list of Essential Community Providers (ECPs) included in the QHP
- Carrier licensing credentials
- Quality improvement strategies
- Methodology to disclose and report quality improvement and outcome measures
- Statistics and other information related to marketing practices
- Key management staff
- Licensure
- Solvency
- Parent/subsidiary relationships

Quality data can be displayed from various sources such as state and federal governments, and consumer ratings. In addition, the Alliance offers a value-added option as a result of our relationship with the National Committee for Quality Assurance (NCQA). We can provide a unique plan quality rating solution to West Virginia by collecting quality measure data (HEDIS/CAHPS/other quality measures) from all carriers who participate in the West Virginia Exchange. NCQA can use the plan quality results they receive to calculate a quality rating for the Alliance to display on the West Virginia Exchange web portal for consumers to view. NCQA currently collects HEDIS results from West Virginia issuers for various programs and commercial carriers.

The relationship with NCQA enables us to enhance the capability to capture QHP plan quality ratings and quality improvement strategies in StateAdvantage. In fact, we are able to offer three options for how we can present quality information to consumers in the West Virginia Exchange.

- **Option 1:** Standard ratings and report cards produced by NCQA, such as the Health Plan Accreditation Report Card
- **Option 2:** Customized rating developed in conjunction with the West Virginia OIC
- **Option 3:** Customized and individualized dynamic rating for decision-support that provides plan ratings based on preferences provided by the users and weighting of certain measures accordingly

Another tool that could be leveraged for the Exchange is CompareCare WV, a hospital price comparison tool that is currently operated by the West Virginia Health Care Authority (the

Authority). The Alliance can facilitate a Memorandum of Understanding with the Authority to interface with CompareCareWV and display the provider price information on StateAdvantage.

Financial Management
We offer a complete financial management solution.

Functionality Met?	Programmatic Benefit(s) of our Solution
Plan assessment, reinsurance, risk adjustment and risk corridors	• StateAdvantage supports built-in workflows for plan selection including a plan advisor tool • The rate administration tool allows insurers to input risk adjustments and risk corridors for specific plans and other criteria
Reconciliation of reductions in enrollee out-of-pocket costs	• The sources of a premium payment may include a combination of the enrollee, the federal government, and the enrollee's employer • Premiums that go to the Exchange must be aggregated from their various sources and remitted to the health plans • Payments may be accepted through a variety of electronic methods and from multiple online resources such as PayPal • Payments will be remitted for the SHOP Exchange
Determination of issuer credits	• StateAdvantage integrates with the eligibility engine to determine the issuer credits • Once the consumer is enrolled, the financial management component will handle necessary reconciliation processes
Premium tax credit and cost- sharing	• StateAdvantage integrates with the eligibility engine to determine cost-sharing reduction administration

State Advantage integrates enrollment, billing, collection, eligibility (based on current premium payment), health plan and Navigator/broker remittances, and reporting. It creates and stores all financial transactions at an individual, employer group, and employee level. It provides the Exchange with extensive daily and monthly reporting to reconcile its bank account.

Our solution understands that payment options will influence consumer behavior and participation in the Exchange. We know that the likelihood of a payment being made increases with the number of available options such as *ACHIEFT,* credit card, PayPal and check.

During initial enrollment and as part of ongoing policy maintenance, consumers may select their preferred method for receiving their bill and the option to set up automated ACHIEFT payments. They can choose to receive a paperless bill or to receive one through the mail. The paperless option delivers an electronic copy of the bill via a secured link within an email. With this email technology, a consumer can view the bill and click on dynamic buttons to make a payment to credit or debit card, electronic check or a third patty vendor transaction such as PayPal.

Billing and collection of premiums is an operational nerve center that directly affects ongoing enrollment through a relatively complicated set of transactions. The interfaces associated with billing are particularly important because of the multiple ways in which premiums can be paid

and the payment data reconciled among the affected entities (primarily the insurers/health benefit plans but also Navigators/brokers and potentially other entities).

State Advantage can handle billing in multiple ways depending on Exchange policy or need. As with payment methods, there are pros and cons to monthly billing versus a primarily or fully automated process. If employer groups are to be billed, our solution generates bills that list each participating employee, the insurer/health benefit plan associated with each participant, and the amount due at the employee and aggregate level.

To minimize administrative costs and maximize availability and transparency, our solution gives employers and individual consumers the ability to securely authenticate themselves and log on to the payment system to view and pay their bill online and view a billing and payment history. The billed amounts include current and past due amounts.

The StateAdvantage Fund and Aggregate Payment functionality allows the employer to provide payment in full, pay current premium only, or pay past due amount. StateAdvantage bills employer groups with multiple plans and multiple benefits on one bill listed by employee by coverage type.

If a paper bill is the customer's preferred method for receiving their bill, the StateAdvantage Fund and Aggregate Payment Module produces a paper bill which provides the details a customer needs. A common employer format includes multiple coverages, which may or not be from the same carrier, as well as a summary showing previous adjustments and employee level detail. An individual's bill can also include multiple coverages where each family member is enrolled in a different program, plan and carrier.

Changes which occur during the normal course of business are handled within StateAdvantage. As information regarding any changes (for example, births, marriages, new hires, and terminations) are received, StateAdvantage updates the billing statements to reflect these changes (either retroactively or prospectively), and the next bill generated will show the appropriate adjustments, as well as any carry forward amount due/credit.

The Alliance will handle transactions received via phone, paper, fax, or email. This will include new additions, terminations, plan changes, address changes, and so on. Any of these adjustments result in a premium adjustment that is tracked in StateAdvantage and shown on the next billing statement, as well as synchronization with the carrier's membership systems. We generally do not issue refund checks unless the credit is for a terminated account. All other credit balances are applied to the bill period.

Through our work with employer-based plans and several of the largest CHIP programs in the country, we have developed or been exposed to a set of premium payment and aggregation best practices that inform our solution.

With the high cost of health insurance today, many West Virginians will be attracted to the Exchange in hopes of qualifying for premium tax credits and reduced cost sharing. To accommodate them, StateAdvantage:

- Provides simple calculator tools to allow individuals to estimate their qualification for a tax credit quickly and easily
- Calculates the actual amount of premium tax credits and all applicable cost sharing reduction for a qualifying individual

- Displays the premium tax credit amounts and cost sharing reduction amounts to the qualifying person
- Subtracts the applicable credit from the total monthly premium, generating the net amount owed by the insured individual
- Tracks and reports the tax credit information to the U.S. Department of Treasury and the health plans

The Alliance also understands that individuals may choose to receive the premium tax credit as part of their tax filing process rather than advance tax credits paid monthly by the federal government and our system incorporates that option as well.

Customer Service
The Alliance offers multiple ways for West Virginians to communicate with the Exchange-call center, Internet, mail and fax. All customer-facing web sites and printed materials are designed with health literacy guidelines in mind. Our customer service staff is trained to use simple language when communicating. We offer communications in multiple languages and are sensitive to the different cultures and educational levels represented in West Virginia.

Functionality Met?	Programmatic Benefit(s) of our Solution
Call center	• Telephony system configured to *effectively* handle *volumes* and call lengths and *provide* robust reporting features • Multiple self-service informational and transactional options *available* to the public 24x7 through an IVR system • Always-available, in-person assistance during regular business hours • CSR access to all the details of a caller's case history and previous contacts • Desktop integration tools which make it easier for staff to access consumer information from a variety of program systems, enhancing the quality and speed of customer service • Sufficient number of bilingual representatives to meet the needs of the largest non-English speaking groups, and use of a Language Line for all others • Call recording technology to facilitate real-time and post-call quality monitoring • Workforce management software to enable accurate, just-in-time scheduling of calls • Automatic call distribution (ACD) system to route callers to appropriate queues based on language, skill sets or program area
Internet Web • Provides standardized comparative information on each available QHP • Is accessible to	• Section 508 and Web Content Accessibility Guidelines 0NCAG) 2.0 accessibility and usability standards • Web 2.0 design principles with a highly intelligent and respect approach to communication with multilingual and low literate consumers • Plan Advisor tool to assist consumer in finding a plan to meet their specific preferences and needs

Functionality Met?	Programmatic Benefit(s) of our Solution
people with disabilities • Publishes [certain] financial information • Provides information about Navigators, etc. • Allows for an eligibility determination • Allows for enrollment in coverage	• A complete suite of online interactive and transactional tools to accommodate self-service for each primary function including application, eligibility initial screening and final determination, identification of missing information, health plan and provider selection, health plan enrollment, premium payment, and Navigator involvement • Real-time connectivity to web-based transactions • Segregation and integration of individual and SHOP functions, as appropriate
Exchange calculator	• Provide simple calculator tools to allow individuals to estimate their qualification for a tax credit quickly and easily • Accurately calculate the actual amount of premium tax credits and all applicable cost sharing tax credits for which the individual qualifies so that the Exchange can appropriately track and report the information to the Department of Treasury and the insurer.
Consumer Assistance Including the Navigator program	• Support assistance for all users including consumers, employers, employees, brokers, navigators, carriers, state employees, etc.

Our call center balances the needs and desires of a range of customer service preferences based on a person's comfort with, or desire for, phone-based self-service. We answer questions or provide additional information about the health coverage provided by the health plans, the programs that the application process encompasses, and the different types of services offered through the Exchange.

We provide a number of technology tools at our consumer call centers to allow for the rapid resolution of caller questions. Our CSRs know the key processes associated with policies and thus can typically address customer issues successfully on the first call. We treat every caller with respect; they understand that their issues are important to us. Our trained staff has the necessary authority and responsibility to resolve caller inquiries and grievances.

The StateAdvantage web portal is designed so that West Virginians may quickly navigate to their areas of interest. We test every link for usability and ease of navigation.

The Alliance is a national leader in public health insurance and commercial website portals that combine Web 2.0 design principles with a highly intelligent and respectful approach to communication with multilingual and low literate consumers. The Alliance websites are among the top online portals for information and transactions related to government programs that are enhanced by the expertise and skill of the Center for Health Literacy.

Communications

Functionality Met?	Programmatic Benefit(s) of our Solution
Outreach and education	• Considerable array of marketing and outreach tools and capabilities • Materials and online information to promote consumer understanding and awareness • Mass media advertising, public relations, and online advertising
Applications and notices	• Communication by mail, e-mail, or text messaging to inform the consumer of enrollment, eligibility, renewal and other events • Generation of traditional mail-based notices through multi-lingual correspondence templates and system triggers tied to primary business process events such as missing information notices • Confirmation of eligibility determination and enrollment, initiation of renewal and/or open enrollment, and monthly premium billing • Capability for email notification, text messages, and mobile device notification • Online "smart" applications that only require questions based on previous answers
Measurement/reporting of communication effectiveness	• Real-time reports generated via queues or active queries • Effectiveness reports for specific communications (i.e. number of open emails, link through, etc.)

Success for the Exchange depends on effectively communicating its value to consumers and small businesses. Surveys conducted by the Kaiser Family Foundation and other reputable organizations point to a high degree of mistaken beliefs regarding the value of health insurance exchanges specifically, and the benefits of ACA in general. Many West Virginians are conflicted about ACA as well and do not have a comprehensive understanding of the Exchange and its impact on them. Therefore, West Virginia should consider a two-phased approach to communicate-first to achieve a deeper understanding of ACA and the Exchange that corrects misinformation and creates a positive view; and second to promote the use of the Exchange and provide education on how the Exchange works, how to apply and enroll, and when to begin. The Alliance can perform research to clarify the level and kind of marketing and outreach that is needed in West Virginia. Through our research, we determine the most appropriate messaging, and the best avenues for disseminating and presenting this information. We conduct online surveys, in-depth interviews, and focus groups to study the needs of individual consumers and small businesses.

The way in which the program is marketed to the public will have a major impact on the willingness of many West Virginians to become involved with a program that could easily be misperceived as too difficult, complex, or confusing. Creative social marketing approaches are needed to "sell" ACA and the Exchange.

Oversight

StateAdvantage is designed in a way that not only provides a comprehensive user experience to those applying for coverage on the Exchange, but also allows for the administration of the Exchange at various levels.

Functionality Met?	Programmatic Benefit(s) of our Solution
Oversight and financial integrity	•Standardized and customized reports to enable oversight • GAAP-compliant financial processes • Project management according to nationally recognized principles and standards • Clearly defined work plans and careful monitoring for adherence to plan timeframes • Proven practices for risk management and issue resolution conducted in partnership with the Exchange Board
Quality activities	• Corporate and project-level commitment to quality • Proven tools to measure and monitor quality of technology and business processes • Staff assessments of adherence to quality form the basis of our performance management

When the West Virginia Exchange Board procures for Exchange technology and services, there is a responsibility to closely monitor adherence to contract terms and conditions, timeliness and quality of deliverables, and performance measured against established standards. The Alliance initiates strict internal controls and systems to oversee our own performance, and offers the Exchange Board transparency into our findings.

To enable appropriate oversight, the Alliance generates a number of standardized and customized reports, including those focused on performance management, public transparency, policy analysis, program integrity, program evaluation, and ad-hoc business improvement functions.

2.1.10 Oracle

The ACA represents both new challenges and opportunities for states that chose to create their own Health Insurance Exchange (HIX). The HIX has the potential to become a major system and nexus point between health and human services programs. With this creates opportunities to serve citizens in new ways and through approaches that use self service delivery channels to guide citizens to services in an expeditious and cost effective manner.

With this opportunity also come several key challenges. There is a short timeline to deploy the HIX with key milestones occurring in early and late 2013 with final implementation in 2014.Additionally, the HIX environment is rapidly evolving. For all but a few states, the establishment of a HIX represents and completely new program to administer and integrate with their existing environments. It is also likely that the policy mandates and guidance from Centers for Medicare and Medicaid Services (CMS) will be updated during the program rollout creating a highly dynamic environment. For example, analysts have found that the current legislation has unintended consequences of charging older citizens different amounts for the same coverage due to the way in which Social Security Income (551) is factored into benefit calculation[2], Due to

[2] AP Exclusive: Older workers would pay more due to unintended consequence of health care law, (June 30, 2011)

the complexity of the legislation it is likely that other aspects of the policy will be tuned as the programs mature.

As we have worked with States around the country, the following key focal points for the exchange have emerged:

- Relatively short time for deployment
- Dynamic and evolving environment
- Large amount of visibility for program success and cost
- Desire for a "sustainable" system maintainable by the State at some point in future
- Extensibility to support other business and information technology and strategic initiatives

Oracle is a unique HIX partner through our complete offering to the State, with functional capabilities that address the CMS developed business architecture while also providing a complete technology platform spanning from hardware to the application tier. In addition to being comprehensive, the HIX architecture is also "pluggable" meaning that components may be interchanged. For example, if the State has existing assets such as a financial system it can be easily integrated into the Oracle HIX solution through our service oriented architecture (SOA) and technology such as an enterprise service bus (ESB). The Oracle architecture brings the benefits of a single vendor platform while pluggability and use of open standards avoids "vendor lock-in."

Through Oracle's pre-integrated products, Exchange business processes are seamlessly supported through all phases of benefits management. The Siebel Public Sector Case Management platform can be configured to support multiple programs such as AHIX and SHOP while also tracking other programs supported by the Exchange Portal such as CHIP and Medicaid all within the same database. Not only does this simplify the overall architecture through a consolidated application platform but also facilitates cross program analysis by providing Exchange workers and other authorized users a longitudinal client view. The Exchange architecture is based on a SOA platform that provides a loosely coupled integration for modularity.

Exchange Functional Areas

The Oracle HIX solution was developed using the Business Architecture supplied by CMS combined with our experience as the technology provider for many human services systems such as eligibility, child health insurance (CHIP) and Medicaid management information system (MMIS) across the country.

Through our vast portfolio of vertical applications in the areas of Public Sector case management, Health Insurance, Call Center and Financials the Oracle HIX addresses the key functional areas of the HIX as defined by CMS:

- Eligibility and Enrollment
- Plan Management
- Financial Management
- Customer Service
- Communications
- Oversight and Reporting

Oracle is uniquely positioned to support all of the Exchange functional areas through our vast portfolio of vertical applications spanning Public Sector, Insurance, Financials and Customer Relationship Management (CRM).

General Functions of the Exchange

Issue certificates of exemption
Oracle's HIX solution addresses the exemption process using similar process patterns to establishing eligibility for Insurance subsidies and other benefits. The rules for the exemption are defined in the Oracle Policy tool using natural language as defined in the legislation or guidance. The Policy engine generates an intelligent guided set of questions to gather the information to determine if the user is eligible or qualifies for the exemption. The information provided is then run through a verification process. The user identity is created and the applicant agrees that the information provided is correct. The exemption qualification status is managed on the back end through case management and a set of workflows that notifies the appropriate state and federal entities via the integration layer. Certificates can then be issued online or via mail depending on the requirements.

Perform initial and ongoing eligibility determinations and case maintenance
The Oracle solution enables you to perform both initial and ongoing eligibility determinations. Oracle's eligibility determination facilities are also "time aware". This means that rule sets operate simultaneously for specific points in time as well as across time periods. This calculation method provides a revolutionary way of quickly and simply capturing and applying rules required to accurately calculate changing rates. It also allows the State of West Virginia to determine the impact of time on entitlements such as projected payments. It allows a rule-based application to process very efficiently across complex sets of changing rules and changing circumstances in individual citizens' cases.

Oracle Policy Automation includes built-in support for detailed and accurate auditing of decisions, producing fully reasoned explanations as to how decisions were made and what outcomes were determined. These explanations are provided using the language of the underlying rules, in easy to understand verbiage. The audit reports provide navigation facilities back to the data collected in the interview, allowing a user to make amendments, if required. The audit reports enhance the State's capacity to be accountable by offering complete auditability and transparency in its decision-making. The explanation is stored for future review or appeal. Such transparency reduces customer escalations.

Process appeals of individual eligibility determinations
Using the Oracle solution, if an employer, employee or individual is found not to be eligible, they can appeal that decision. When they appeal, an appeal case will be created and assigned to the appropriate group or worker who can document and reevaluate the decision.

Our eligibility determination engine, Oracle Policy Automation (OPA), automatically produces high quality decision reports that are actually linked to the underlying source rules. The decision reports can be saved for audit purposes and can be used to fully explain any business decision that has been made by the rules engine. This is particularly useful for HIX eligibility as OPA has the ability to produce a document that shows exactly how the benefit was calculated aiding the appeal process. In addition all data that was captured during the interview is captured and stored in the system minimizing the research time for appeals.

Perform oversight and ensure financial integrity

Oracle's proposed solution includes PeopleSoft Enterprise Financials enabling West Virginia to automate and streamline the funds management business process. This solution has a proven track record over multiple large-scale, statewide implementations and combines a low-risk proven solution with an experienced implementation team. Using the HIX pluggable and SOA based architecture an existing or third party Financials system could be leveraged as well.

Siebel Public Sector case management will capture information for customers, employers, insurance carriers and other entities to support the funds management business process. Detail needed to execute back-end financial processes and transactions are communicated via SOA Suite integration. Additional information on financial integrity is provided in the Financial Management section of this response.

Support quality management
The Oracle solution enables the carrier (insurance provider) to submit QHPs to the exchange for consideration. Once a plan is submitted to the Exchange, that plan can go through an approval process where back and forth communication modifying the QHP will take place to ensure a quality plan that meets the standards of the Exchange and the carrier is agreed. Only after this approval process is the QHP available to the exchange for enrollment.

Operate a call center
The Oracle solution offers an integrated call center for the Health Insurance Exchange. Establishing a call center represents a non-trivial project, especially in the area of integrating telephony with the call center application. Oracle's solution includes extensive administrative capabilities that significantly reduce the complexity and the amount of time it takes to set up computer telephony integration (CTI). From an agent perspective, the application includes a CTI Toolbar, from which the agent can perform all telephony operations. Incoming calls through Interactive Voice Response (IVR) can trigger a screen pop to navigate agents automatically to appropriate views. Chat and co-browsing are supported to help provide assistance to users of the Exchange website. Oracle can integrate with an existing telephony infrastructure or provide the infrastructure. The call center application itself provides comprehensive Case Management capabilities, which can be exposed through web services for integration with external systems. Additional information on call center and delivery channel capabilities is provided in the Communications section of this response.

Operate an Internet Website
The Oracle solution offers an accessible portal that enables individuals and employees the ability to: (including but not limited to)

- Conduct comparisons of QHPs (comparison of financial information, and attributes of a plan
- Include Navigator information (if Navigator assists)
- Determine eligibility for the QHP
- Enroll in chosen QHP
- Provide an Exchange calculator

The Oracle solution is equipped with an integrated eligibility determination rules engine that will accurately calculate the subsidy an individual is eligible for. This calculation will take into account information including but not limited to income, number of family members, and expenses to calculate potential subsidy amounts. The data entered will have to be validated externally prior to the initialization or distribution of assistance.

Navigator Support
The Oracle solution provides the ability to enable Navigators/brokers to assist individuals, employers and employees in getting set up with the exchange. The Portal the Navigators utilize enables them to track which employers, employees and individuals they assisted and set up on the exchange. This becomes very important if Navigators are compensated (commission) for this work.

Support Outreach and Education
The Oracle solution offers an integrated capability supporting outreach and education campaigns to inform individuals and employers of potential Exchange benefits they may be eligible for. The Campaign Management capabilities track the individual and employer response to these campaigns as required. Oracle outreach consists of email, telephone and physical (billboards, mail pamphlets, etc) campaigns.

Produce Notices
The Oracle HIX solution includes Oracle Business Intelligence (BI) Publisher for the generation of forms, notices and pixel perfect reports. BI Publisher can produce highly formatted documents, such as operational reports, electronic funds transfer documents, government PDF forms and marketing letters, and much more. Oracle BI Publisher can generate tens of thousands of documents per hour with minimal impact to transactional systems. Reports can be designed using familiar desktop products and viewed online or State of West Virginia Strategic Planning for the Future Health Insurance Exchange scheduled for delivery to a wide range of destinations. Particularly important in the State of West Virginia is the support for multiple languages. Using the XLiFF standard, translations can use one layout for multiple languages, or create separate layouts for each language.

Authoring and Generation
- BI Publisher Layout Editor directly from Web browser Microsoft Word, Microsoft Excel, Adobe Acrobat, Adobe Flex Builder, or XML IDEs
- Output formats: Interactive, PDF, HTML, Excel, PowerPoint, RTF, Flash, eText (for EDI/EFT), CSV, and XML
- Supports delivery via printer, e-mail, fax, WebDAV, FTP(S), HTIP(S), AS2 or custom channels

Security
- Role based authorization and access to report folders and data sources
- PDF document security - password protection, control on print, copy text etc.
- PDF Digital Signature

Individuals Qualified Health Plan Enrollment Functions

The Oracle HIX solution includes a full set of functions to support the enrollment of individuals in qualified health plans to support the American Health Benefits Exchange (AHIX):

Plan Selection
The Oracle solution enables an individual to access the information on the qualified health plans made available by Insurance Carriers to the Exchange. The search capabilities offered play no favorites in which carrier and plan is presented to an individual. Individuals can simply query for the plans using attributes that are important to them including but not limited to:

- Co-pay
- Emergency room co-pay
- Monthly premium

An individual can compare plans side-by side to get a better idea of which plan better fits their needs. Individuals can conduct a search of plans available to the Exchange anonymously, but based on eligibility determination enroll in plans in which they are eligible (using the integrated eligibility engine). Individuals will provide information necessary to determine eligibility for Health Insurance Benefits from the Health Insurance Exchange of West Virginia. Once eligible, individuals will have the ability to select a QHP (from a list of QHP's they are eligible for based on eligibility) and enroll.

Plans may be searched by a variety of criteria and sorted by categories such as Platinum, Gold, Silver and Bronze.

Enrollment
The Oracle HIX solution sends notifications and messages (in an acceptable format) directly to the selected Insurance Carrier (issuer) indicating that an applicant has selected a QHP and wishes to enroll in the plan. The issuer would then assign a policy number to the individual and transmit that information back to the system. Using the Oracle solution, information captured through the enrollment process can be transmitted to the issuer to enable the issuer to complete the enrollment and provide a policy number. Upon plan selection, the Oracle SOA Suite can generate a HIPAA X.12 based transaction or other message format required by the carrier to complete the enrollment.

The acknowledgements from carriers offering the QHP can be captured and stored. If the acknowledgement is not received in an acceptable time period, activities can be automatically generated to proactively call the carrier to ensure the individual is properly enrolled in the QHP. Upon enrollment the Oracle HIX maintains a highly secure record of the election. With this solution, you can easily see the effect of Change of Circumstance (like the change of income or pregnancy etc) that may make the individual eligible for Medi-Cal. The record history will show the individuals moving in and out of Health Insurance benefits to Medi-Cal (and back). Using Oracle SOA Suite, the enrollment information can be sent to the Health and Human Services Agency systems. Oracle SOA Suite supports a wide variety of message formats and technology adapters to address the diverse systems within the State of West Virginia such as web services, JMS, CICS and VSAM.

Reconcile Enrollment Information with QHPs Monthly
Using the Oracle solution you can maintain enrollment information with the QHP organizations. When individuals are terminated, become in-eligible for any reason, or even renew, that information can be instantly conveyed to the QHP organization. The QHP can securely access Health Insurance Exchange information directly from a web portal. This will enable the QHP to reconcile information as required.

You can use a single streamlined application for eligibility determination and enrollment for QHPs, advance premium tax credits, cost sharing reductions, Medi-Cal, Healthy Families, and Basic Health Plan (if applicable). The Oracle solution offers a single streamlined application that will determine eligibility for QHPs, advance premium tax credits, cost sharing reductions, Medi-Cal, Healthy Families, and Basic Health Plan as required. This gives the individual a "no wrong door" application where the individual might be trying to determine eligibility for a QHP for

themselves and family members but find that they are eligible for the QHP while their family members are eligible for Medi-Cal benefits.

Using the Oracle solution, applications can be accepted from the applicant, a Navigator/Broker (who is an authorized representative), or an individual acting responsibly for the applicant.

Multi-Channel Filing via Internet, Telephone, Mail and Person
The Oracle solution enables consistent treatment regardless of which communication channel the individual chooses. These include internet, telephone through the call center, mail, and in person. The Oracle HIX solution includes a multi-role based portal, IVR integration, document imaging and case management to provide multiple channels of interaction.

Enrollment Period
The Oracle solution supports the ability to have initial and annual open enrollment periods. If an individual misses the open enrollment period, a "default" insurance plan can be automatically chosen for them, or the existing plan they are enrolled in will be renewed (if that plan is still available for enrollment). Additionally, special enrollment periods may be configured based on triggering events (such as a change of circumstance for the individual).

Process Terminations of Coverage
The Oracle solution enables the processing of termination of coverage for an individual. Terminations can be initialized on either the issuer side or by the West Virginia Exchange (due to lack of payment, change of circumstance, etc).

SHOP-Specific Functions
The Oracle HIX solution addresses the functions to support the Small Business Health Options Programs (SHOP) portion of the exchange:

Enrollment of Qualified Employees into QHPs
The Oracle solution enables qualified employers to identify qualified employees that are eligible to enroll in QHPs. Employers can define the employer portion of the QHP, and based on which QHP the employee chooses (and rate band associated to the QHP) calculate the employee payroll deduction (done by the employer). The Oracle solution enables employers to choose the QHPs that they make available to their employees.

Perform Premium Aggregation
Siebel Public Sector case management system can accommodate the fund aggregation requirement. Siebel can factor in the various sources and the associated contribution amounts in the insurance premium calculation. The PeopleSoft Financial system can also accommodate receipt of payment from the various sources and properly apply the payment to the appropriate insurance premium.

Administer Rates and Rate Changes
The Oracle solution enables the Exchange, working closely with the carriers, to administer and maintain QHP rate bands and rate changes. Before making the change, the Exchange could see the impact of the change on both individuals and employees utilizing the QHP. Before the change is made, notifications can be sent out to impacted individuals.

Perform Eligibility Determination
The Oracle solution enables eligibility determination including but not limited to employers and employees. The eligibility determination is performed by the HIX rules authoring component Oracle Policy Automation which allows the generation of executable business rules within Microsoft Word®. For employers you can take into account the following attributes (including but not limited to):

- Number of employees
- Employee wages
- SIC Code
- Location

For employees you can take into account the following attributes (including but not limited to):

- Number of hours worked
- Full time/part time
- Amount of wages

Data entered will be verified by the system (and perhaps external sources), adjustment periods will be determined and notifications will be sent and tracked as appropriate.

Administer enrollment of employees into QHPs under SHOP
The Oracle solution enables the Exchange (along with the employer) to administer the enrollment of the employees (identified by the employer). Employees can be identified and verified, enrollment timelines can be set, QHPs made available for the employees to choose from can be identified, payment portions can be set (dynamically),information can be reconciled with the carrier(s) as appropriate, and notifications can be sent as required.

Administer enrollment periods under SHOP
The Oracle solution can enable the administration of enrollment periods for the SHOP Exchange. Initial and open enrollment periods can be defined and special “change of circumstance" (marriage, divorce, birth of a child, etc) periods can be accommodated.

Comply with application standards
Oracle facilitates compliance with application standards established by the Federal Government and State of West Virginia. Oracle's SOA implementation based on service enabled COTS applications and leading technology infrastructure such as Oracle Service Bus provide an approach that aligns with MITA guidelines. Additionally, Oracle brings the experience of working on the MITA TAC in several domains.

Plan Management
Oracle's solution supports submission of plans for initial certification, as well as recertification and possibly decertification. Using core functions such as Activity Plans (tasks automatically generated and assigned to appropriate individuals) and Approvals, you can support your processes, with the flexibility to differ depending on the process (certification, recertification or decertification). Additionally, Oracle's solution offers Contracts (Agreements) management to track terms and conditions for a plan. The functionality supplied by Oracle's solution is web service enabled to allow for integration with external systems. Note that submission of plans from carriers may take place in a variety of ways. Carrier may input plan information via a portal.

Or they may submit files (e.g. spreadsheets) that you can import via the eAI business integration services. Finally, you can expose real time integration for carrier, for example via web services. We model Plans as Products with Attributes. This allows us to associate rich information with Plans (for example, related Providers, Literature and so on). Also, we can put Plans in Catalogs to facilitate searching and we can allow individuals to look for Plans by Attributes (so called Parametric Search) and then compare selected Plans.

Financial Management

Oracle's proposed solution includes PeopleSoft Enterprise Financials enabling the Exchange to automate and streamline the accounts receivables business process associated with the payment of the insurance premiums. This solution has a proven track record over multiple large-scale, statewide implementations and combines a low-risk proven solution with an experienced implementation team.

Siebel Public Sector case management will capture information for customers, employers, insurance carriers and other entities to support the collections business process. Detail needed to execute back-end financial processes and transactions are communicated via SOA Suite integration. The inclusion of Application Integration Architecture (AIA) Foundation Pack in the overall solution rationalizes the Siebel and PeopleSoft Financials object models making the integration extremely straightforward. The receivables functionality is an integral part of our proposed solution, and will be used to satisfy many of Exchange accounts receivable requirements. Receipts from both employers and individuals will be processed.

The embedded financials capabilities will streamline Exchange accounts receivable processes to track employer and individual client balances. Each employer and individual client will be recognized within the system as a customer, and the delivered functionality provides a 360-degree view of each customer record. This provides a complete view into all activities and State of West Virginia Strategic Planning for the Future Health Insurance Exchange provides the ability to track a complete history of all employer and individual client account balances, invoices, and cash receipts remitted by each customer over time.

Any funds received will be matched to the correct individual or employer account as appropriate, and the receipts will update the corresponding receivables records automatically. Receipting functionality is also delivered, which will capture and post cash receipt information and remittance type, whether via ACH, wire transfer, lock-box, check, etc. Once a customer payment has been applied the payment information will also be reflected in the Siebel Public Sector case management system. The Siebel Public Sector case management system will monitor and transmit any communication of payment data based upon your business rules to third party entities such as Insurers, Federal data services hub. The Siebel Public Sector case management system will also monitor and initiate payment requests to the PeopleSoft Payables Module according to your defined business process, since payment to a third party entity could be dependent upon the receipt of payment from the customer.

PeopleSoft Receivable module offers a variety of payment collection methods such as cash, check, credit card and direct debit. The PeopleSoft Receivable module provides the ability to put customers on an automatic payment plan through a credit card or direct debit payment method. For those customers who prefer to play a more active role in their payment processing, the customer can initiate payments through PeopleSoft eBill Payment. PeopleSoft eBill Payment is an electronic bill presentment solution that allows organizations to reduce the cost of billing and collections, while improving overall customer service. It is an enterprise management solution for business-to-business and business-to-customer relationships. PeopleSoft eBill Payment tells

your customers everything they need to know about their accounts. Customers can monitor their account status, view recent transactions and make payments over the internet.

Delinquency processing will be setup according to Exchange rules, and will automatically generate delinquency letters to the appropriate parties with any overdue charges assessed according to your business rules. The delinquency process reviews customer's open items and identifies those that are eligible for overdue charges and are based on the amount, interest rate, fixed amount, and date basis that you specified when defining overdue charge IDs. Delinquent letters may also be defined using letter codes that specify the text that you want to print on a Dunning letter based on a user defined aging schedule. The Siebel Public Sector Case Management system will provide the ability to accept termination notices from the insurers and will generate the appropriate letter to the customer based upon your defined business rules.

Provide data support to endure financial integrity
The Oracle solution supports GAAP and GASB standards utilizing delivered system functionality. Exchange functional staff will have the flexibility to define the Chart of Accounts to meet Exchange's complex accounting requirements and allow coordination with the existing financial system. In addition, reporting hierarchies and roll-ups may be defined utilizing the hierarchical tree functionality to meet complex internal and external reporting and interface requirements.

Accounting templates are used to manage the chart of account combinations generated from financial events. The accounting templates can be configured to meet Exchange's unique accounting needs. The system will post transactions to the appropriate entity in the general ledger, and includes both the effective date and the posting date for inquiry and reporting purposes. The source of every automated general ledger entry is also tracked so that Exchange staff can readily identify the source when needed. The system also provides for account balances to be transferred between GL accounts when required, such as when a member leaves a plan. Accounts can be adjusted to prevent any out of balance conditions, and an explanation for the entry can be entered and will be tracked historically. The system automatically retains a complete audit trail of all adjustments, reversals, etc. for online inquiry and reporting purposes.

The internal general ledger provides strong controls to meet financial reporting regulations and at the same time is flexible enough to accommodate different accounting standards and business requirements. A fully automated close and consolidation solution for legal and management reporting, including support for Generally Accepted Accounting Principles (GAAP), is delivered with the system. The system also delivers functionality to distinguish various entry types and produce reports to meet the requirements of GASB Statements 34 and 35. Any additional reporting required by Exchange will be created during implementation using the delivered reporting tools.

Communications
The Oracle HIX provides numerous channels of communication to promote efficient operations and equality of access. Some previously described channels include the external web portal, document imaging, SOA. In addition to channels of communication, the Oracle HIX also includes marketing management capabilities via Siebel's marketing capabilities to help the State of West Virginia promote enrollment within the Exchange.

The solution also includes CTI and IVR integration. Siebel CTI provides integrated inbound, outbound, and transfer call routing based on comprehensive information about the customer,

agent, channels, and service-level agreements, ensuring optimal productivity for each customer interaction. Siebel CTI helps decrease call times and improves customer intimacy. It supports off-the-shelf integration with popular CTI middleware providers to provide integrated call handling, email & chat communications, call tracking, and automated screen pop capabilities with a broad variety of Automated Call Distributors (ACDs).

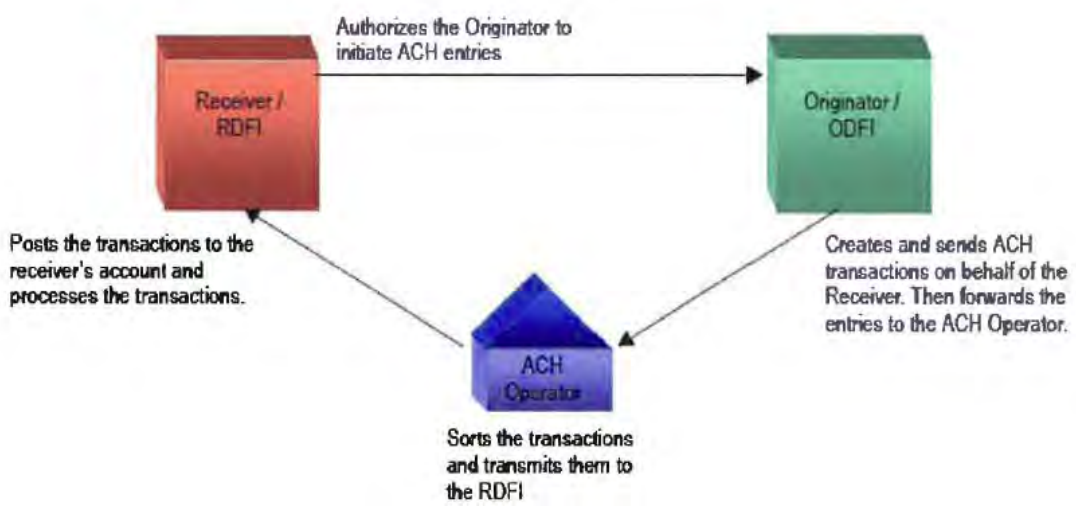
Siebel CTI includes Siebel Adaptive Communications API, a framework that supports the ability for middleware vendors, systems integrators, consultants, and customers to integrate additional third-party middleware applications and leverage the features of Siebel CTI.

2.1.11 Software AG

Software AG offers software that serves as the integration and business process management platform for the Exchange. Our software is not classified as an application suite with a set of functional components/modules, per se; rather it provides the seamless interoperability across the numerous and complex systems, applications, and stakeholders (State agencies, providers, payers, pharmacies, etc) involved in the operation of an Exchange. The flexible, ready-to-grow integration platform is secure, auditable and standards-based, enabling automation of processes across the entire Exchange to expedite the development of the Exchange while providing WVOIC transparency into the business. WVOIC can also leverage our software to modernize the Medicaid eligibility and enrollment systems that are necessary components in the Exchange. Software AG's integration platform "speaks" every technology, therefore, WVOIC can easily share data stored in existing State systems and new Exchange applications across the entire Exchange enterprise. We present the details behind our system architecture and compliance with standards in the subsequent sections (2 and 3).

For this question 2a, Software AG will be responding only to Financial Management above:

Financial Transaction Processing
The webMethods Solution provides two different financial transaction processing capabilities: ACH Module and the SWIFT Module. The ACH (Automated Clearing House) Module will process payments as electronic transactions. ACH transactions are processed through the ACH network, which is a nationwide batch-oriented, electronic funds system that is governed by NACHA. The following diagram illustrated the ACH network:



The SWIFT (Society of Worldwide Interbank Financial Telecommunication) Module and its networks provide a secure, global financial IP-based messaging platform that enables financial institutions to exchange formatted financial information and transactional data. The SWIFT networks enable you to exchange SWIFT FIN messages using the original SWIFT Transport Network (STN) or the new SWIFT Secure IP Network (SIPN).

2.1.12 Speridian

Proprietary response provided.

2.2 REGIONAL OR STANDALONE STATE EXCHANGE

How do you envision your solution working as part of a regional Exchange as well as a standalone State Exchange?

2.2.1 ACS

The State has the option of operating a single Exchange that serves the entire state, multiple Exchanges serving different geographic areas within the state, or a multi-state Exchange that serves two or more states. There are several pros and cons to consider for each of these scenarios:

- Efficiencies in business process support
- Differences in insurance regulations, risk mitigation strategies and enforcement
- Alignment of different governance, financing, technology and administrative models
- More consumer choices and access to care beyond state boundaries
- Alignment of government program rules across multiple states
- Differences in geographic populations served and their needs

There are definite advantages and opportunities to the consolidation of some Exchange functionalities across two or more states. For instance, the Exchange Web site, data collection mechanisms, enrollment processes, federal subsidy determination processes, etc. could be developed and jointly operated within our HIX Solution Suite to achieve administrative efficiencies in a multi-state Exchange environment. Call center support, premium processing, document management and other operational functions can logically be shared among state exchanges with the ACS Team solution.

The ACS Team is prepared to provide solution support should the State elect to share Exchange functionalities beyond the reach of its state boundaries for either or both of its individual and SHOP Exchanges. Our HIX Solution Suite is geared to offer either a single state solution or a multi-state exchange. In a multi-state solution we can provide efficiency in "back-office" processes, as discussed above, while providing a single state "front end" through a common Web portal, call center number, collateral materials and branding. We look forward to working with West Virginia individually or with partner states to configure our solution to meet the single or regional exchange model.

2.2.2 CGI

CGI's flexible and adaptable Health Insurance Exchange360 can operate either as a regional Exchange or as a standalone State Exchange based on specific regional or state requirements.

West Virginia will need to determine its approach from a regulatory and policy standpoint. As the State's partner, CGI would engage West Virginia in a discussion and analysis of the benefits and drawbacks of each approach and help the State reach a conclusion that is in the best interest of the State and its citizens.

2.2.3 Cognosante

As a Systems Integrator, Cognosante brings together components and interfaces to support the federal Exchange, and regional and state Exchanges. Regional Exchanges are encouraged by CMS where possible. The advantages of a regional Exchange include shared costs, functionality, and information. Disadvantages include the need for one of the states to take the lead in terms of decision making, contracting, and integrating, and potentially more complex program integration and interfaces due to state differences.

Various states' Exchange policy decisions may support stand-alone state Exchanges. Most of Cognosante's current efforts are focused on such state Exchanges; however, we are also a key player developing the federal Exchange. The federal Exchange will become the de-facto Exchange states will utilize if they choose not to implement their own Exchange, or if the state Exchange is not certified or operational in time.

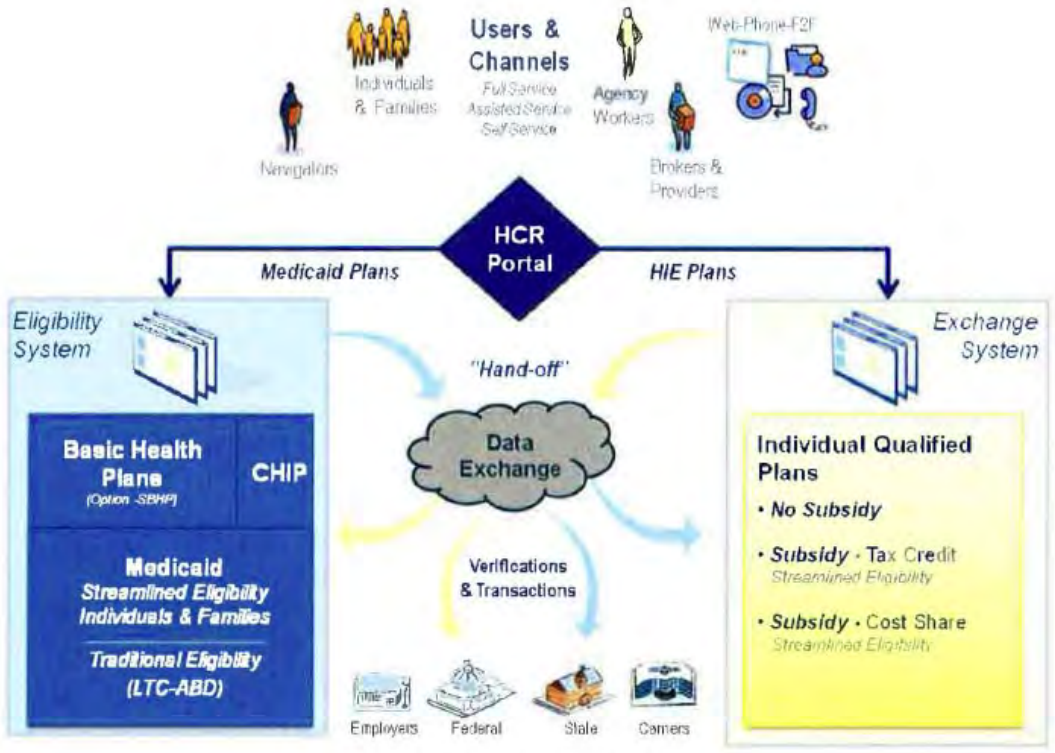
2.2.4 Cúram Software

Cúram HCR provides states with the ability to implement any of the three integration strategies - interoperability, vertical integration and horizontal integration - to address the legislative requirements of providing both Medical Assistance and Insurance Exchange related solutions. The three integration strategies, and how Cúram supports them, are discussed below.

Interoperability

In the Interoperability model, two separate systems are used to support the Medical Assistance and Insurance Exchange solutions.

- The Eligibility System for Medical Assistance is supported by Cúram, with Cúram Global Medical Assistance™ (CGMA) providing the solution to support the new Streamlined Eligibility model for Medicaid, CHIP and the new State Basic Health Plans. CGMA would continue to provide for the traditional eligibility model for Long Term Care and ABD.
- A separate non-Cúram system would be used by the State to provide the solution for the Health Insurance Exchange system, including the handling of insurance program benefits such as the premium tax credit and cost-sharing subsidies.



Interoperability model

Portal hyperlinks, Referrals or a similar 'hand-off, would be used to connect the two solutions, with Cúram receiving referrals from the Exchange system of consumers who are seeking medical assistance and Cúram sending referrals to the Exchange system of consumers seeking Insurance plan information or financial assistance in paying for insurance.

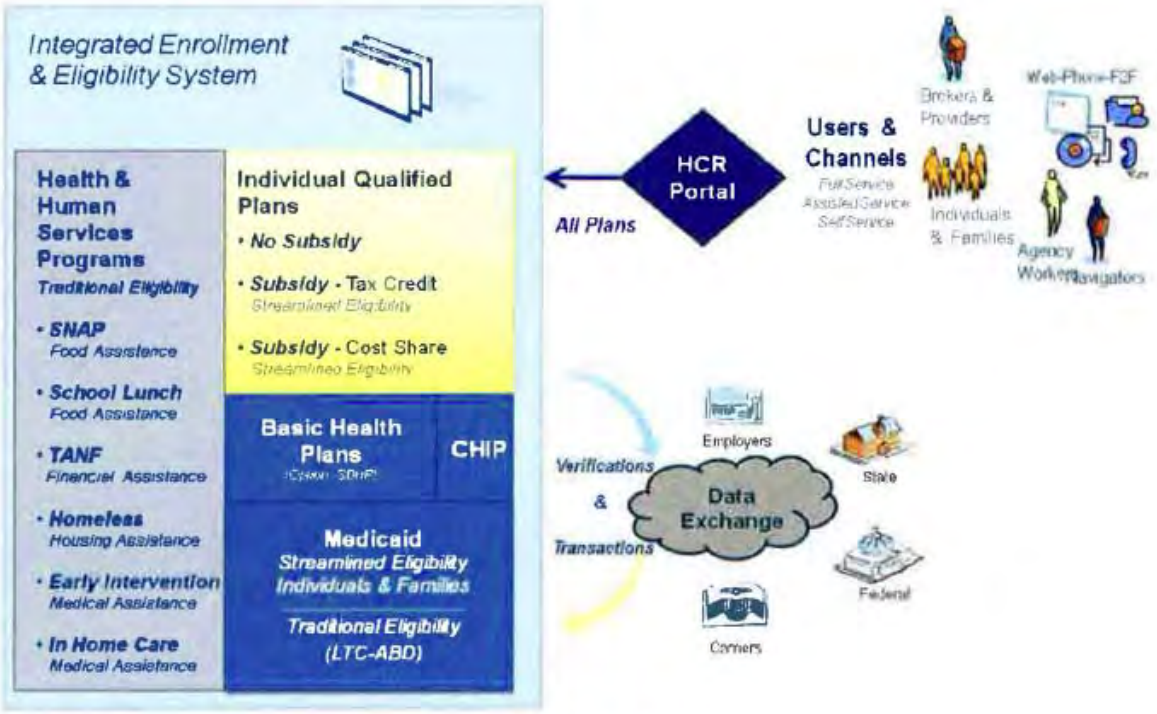
Some states may choose this option as a first step towards building a fully integrated solution, it is the minimum required by HCR to be delivered by January 2014. Other states may choose this option because they plan to integrate with a Federal or regional exchange, rather than an HIE owned by their state. A state may also prefer this option if they have specific requirements around the separation of responsibilities for their Insurance and Medical Assistance programs.

Vertical and Horizontal Integration

In the Vertical Integration model, a single Cúram system is used to provide the Medical Assistance and Insurance Exchange solutions. Cúram supports both the new streamlined and the existing traditional eligibility models for Medical Assistance eligibility through CGMA. This also includes the new State Basic Health Plans. Additionally, new Cúram functionality is provided to support the Insurance Exchange and Tax Credit/Subsidy program.

In the Horizontal Integration model, all the functionality of the Vertical Integration model is included with the addition of the full Cúram Global Income Support Suite™ (CGISS) used to support traditional eligibility models for Cash, Food and Medical Assistance and the new streamlined eligibility model for Medical Assistance, including the new State Basic Health Plans option. Additionally, new Cúram functionality is provided to support the Insurance Exchange and Tax Credit/Subsidy program.

These solutions provide a common eligibility and enrolment system integrating the functionality of the Eligibility and Exchange systems, thus delivering a no wrong door approach for the State while creating an integrated State exchange. Cúram provides the flexibility for states who want to closely integrate their HIE and MA programs or provide further integration with human services programs (SNAP, TANIF, etc.) supporting an HHS enterprise strategy or leverage their modernization investment via a common eligibility and enrollment system.



Integration Model

In this no wrong door approach, citizens would access screening via the Portal and determine their potential eligibility for both Medical Assistance and Insurance Subsidy programs. The Integrated health insurance exchange will allow them to search and compare insurance plans, identifying their potential savings via tax credits or cost-sharing programs.

Citizens will be able to process applications and enroll, via both traditional and streamlined applications (depending on the program).

2.2.5 Deloitte

Although our solution was developed on a single state perspective, we anticipated the need for alternate Exchange models including a Regional State Exchange or a Federal/State Partnership model. As such our core solution design is a modular "plug and play" model that was architected so that both the business functional and technology components can be readily interchanged with other solutions as needed.

Several Regional Exchange model variations are possible - ranging from a complete business and technical delegation by one state to another, a shared services model, to a more limited or discrete component/service option. Each approach has its merits and challenges as well as

technical, business process definition, and policy implications, but with our solution's modularity it can be readily tailored to meet any of these Regional Exchange models if pursued by the State.

2.2.6 Exeter

OneGate is a flexible solution and incorporates a technical framework and health insurance shopping experience that can be used in a variety of contexts, including regional and state exchanges. In a regional exchange environment, OneGate's advanced rules engine and included Exeter rule content allow consumers from a given state or area to view plan options and rules specific to that state or area. This is applicable to a standalone state exchange or regional exchange environment. OneGate and its rules can also be used similarly within a single state. OneGate incorporates powerful workflow tools and an architecture that allows information to be transmitted to and from a variety of systems that need not be in the same state, while ensuring that applications and other information get routed appropriately based on state and regional policies.

2.2.7 Getinsured.com

A Getinsured solution, as an out-of-the-box exchange, offers the state lower implementation risks, flexibility and cost savings. It can easily be stood up within the time frames of the federal law and regulations. While the state may find a regional approach attractive for some components of the exchange, Getinsured believes that the uniqueness of state programs and policies will necessitate a state specific solution. The state may choose to partner with other states for development of a specialized call center to serve the region (see Call Center discussion under 1.4 (a).) As ACA becomes fully implemented and state programs become more mature in their experience, there may be other opportunities for partnering with neighboring states to reduce operational costs. Getinsured stands ready to assist the state in developing those opportunities as they arise.

2.2.8 LexisNexis

No response provided.

2.2.9 MAXIMUS/Connecture

Proprietary response provided.

2.2.10 Oracle

The Federal health reform legislation gives states four options for structuring the governance of an exchange: a newly created state government agency, an existing state government agency, a nonprofit entity established by the state, or a multi-state exchange. It also allows states to establish one of more sub-state exchanges that serve geographically distinct areas within the state.

Regardless of the approach West Virginia ultimately decides upon, most of the issues will remain the same, including accountability, security and privacy, preventing conflicts of interest, financial reporting requirements, quickly adapting to policy and legislative changes, administering qualified health plans, etc. Oracle's solution is uniquely positioned to assist West

Virginia with addressing these issues and work with a regional Exchange or standalone State Exchange.

An optimal architecture for any option is flexible, extensible, scalable, multi-tiered, and object oriented. It should centralize reusable business logic in an external, middle layer (rather than at the database level or hardcoded into the system) and support multiple channels and deployment options such as portals based on role, mobile disconnected web client, call center, wireless and handheld. Oracle's integrated solution is a highly flexible, scalable, secure, commercial-off-the-shelf (COTS) package that is easily integrated with internal and external systems. Oracle provides a solution, which consists of proven technologies that are architected to work together, modular by design, and provide the necessary capabilities required to deliver a successful program. These products are based on standards based technology and can be implemented together or separately over time as needed, allowing West Virginia to reduce risk as the exchanges evolve.

Oracle understands that the current Health Reform environment, with a large number of States implementing new systems in a similar timeframe, encourages States to collaborate and share rule content. To this end, the Oracle solution supports a number of important rules best practices:

- *Loose coupling of rules* to *the application.* In many traditional business rules environments, rules are built from the ground up to address an implementation-specific data model. Within Oracle, rules are written from the top-down from statutes, regulations and policy documents. As the rules are not closely tied to the specific technical artifacts of a single implementation, they are able to be used across multiple systems and shared.
- *Rules should map closely* to *source material.* Within Oracle, rules are written in natural language and tables, which allows them to map very closely to the policy provisions they implement. As a result, it is very easy with Oracle to see the impact that a change to a policy provision will have on the rules - simply by comparing the text of the new legislated provision with the text of the Oracle rule.
- *Rule source should be labeled.* OPA rules are written in Microsoft Office Word and Excel and the rule development environment allows rule authors to use standard features of those products - footnotes, tables of content, headings etc. Oracle best practice is for each rule to be clearly labeled to show the legislative or policy source for the rule. Rules are organized into documents according to their source. Rule authors are also able to add notes about policy interpretation or other comments within the rule documents. The result is that when rules are shared, it is easy to establish a mapping between rules and the policy provisions that are relevant for a specific implementation. This is an important advantage of the Oracle Policy Automation approach. In many other rule products, and also approaches that convert rules into procedural programming code, this important policy traceability is lost.
- *Logic should be contained in rules rather than custom code.* In order to maximize ease of policy updates and rule sharing, the Oracle solution has a strong principle that wherever possible, legislative decision logic should be written in rules so it is all available in one place for editing and review by policy personnel. Oracle discourages the use of custom code to implement legislative provisions.

2.2.11 Software AG

Our approach to Regional Exchange is proven successful by our long term customer relationships whose projects have grown incrementally - in much the same way as West Virginia's Health Insurance Exchange (HIX) is expected to grow. We not only provide immediate value to our clients in helping stand up priority exchanges, but also provide a scalable, standards-based architecture that has the flexibility to accommodate new information sharing and Exchange requirements as they arise within the Regions and State of West Virginia.

Software AG is committed to the concepts of the National Information Exchange Model (NIEM) and Medicaid Information Technology Architecture (MITA) to create integrated Exchange environments for our clients both at a State and Regional level. We use innovative technologies such as web services and service oriented architecture (SOA) as the underpinnings of our integration work. As a subject matter expert, our design and implementation approach will make use of standards, such as NIEM and MITA, all resulting in a standardized and reusable data exchange model that can be easily extended to accommodate requirements for connecting at a regional level, beyond the State Exchange.

The webMethods suite will provide a robust, reliable and flexible foundation for building the SOA and will facilitate the message routing and orchestration, error handling, guarantied receipt and message logging (audit) across the State Exchange and Regional Exchange, as needed. Software AG's solution offers a high degree of flexibility when connecting too many different systems such as those that comprise West Virginia. Deploying Software AG's webMethods suite would enable West Virginia to leverage existing State technology investments and share data seamlessly while retaining control of its individual business processes, applications, and data.

2.2.12 Speridian

Proprietary response provided.

2.3 PROPOSED SOLUTION WORKFLOW

Describe and/or provide a visual representation of your proposed solution workflow and how each component is utilized throughout the workflow.

2.3.1 ACS

As shown in Exhibit 2-3, Exchange Process Flow, our HIX Solution Suite provides a seamless process through the Exchange. Our solution components seamlessly interact with one another, ensuring accurate eligibility, enrollment, member and financial services are preserved during the enrollment lifecycle.

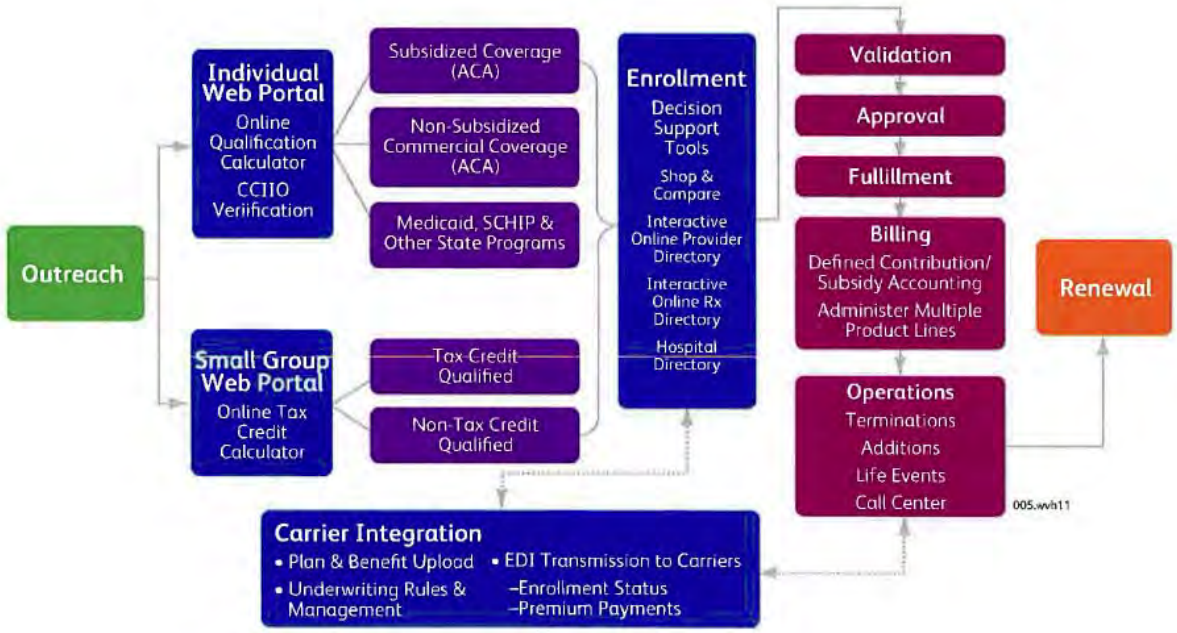


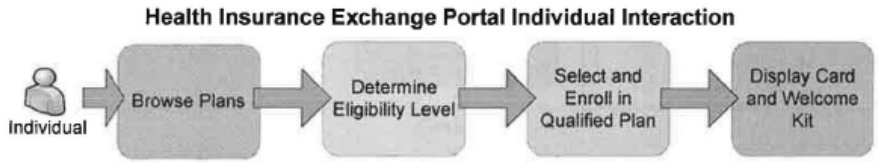
Exhibit 2-3. Exchange Process Flow

Our HIX Solution Suite offers a complete, integrated solution with the features and functionality to help the State meet their project principles and standards faster.

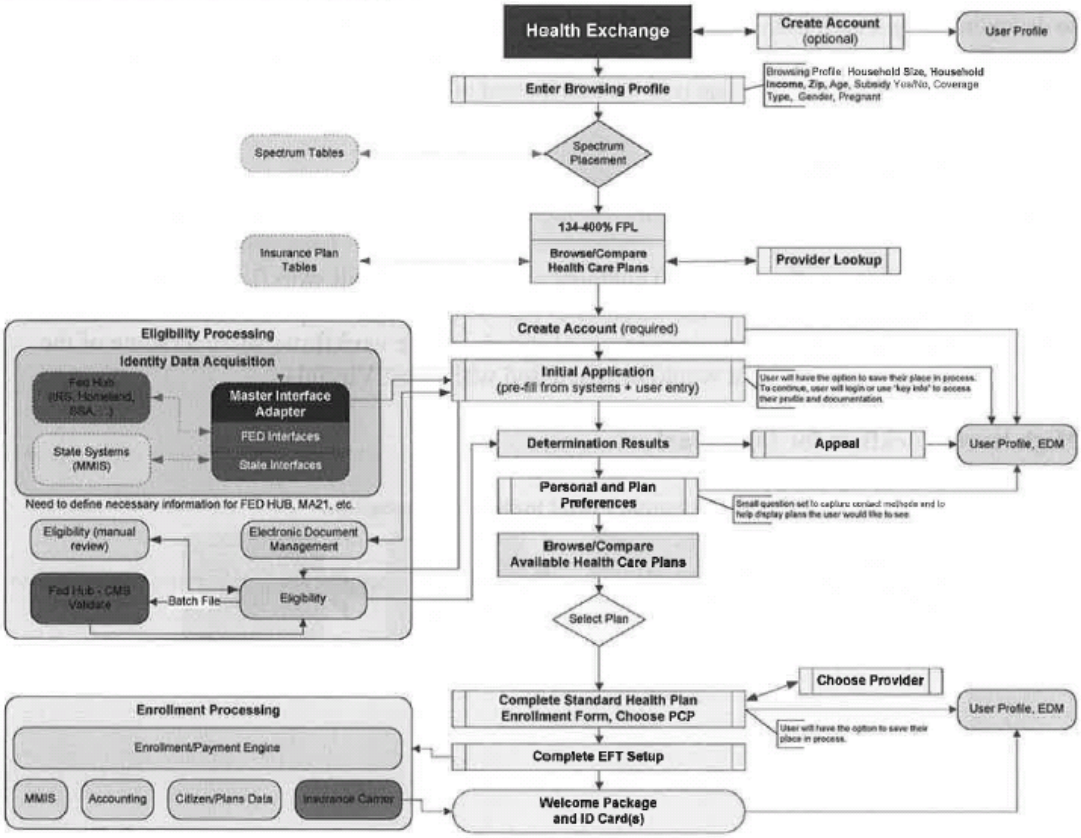
2.3.2 CGI

CGI's Health Insurance Exchange360 contains a series of pre-built workflows that will be confirmed and/or modified by West Virginia as part of the project implementation. Below are a series of workflows that show various levels of detail. These workflows serve as some of the basis of business processes that would be discussed with West Virginia.

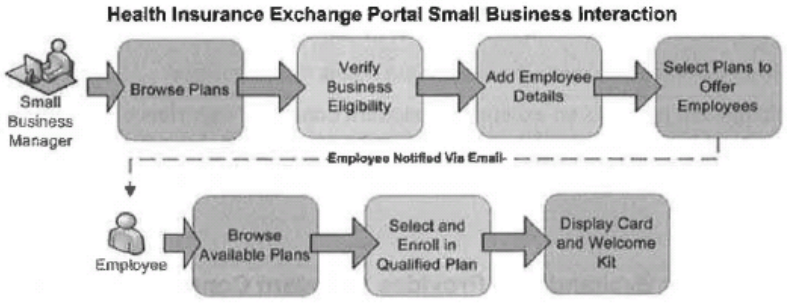
High level Workflow for Individual

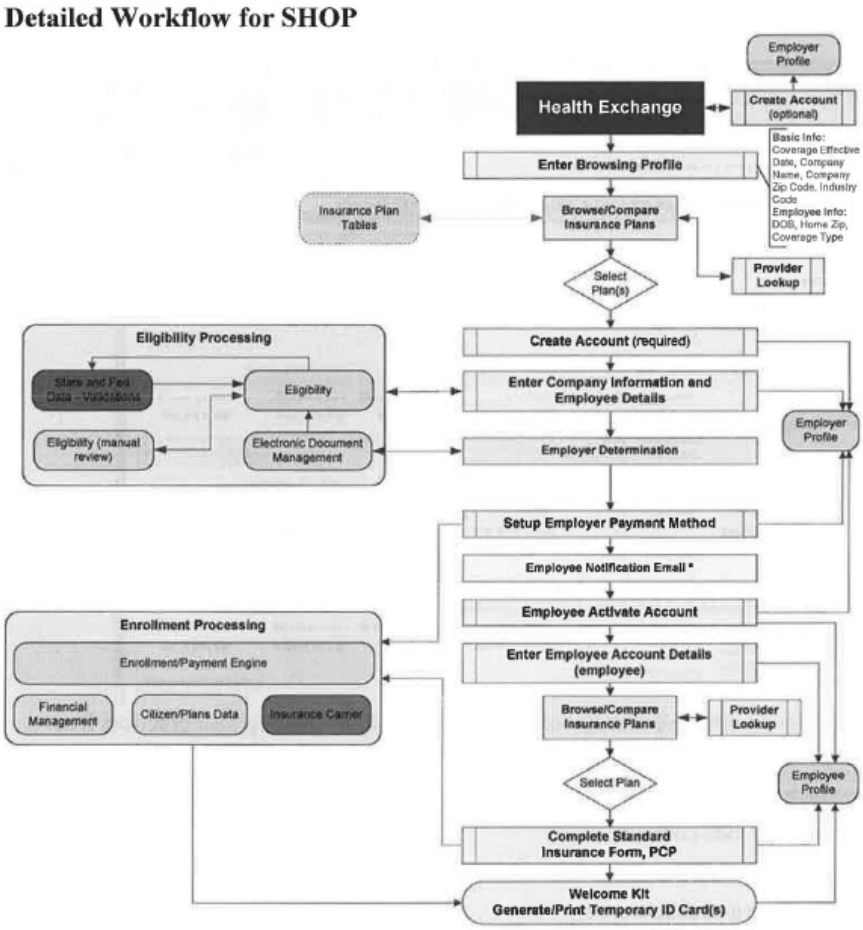


Detailed Workflow for Individual



High Level Workflow for SHOP



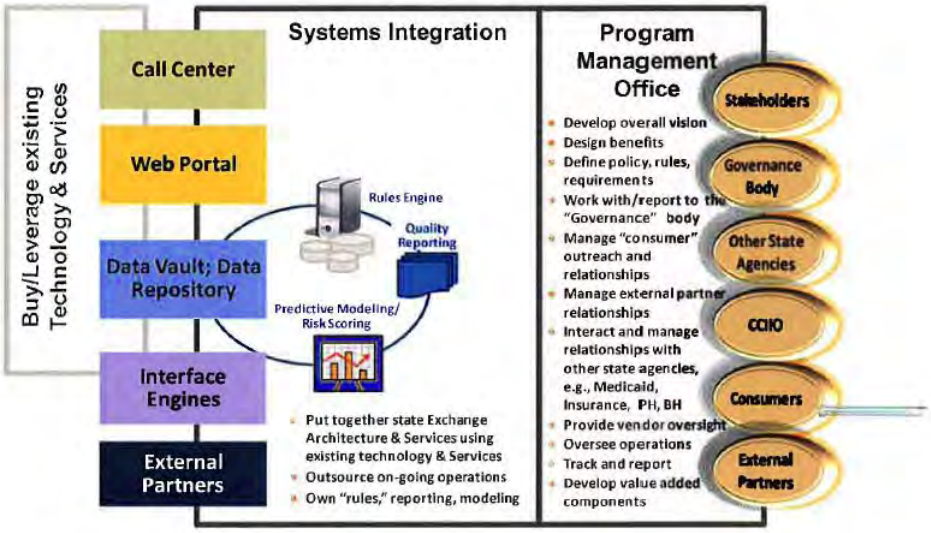


2.3.3 Cognosante

Cognosante's role as Systems Integrator, including PMO services, makes the complex workflows and interactions simple.

Figure 2 depicts our simplified Systems Integrator/Program Management Office model:

Figure 2 – Potential Systems Integration/Program Management Office Model



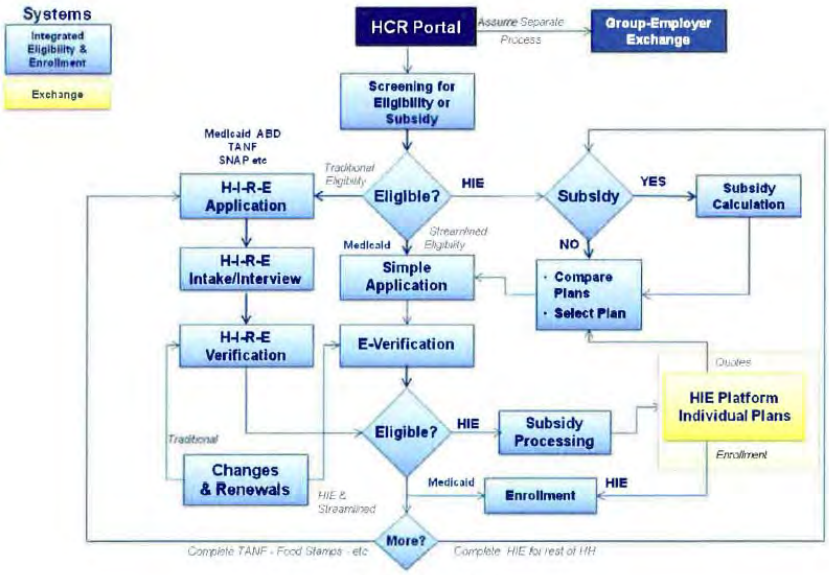
The use of each component in the workflow can best be described in a user story. Table 2 presents a user story that follows one of the many workflows and does not, by definition, cover all use cases or business process flows; however, it demonstrates use of each component in a basic flow.

User Story	Workflow
Rita needs health insurance for herself, her spouse Dan, and her children, Katy (17) and Danny (13). Rita's COBRA insurance expires next month, and she has not found a new job. Her husband Dan is physically unable to work due to a car accident and does not have health insurance coverage. Katy just told her parents that she's pregnant, and when she went to the doctor's office to confirm it, she was given information about the Exchange.	Communications - Outreach
Rita and Katy go to the Exchange website to see what insurance plans are available, and they notice an option of pre-screening eligibility for State health assistance. They complete the eligibility screening and discover the family is eligible for subsidies - making health insurance affordable. They browse and compare plans, and decide on BestHealth coverage. The Exchange also indicates that Katy is eligible for Medicaid.	Exchange Portal Communications - Outreach Eligibility
Rita enrolls her family in the BestHealth plan, and Katy enrolls in Medicaid. The Exchange calculates the amount of subsidies and the premium due. The Exchange shows Rita monthly, quarterly, and annual premium payment options. Rita elects to use her severance payment to pay the entire annual premium online. The Exchange	Enrollment Rules Engine Financial Management

User Story	Workflow
automatically prepares and emails Rita an electronic receipt for the BestHealth plan, communicates and relays information to the BestHealth plan administrator, and emails Katy Medicaid information.	
A mid-year reminder for change in family circumstance is automatically emailed from the Exchange. The email contains a link to the Exchange area to update personal information. Rita found a part-time job and clicks the link to update income information. Her benefits, premiums, and subsidies do not change. Rita calls the customer service line also listed since she works 24 hours a week and wants to verify the subsidies still apply. She calls and receives verbal confirmation. She also receives an email acknowledging the change in income and confirming no changes to her plan.	Oversight - Account Management Rules Engine Customer Service - Call Center
In the hospital, Katy gives birth to a beautiful baby girl, Kelli. The nursing staff is able to go to the Exchange and add the new baby. Kelli is automatically eligible for Medicaid for up to one year. The nurse provides Kelli with her Medicaid identification number. A navigator merges the family members under Rita, but maintains separate cases.	Oversight - Account Management Rules Engine

2.3.4 Cúram Software

The diagram below shows the proposed workflow from the citizen entering the portal for screening and eligibility, through completing the application, plan selection and enrollment.



Proposed Solution Workflow

We will be happy to discuss the workflow in greater depth and detail at a later stage.

2.3.5 Deloitte

No response provided.

2.3.6 Exeter

The diagrams below provide a high-level overview of OneGate's solution workflows for individual and family as well as for SHOP.

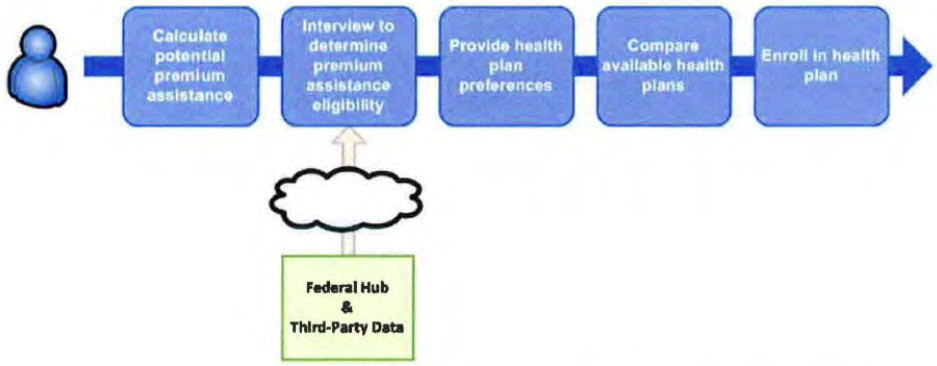


Figure 5: HBE Individual and Family Workflow

Figure 6: HBE SHOP Workflow

Health Benefit Exchange (HBE) Individual and Family

OneGate provides the following features to support HBE individual and family:

- Complete eligibility and enrollment functionality to support the HIX;
- Easy-to-use premium assistance calculator that allows the customer to quickly estimate how much of a tax credit is available to him/her and his/her family;
- Integration with the federal hub and other state or third-party systems to retrieve data for automated verifications;
- User-friendly views and enables easy side-by-side comparisons;
- MAGI Medicaid rules to alert users of Medicaid eligibility and allows them to enroll in Medicaid;
- Configurable back-end store of health plans and related carrier information (i.e., carrier list of providers and facilities); and
- Capability for batch processing health plan and related information through back-end services.

HBE Small Business Health Options Program (SHOP)

OneGate's modular design will support the following features of HBE SHOP:

- Federal SHOP rules to enable small businesses to easily determine eligibility;
- A customer-centric user experience allowing small business employers to easily navigate through a guided interview to determine eligibility, register their employees, select plan enrollment dates, and shop and select qualified health plans for their employees;
- Self-service management features allowing employers to see a consolidated view of their employees and their selected plans; and
- Back-end business services to aggregate, prepare and package payment data with various data interchange formats supported, for remittance to plan carriers.

2.3.7 Getinsured.com

No response provided.

2.3.8 LexisNexis

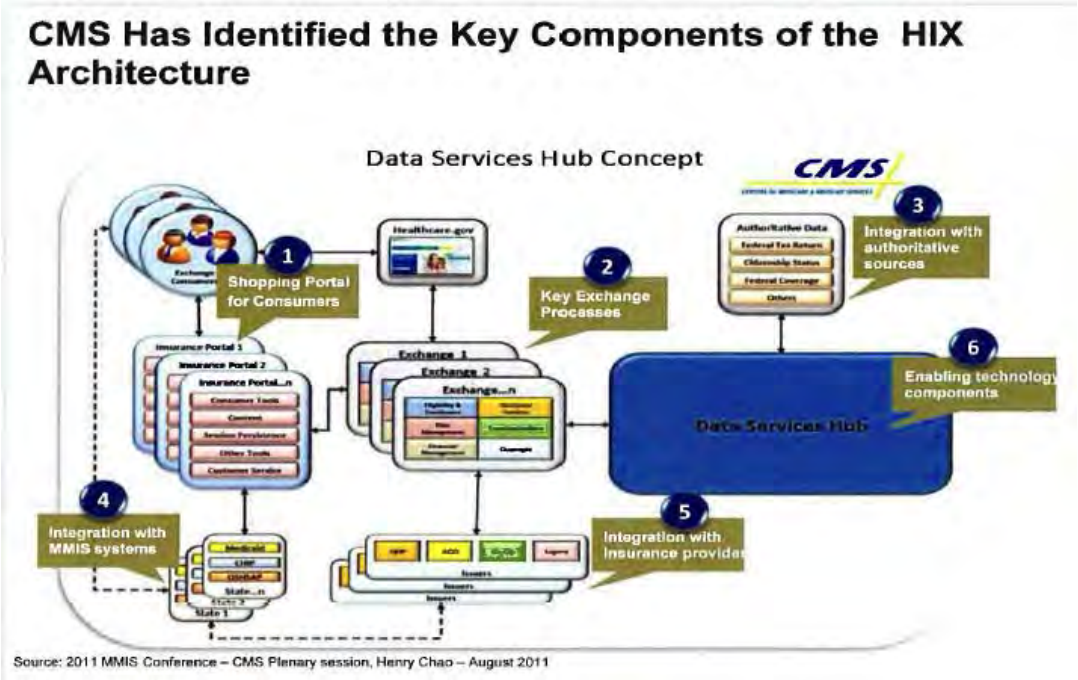
By using common XML calls through proven Web Services techniques, Verification and Authentication can integrate smoothly within the technical framework of the Exchange. This sort of security is commonplace in many modern customer experiences, either on-line or through Help Desk applications, where those accessing Banking, Insurance, or Government applications must respond to identity authentication based on knowledge beyond what could be determined by a lost or stolen wallet, for example.

2.3.9 MAXIMUS/Connecture

No response provided.

2.3.10 Oracle

The figures below define how the Oracle solution addresses the various functions and business processes that are required throughout the Health Insurance Exchange and how they map to the key components identified by CMS.



The subsequent figure includes the various components of the Oracle solution for each of the above functions. This is a high level overview of the processes; more detailed information can be provided.

2.3.11 Software AG

No response provided.

2.3.12 Speridian

No response provided.

2.4 MODERN CONSUMER EXPERIENCE

How does your solution meet the Federal vision of a "modern consumer experience" comparable with those offered by leading retailers? Please provide a visual (e.g., diagram, screenshots) illustrating how a consumer completes eligibility determination and enrollment. Links to demonstration sites are encouraged.

2.4.1 ACS

Because many portions of our solution are in operation today, we have been able to study and refine the user experience aspects of our HIX Solution Suite components over the last eleven years to ensure the consumer has the modern tools and consumer-friendly appearance and functionality users are accustomed to most up to using at popular retailer websites. The ACS Team has an entire department dedicated to studying user trends and behavior and modeling the software on those patterns. In the formal presentation planned for this procurement process, the ACS Team will give a full demonstration of the user experience and the various proven patterns utilized within the software. The HIX Solution Suite is flexible enough to adhere to the final EnrollUX2014 specifications, which are scheduled for release in March 2012.

In advance of our demonstration, we encourage the state to visit the Maryland Virtual Compare web-site that is powered by our HIX Solution Suite technology. In April 2011, the Maryland Health Care Commission sought to establish an online tool for small business employers to use in identifying health insurance options for themselves and their employees and to identify brokers/agents to assist them when needed. The website, http://viltualcompare.benefitfocu .com, allows employers to compare plans across carriers and assists them in identifying the best benefit plan for their employees. A screen shot from the Virtual Compare site is provided in Response Section 2.e, Shop Functionality.

Eligibility and Benefit Election in the Member Role

The HIX Solution Suite supports both field-level and page-level verification to ensure eligibility determination that follows the business rules established by the State. First, demographic information entered by consumers is verified against the State's business rules to determine eligibility for the exchange. Field-level verification ensures that the user enters all application data correctly and helpful messaging provides guidance within the tools (e.g., nine digit SSNs, mm/dd/yyyy date fields, etc.). All consumer demographic information is compared against date rules for eligibility adjustments.

The HIX Solution Suite is designed to help consumers complete enrollment with a guided interview that includes decision support tools such as video, plan filtering, plan comparison and status menu, with modern consumer look and feel. These tools are in use today and are helping more than 14.5 million consumers enroll in benefits online.

The HIX Solution Suite presents a health benefit enrollment workflow that shares many characteristics of a traditional retail experience. For example, medical plans are presented in a grid layout with all available coverage levels, deductibles, and premiums available for

comparison. This experience is not unlike the consumer who is deciding between the 42" HDTV or the 50" HDTV. In both examples, the consumer has the ability to evaluate the product through varying levels of criteria and compare high-level features with the goal of decision-making. The ability to compare is essential and one of the most important elements of the enrollment experience in a successful exchange.

Whether a consumer accesses the HIX Solution Suite via desktop or mobile device, the shop and compare process must be visually-pleasing with a side-by-side display of two or more benefit plans, enabling users to make informed decisions on health care coverage - as demonstrated in Exhibit 2-4, Side by Side Comparison of Plans. This is a key attribute of the solution we offer to the residents of West Virginia.

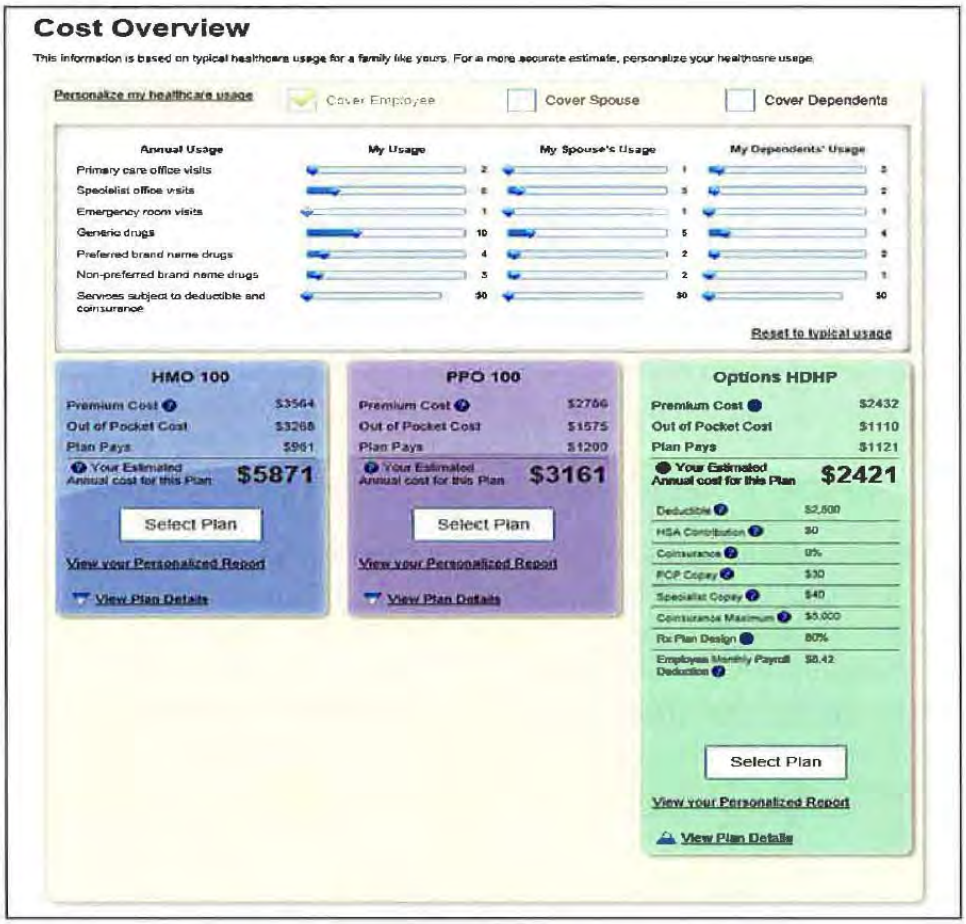


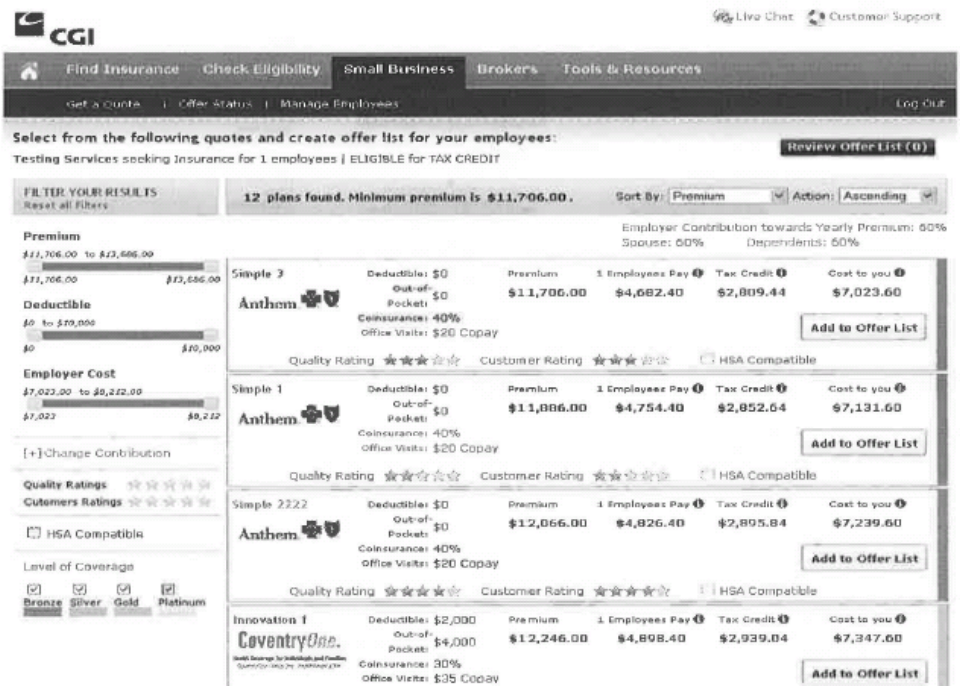
Exhibit 2-4. Side-by-Side Comparison of Plans

The side-by-side plan comparison is visually appealing and familiar to consumer shoppers.

2.4.2 CGI

CGI's Health Insurance Exchange360 provides an exceptional modem consumer experience and it is highly comparable to those offered by leading retailers. The screen shot found in Exhibit 2 exemplifies the clean and modern interface found throughout CGI's Health Insurance Exchange360:

Exhibit 2: CGI's Health Insurance Exchange360 Provides a Modern Consumer Experience

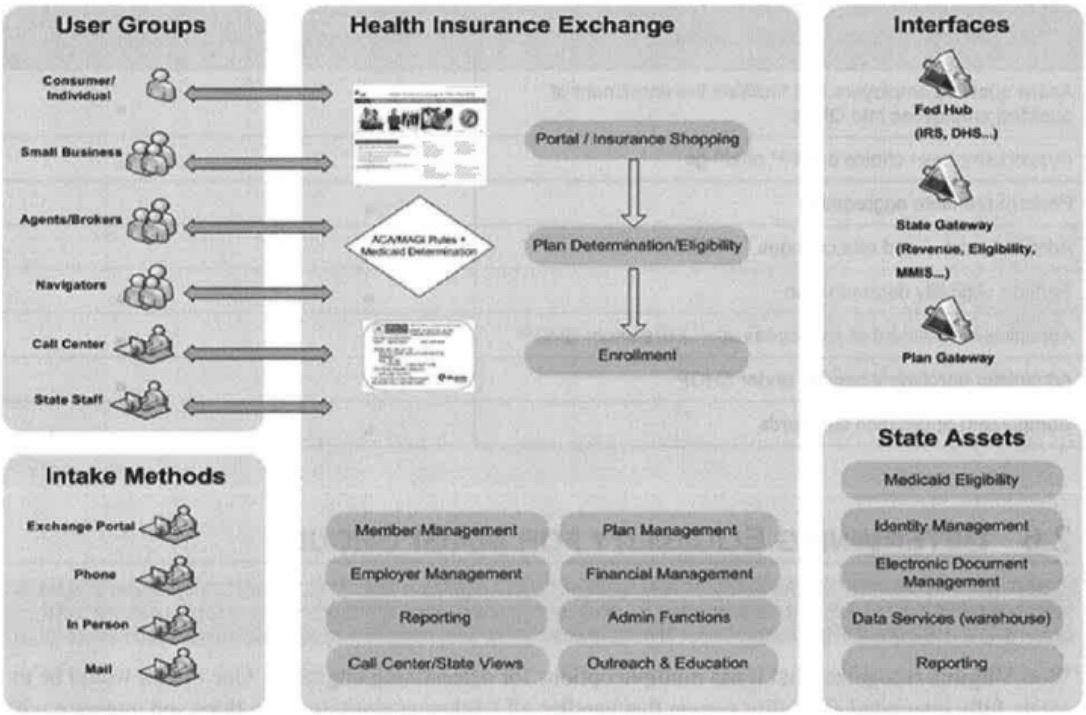


The solution has been designed with the consumer experience in mind, leveraging best practices from both commercial and public sector consumer experience leaders. Features include:

- Intuitive user interface
- Ability to perform side by side compare
- Integrated functionality, provider search, and filtering options
- Self-service capabilities and account management
- Compatible with leading browsers

CGI would welcome the opportunity to demonstrate Health Insurance Exchange360 for the State of West Virginia so that the State can get a deeper understanding of the consumer experience it provides. Furthermore, the diagram found in graphically represents the Customer Functional view of CGI's Health Insurance Exchange360:

Exhibit 3: Customer Functional View



CGI has direct experience developing easy-to-use and engaging consumer-facing portals such as www.mymedicare.gov and www.medicare.gov. The websites empowers beneficiaries and caregivers to use quality and cost information to make more informed health care choices. In doing so, the tools also stimulate market forces and provide incentives for high-quality performance by healthcare providers. The CMS websites are consistently recognized with industry accolades and awards, including Gold and Silver 2008 eHealthcare Leadership awards and a 2008 WWW Health award.

2.4.3 Cognosante

Today's shoppers are used to simple, secure, and easy to use websites to browse, compare, and purchase products and services. As the Systems Integrator, Cognosante brings choices from vendor offerings that support West Virginia's needs best; whether that's including online informational videos, online chat, information scroll-over displays, call out boxes, many other features supporting the 'no wrong door' approach.

2.4.4 Cúram Software

Solution Compliance and Standards

Cúram Software understands that the CMS "Seven Standards and Conditions" are fundamental to all state Medicaid modernization/Health Care Reform requirements. Consequently, we have designed Cúram to offer a technological and functional base that provides an extremely high level of support for these standards.

Modularity Standard: Cúram Software offers a deployment model that allows organizations to modernize systems incrementally with minimal project risk. The term "Incremental Modernization and Transformation" (IMT) describes our approach to modernizing mission-critical systems from a platform and solutions perspective. As a component based, Service Oriented Architecture (SOA)-compliant solution, Cúram fully supports a deployment model that allows organizations to modernize systems incrementally with minimal project risk. Because Cúram is an enterprise level, integrated solution, it allows system components and functionality to be added seamlessly to arrive at a complete solution that can interface with one or many existing systems, including legacy systems.

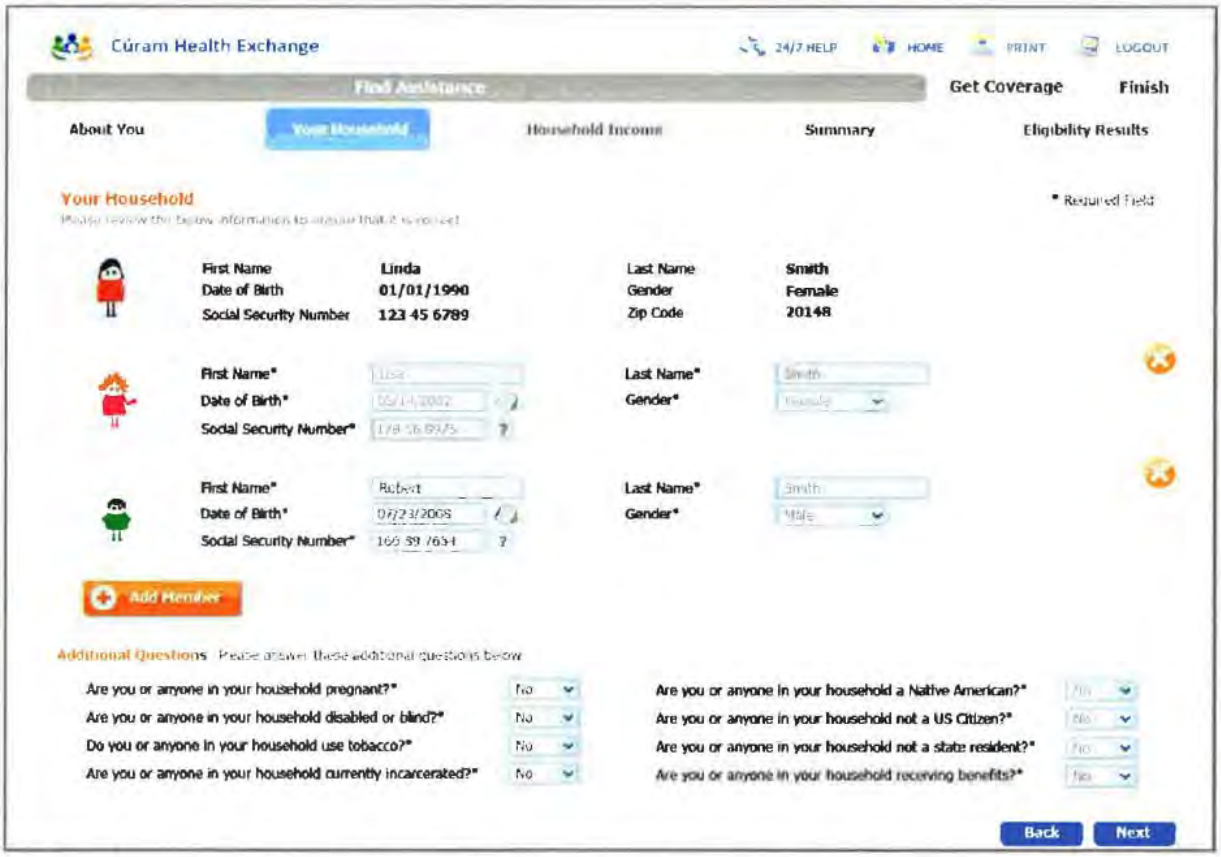
MITA Condition: Our solution is designed with the MIT A guidelines in mind and has, for several years, been following the key principles of MIT A including data sharing and data management, reusable components and solutions, modular, non-monolithic design, open architecture, standards, collaboration, and security and privacy.

Our early assessment is that in nearly every one of these areas Cúram can help agencies achieve at least a MIT A Maturity Level of 3 or higher.

Industry Standards Condition: Cúram aligns with and incorporates industry standards, including HIPAA, NIEM, and accessibility.

Exchange Portal and Eligibility

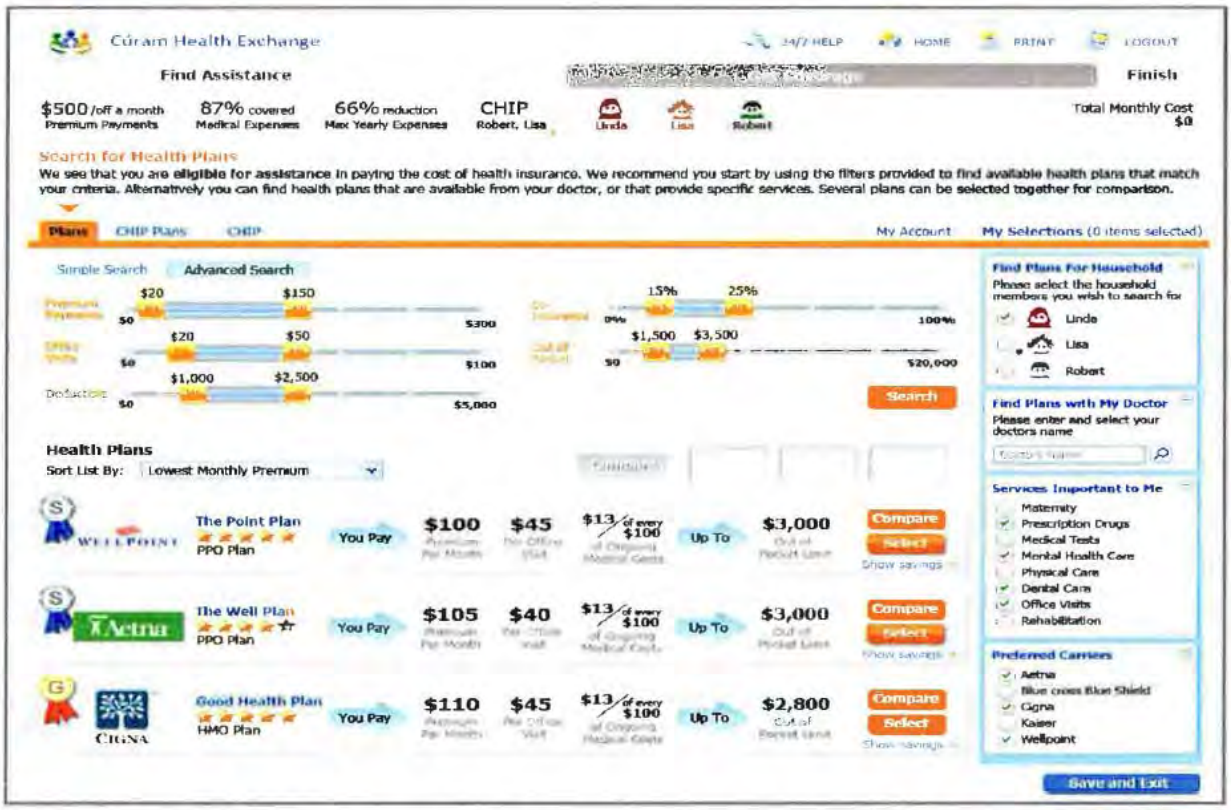
Cúram HCR is being designed to be the face of Health Insurance Exchanges that will provide a portal through which various customer groups can access Exchange services via the Internet. For example, the portal will enable consumers to apply for either public or private plans without having to specify which type of plan they are applying for. Cúram will present a guided questionnaire with a minimal number of questions to the user. An example of such a portal is provided below.



Sample Cúram Health Insurance Exchange Portal

The answers to these questions will be verified using available online interfaces, such as the Federal Hub. Once verified the Cúram Rules Engine will determine eligibility for plan types and if applicable entitlement for Cost Share and Tax Credits. Alternatively, the Cúram Solution will identify if the household should be directed towards traditiona; full Medicaid eligibility. This will occur if any member of the household has been identified as aged, blind, or disabled, or belongs to any other specific category that requires traditional/full eligibility processing. If this occurs, responsibility for the application will be handed off to the existing state eligibility systems.

Once it is determined what planes) an applicant's household is eligible for the user will be presented with a list of available plans. These plans may either be public plans (Medicaid, CHIP, etc.), private plans, or both. Any applicable subsidy will also be presented to the user. An illustration is presented below.



Example Plans Presented in Cúram Health Insurance Exchange Portal

Once the user chooses which plan or planes) to apply for (e.g. a CHIP plan for a child, and a private plan for the parent), Cúram will record the chosen plans, call the Exchange Partner Interfaces to record the application for any Private Plans with the Insurance Carriers, and record the application for any Public Plans with the State systems. Any premium due from the applicant will be billed to the applicant either by the Insurance Carrier or via the preferred Financial Services partner. If required, support for a credit card purchasing solution can also be considered.

2.4.5 Deloitte

Proprietary response provided.

2.4.6 Exeter

OneGate provides a customer-centric user experience, allowing end-users to easily navigate through the health plan shopping and enrollment process. The customer is guided through the process with user-friendly screens that contain clear, easy to understand text. Inline help text options are provided to allow end-users to easily find answers to common questions. The system attempts to streamline the user eligibility and enrollment processes, but does not lock the user into a particular flow. For example, the customer can opt out of having his or her information sent to third-party systems for external verifications. The rules-driven eligibility process provides easy navigation through data review screens, allowing the user to move back and forth through screens if edits need to be made. The eligibility determination can be

transparent to the customer, to the extent the state chooses, by displaying a dynamically generated "decision report" populated with the rules that were executed based on the customer's answers to questions. The depth of the decision tree that is displayed to the customer is configurable.

Additional integration with call centers are supported to provide end-users with live help if the state chooses that option. The premium assistance calculator is available to enable customers to pre-screen themselves for potential eligibility for premium assistance, as well as show the value of cost savings. The calculator also provides logic to determine potential eligibility for Medicaid, based on the future expanded Medicaid and MAGI Medicaid rules. OneGate provides the "no wrong door" approach for health insurance and Medicaid. The modular OneGate system also allows states to easily add additional human services programs including, but not limited to, SNAP and TANF. OneGate is fully accessible, with support for Section 508 of the ADA, WCAG 2.0 and W AI-ARIA. Keyboard navigation is available, in addition to support for integration with third-party screen readers. In addition, OneGate includes configurable, multi-lingual features to allow non-English speaking end-users access to the same customer-centered user experience.

2.4.7 Getinsured.com

Getinsured has extensive experience in developing Exchange-related workflows in its Back office as well as consumer-facing UI. These workflows include but are not limited to workflows for the following business processes:

- Email automation
- Work queues for Broker/Navigators
- Enrollment processing

Enrollment Process Scripting: Getinsured will incorporate any common application forms that West Virginia requests into the Exchange project. This includes uniform enrollment and application forms that the ACA requires HHS to develop under §1311(c)(l)(F) (for QHPs), §1413 (for subsidy programs), or any state derivations.

Currently, HHS and the Consumer Information Subgroup of the NAIC are working together to define the field and standards of a common application form that states have the option to incorporate into their Exchanges. Getinsured will continue to monitor these developments and leverage emerging application standards as they become adopted. The expectation is to create a common application form across all carriers and plans on the Exchange-public or private.

Enrollment Script Execution: Although some states anticipate that the bulk of their enrollments in the exchange will take place through the web portal, in West Virginia, many individuals who are seeking to enroll in health insurance may lack ready access to the Internet. Others may prefer to talk to a knowledgeable, licensed customer service agent in order to select and enroll in a health plan. Getinsured has worked with most major carriers around the country to enable applications to be taken over the phone, and to either record a voice signature or request the user to provide an e-signature when they have online access. We anticipate that these technologies and processes will be directly applicable to users on the West Virginia exchange.

Current Enrollment Status Verification: Since health insurance carriers have differing levels of capability and different formats, frequencies and methods to communicate enrollments

statuses back to the Exchange, Getinsured will utilize its existing, production tested ability to interface with thousands of health plans to Exchange status information. We will repurpose our current processes and work queues to enable follow up with consumers for corrections or additional information, notification of successful enrollment, renewal reminders, etc.

User Authority Validation: Getinsured Exchanges will assist Exchange Administrators in setting Open Enrollment windows for West Virginia residents to apply for coverage. Additionally, life events such as changes in employment, income or family size could enable changes in coverage outside of Open Enrollment periods. Such user-inputted life events will be validated through the Eligibility Module, and changes in enrollment will be supported either online or over the phone.

[Figure 2.3·1 is considered proprietary to Getinsured.com and therefore is not included in this document.]

[Figure 2.3·2 is considered proprietary to Getinsured.com and therefore is not included in this document.]

Link to Demo Site for Modern Consumer Experience
Getinsured has made available a sample web-site demonstration for this response, found at http://www.nvexchangepilot.com.This information was recently provided to the state of Nevada during a demonstration. Getinsured would be delighted to provide a similar demonstration pilot for West Virginia at no charge upon request.

2.4.8 LexisNexis

No response provided.

2.4.9 MAXIMUS/Connecture

Proprietary response provided.

2.4.10 Oracle

User Experience
The Health Insurance Exchange will service thousands upon thousands of individuals who have never received public assistance, the majority of which will be accustomed to interacting with commercial ecommerce websites. The Federal Government expects Exchanges to provide "modern consumer experiences," via multiple delivery channels. The Oracle HIX is designed to facilitate "no wrong door" through an intuitive user experience that

The Oracle HIX portal provides end users with an intuitive Web 2.0 experience

automatically guides citizens to relevant programs.

The Oracle HIX provides two user interface capabilities: the first serves the Exchange external users with a rich Web 2.0 focused interface along with a second user interface for Exchange Workers that provides productivity enhancing capabilities such as drag and drop *The Oracle HIX portal provides end users with an intuitive Web 2.0* placement and auto- *experience* save functionality.

The Oracle HIX solution aligns with the principles defined by the UX 2014 by incorporating the following into the exchange user interface:

- World class user experience
- Multiple access points such as web, IVR and mobile channels
- Component re-use to promote familiarity with the Exchange
- Performance and ease of use at scale

Portal User Interface

The Oracle HIX provides a multi-role portal to support the various end user roles that interact with the system. The Exchange utilizes a single logical portal that allows users to take on multiple roles depending on the context of their activities. The Oracle HIX provides for role based access control (RBAC) for the following account interfaces:

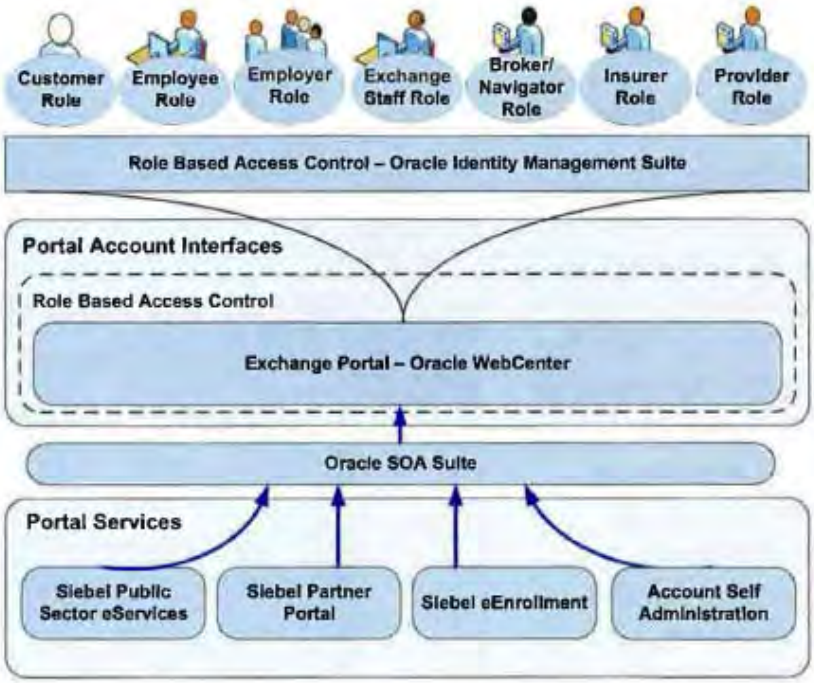
- Individuals
- Insurers
- Employees
- Employers
- Navigators/Brokers

Based on West Virginia's policy, individuals could have the ability to maintain their own demographic and personal data utilizing their secure portal. For example, an individual may go to the portal to report a change of income level. Depending on your business process, this updated data would have to be verified through an external source (i.e. the IRS) before conducting a re-determination of eligibility.

The portal is implemented

via a multi-tiered architecture based on portal services such as those provided by our case management system, user
interfaces provided by our
portal (Oracle WebCenter) and security from the Oracle Identity Management Suite. The figure below represents
the interaction of the multiple tiers and underlying technology:

Individuals using the system may take on a different role depending on their activities. For example, a small business owner may take on the "Employer" role when establishing the specifics of his business' insurance offering and later take on the role of an "Employee" to make elections for himself and his family. In this example, the small business owner would have a single login (identity) within the system, which helps to promote a positive end user experience and bolsters the security of the Exchange, thereby reducing the number of identities and roles managed by the HIX. The Account Interfaces present the business functions available to the role(s) granted to a user of the system. As entitlements change so do the business functions available to an end user.



The Oracle HIX portal provides role based account interfaces for increased security and end user experience.

Oracle WebCenter Suite is the modern user experience platform for the enterprise and the Web. It consolidates the best user experience capabilities from a significant portfolio of leading portal products and related technologies to deliver a modern user experience for the enterprise that is seamlessly integrated with your enterprise applications. The suite consists of four main components including: Portals & Websites; Composite Applications; Social & Collaboration; and Content Management.

The technical approach using Oracle's WebCenter to front-end an existing application is quite straightforward:

- Expose the backend application/resource via a web service, OR
- Use SOA Suite (e.g. BPEL) adapter(s) to expose the backend application/resource as a web service (BPEL itself is exposed as web service)
- Consume the exposed web service (above) from WebCenter using the Web Service data-control - that is dropped onto a WebCenter page/portlet

Using this technology, you can integrate services from the Exchange with integration partners such as other state systems or the insurance carriers into a single user interface.

2.4.11 Software AG

No response provided.

2.4.12 Speridian

No response provided.

2.5 SHOP FUNCTIONALITY

How does your solution provide the SHOP functionality including, but not limited to, determining employer and employee eligibility for the SHOP and premium aggregation and remittance to carriers?

2.5.1 ACS

Vendors who have not managed the variety of needs held by the group market often underestimate the complexities of supporting this market segment. The ACS Team has in-depth experience supporting both individual and group markets in shopping for and comparing health plan offerings nationwide and in West Virginia. Our HIX Solution Suite provides decision support tools that include a personalized plan shopping experience and educational videos to assist individuals, employees and employers in their plan selection process.

Employer Choice Shopping. The HIX Solution Suite's group shopping capabilities are supported by a combination of strong eligibility and business rules, scalable decision support tools, and industry-proven retail shopping patterns. During the shopping workflow, employers have the ability to view all available plans from a carrier and preselect plans for their constituent populations. Employers can see the names of the plans, the carrier's offerings, and the estimated cost for each coverage level as shown in Exhibit 2-5, Plan Information for Group-based Shopping. When the consumer needs more fine-grained details, our solution has the ability to add PDFs and video explanations with each plan.

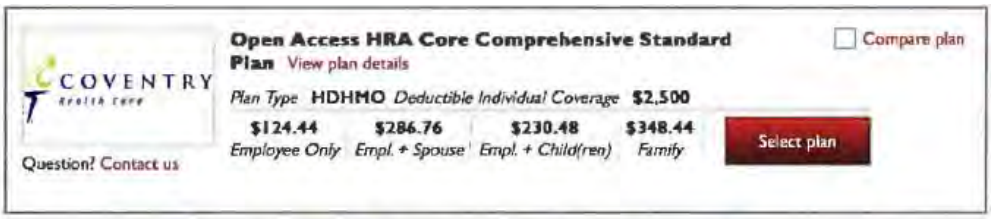


Exhibit 2-5 Plan Information for Group-based Shopping

Individuals, employees and employers see the names of the plans and estimated costs per coverage level.

Refining results is an important tool in comparison shopping. The refinement tools that accompany the HIX Solution Suite are configurable, meaning we can set them to any plan attribute as required by state rules and regulations. Typical refinement attributes include premium, deductible amount, HAS compatibility, and plan type. An example of the refinement

menu is shown on the left hand side of Exhibit 2-6, Side by Side Comparison of Key Plan Attributes. This exhibit also shows the comparison information offered for all plans available to the user. Shoppers can then compare up to four plans side-by-side using the "Compare plan" option and select the plan from this comparison to add to their cart.

Exhibit 2-6. Side-by-Side Comparison of Key Plan Attributes

Users can review all of the plans that fit the criteria they've selected and select specific plans to compare side-by-side using the "compare plan" tool.

Employee Selection in the SHOP Environment. Once the employer selects plans for the employees to choose from, the HIX Solution Suite supports benefit comparison and selection processes for employees. In the employee role, employees can access a self-service enrollment module that provides a business rules-based Web enrollment wizard designed to:

- Be easier to complete than a typical paper enrollment form;
- Provide active benefit education and plan selection decision support to individuals, ensuring understanding and the selection of those benefit plan options best for their situations; and,
- Enforce the complete set of plan design and group eligibility rules in a manner superior to the capabilities of *NR* and paper-based enrollment workflows.

The employee enrollment experience is presented similar to the individual exchange experience. The employer has selected a subset of the total number of plans available. These plans are then displayed distinctly, along with all plans available to the employee, as part of the employee experience in an easy to compare display as shown in Exhibit 2-7, Plan Selection Employee Experience.

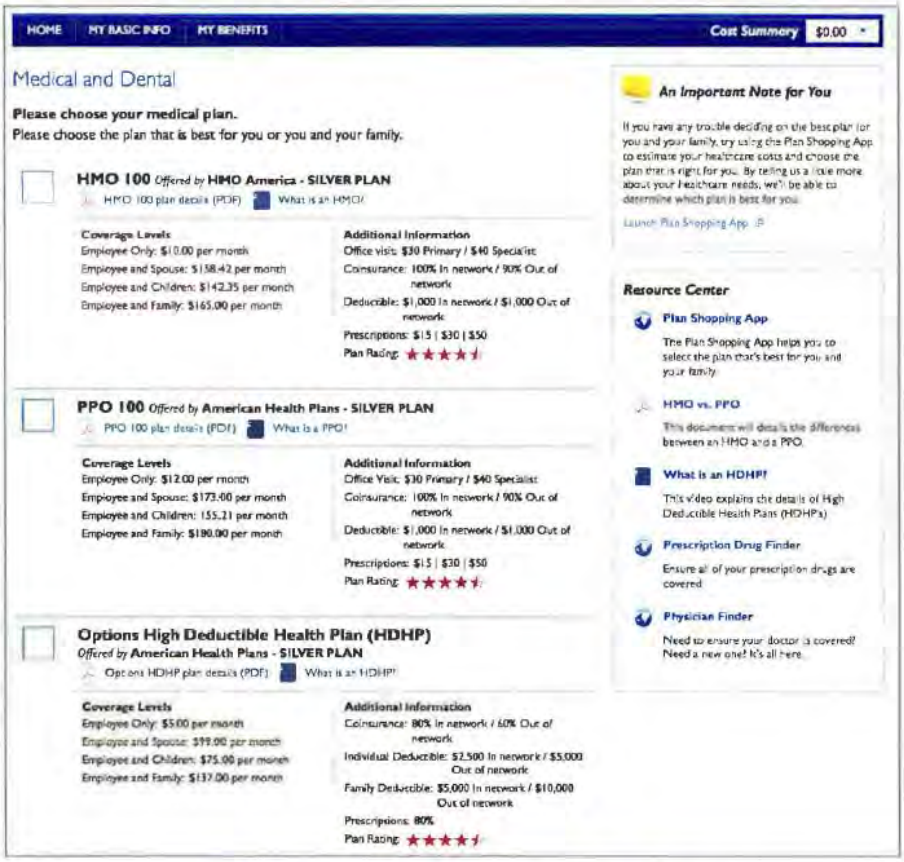


Exhibit 2-7. Plan Selection Employee Experience

In a SHOP model, employer selected plans are presented during the enrollment experience.

Employer-Specific Eligibility Rules. Eligibility rules are managed in the HIX Solutions Suite as employers are guided through a prequalification workflow. Our solution will show only the plans and services the employer is eligible for based on business rules dictated by the State. Eligibility rules are assigned automatically to each group. If the state decides to make rule changes for a specific employer or group of employers, rules can be configured in our system a timely manner, as directed and approved by the State.

Enrollee-Specific Eligibility Rules. The ACS Team provides a robust and flexible plan for eligibility management. Specific benefit offerings are made available to the enrollee based upon configurable "category" determinations that define the relevant eligibility distinctions among the enrollee population. These defined subsets ensure that only enrollees eligible for a product are presented with that product for enrollment. Further, eligibility can drive coverage levels, such as salary-based life benefits where the eligible volume is a function of the employee's Modified Gross Adjusted Income (MAGI) information.

Enrollment period date rules are automatically enforced to include allowable enrollment dates, waiting periods, grace periods, effective dates, and post-enrollment limits on offerings. All of these rules are enforced automatically during the enrollment workflow, so retroactive reviews for eligibility compliance are not required.

Funding Transmission To/From Employers and Carriers. Our proprietary system allows for electronic and/or paper billing, and accepts multiple payment types including credit cards, electronic fund transfers, automatic debit, Integrated Voice Recognition (IVR) capture, check by phone, and paper checks. We also track and reconcile all accounts and report payments to the appropriate entities. Payment receipts are aggregated from all applicable entities on behalf of individuals enrolled through the Exchange. These payments are listed in detail on the employer and individual's monthly statement, as well as documented and provided in the 820 EDI file sent to participating carriers each week. Our system automatically adjusts an employer's invoice to reflect prorated amounts for additions and terminations within the group plan. We also notify participating carriers of late or short pays. Funds are transmitted to/from employers and carriers via ACH or paper check, on a daily, weekly, or monthly timeline depending on the funding arrangements.

2.5.2 CGI

Exhibit 4 displays how the required SHOP processes are supported by the portal and/or the services of CGI Health Insurance Exchange360 solution. The portal supports small businesses with all the functionality required in much the same fashion as for individuals. Pre-built workflows and screenshots are available in the solution, but have not been included due to page constraints. CGI would be available for a demonstration to West Virginia of this functionality as part of this RFI process, if required.

Exhibit 4: SHOP Specific Functions

SHOP Specific Function	Exchange360 Portal Software – Automated Solution	Call Center – Centric Solution – Call Center operators Supporting any of the 4 customer entry points
Assist qualified employers and facilitate the enrollment of qualified employees into QHPs	√	√
Support employer choice of QHP offerings	√	√
Perform premium aggregation	√	
Administer rates and rate changes	√	
Perform eligibility determination	√	√
Administer enrollment of employees into QHPs under SHOP	√	√
Administer enrollment periods under SHOP	√	√
Comply with application standards	√	

2.5.3 Cognosante

As the Systems Integrator, we ensure the specific West Virginia and federal SHOP functionality requirements are met through the rules engine, account management, financial management and plan management functions. The rules engine determines what type of SHOP user signs in (employer, employee, or broker) and drives the workflow specific to the user. Among many other functions, the broker has setup options, the employer has administration options, and the employee has browse, compare, and purchase options. The Exchange accepts, certifies and decertifies QHPs, aggregates premium payments, bills premiums, produces statements, notices and notifications, and pays plan issuers.

2.5.4 Cúram Software

Our solution provides out-of-the-box functionality to deal with the capture of employer and associated employee data in order to determine eligibility for employer Exchange participation along with eligibility for premium tax credits.

Data capture will include elements that affect the group's premium rates, such as, geography, industry code, employer size, employee census data, as well as other elements that will determine whether or not an employer is eligible to participate in the Exchange. Based on guidance from the federal government, our solution will also address the question of affordability by taking into account employee income data along with proper calculations based on premium costs and employer contributions to the purchase of health insurance.

Where appropriate, our solution will provide integration with benefits administration partners to deliver additional small employer functionality. Cúram HCR out-of-the-box SHOP functionality will include:

- Defined benefit and/or defined contribution features
- Enrollment notifications, change in circumstance communications and verifications
- Navigator/broker functions
- Appeals processing
- Appropriate reporting to the various stakeholders, including the federal government.

Cúram Software has established relationships with best of breed vendors whose core business is in the area of health care financial services and health insurance premium processing. Our partners include recognized names in health care financial services and third-party administrators (TPAs) who have the experience to administer premium payments as well as deal with the issues of tax-advantaged health care accounts.

2.5.5 Deloitte

Proprietary response provided.

2.5.6 Exeter

OneGate's modular design will allow for re-use of components and services for the individual Exchange and the SHOP Exchange. The rules and user interface will be driven by an integrated rule base, allowing for a single application for Exchange users. The interactive online interview configured via rules will ask questions based on whether the customer is shopping for an employer sponsored (SHOP) plan or an individual or family plan. The customer would be able to shop for, filter and compare plans. The returned list of eligible plans would be filtered based on individual versus SHOP access. From the customer's perspective, the application process, shop/compare, enroll and self-service management features will be the same, allowing for seamless transitions from SHOP to the individual Exchange.

The OneGate HBE employer portal will allow qualified employers in the State to sign up for, setup and manage health insurance plans for their respective employees through the State's SHOP Exchange. Built on configurable and modular OneGate core components, the portal will support changes to West Virginia's SHOP Exchange based on policies and timeline set forth by the state, the ACA and CMS.

Employers will have additional features available to them through the Exchange, to apply for, and administer the SHOP plans for their employees. Leveraging the rules engine and the interactive interview front-end, the employer would be able to apply for SHOP. If the employer qualifies based on the application, the employer would be able to perform the management functions required to allow employees to shop through the exchange. High level features are outlined below:

- **Employer SHOP application:** OneGate will allow employers to submit applications to the Exchange. The employer is able to create an account, respond to a short rules/policy driven interview and submit an application. OneGate provides the hooks necessary to integrate with external agencies in order to expedite the verification process.
- **Employer SHOP setup:** After successful eligibility determination, the employer has access to additional SHOP features on his/her self-service SHOP account. The employer will be able to select qualified health plans (QHPs) for employees, based on the offerings provided by the State. Employees will be uploaded in bulk into the employer's SHOP account, allowing employees to shop for insurance. The employer will have the option to set the level of contribution for the plans, and set up the employee enrollment periods based on state policy for employer election periods. The Employer portal would include the necessary employee management and alerts and messaging features required to facilitate the enrollment of employees in QHPs through SHOP.
- **Employer SHOP maintenance:** Through the Exchange, the employer has self-service features accessible through the Employer portal that allows for management and maintenance of employees covered, enrollment periods, QHPs offered to employees and employee enrollment rollover processes. Alerts and notification features will keep the employer informed about any employee initiated actions, such as employee termination of coverage. While employers will be able to see some employee data, only the data required to perform the functions of the Exchange will be accessible, conforming to HIP AA privacy and security standards.
- **SHOP integration:** OneGate's service-oriented design allows for the employer and customer portals to integrate with carriers of QHPs. Included in the offering will be functions to maintain and aggregate payments and other enrollment data. OneGate's SOA infrastructure is fully capable of integration with different transport protocols, and message formats, including HIPAA 834 Transaction.

2.5.7 Getinsured.com

Please refer to the SHOP discussion in section 1.1a for a full set of functions, requirements and business processes. Getinsured will also be delighted to provide a complete demonstration of a SHOP portal including a comprehensive set of capabilities for employers, employees, carriers and brokers. The demonstration includes the set-up and ongoing management of premium aggregation and remittance capabilities.

2.5.8 LexisNexis

No response provided.

2.5.9 MAXIMUS/Connecture

Proprietary response provided.

2.5.10 Oracle

Unified SHOP and AHIX Functions

Oracle Siebel provides a single platform for multiple programs to provide a historical and longitudinal client view

When you are evaluating applications that support the Exchange, Oracle recommends that you look for solutions that are highly configurable without having to modify code. Oracle also recommends the ability to re-use core functions for multiple business processes. Oracle offers a COTS configurable solution that supports both individual and SHOP exchange functions. The core functions are shared for individual and SHOP exchange processes including but not limited to:

- Family Structure
- Enrollment
- Catalog - Choosing the plan from catalog (may be subset of plans available for SHOP exchange depending on which plans the employer makes available)
- Plan Comparison
- Communication and Notification (to Carrier, Individuals, Employers, etc)
- Case Management - Creation and maintenance of Health Insurance Exchange cases
- Payment Obligation - Generation of payment schedules and calculation of citizen obligation (or payroll deduction)
- Renewal processes
- Cancelation
- Termination

SHOP Specific Functions

The Oracle HIX solution addresses the functions to support the Small Business Health Options Programs (SHOP) portion of the exchange:

Enrollment of qualified employees into QHPs
The Oracle solution enables qualified employers to identify qualified employees that are eligible to enroll in QHPs. Employers can define the employer portion of the QHP, and based on which QHP the employee chooses (and rate band associated to the QHP) calculate the employee payroll deduction (done by the employer). The Oracle solution enables employers to choose the QHPs that they make available to their employees.

Perform premium aggregation
Siebel Public Sector case management system can accommodate the fund aggregation requirement. Siebel can factor in the various sources and the associated contribution amounts in the insurance premium calculation. The PeopleSoft Financial system can also accommodate receipt of payment from the various sources and properly apply the payment to the appropriate insurance premium.

Administer rates and rate changes

The Oracle solution enables the Exchange, working closely with the carriers, to administer and maintain QHP rate bands and rate changes. Before making the change, the Exchange could see the impact of the change on both individuals and employees utilizing the QHP. Before the change is made, notifications can be sent out to impacted individuals.

Perform eligibility determination
The Oracle solution enables eligibility determination including but not limited to employers and employees. The eligibility determination is performed by the HIX rules authoring component Oracle Policy Automation which allows the generation of executable business rules within Microsoft Word®. For employers you can take into account the following attributes (including but not limited to):

- Number of employees
- Employee wages
- SIC Code
- Location

For employees you can take into account the following attributes (including but not limited to):

- Number of hours worked
- Full time/part time
- Amount of wages

Data entered will be verified by the system (and perhaps external sources), adjustment periods will be determined and notifications will be sent and tracked as appropriate.

Administer enrollment of employees into QHPs under SHOP
The Oracle solution enables the Exchange (along with the employer) to administer the enrollment of the employees (identified by the employer). Employees can be identified and verified, enrollment timelines can be set, QHPs made available for the employees to choose from can be identified, payment portions can be set (dynamically), information can be reconciled with the carrier(s) as appropriate, and notifications can be sent as required.

Administer enrollment periods under SHOP
The Oracle solution can enable the administration of enrollment periods for the SHOP Exchange. Initial and open enrollment periods can be defined and “special change of circumstance" (marriage, divorce, birth of a child, etc) periods can be accommodated.

Comply with application standards
Oracle facilitates compliance with application standards established by the Federal Government and the State of West Virginia. Oracle's SOA implementation based on service enabled COTS applications and leading technology infrastructure such as Oracle Service Bus provide an approach that aligns with MITA guidelines. Additionally, Oracle brings the experience of working on the MITA TAC in several domains.

2.5.11 Software AG

No response provided.

2.5.12 Speridian

Proprietary response provided.

2.6 DETERMINING ELIGIBILITY FOR MAGI GROUP

To determine eligibility for the newly eligible Medicaid population (aka the "MAGI group"), States can choose to have a fully integrated eligibility system that handles all Exchange eligibility functions or a system shared with other existing Medicaid eligibility systems. Which alternative do you recommend for your solution and why?

2.6.1 ACS

One of the fundamental principals the ACS Team developed our solution under was that we did not want to mandate an eligibility solution for our state clients. Our HIX Solution Suite is eligibility system agnostic, meaning that our solution can support either an integrated Medicaid eligibility solution or a stand-alone MAGI group eligibility. However, for ease of reporting and consolidation of Medicaid case data, we recommend that the State consider an integrated solution.

2.6.2 Cognosante

Cognosante's Medicaid eligibility system recommendation depends on each state's current status and future plans. Federal guidelines clearly state that all eligibility determination should be done in the Exchange. However, many states we've worked with have integrated health and social program eligibility systems and others have plans to upgrade their eligibility systems. West Virginia currently uses the RAPIDS system for eligibility determination. On the whole, the Exchange is interoperable and should be able to function as the eligibility system for all Medicaid, CHIP, other health insurance assistance, and QHPs as well as work with existing eligibility systems. The capabilities, interfaces and communication with existing eligibility systems can sometimes make this option more cumbersome and may not be real-time, so our general recommendation is to utilize a fully integrated eligibility system that handles all Exchange eligibility functions.

2.6.3 CGI

West Virginia recognizes that it has multiple options for determining eligibility. One option would be to create fully integrated eligibility system that handles all Exchange eligibility functions and integrate with the Exchange. This approach provides the opportunity for overall citizen management and service while realizing savings through a shared platform. CGI's Health Insurance Exchange360 already contains all of the MAGI rules and provides connectivity with Federal and State interfaces that could be leveraged. Alternatively, the State can select to build the MAGI rules into an existing State platform. Since many states have made substantial investments in existing eligibility systems, there may be a benefit to integrating them within a common platform. As West Virginia's partner, CGI would analyze all options and work in partnership with the state to deliver what meets the State's requirements.

2.6.4 Cúram Software

Cúram provides the capability to integrate with an existing eligibility system or completely replace the existing system. We recommend the replacement of the system with the Cúram pre-configured medical programs.

Cúram can provide dedicated eligibility functionality out-of-the-box for health and human service programs -including medical assistance programs such as Medicaid. The Cúram Global Medical Assistance (CGMA) solution module which can be configured to support the Exchange has been specifically designed for agencies administering medical assistance programs.

CGMA provides pre-built screens, workflow and rules to provide agencies a significant advantage in achieving targets for system modernization and process improvement. CGMA includes the federal rules for Medicaid determination out-of-the-box, as well as many of the state Medicaid coverage types. Additional rules, workflows and other system capabilities can be configured and tailored to meet exacting organizational and jurisdictional requirements as needed. Rules are used extensively throughout Cúram for various purposes, including eligibility determination, screening, assessments and workflow. The dynamic rules editor facilitates setting up and maintaining complex rules and the results associated with those rules through an easy-to-use graphical user interface in a manner that is external to the underlying code. It provides intuitive support for the creation, maintenance and management of rules that are valid for specified time periods.

CGMA integrates service delivery by allowing agencies to share evidence, business processes and determine eligibility across multiple programs, providing the caseworker with a list of medical support alternatives that best meet the consumer needs.

As a modular component of the Cúram Business Application Suite™, CGMA combines seamlessly with other application suite components for an integrated enterprise wide solution providing security, workflow automation, and access to a wide range of business and technology services, including integrated case management, service planning, and financial and provider management. CGMA includes evidence (data items) and rules for a wide range of medical assistance and disability programs. It determines eligibility in mandatory coverage groups for each individual in the household, taking into account rules about which household members must be counted for each program. This may result in an individual or individuals being eligible in more than one coverage group. CGMA prioritizes the eligibility determinations for programs, to produce "cascading eligibility," or more simply put, program eligibility may be determined by a program hierarchy.

2.6.5 Deloitte

Deloitte recommends a fully integrated system that handles all Exchange eligibility functions. We believe in order to optimize and increase efficient use of technologies for the State, the exchange and the Medicaid systems should share common services. There is inherent value in implementing common services supporting integrated eligibility. For example, a common point of entry for people seeking health benefit assistance – either participation in a health plan on the exchange, or Medicaid assistance - is a requirement of the Affordable Care Act (ACA). Implementing differences in the look-and-feel of the front-end, separating a client's perception of participating in a health plan on the exchange or receiving Medicaid assistance, can be achieved without compromising on the efficiencies of using shared technology services.

The following table provides a list of some of the services for which efficiencies, and in some cases simplicity of implementation, is gained by being shared across the functions of the exchange and the Medicaid systems:

Service	Advantages to Sharing the Service
Business Rules Engine	Determining eligibility for the newly eligible Medicaid population, based on the modified adjusted gross income (MAGI) methodology (a.k.a. the "MAGI group"), is a prime example of why a fully integrated system is necessary. According to proposed rule CMS-2349-P from the Centers for Medicaid and Medicare Services (CMS), "States would still have to determine eligibility under all possible categories [of Medicaid] if the individual is not eligible under this new optional [MAGI] group." Hence the implementation of the new income rules to determine individuals eligible for Medicaid must be done in a manner that allows for "cascading" of eligibility determination down to the current Medicaid rules. That is, there must be a seamless integration between the new rules and the existing rules.
Client Registration	The individual client who needs to access public programs expect a common access point for inquiring and applying for benefits, where data is collected only once, and used to determine eligibility for all applicable programs. In fact, this is a requirement of PPACA. Supporting this apply-once approach is a Master Client Index (MCI) that shares secure information across State applications using secure common identifiers. The centralized storage and analysis of client information improves the correct unique identification of individuals and supports fraud detection.
Common Data Exchange	For the purposes of determining eligibility, both the exchange and Medicaid systems need to reach out to the Federal data hub, and other secure sources for verification of data. With an integrated system the data is retrieved from these sources once, and used for both health plan benefit eligibility and Medicaid eligibility. The current eligibility system has 27 existing data exchanges with Federal and State resources.
Data Management	Organizations benefit from having a single source of data to which to refer to understand a client's eligibility, the underlying data that produced the eligibility results, and be made aware (alerted) of the case maintenance requirements. Also, technology benefits since there is a single "system of record" for data and eligibility results, eliminating the need for costly data routing and reconciliations.
Correspondence	Notices to clients are best managed through a common module and a single technology solution. Integrating notice management to individuals, from both the exchange and Medicaid components of the solution, is particularly important for the population that are expected to "churn" back-and-forth from being eligible to premium and cost-sharing subsidies, to being fully Medicaid eligible. Also, a common module promotes the combining of notices where feasible, which can reduce confusion for the client by consolidating messages, and reduce cost for the State by combining multiple notices into one envelope.
Reporting	The HIX solution must combine both business and clinical information (supporting quality assessments of providers in carrier networks) and deliver business analytics, operational support, and outcomes management into the operations of the HIX. Additionally, HIX staff will need to leverage repositories to identify fraud risk factors and schemes and help stave off potential fraudulent activities within the HIX. This kind of data analysis will be in addition to the management reports that are already needed for Medicaid. So again, an integrated system, including integrated eligibility, streamlines the data gathering, mining, and analysis needed to produce the performance reports that are expected by State management and Federal agencies.

Figure 10. Advantages to Sharing Common Services.

In summary, all Exchange eligibility functions are integrated. Deloitte is uniquely positioned to provide a fully integrated system due to our extensive experience in Health and Human Services, and in particular our singular experience with the current RAPIDS integrated eligibility system. We have already mapped out plans for eligibility extensions into Medicaid presumptive eligibility, new Medicaid groups based on MAGI methodology, and premium and cost-sharing subsidies.

2.6.6 Exeter

To ensure minimal duplication of information and a streamlined experience for customers, Exeter recommends that states take advantage of OneGate's integrated Medicaid and Exchange eligibility functions as thoroughly as possible. OneGate provides a "no wrong door" approach for a variety of benefit programs, including Medicaid. To facilitate this approach for the MAGI group, Exeter recommends allowing people to apply for MAGI-based Medicaid either

through the same application as for other Medicaid categories or the same application as for Exchange enrollment and premium assistance. OneGate also supports a non-integrated approach to Medicaid and Exchange eligibility, should a State elect to take this type of approach.

2.6.7 Getinsured.com

Under ACA §1413, the Exchange is expected to develop a streamlined eligibility process that determines the programs an individual is eligible for and thereafter, his or her premium tax credits and cost sharing reductions.

Verifying Submitted Eligibility Data

In order to administer multiple eligibility determinations from one integrated portal, the West Virginia Exchange needs a data verification center that interfaces with federal, state and private systems to verify and record data. Only after this verification is completed can consumers enroll in state health care programs or make purchases from the Exchange with subsidies and tax credits. Getinsured understands that the state has a Rapid Automatic Payment Information Data System (RAPID) that provides an automated facility for administration and management of many of the public assistance programs in the state. Getinsured also understands that the eRAPIDS program is in the process of providing an incremental web modernization of this system to improve a better front end for users. The potential to link or interface with this system will require exploration although the state should be cautious in being overwhelmed with such that might bog down the exchange development.

Federal requirements for interoperability of the exchange are already considered a difficult challenge. Whether or not West Virginia can forego some of these interfaces through the existing RAPID is unknown by this vendor. However, we would welcome the opportunity to review such opportunities with the state while assuring compliance with federal exchange timelines would need to be met.

West Virginia has expressed the need to transition some state-specific government health care programs into the Exchange. Getinsured understands these programs are not currently part of RAPIDS. Putting all government health care programs under one Exchange roof may further ACA goals because it will likely increase efficiency in access to coverage. Also, some of these programs will no longer be necessary in 2014. However, these are more than just programs. They represent approximately 20,000 citizens whose path to health care needs to continue. Getinsured will work with state health program administrators to design a customized solution if necessary for transitioning persons now covered by AccessWV, the SHAP Demonstration for the Uninsured, the Small Business Plan and the WV Preventative and Primary Care Pilot to obtain coverage through the Exchange. Utilizing the design for outreach and education as proposed by the West Virginia staff, a Getinsured.com solution will provide the nearly 200,000 citizens who currently receive care through the Free Clinics in State with information and assistance for enrollment.

Streamlining Eligibility Determinations and Coverage Enrollment

Getinsured proposes a 3-tiered eligibility determination process. The first tier is straightforward in that it allows Exchange users to opt out of Eligibility Determination and start shopping. This will apply to higher income enrollees who know they will not be eligible for any government assistance for their coverage. The second tier allows for a quick preliminary eligibility

determination based on high level information supplied by the user. After input, the Exchange will interface with the Federal HUB and those state designated databases to confirm identity and make a preliminary determination using MAGI of eligibility for Medicaid or federal tax subsidies and cost sharing. For those determined to be Medicaid eligible, they will then be routed to a more detailed questionnaire (if necessary) on the state Medicaid site for application and enrollment. Other

specific state programs that request original documents or specialized information may require a third tier of screening, possibly including paper applications and in-person interviews. Getinsured understands that such screening processes are highly inefficient and, at the request of the state, will digitize and integrate them into the Exchange. All Getinsured Eligibility Modules will be rule based and flexible, so that the Exchange can accommodate such workflows.

Upon completion of the application and verification with electronic linkages to the federal HUB and other state data systems, the consumer will go to the shopping page where they will see an array of plans available in their geographic region. Below is an example of a screen shot showing eligibility for tax credits and reduced cost sharing.

Results from Getinsured's Eligibility module will include all government and commercials plans each family member is eligible for, any premium support and cost sharing reductions available to each member, and any exemptions from coverage, if applicable. Such results will also be updated in customer-facing accounts and recorded for administrator auditing and reporting protocols. The Getinsured.com solution will also notify federal entities with appropriate information to process exemptions so taxpayers are not wrongly assessed tax penalties or employers wrongly penalized.

2.6.8 LexisNexis

OIC should consider best practices from Government, Insurance, and Banking to integrate true Authentication as part of the Eligibility and Enrollment process. By determining not only that the applicant's identity exists, but that the person accessing the Exchange truly is the identity involved, OIC can maintain strong security oversight and protect the integrity of the health system as a whole.

2.6.9 MAXIMUS/Connecture

Proprietary response provided.

2.6.10 Oracle

West Virginia's Exchange can serve as a one-stop site where individuals will get information about their health plan options, determine eligibility for tax credits for private insurance, or for

other programs such as Medicaid and the Children's Health Insurance Program (CHIP). Additionally, the Exchange must determine exemptions from requirements on individuals to carry health insurance, granting approvals to individuals relating to hardship or other exemptions.

Manage Policy Complexity and Program Change
Oracle's Policy Automation (OPA) solution determines eligibility in complex legislative environments. Within the context of the proposed solution, OPA offers the ability to manage business rules in a separate, but integrated fashion. For the first time, jurisdictions are able to seamlessly link the creation of policies to eligibility and delivery of service. Unique natural language authoring capabilities will enable subject matter experts of the State to develop rules directly from complex legislative text, policy documents, and regulations using Microsoft Word, Excel, and Visio. Patented temporal reasoning makes it possible to easily manage both personal circumstances and policy rules that change over time. Comprehensive testing modules enable you to pinpoint the impact of proposed legislation, regulations, and policy changes. By allowing what-if analysis of proposed amendments, West Virginia will be able to analyze the impact of change.

Through Oracle's Policy Automation solution, policy makers will be able to analyze the best policy option and ensure policies are accurately implemented. In combination with Oracle's Health and Human Services solution, jurisdictions are able to triage issues as they arise to ensure intended policy outcomes are achieved.

2.6.11 Software AG

No response provided.

2.6.12 Speridian

Proprietary response provided.

2.7 MANAGING CHURN BETWEEN BENEFIT PROGRAMS

Please describe your approach to managing the "churn" between benefit programs, e.g. Medicaid, eligibility for advanced payment of premium tax credits and cost-sharing?

2.7.1 ACS

The issue of churn is real and needs to be managed. It was recently estimated that because of fluctuation in income and family composition, there could be as much as 35% churn between Medicaid and Exchange enrollment in adults with < 200% FPL in the first 6 months of enrollment and up to 50% in the first year of enrollment in the same population. We think the following represents a thoughtful approach to managing churn:

- Provide smooth and clear enrollment "swim lanes" between subsidized and commercial programs
- Maintain clear and accurate database of enrollees by enrollment category (e.g. Medicaid, tax credit eligible, commercial, etc)
- Dually certify certain health plans to be QHPs for Medicaid and for Exchange enrollment
- Establish minimum eligibility periods to stabilized enrollment fluctuation

2.7.2 CGI

Recognizing that it is inevitable that churn will occur in any State Health Exchange, CGI's solution and governance structure is focused on carefully managing churn in a systematic and efficient way primarily through robust data management. The West Virginia Health Insurance Exchange will be responsible for facilitating continuity of coverage by notifying the individual if they have been found to have an eligibility determination level that would require them to enroll in a different healthcare plan. For example, a mother has an increase in income which makes her no longer eligible for advance premium tax credits and her children no longer are qualified for the CHIP program. In this case, the State Health Exchange would show the individual available healthcare plans and transport the information from the uniform enrollment form to the new healthcare plan enrollment and communicate to the carriers and other agencies regarding the change of coverage. In other words, churn based on a life change event will happen therefore the Exchange proactively monitors and manages the change process. We believe a strength of our CGI Health Insurance Exchange360 lies in solid master data management in that if an individual or family requires a move into another eligible category, data would be accessible and easily transferable without cumbersome processing. This is particularly important if there is a change in carrier because a plan or carrier does not service a part of the spectrum of coverage where the individual previous maintained insurance.

2.7.3 Cognosante

Cognosante is experienced with the eligibility churn with Medicaid. As the Systems Integrator, we will utilize our knowledge to manage the churn between the benefit programs through the rules engine, account management, and communications components.

2.7.4 Cúram Software

Cúram HCR is a modular, flexible solution that is structured to accommodate changes dues to federal or state policy, as well as technology change. We have identified various principals that states must address for effective management of state health care reform policies and the churn which will be associated with it. Some of the items which will address the management of "churn" include Income Changes and Coverage Changes.

Income Change
The ACA defines income based on an individual's gross adjusted income from his or her IRS tax return. As a result, a consumer applying for health care in March will be referencing income information that is 15 months old. A lot can happen to an individual's income in that period of time. Cúram HCR is designed to manage not only the capture and storage of IRS income data, but management issues and verifications required when that data does not align with current income or income has changed.

Cúram Software delivers a common front-end for all eligibility, enrollment, and account management functions. When a consumer loses his job, Cúram life event management capabilities initiate a number of activities:

- Capture all relevant information to effectively process the change;
- Notify the carrier of the changes to the previous health care plan and the effective date of those changes;
- Notify the financial broker of changes to the previous health care plan and the effective

date of those changes;

- Refer the consumer to new health care programs, if applicable;
- Provide consumers with an overview of new plan enrollment options;
- Refer the consumer to additional government services, if applicable;
- Refer the consumer to relevant community services;
- Send updated consumer information to relevant back-office systems.

By delivering eligibility for all government programs through a unified front end, Cúram provides consumers with a seamless experience. From an administration perspective, the unified front end certifies consumers are always enrolled in the correct program with much of the reporting required to demonstrate compliance initiated out of the common front end.

Coverage Changes

The ACA provides broad coverage for a wide variety of consumers across multiple programs. As a result of CHIP expansion and the introduction of subsidized plans, states will end up with families that span multiple programs. For example, a mother is on a subsidized plan, a father is on an employer-subsidized plan, and a child is on CHIP. Technically, each of these plans is a "program" with different rules defining which plans are available for each program. The danger of implementing a siloed, program-centric approach to health care reform arises when a family or "coverage unit" spans programs. In the example of the mother, father, and child on separate plans, this coverage unit still wants to coordinate doctors and analyze the best plan selection for the whole unit, not just one individual. Through the use of rules and prebuilt exchange integrations, Cúram HCR will support the ability to shop for plans across the "coverage unit," reviewing options that work best for the unit as a whole.

Premium and Tax Credit Processing

Cúram Software has established relationships with best of breed vendors whose core business is in the area of health care financial services and health insurance premium processing. Our partners include recognized names in health care financial services and third-party administrators (TPAs) who have the experience to administer premium payments as well as deal with the issues of tax-advantaged health care accounts. Cúram Software's focus is delivering the core platform from which end users can access content from integrated partners who excel in delivering health care financial services which are essential to Premium & Tax Credit Processing.

Today, this approach is in operation in the State of Utah where the Cúram solution module for medical assistance is utilized in delivering eligibility determinations for a program known as, the Utah Premium Partnership (UPP). This program allows Utah citizens to determine if they are eligible for insurance premium reimbursement for health insurance plans they have purchased in the traditional market. An eligibility determination is made based on evidence and insurance product chosen; an amount for reimbursement is determined and then each month a check is delivered to the citizen to reimburse them for insurance premium expenses they have incurred. By utilizing this approach of allowing each vendor to focus on their core services and solutions, Cúram Software and our partners will be able to deliver an end-to-end solution within the time schedules required by the ACA.

Deloitte

As consumers eligibility conditions change over time triggered by factors such as a change in household income or occurrence of a life event, the consumer may qualify for different health

insurance programs. Based on historical patterns individuals in the lower FPL levels experience high degrees of income and household condition changes that in the new Health Insurance Exchange environment is expected to result in relatively significant movement ("churn") of consumers between the Medicaid program (below 133 percent FPL) and the subsidized commercial market (133<400 percent FPL) - although more likely in the 133 percent<200 percent FPL segment.

Today the operating environments for these two markets - Medicaid and Commercial Insurance - have some disruptive differences including:

1. Benefit Levels: in general the benefits offered Medicaid beneficiaries are more generous than under a commercial plan. As a consumer moves from one segment to other patterns of care and delivery of service may be disrupted (e.g. a Medicaid member undergoing an extended series of Physical Therapy may have exhausted their benefits under a Commercial plan). Furthermore consumers will need to be (re)educated to the new product benefit options available to them.

2. Provider Networks: historically there tends to be very low overlap in the participation of providers in the Medicaid and the Commercial networks that the respective consumers access. This will likely require consumers needing to change their providers resulting in "new patient" costs and possible existing treatment disruption.

3. Consumer Consumption and Engagement Behaviors: because of the historical nature of managing care in the commercial market many programs exist today to interact with members and influence compliance behaviors such as medication regimen compliance and select disease state management. Again as consumers move between markets the value of these programs will likely be lost.

4. Health Insurer Participation: today health insurer participation in both market segments is relatively low resulting in the consumer needing to select a new carrier, set of products and related programs. The disruption in relationship history and education requirements may add to cost and delivery inefficiency.

The cumulative effect of consumer "churn" is likely to be significant and have a significant medical and administrative cost impact, disruption in care delivery and consumer well being and great consumer as well as Provider and Carrier dissatisfaction. The ultimate cost of this disruption will be borne by the State and citizens of West Virginia by elevating medical cost levels, lowering clinical outcomes and health status and making the State less "business friendly".

We would recommend developing a programmatic plan to address this consumer "churn" comprising all, or as many of the following strategies as possible:

1. Income requirement "leveling". Consider options to "smooth" out fluctuations in income levels (particularly for seasonal workers) under CMS Rule 2349-P (Point in time measurement of Income).

2. Harmonization of benefits and products between Medicaid and Commercial market segments. Consider benefit/product design changes to bring alignment between products offered in both segments respectively.

3. Increasing provider participation rates in both programs. Consider options (including regulatory, financial incentives) for improving provider participation rates across segments.

4. Continuity of clinical and health programs. Similarly, create alignment, data sharing across programs.

5. Improved Health Carrier Participation in both markets. Consider options (regulatory to financial) for creating common carrier offerings in both segments.

6. Ongoing monitoring of "churn" activity to monitor levels and effectiveness of mitigation strategies and to take remediation action as issue exceeds target levels.

2.7.6 Exeter

To minimize the impact of the "churn" of individuals moving between programs, OneGate's modular architecture provides technical integration of Medicaid/CHIP/QHP programs with the Individual and SHOP Exchanges. While the benefit programs and exchanges may be administered independently, the programs may benefit in sharing a unified, "no wrong door" approach to benefit screening and enrollment. OneGate's approach is to integrate and link Medicaid and CHIP programs with the Individual and SHOP Exchanges to provide applicants a continuum of benefits and cost-sharing structures.

OneGate leverages modularity in its design to reuse common modules and processes across the following:

- Unified web portal;
- Integrated multiple screening and eligibility determination; and
- Common case management workflow process.

2.7.7 Getinsured.com

Exchange users with income between 100% and 200% of FPL may "churn" significantly between government –sponsored programs and commercial health insurance. This will lead to the following problems:

• **Provider continuity:** Users will need to choose commercial health programs which have a meaningful and high overlap to the provider networks offered by Medicaid programs in the state. Getinsured is working on strategic alliances that will provide a range of user tools so that users will not only be able to choose a commercial plan, they will also have access upfront to choose providers that accept both commercial and government sponsored health plans.

• **Differing Co-pays and Out-of-pocket costs:** Users that switch between commercial health insurance and Medicaid will notice significantly differing out-of-pocket expenses. This issue can be addressed in two ways: (a) up-front education and (b) cost-sharing subsidies available to customers when those are implemented.

• **Plan Design:** Some states are encouraging health insurance carriers to design plan-pairs - one of which is commercial and the other is a Medicaid plan. Some national carriers are leading the charge in this direction.

• **Provider Tools:** Some states like Minnesota are making extensive investments in provider display and tools as part of the Exchange. These tools go over and beyond the core ACA mandates and can play a significant role in churn management.

Approach to premium tax credits and cost sharing

Getinsured's solutions for premium tax credits and cost sharing are divided by a very wide ocean of uncertainty. Calculation of tax credits paid toward premiums is not that difficult. The Exchange design will determine the user's level of eligibility and show the user plans that meet his or her needs with the premium costs and the tax credit reduction, giving the user the net amount owed on each plan for comparison purposes.

The other side of the ocean is the calculation of the cost sharing in advance to allow the user to determine the best plan. The ACA speaks to this by setting maximum amounts of out-of-pockets for income bands within the FPL and then stating that the contribution being provided to assist the consumer results in an increase in the actuarial value of the plan they have selected. While this is easy to state as a description of the effect of the law, implementation of this law requires the Exchange to interface with the claims management systems of carriers. This is a new level of complexity to Exchange projects with business-process and technology uncertainty -- particularly risky in the face of already daunting deadlines for Exchange stand-up.

2.7.8 LexisNexis

LexisNexis has the deepest, most thorough, and most reliable access to personal and professional identity available through the most comprehensive sourcing network for primary data, public and private. In their June 2011 audit report *SUPPLEMENTAL SECURITY INCOME RECIPIENTS WITH UNREPORTED REAL PROPERTY,* the Office of the Inspector General, Social Security Administration, recommended that field officers enrolling beneficiaries in SSA should access the LexisNexis data network as the officers process applicant information. In the study, the DIG pointed out an 8 to 1 return on investment by using LexisNexis.

2.7.9 MAXIMUS/Connecture

Proprietary response provided.

2.7.10 Oracle

The Oracle Health & Human Services Solution is comprised of a proven configurable set of applications and technologies that support the key business process for health and human services case management, screening, eligibility determination, benefit payments, provider payments, eCommerce, health insurance enrollment and outcomes measurement (analytics).

Oracle is confident that our Health & Human Services Solution will provide West Virginia with the following benefits that are unique and distinguish our solution:

- Oracle offers a complete, open & integrated enterprise Health and Human Services solution
- Oracle offers the fastest time to value, with less risk and a proven ROI
- Oracle offers a valuable strategic partnership of unmatched stability and reliability

Most Complete Enterprise Solution for an Integrated HHS Delivery Management System

Oracle's solution offers the only true enterprise software that provides a complete, open and integrated platform for integrated program delivery. To meet the ever increasing challenges, state agencies must transform their legacy IT systems into enterprise wide platforms that can support multiple programs, be deployed more rapidly and cost-effectively, and deliver a comprehensive view of the services being provided to clients and their families. Oracle's best-of-breed COTS solution approach will allow West Virginia to leverage its existing infrastructure investments, while providing the ability to move forward on the path to a state-of-the-art SOA-based architecture and a truly scalable solution. Here are a few of the unique ways in which the Oracle approach can help West Virginia achieve long-term self-sufficiency:

- Comprehensive functionality addresses a broad range of requirements across Integrated Eligibility / benefits Case Management and Health Insurance Exchange
- Oracle's componentized solution can be incorporated into the current State technology environment on a phased basis, avoiding a "rip and replace" approach to modernization
- Supports key CCIIO and ONC Guidance including modular system integration, open Service Oriented Architecture (SOA), and isolation/externalization of business rules

Self-Service Screening and Eligibility, Enterprise Case Management, Provider Management, and Health Insurance functionality reside in a very sophisticated service architecture that has been developed over many years. Our solution's underlying technical architecture has been proven with more than 6,000 customer implementations worldwide, including Health and Human Service agencies to support the licensing, referral, and case management processes in countries like Spain, where 2,000 case workers are deployed on mobile devices to manage more than 350,000 disability cases across a network of thousands of providers. British Columbia, Canada, is implementing our solution to manage benefits across many of their programs including enabling self-service for citizens and a provider portal for thousands of providers. In another example, the Internal Revenue Service uses Oracle Policy Automation in all call center and walk-in centers (256 call centers for 15,000 users) and on its external citizen facing websites.

Key Oracle components of the overall solution span Policy Automation (Eligibility & Business Rules Enterprise Case Management (Siebel Public Sector Contact Center Management, Financial and Human Resource Management, Business Intelligence, Master Data Management, Middleware, SOA Enterprise Integrated Services (ESBL Identity Management, Database Management Systems, Storage, Virtualized Operating Environments, Hardware, and potentially Cloud / Hosting Services through Oracle On Demand.

2.7.11 Software AG

No response provided.

2.7.12 Speridian

Proprietary response provided.

2.8 COTS PRODUCT

Is your solution a COTS product? If yes, please describe the level of customization and areas where that is available. If no, please describe the status of your solution's design and development and its readiness to be used by the State of West Virginia.

2.8.1 ACS

The ACS Team's HIX Solution Suite is offered in a SaaS model; and because of that, we bring the unique and valuable experience of implementing and operating exchanges with a solution that is highly capable as well as adaptable. Unlike COTS products, our solution is specifically geared to serve the needs of the Exchange. The components that make up the HIX Solution Suite are in production today, serving brokers, carriers, and private exchange enrollees across the country. The front-end portal is customizable to West Virginia's specific needs in everything from look and feel, to specific questions that are asked of the applicant. Our implementation timeframe is much shorter than other vendors because we are not building a new "environment" for each state; we are customizing the user experience and business/workflow rules for state specific requirements.

2.8.2 CGI

Yes. CGI's Health Insurance Exchange360 is a COTS product that has been specifically designed and developed to meet the ACA requirements for a state Health Insurance Exchange. As a best of breed solution, it was designed with flexibility in mind allowing it to be customized through extensibility and configuration to meet the unique requirements of each State. Until we understand more of the specific requirements from West Virginia, we would not be able to specifically describe the level of customization needed.

2.8.3 Cognosante

Cognosante uses COTS products for HIX solutions, in addition to existing state assets, and leveraging best practices and lessons from other states. Our goal as the Systems Integrator is to minimize customization, usually required with legacy state assets rather than the COTS components. Flexibility and agility in our solutions is generally with the rules engine, account management, and reporting components of our HIX solution. When needed, Agile methodologies are used for development to ensure operational readiness.

2.8.4 Cúram Software

Since Cúram is a COTS solution, customers make most of their changes through configuration rather than customization. Cúram does not, however, limit customers to configuration only. It also allows customization or extension of the product with very few limitations. It is strongly recommended that any such customization or extension is carried out in accordance with Cúram customization guidelines.

2.8.5 Deloitte

Our solution is not a COTS product. Our solution framework has been developed and is available to be integrated with the existing State assets. Changes to those State assets and customization of the framework are required to deliver a fully functioning exchange solution.

Deloitte's solution is designed using open-source platform and leverages current infrastructure and Service Oriented Architecture (SOA) framework to provide highly-integrated services. This architecture allows the HIX the flexibility to make changes to aspects of the solution without impacting the rest of the application code, and the ability to scale as needed.

2.8.6 Exeter

Out-of-the-box, OneGate provides the core components that will allow West Virginia to implement individual and SHOP Exchange functions and set the groundwork for leveraging components in the State's eligibility system modernization efforts.

Unified Portal
OneGate features a set of innovative presentation portals created with the constituency of state agencies in mind. By incorporating a user-focused approach, Exeter created the OneGate customer self-service portal featuring easy to follow question and answer sessions for eligibility determinations for Exchange functions, including Individual and Family, and SHOP applications. Using OneGate's secure user registration and My Account Page, West Virginia's constituents can perform self-service functions in HIPAA and 508 compliant environments. OneGate's portals feature state-of-the-art user experiences, integrated security and SOA-based connectivity that will allow its flexible integration with external and legacy systems.

The customer-focused HBE portal components of OneGate will provide West Virginia residents with the ability to apply for subsidized insurance, and to shop for and enroll in insurance plans (both individual and family plans) and SHOP plans, if applicable. The SHOP functionality will re-use the core components of the individual Exchange rules and public facing components, allowing for a single application. In addition, the HBE Employer portal will allow employers to apply for, select and manage employee enrollments.

Central Rules Repository/Engine
OneGate's central rules repository and engine drives the application/eligibility determination process, providing customers with intelligent, interactive interviews that only ask relevant questions, streamlining the application process. Rules are written in natural language, and are viewable and editable in Microsoft Word and Excel documents, which allows for transparency and ease of modification, allowing the West Virginia Exchange to comply with changing federal and state policies. Rules and policies are exposed as services providing a single repository or source of truth for any application or system that needs access to it.

Out-of-the-box, OneGate provides a baseline set of rules based on federal and CMS policies, incorporating exchange health insurance as well as new streamlined Medicaid eligibility rules. The following rule-based backed eligibility applications are provided:

- Individual and Family Eligibility Determination;
- Employer SHOP Eligibility Determination;
- Medicaid/CHIP Eligibility Determination; and
- Premium Assistance Calculator.

Service-Oriented Backbone
As new health care reform (HCR) regulations are solidified with regard to the Federal Hub, the SOAbased design of OneGate allows the flexibility for the exchange system to easily interface with external agencies to automate verification, whether that includes many agencies providing

separate services, or one federal hub of consolidated services. OneGate's health insurance application, included in the HBE offering, contains hooks that allow for call outs to external services mid-way through the online application. In addition to the base services already provided out-of-the-box, additional verification services can be integrated into the online application, which can help simplify the customer application process. When a customer pulls verified data from external trusted sources, he/she will have less information to fill out manually, thereby decreasing the time it takes to complete an application and reducing chances of user error. In addition to external system verification, other services exist to transform and route data within agency systems. For example, at the end of the application process, application data is routed to the backend system. The data is transformed, printed to PDF format and is routed to a document management system. In support of OneGate's modularity focus, the composites are built on open standards and can be deployed to the service bus offered by OneGate or another standards compliant service bus.

State Exchange Administration

OneGate provides a health plan administration component that allows state employees to administer and manage QHPs. Additionally, insurance carriers, their network of primary care providers and hospitals/facilities can be managed. Bulk import functions are included to allow for easy uploading of data. Data formats can vary, and additional methods of integration (i.e., bulk flat file transfers and upload) can be accommodated.

2.8.7 Getinsured.com

System design, readiness and need for customization

Based upon years of experience with running a commercial Exchange, Getinsured.com could provide all of the deliverables described in this proposal through a Software-as-a-Service (SaaS) model. Such a model is very consistent with the existing infrastructure being currently deployed at Getinsured.com. Furthermore, this SaaS deployment could be launched through a private hosting service or on a federal or state run cloud.

In a SaaS model, we would contemplate delivering each of the components described in the section above, on an integrated basis. The SaaS delivery model would further include all of the following services:

- Hosting of Eligibility service
- Hardware provisioning and scaling based on advance planning and volume projections
- 24/7 uptime monitoring and Service Level Agreements (SLA)
- Performance monitoring and SLAs
- Security monitoring
- Predefined maintenance and service enhancement windows

Alternatively, if the state of West Virginia were to decide that it seeks to run the Exchange sub-systems internally, then Getinsured.com is in a position to provide these modules on a licensed basis. The Getinsured.com solution is modular and consists of the following modules:

- MAGI based eligibility determination.
- Web portal with Individual plan shopping capabilities.
- Broker management.
- Provider Tools.

- Health plan enrollment.
- Customer Service and Assistance.
- Plan and Carrier Management.
- SHOP.
- User administration.
- Payments management.

System behavior and look-and-feel of the Getinsured product suite can be customized in a number of ways:

- Parameterization - common, domain specific variations in attributes or behavior are captured as parameters in setup screens for plans, insurers, etc. Examples of this include carrier-specified minimum age or types of payments accepted for health plan applications, attributes for grouping plans with similar benefits, employer parameters for choosing between defined contribution or defined benefit arrangements, etc.
- Business rules - changes in business logic or formulae used in computation or eligibility, tax credits, etc. can be made by editing business rules in the rule engine.
- Workflow - more complex processes with dependency on external systems or offline actions that may not occur in real time can be modeled and adjusted through the use of workflow.
- Style sheets - screen customization can be accomplished throughout the application using cascading style sheets.

2.8.8 LexisNexis

No response provided.

2.8.9 MAXIMUS/Connecture

Proprietary response provided.

2.8.10 Oracle

Reduce Risk and Improve Time-to-Value While Increasing Responsiveness to Change

The need for solutions that enable horizontal data sharing, integrate disparate systems, improve efficiency, and reduce program costs has never been greater. Oracle's integrated solution is a highly flexible, scalable, secure, commercial off-the-shelf (COTS) package that is easily integrated with internal and external systems. Oracle recognizes that Insurance and Health and Human Services agencies must modernize the manner in which services are being delivered to their clients. Key capabilities include:

- Delivering one application platform that can be leveraged across the entire enterprise
- Reduce costs and improve maintainability and self-sufficiency through flexible application configuration
- Protect your investment with patented application upgrade technology
- Lower risk with a solution foundation proven at over 4,000 enterprises and 5 million deployed users worldwide, and an equally robust ecosystem of Siebel-trained certified consultants.
- Configurable applications and flexible business rules architecture enable you to leverage and extend your investment as legislation changes or you need to phase in new programs

Oracle offers you the ability to continually refresh your solution through product upgrades so you can continue to serve your clients effectively. The upgradeability of our solution components has been demonstrated at the majority of our customers globally. We are known for providing smooth transition to new releases for our customers. We would encourage you to scrutinize the upgrade track record of all vendors aspiring to do business with your agency as this ability significantly impacts the total cost of ownership and longevity of your solution.

2.8.11 Software AG

Software AG offers market-leading products for Application Integration and Business Process Management (BPM) and is generally classified as a COTS development package. It is important to note that we do not offer a packaged COTS Health Insurance Exchange application, per se; rather our web Methods suite would serve as the key middleware technology for the West Virginia Health Insurance Exchange, enabling the State to 1). Seamlessly connect, share, and exchange data with the various systems required to interact as part of the Exchange (e.g. eligibility, enrollment, billing, etc.) and 2.) Manage the associated business processes of the Exchange. No customization of the Software AG products would be required. Our Integration and BPM solution would be *configured* to meet the needs of the Exchange. For example, our solution can be configured to model and execute the processes involved in member information management, member enrollment management, member grievance and appeal, premium payment management, etc. These processes can include human workflow, document workflow and can utilize the business and technical services delivered by the Integration platform. Also as part of the solution, various channels of communications can be supported to interact with members from out of the box portlets to help manage dissemination of member information and other key functions. The Software AG solution also embeds an enterprise class business rules management system that allows the flexible management of business rules to help determine eligibility. In addition, existing legacy rules can be extended through the Integration platform.

2.8.12 Speridian

Proprietary response provided.

2.9 IS SOLUTION CURRENTLY IN USE OR UNDER CONTRACT WITH OTHER STATES?

Is your solution currently being used and/or are you under contract to implement in any other states; if so, are you able to share which states?

2.9.1 ACS

Components of our solution are in use by over 14.5 million consumers across the country in the commercial health care marketplace, as well as providing key business process services for five private exchanges in California. We are not currently under contract to implement an Exchange in any other state.

Our existing architecture provides for rapid deployment, flexibility for enhancements and effective management of regulatory changes, and efficient maintenance of such changes. Our development philosophy calls for relatively short coding cycles due to the rapidly changing needs of our customers. Each cycle includes developer testing; feature/issue testing; user acceptance testing; as well as performance, parallel and regression testing. This design process

allows the HIX Solution Suite to quickly reflect industry changes, new legislation and the evolving business needs of our clients.

2.9.2 CGI

As this is a new Federal program, CGI's Health Insurance Exchange360 is not implemented in its current form. It is based in elements of commercially available insurance exchanges and has been modified to meet ACA requirements, but it has yet to be implemented as an ACA-compliant Exchange. CGI would welcome the opportunity to demonstrate our fully functioning solution to West Virginia as a part of this RFI process.

2.9.3 Cognosante

As a Systems Integrator with no one 'out-of-the-box' solution, this section is not applicable to our response.

2.9.4 Cúram Software

The Cúram Business Application Suite is deployed in health and human services agencies at local, state, provincial, and national level throughout the world including the United States, Canada, Europe, Australia and New Zealand.

The list below outlines the US states in which Cúram is implemented:

- California
- Indiana
- Louisiana
- New Jersey
- New York (New York City)
- Nevada (Clark County)
- North Carolina
- Utah

2.9.5 Deloitte

We have successfully completed or are currently engaged with nine other states - Colorado, Indiana, Illinois, Maine, Massachusetts, New Mexico, Pennsylvania, Texas, and Wisconsin – on Health Insurance Exchange (Exchange) and Health Reform related projects.

Our solution is currently being implemented in two states, to our knowledge, more than any other vendor. We are also one of four vendors who have been down selected to provide an exchange solution in the State of Minnesota. We are currently working with sixteen states to support Integrated Eligibility Systems (a key component of insurance exchange) and support Health and Human Service portals in eighteen states. Many of these states are considering a similar approach to the one noted throughout this proposal, with Deloitte playing a key role in the system implementation.

State	Deloitte's Health Reform & Health Insurance Exchange Experience
Wisconsin	**HIX Planning and Implementation.** Deloitte worked with Wisconsin to develop a functioning public prototype which simulates a health insurance exchange customer portal. This prototype simulates the customer experience including leveraging data exchanges, calculating eligibility for Medicaid and federal tax credits, and shopping and comparing for health plans. Wisconsin has contracted with Deloitte to develop the technology solution to support the health insurance exchange and the planning stages for this effort are currently underway.
Colorado	**Health Reform Options Assessment.** Deloitte is currently assisting in the evaluation of options to move Colorado from its current state to a more advanced and federally compliant state of health care and public assistance provision. We are reviewing the current state of Colorado health care, benefits, and enrollment to identify and validate options and associated impacts (financial, political, technical), and to develop an implementation roadmap.
Indiana	**Exchange IT Assessment.** Deloitte assisted Indiana by performing a technology impact assessment of the health reform legislation as it relates to the Exchanges on Indiana's existing systems. Deloitte identified the required technology components necessary to support the Exchange and assessed Indiana's existing systems extensibility to meet the requirements for the Exchange. Identified gaps with regards to functionality and technology needed for the Exchange. **Exchange Business Requirements.** Deloitte assisted Indiana in developing a potential state based Exchange operating model that included definition of more than 300 future state business processes, operational cost model, and detailed functional business requirements to support a state based Exchange.
Maine	**Health Reform Impact Assessment.** Deloitte assisted Maine by performing an in-depth impact assessment of the health reform legislation on Maine's processes and systems. Additionally, Deloitte performed a readiness assessment on how well the State's Medicaid and health care operating model can support changes mandated by health reform.
Massachusetts	**Health Connector Business Process Reengineering.** Deloitte assisted in the implementation of the Massachusetts Connector by examining and documenting the existing operational processes of the Commonwealth's Choice Voluntary Plan product including employer group setup and employee enrollment, the online and call center experiences and the back-end process including billing, A/R management and account management. Deloitte is currently engaged with the Massachusetts Connector working with eHealth to develop a provider search capability and assisting the Connector meet ACA requirements.
Minnesota	**HIX Planning and Implementation.** Deloitte is working with Minnesota to develop a functioning public prototype. Deloitte is developing a solution that will include both business architecture and technical architecture. Deloitte is conducting end-to-end Exchange Implementation that seamlessly integrates Individual Eligibility and Exemption, Individual Enrollment, Small Employer Eligibility and Enrollment, Health Plan and Navigator/Broker Certification and Display, Provider Display, Fund Aggregation and Payment, Account Administration, and Mobile Application or Accessibility modules.
New Mexico	**HIX Planning and Implementation.** Deloitte is currently engaged with New Mexico to develop and implement an HIX technology solution. Deloitte is working to enhance New Mexico's income support eligibility and integrate it with the HIX solution.
Pennsylvania	**High-risk Program Implementation.** Deloitte assisted Pennsylvania's Insurance Department with the implementation of their state-run high-risk insurance program called Pennsylvania Fair Care. In just 4 weeks, Deloitte leveraged Pennsylvania's implementation of the award-winning COMPASS Self Service portal solution to provide an intuitive, easy to understand online application available statewide.

Figure 11. Deloitte's National Leadership in Health Reform and the Planning of Insurance Exchanges

2.9.6 Exeter

Exeter has significant experience implementing OneGate components, such as Oracle Policy Automation (OPA). Although OneGate has not yet been implemented as a solution designed to specifically address the newly established requirements of the ACA, Exeter's successful OPA implementation at the Massachusetts Registry of Motor Vehicles (RMV) provides a strong foundation for the successful implementation of OneGate. Exeter was also the first certified OPA implementation partner in the United States and has the largest number of consultants certified in OP A. The original set of open source federal rules for Medicaid, SNAP and TANF were written by Exeter's OPA-certified consultants, led by our HHS subject matter experts, and in collaboration with Oracle's product team. Exeter's investment in the rules as well as developing portal, case management and interface components is indicative of the firm's commitment to leveraging the possibilities of advanced rules engine technology in a way that allows states to collaborate and maintain those rules.

To address this growing need in the HHS market for an effective, agile solution, Exeter made a strategic decision in 2010 to enter this market, investing thousands of man hours and leveraging

the experience of subject matter experts to develop OneGate. OneGate was designed by subject matter experts and former leaders in the HHS sector who understand the states' demands in the changing landscape. By leveraging Exeter's major investment in developing eligibility rules, customer portal features (including online applications and self-service), case management, and the interfaces between them, OneGate enables state agencies to implement an Exchange solution in a fraction of the time and cost of traditional marketplace solutions, with lower risk. OneGate not only improves the user experience for citizens and staff, but also helps agencies meet regulatory requirements associated with HCR and the ACA.

2.9.7 Getinsured.com

Getinsured was a successful awardee for prototype development from the state of Minnesota. The modules Getinsured is currently in development and design are:

(1) Individual Eligibility and Exemption,

(2) Small Employer Eligibility and Enrollment,

(3) Health Benefit Plan and Navigator/Broker Certification and Display, and

(4) Provider Display

2.9.8 LexisNexis

LexisNexis identity management solutions are ubiquitous within the Banking, Insurance, Legal marketplaces, enabling our customers to verify and authenticate identity prior to accessing sensitive, secure applications. In the Government space, LexisNexis provides solutions to all 50 states and multiple Federal agencies.

2.9.9 MAXIMUS/Connecture

Proprietary response provided.

2.9.10 Oracle

Oracle has recently been selected by the first state to deliver Oracle's Health Insurance Exchange solution as mandated by The Patient Protection and Affordable Care Act which is already transforming healthcare throughout the United States. One of the biggest challenges for States is the creation of Health Insurance Exchanges - secure, dynamic marketplaces to compare the service levels, coverage rates, benefits and quality of competing insurance plans.

Oracle's Health Insurance Exchange COTS solution provides the first state with a powerful, cost-effective modular solution. It also delivers a robust infrastructure for the secure, real-time eligibility determination and Insurance premium presentation, selection and enrollment. Some of the benefits and reasons as to why Oracle was selected by this state are listed below.

- Accelerate time-to-value with rapid deployment of proven solutions
- Minimize development risks with integrated, market-leading security
- Take control with a single vendor solution and a license owned by the state
- Reduce cost and complexity with on demand hosting and management
- Retain flexibility in order to address future legislative changes

- Oracle is providing all the required HIX rules as part of the overall solution
- Complete end-to-end solution designed for HIX

Moving forward, Oracle continues to work with this state to deliver the Oracle Health Insurance Exchange COT's solution, providing the latest HIX rules, and working with various implementation teams to ensure timely delivery per the Federal guidelines. Due to being selected by the first state, Oracle offers tremendous knowledge, technology, and real-time experience in planning and delivering what is required for delivering these initiatives.

2.9.11 Software AG

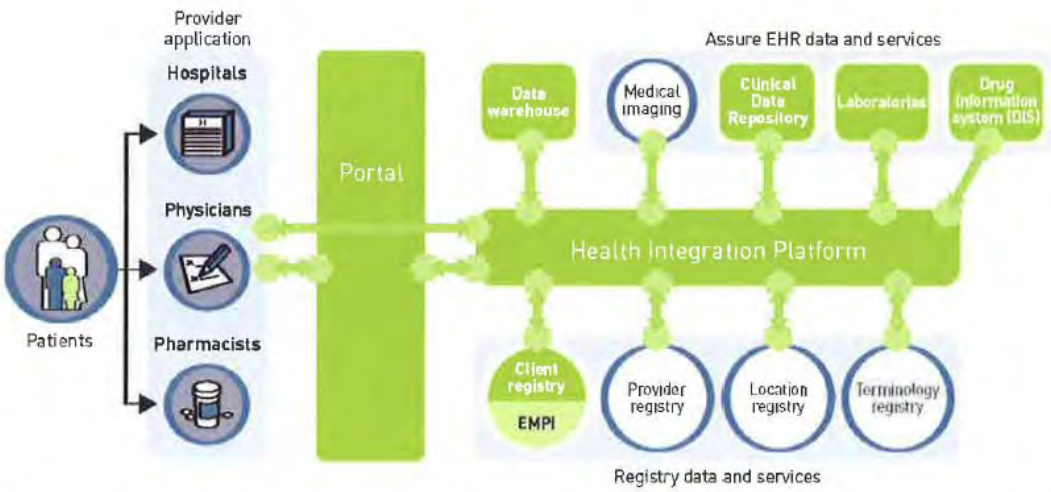
TELUS Health Solutions is using Software AG's SOA Suite to help Canada "get there faster" by delivering a Health Information Access Layer (HIAL) solution that aligns with the Canada Health Infoway Blueprint and will enable every provider in the province of Newfoundland and Labrador to access Drug Information System (DIS) data. This is among the first provincial DIS system in Canada.

The Health Integration Platform brings together data from virtually any system, including care-provider registries, domain-specific clinical data repositories, hospital-based clinical information systems and pharmacy practice systems. To access the DIS data, a healthcare provider can use a portal, such as the Care Provider Portal TELUS developed using web Methods technology. He or she can then update the EHR data in real-time, so that the next provider has the latest, most accurate patient record. Providers can also access the same data through their EMRs connected to the HIAL.

The TELUS HIAL utilizes almost the entire webMethods suite. For example, the webMethods ESB integrates all applications and systems as the key component of the TELUS Health Integration Platform. Healthcare providers can use systems they already have to access EHR data. webMethods Broker provides the messaging backbone to assure fast response times as well as the secure, reliable information flow between systems.

Using webMethods, TELUS has visibility into the HIAL infrastructure to proactively identify and resolve bottlenecks. TELUS measures Key Performance Indicators (KPls), such as time to complete transactions end-to-end. This helps TELUS optimize HIAL performance and assure it is meeting established Service Level Agreements (SLAs).

TELUS also uses webMethods to enforce and manage policies of all HIAL Web services in a central registry. Using the Software AG service mediation layer, TELUS was able to build strenuous logging facilities to improve HIAL security.



The Health Integration Platform, based on the webMethods ESB, connects a wide range of systems so healthcare providers have a single view of a patient's complete e-health record—or EHR—for timely, accurate decision-making.

TELUS Health Solutions also operates a market-leading multi-benefit claims submission and switching platform that processes millions of claims a year. More than 60% of all pharmacies in Canada are connected to the system. The solution, using webMethods technology, handles several integration processes, such as claims adjudications between pharmacies and claims payors, dental claims transport and adjudication, and workers' compensation claims in Ontario

TELUS was the first to use the HL7v3 messaging standards for the electronic exchange of invoicing, adjudication and payment documents for healthcare invoices in North America.

2.9.12 Speridian

Proprietary response provided.

2.10 COMMON CHALLENGES

What are some of the common challenges you expect Exchanges to encounter when interfacing and integrating data with Exchange users and data providers such as small businesses, health insurance carriers, and the Federal government. Describe how your technical solution addresses those challenges.

2.10.1 ACS

The most significant integration challenge we foresee is with the Center for Consumer Information & Insurance Oversight (CCIIO) information hub and attendant government interfaces such as determination of the MAGI definition and protocols. Meeting key implementation dates requires appropriate time for systems integration and testing. With open enrollment scheduled to begin in fall 2013, integration testing should be completed by summer 2013. As we are essentially in 2012, at present, there are significant policy and systems refinements that need to be defined and implemented in the next year.

Table 2-2 lists a handful of other common data integration challenges and the methods our team uses to overcome them:

Table 2-2. Common Data Integration Challenges	
Common Issue	**Experienced Solution**
Source system does not exchange data in industry standard formats	The ACS Team offers a data mapping solution that transforms any data format into an industry standard format for consumption by the HIX Solution Suite.
Source system can not provide or consume real-time services	The ACS Team can accept file-based (batch) EDI for most system functions. This may cause a degradation of the user experience, but is not uncommon in legacy state systems.
Source system does not have the resources to make incremental upgrades as necessary.	Utilizing the AmberPoint SOA management provider, the system supports Web service versioning in such a way that the state does not need to make continuous, incremental upgrades.
Source system does not currently exist or is incapable of exchanging data.	The HIX Solution Suite can be purchased as a stand-alone, full featured tool that does not require complex data integrations at go-live. Future systems can be added incrementally to provide additional features, but will not inhibit hitting initial milestone dates.
Source system sends inconsistent or incorrect data.	The HIX Solution Suite is capable of enforcing business rules and thresholds on data exchanged with the system.

2.10.2 CGI

The Health Insurance Exchange360 portal and overall solution requires initial input from individuals, small businesses and health insurance carriers as they begin their participation. The initial information from individuals and small businesses is used to verify their identities as well as communicate to other systems in order to request additional supporting information during the eligibility screening and determination process. Carriers submit healthcare plan information via electronic data interfaces (EDI) that is converted into uniform plan structures for display on the Exchange. In addition, the Exchange performs collection of on-going data exchanges with Carriers, Federal government, and State agencies to efficiently and effectively support the HIX participants. This collection of data and information needs to cover the complete life cycle of an individual or small business as they move through the various operational delivery stages of eligibility screening, identifying and selecting a health plan, enrolling, paying insurance premiums, renewal cycles, life change updates, and ultimately until they are no longer enrolled in a specific plan.

The Federal Data Services Hub will provide information request responses to the Exchange regarding SSN validation, legal alien/citizenship status, income information, existing enrollment, and enrollment/disenrollment information. The State agencies will be providing a variety of information including current income, state residency, ethnicity, current enrollment, eligibility determination, and Medicaid enrollment. The Carriers will be providing the Exchange with information regarding plan and benefit details, plan rates, provider networks, enrollment, billing/payments, and disenrollment.

As data is being provided by users and the various data sources, there will be many challenges resolving the irregularities and keeping the data up to date. In addition, data interface

connections will need to be monitored to track service availability. Exhibit 5 lists several types of data issues that pose a challenge to the exchange data management.

Exhibit 5: Examples of Incoming Data Challenges

Type	Description
Input from Users	Incomplete or misspelled information
Data Format	Data source feeds can vary (Text, XML, Tab Delimited)
Data Sources	Federal, state, and self-attested data can have discrepancies in information
Data Transformation/Mapping	Correlating the different data feeds into the Exchange data store
Age of Data	Timeliness of data as a usable source

Our solution addresses these data interfacing issues by integrating the data by the following methods:

- Assist the user during initial entry by including clear guidance at each form input element. The forms will not be able to be submitted without completion of necessary elements and proper character entry.
- Resolve the variety of data feed formats by transforming all input to common format for Exchange.
- Utilizing a standard functionality for message translation, transformation, enrichment and routing.
- Rules engine to define priority of data sources when there are mismatches in feed information.
- Under certain circumstances, such as income projections, the mismatched information would be presented to the user to select the appropriate value.

2.10.3 Cognosante

One of the most common challenges when interfacing and integrating data with multiple entities is the actual data exchanged having different standards, uses, or meanings. As a Systems Integrator with years of integration and information sharing experience, the solutions we implement do not generally face this issue. Cognosante's strength comes from ensuring strong information models, national standards, and data management are in place, along with data sharing agreements, prior to implementation. Only outliers or exceptions cause any issues, but are addressed as part of data management.

Another common challenge is data currency. Exchanges are expected to rely on real-time responses to eligibility determination, in some cases enrollment, and plan benefit information. Dealing with legacy batch-based systems in anyone of these areas may cause data latency. Regardless of how good the solution is in terms of real-time information, it is only as fast as its slowest source. Cognosante strives for creative solutions that can take a legacy, batch-based source system and 'trigger' as close to real-time information as possible in those cases.

2.10.4 Cúram Software

Interoperability
With any enterprise system which interfaces with external systems there are challenges. In order to reduce the risk involved, Cúram HCR has addressed this very problem leveraging the current Cúram infrastructure as well as adding new functionality to address these exact issues.

Referral Integration with Separate Exchange
In the Interoperability Integration strategy, the Cúram solution would provide a hyperlink or other access point to the separate HIE solution. In a similar manner, the separate HIE solution would have a hyperlink or access point to the Cúram Citizen Portal.
Additionally, referrals will be used to pass entered or known information about a consumer between the two systems when the consumer indicates that they want to proceed to the other system upon completion of screening. This will minimize re-entry of data and improve the customer experience.

Integration with External Exchange
In this model, Cúram would provide the portal but the Insurance Provider and Plan data is maintained in a separate data repository. This model supports states where an integrated HHS/HIE model is desired but the provider and plan data necessary for the Exchange resides in a separate repository such as the state insurance system.

Registry Search Interface
When the HIE Search is invoked via the Cúram Citizen Portal or Common Intake, Cúram will query the provider and plan information via the Registry Search Interface. This interface will provide information on the plans meeting the search criteria and deliver information necessary for further filtering of the results by the consumer or internal worker using the portals.

Enrollment Interface
As consumers are enrolled in plans or programs, interfaces may be necessary to share the Enrollment data to other agencies or with the Exchange. Additionally, status information may be required back from the carrier to provide the customer with status information if enrollment processing is not immediate.

Maintenance Interfaces
As updates are made to data within the Exchange, such as plan costs or availability, the Cúram solution must receive this information to trigger any necessary reassessments and recalculation of medical assistance programs. Additionally during recertification or renewal of consumer programs/plans, it will be necessary for the Cúram solution to retrieve current plan information (such as updated costs) for communication to the consumer.

Financial Services Interface
On completion of enrollment, consumers will continue to process and pay premiums to the Insurance Carrier (directly or, potentially, through the Exchange). This financial information must be available to the Cúram solution so that the financial information can be provided back to the consumer through the 'My Account' features of Cúram Citizen Self-Service.

Additionally, if a consumer is delinquent in payments actions may be taken by the carrier to suspend or cancel coverage. The Cúram solution must receive this information to trigger any necessary reassessments and cancellation of medical assistance programs.

Carrier and Employer/Employee Portals
It is assumed that partners providing third-party Exchange or Exchange Financial services will provide functionality to support the online maintenance of exchange information (Carrier Portal) and to support Employers who wish/qualify to use the Exchange to deliver insurance coverage to their employees' Employee Portal).

Internal Health Insurance Exchange (CPM)
In this model, Cúram would manage all aspects of the HIE repository through the Cúram Provider Management (CPM) module. This model supports states where a fully integrated repository for the Exchange is desired and managed by the Cúram solution.

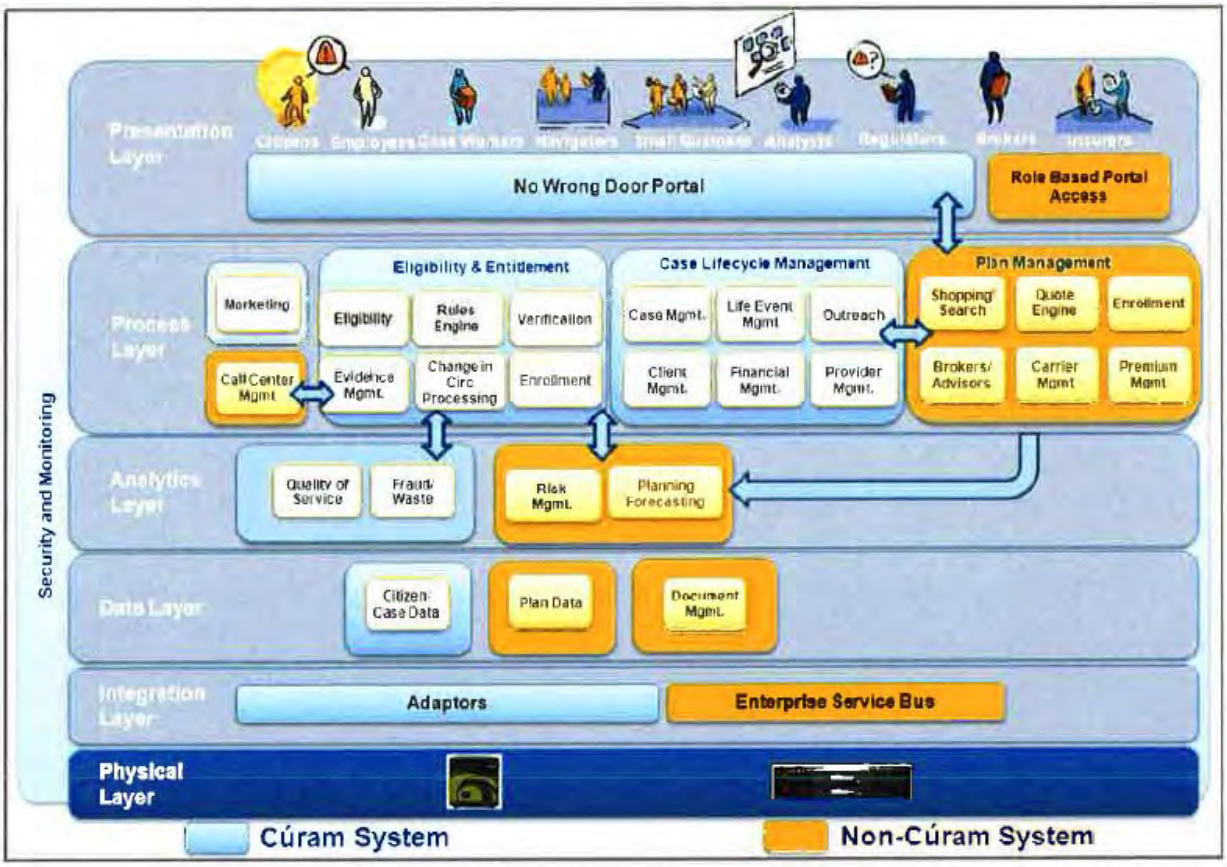
Insurance Provider Registry
Processes would be required for new Insurance Providers to be registered and qualified/enrolled on the system by Resource Managers. This Enrollment would then provide them with access to secure functions via the Provider Portal.

Insurance Provider and Plan Searches
When the HIE Search is invoked via the functions in the Citizen Portal or Common Intake, the Cúram solution will query the provider and plan information via specialized Insurance Provider searches. This search will provide information on the plans meeting the search criteria and deliver a results page allowing for further filtering of the results by the consumer or internal worker.

Provider Portal
A provider portal would be used by Insurance Providers to manage their plan information directly, rather than requiring the intervention of a Curam Resource Manager.

Maintain Insurance Plans
Processes are required for Resource managers and Providers (via the Portal) to create and maintain details regarding insurance plans and coverage options. Processes to support the review and qualification/disqualification of plans and providers may also be required.

An Architecture Supporting Full Integration with Other Systems and Organizations
Cúram HCR delivers out-of-the-box program support, integration with best-of-breed Exchange and financial management vendors, and a service oriented architecture (SOA) capable of communicating with legacy systems. The open, standards-based service-oriented architecture on which Cúram is built facilitates interoperability with existing enterprise systems and business processes and maximizes technology re-use and flexibility.



Cúram HCR Architecture Overview

Cúram HCR provides a uniform, seamless user experience that spans stakeholders, programs, and channels across all required eligibility and enrollment processes in the Health Insurance Exchange.

To support this strategy, Cúram Software is including a number of pre-built connectors to integrate various SOA components in the business processes. Curam HCR will provide interoperability with health benefit plan, provider display, fund aggregation and payment vendors, and other enterprise systems such as call center solutions and electronic content management systems. This approach provides a core system for all enrollment, eligibility, change of circumstance and account information while leveraging vendors who focus specifically on delivering other Exchange capabilities. Cúram has prebuilt connectors to support the insurance exchanges, call centers and content management systems.

Interfacing with Participating Insurance Carriers

While developing the Cúram HCR solution, we have established partnerships with leading vendors delivering aspects of a complete end-to-end Exchange solution including health plan management. Our preferred partners have a history of carrier plan data collection and content management around the loading of health plans for sale in their shop and compare websites. Additionally, by utilizing a SOA approach to the shop and compare portion of the Exchange, we are open to interfacing with preferred partners that the State of West Virginia may be in discussions with to provide shopping and plan management functionality.

Interfacing with National Association of Insurance Carriers (NAIC)
Cúram Software has established partnerships with leading vendors delivering aspects of a complete end-to-end Exchange solution including health plan management. Our solution will rely on our partner(s) to address interfaces with SERFF and SIRCON. Our preferred partners have been active advisors providing consultation to the NAIC throughout the planning and implementation discussions that have been taking place around Health Insurance Exchanges since the ACA passed in the spring of 2010.

Interfacing with Required Federal Agencies
Cúram HCR will provide a streamlined application process to collect and verify consumer and household information, including e-verification through trusted sources. The Cúram solution is designed to integrate and interface with the IRS, SSA, and the Department of Homeland Security through the Federal Data Services Hub for purposes of verifying household composition, income, citizenship, and immigration status. In addition, the system is designed to exchange eligibility and enrollment information with the Federal government and insurers.

Interfacing with Existing State Welfare Eligibility and Medicaid Claims Processing Systems
Cúram HCR will interface with state welfare eligibility system for purposes of exchanging and verifying consumer data. The Cúram solution will also interface with the state MMIS to exchange eligibility and enrollment information and facilitate claims processing.

2.10.5 Deloitte

The Exchange is expected to interface with multiple stakeholders including small businesses, carriers, and the Federal government. We see the biggest challenges around interfacing with carriers and the Federal government because of the varied enrollment systems across carriers and with regards to the Federal government, the lack of technical guidance provided to date around the Federal data services hub.

Challenge	How Deloitte's Solution Addresses the Challenge
Lack of specifications regarding Federal data services hub	•Reuse from 27 existing data exchanges with the Integrated Eligibility system. • Utilize ESB to support variety of standard messaging protocols • The ESB provides service orchestration that supports process automation by invoking services in a particular order and following a set of rules. • The ESB supports a variety of standard messaging protocols. • The ESB manages messages so messages are intelligently routed between services. • The ESB supports message transformation functionality to enable communication among systems. The ESB transforms data into a common data format that is understood by both the sending and receiving systems. • The ESB supports content-based routing functionality that determines the destination of a given message based on its content. • The ESB provides real time message tracking and distributed flow control debugging. It also allows for the diagnosis and management of problems in complex distributed systems.

Challenge	How Deloitte's Solution Addresses the Challenge
	• The ESB supports publishing and subscribing functionality that employ an event-driven model in which an event occurring in one application can trigger an action in another. • The ESB provides the capability to link services across the enterprise with both queuing and publish and subscribe behavior • The ESB is fault tolerant and provides high availability within a reliable infrastructure even if a component and its distributed infrastructure should fail. • The ESB allows the ability to change orchestration, rules, data mapping, and relationships between systems with minimal effort and disruption. • The ESB provides logging and auditing of services as well as the monitoring of faults, service and process status, and detailed performance statistics.
Varied Carrier Enrollment Systems	• Utilize standard HIPAA 834 transaction • Perform adequate testing with carriers beyond file accept and receive
Data coordination challenges across multi-state agencies	• Develop interfaces using open architecture so that as the State defines data sources through requirements it becomes "plug and play"
Eligibility regulations are not yet finalized	• Deloitte's experience developing eligibility systems allows us to configure the rules in a stand-alone rules engine based on our 40+ years of eligibility experience and configure updates when rules are finalized
Individuals moving from Medicaid to Premium Tax Credit eligibility	• Seamless user interface provides eligibility and plan selection for all programs regardless of subsidy level (Medicaid, PTC)

2.10.6 Exeter

Common challenges when interfacing and integrating data are identified in the table below, along with ways that OneGate addresses these challenges:

Common Challenge	OneGate Functionality
Non-standardized insurance plan data from carriers	OneGate leverages insurance industry-standard plan management methods to maintain plan information in its Case Management module. Bulk import, file upload and web form options are provided to accommodate multiple data formats.
To-be-defined functionality of anticipated federal hub	OneGate's Case Management module is designed \to anticipate the automated verification service provided through the Federal Hub with specific connectors built into the Case Management module to fulfill this function. Currently, OneGate provides alternative manual verification by

Common Challenge	OneGate Functionality
	the case worker that is recorded and tracked through the system.
Superior customer service	Both Individual and SHOP Exchanges should generate a sufficient "customer population" to be launched successfully and operate efficiently. OneGate's web portal user interface is easy-to-use and efficient, providing customers real-time eligibility determination and robust self-service functionality. OneGate's core rules engine simplifies complex HBE/HIX rule maintenance for West Virginia and enables accurate and consistent application of state and federal policies for its customers. Furthermore, OneGate's SOA-based architecture allows its core Exchange functionality to be integrated into a wide range of access channels to fit the needs of West Virginia's significant rural customers, including call center and mobile solutions.
Integration with existing program services and functions	OneGate is designed to handle high volume and functions standard cases that the State is expected to receive under expanded ACA rules. Additionally, it is designed to interface and link to existing Medicaid/CHIP/QHP processes that require advanced handling by case workers. This will help bridge the knowledge gap for existing State staff, and at the same time leverage existing program processes that will benefit from a gradual, incremental modernization.

2.10.7 Getinsured.com

Although states have expended a great deal of effort to provide stakeholder information concerning the design and start-up of Health Insurance exchanges under ACA, it remains an elusive concept for many who ultimately will interact with it. Although some are familiar with the ability to shop over the internet, being able to shop for health care coverage is something quite different. The ability to stand up an exchange that provides a world class shopping experience for consumers will require back-office interfacing and integration of massive proportions between the many data centers and systems. For most states, this is a heavy lift to get accomplished before the operational deadline of October 2013.

Getinsured has the experience in the health insurance market to make the user interface easy through a full-service set of capabilities, regardless of the user's role with the exchange. The user, be they an individual consumer, a carrier, a broker, a navigator, an employer in SHOP, or the state administrator, is provided their own view into the exchange platform to support their unique functional needs. Built upon the past six years of experience, the Getinsured design has built-in reminders for users, processing and issuing alerts for required actions in a timely fashion.

Getinsured Exchanges are based on a service-oriented architecture (SOA) that defines common Business and Technical Services and can be modified relatively easily to accommodate changing business and regulatory requirements. This architecture is consistent with CMS guidelines (the CMS Technical Reference Architecture)" which define the key business processes, functional groupings and underlying services. Getinsured exchange

architecture is also consistent with the Medicaid Information Technology Architecture (MITA) and the Exchange Reference Architecture.

The Getinsured exchange architecture is developed as a modular system consisting of open source components and libraries wherever appropriate. As a part of our SOAP-based technology architecture, business rules and process workflows are built as separate components that support and enable the core engine of the Exchange, and they are not co-dependent and intertwined.

Business process and technical services are exposed using standard-defined interfaces. These services interoperate based on a formal definition or contract (e.g., WSDL) that is independent of the underlying platform and programming language. The interface definition hides the implementation of the language-specific service. Key to these services is their loosely coupled nature i.e., the service interface is independent of the implementation.

Web service interoperability goals provide seamless and automatic connections from one software application to another (Eligibility Determination, Plan Selection etc). WSDL, UDDI, and SOAP are the fundamental pieces of the SOA infrastructure. WSDL is used to describe the service; UDDI, to register and look up the services; and SOAP, as a transport layer to send messages between service consumer and service provider. SOAP, WSDL, and UDDI protocols define a self-describing way to discover and call a method in a software application-regardless of location or platform. Data is marshaled into XML request and response documents and moved between software modules (e.g., Eligibility Determination, Plan Selection etc) using HTIP or message-based protocols.

Business Services are maintained in the exchange by a registry that acts as a directory listing. Applications can look up the services in the registry, get the WSDL for the service that has the description, and invoke the service using SOAP. Universal Description, Definition, and Integration (UDDI) is the standard used for service registry. Business Services are published to a public or private UDDI web services registry (Universal Description, Discovery and Integration). The web services registry would be used by Exchange software modules to discover and interact with each other.

Getinsured's SOAP-based architecture is scalable and provides a degree of customization without the need to make costly and complex changes to our platform. We can quickly and inexpensively modify business rules, health plan products, and interfaces without making changes to the source code and reengineering the system.

2.10.8 LexisNexis

No response provided.

2.10.9 MAXIMUS/Connecture

Proprietary response provided.

2.10.10 Oracle

To meet the ever increasing challenges, state agencies must transform their legacy IT systems into enterprise wide platforms that can support multiple programs, be deployed more rapidly and cost-effectively, and deliver a comprehensive view of the services being provided to clients and

their families. One of the biggest challenges for States is the creation of Health Insurance Exchanges - secure, dynamic marketplaces to compare the service levels, coverage rates, benefits and quality of competing insurance plans. Oracle's best-of-breed solution approach will allow West Virginia to leverage its existing infrastructure investments, while providing the ability to move forward on the path to a state-of-the-art architecture and a truly scalable solution.

Oracle is uniquely prepared to minimize the risks and maximize these opportunities for West Virginia in the following ways:

- Comprehensive functionality addresses a broad range of requirements across Eligibility Automation and Health Insurance Exchange
- Utilization of eligibility rules for the northwestern state system will jump-start the West Virginia system, providing a faster, lower risk implementation, and quicker compliance with Federal gate reviews
- Implementation of a system specifically built to handle HIX and Eligibility Automation - not further customization of a legacy system built for other purposes
- Componentized COTS solution that Gartner ranks in the leader quadrant. This solution is designed with the idea that customers should be able to maintain the solution without heavily relying upon system integration vendors for ongoing support. In addition to reducing short-term risks, this improves the return on investment of the Oracle solution by minimizing support and enhancement costs after implementation.
- The Oracle solution allows additional programs to be phased in as requirements change or legislation dictates. This allows our customers to leverage and extend our solution as their business rules solidify and avoid rip and replace
- An Enterprise Architecture that is proven to be implemented quickly, and is extendable - allowing West Virginia to build upon an initial investment for other systems
- To make implementation even faster, Oracle offers our On Demand hosting option, allowing West Virginia to implement in a secure, pre-built, Oracle-staffed environment. Converting back to a State hosting center and support can be done whenever the State is ready - not while you're trying to meet aggressive implementation schedules
- A flexible, SOA solution that allows customers to configure the solution to meet the needs of their business model
- The security of Oracle's long-term corporate viability and R&D investment in these solutions. This patented technology is vital to the long term commitment that Oracle has to its customers and provides the best investment protection to our customers. With over 5 million deployed users worldwide on our Siebel case management platform, Oracle is the most proven solution in the industry
- Supports key CCIIO and ONC Guidance including modular system integration, open Service Oriented Architecture (SOA), and Isolation of Business Rules

The need for solutions that enable horizontal data sharing, integrate disparate systems, improve efficiency, and reduce program costs has never been greater. Oracle's integrated solution is a highly flexible, scalable, secure, commercial-off-the-shelf (COTS) package that is easily integrated with internal and external systems. Oracle recognizes that Health and Human Services agencies must modernize the manner in which services are being delivered to their clients. Key capabilities include:

- Delivering one application platform that can be leveraged across the entire enterprise
- Reduce costs and improve maintainability and self-sufficiency through flexible application

configuration
- Protect your investment with patented application upgrade technology
- Configurable applications and flexible business rules architecture enable you to leverage and extend your investment as legislation changes or you need to phase in new programs
- Solution foundation proven at over 6,000 customers and five million users worldwide, and an equally robust ecosystem of Siebel-trained certified consultants, which becomes more important as states try to implement health insurance exchange.

2.10.11 Software AG

A main area of concern for any Exchange is the level of data that will be housed and shared between various entities (State, Federal, private, etc.). Allowing each entity to build out the correct framework for data exchange will be challenging, especially when working under the constraint of a short delivery timeframe such as that which West Virginia, and all participating States, are currently facing. Software AG has seen firsthand the large amount of effort required for setting up the parameters of an Exchange and this represents a challenge those who rely on technology to make it all work. A framework such as our SOA and BPM suite allows for agencies to continually leverage their investment via the utilization of Web services and standards-based integration, thereby reducing the time required to deliver. The implementation of a distributed, loosely-coupled, services driven and process centric approach to delivering the functional and technical requirements of an Exchange allows for re-use which Software AG views as a cornerstone for success in any large, complex deployment such as that which West Virginia is undertaking.

2.10.12 Speridian

Proprietary response provided.

2.11 HOW INFORMATION IS CAPTURED AND DISSEMINATED

Include how information can be captured as well as disseminated from your solution.

2.11.1 ACS

To capture data from a wide variety of entities, we support most commercially acceptable types of file transmissions initiated or received by the HIX Solution Suite. Our primary method of automating interfaces between systems is with standard Web Services Description Language (WSDL). These services are implemented using standard Simple Object Access Protocol (SOAP) based messaging and Extensible Markup Language (XML) data. These Web services can be utilized to implement programmatic interfaces between systems or to send and receive data between systems. Supported transmission types include:

- Secure File Transfer Protocol (SFTP)
- File Transfer Protocol - Secure (FTPS)
- Hypertext Transfer Protocol Secure (HTTPS)
- File Transfer Protocol (FTP) with Pretty Good Privacy (PGP)
- SFTP with PGP encrypted and/or signed files
- FTP over Internet Protocol Security (IPSec) encrypted tunnels
- HIPAA EDI transactions

Our platform also supports real-time data exchanges using different methods, depending on the type of data and where in the workflow the data is needed. Using standard WSDL Web services, systems can be integrated to support data exchange with the portal or backend systems. The Web services can be called as needed in real-time by other systems and necessary data will be received and processed or sent to the requesting system.

The ACS Team is committed to conducting business in compliance with all state and federal laws, rules and regulations applicable to its services. As such, all data capture, sent or received is handled in accordance with HIP AA Security Policies in compliance with the regulations promulgated by the Department of Health and Human Services under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the "HITECH" provisions of the American Recovery and Reinvestment Act of 2009 (the "HITECH ACT") regarding the security of Electronic Protected Health Information ("EPH!). These HIPAA Security Policies apply when the Exchange uses, discloses, creates, or stores EPHI to, from, or on behalf of health plans or other Covered Entities under the Security Rules.

We maintain appropriate administrative, physical and technical safeguards to protect PHI. These include (but are not limited to) employee sanctions policies, a named security officer, regular workforce security awareness and training, active programs to protect from malicious software, appropriate Business Associate Agreements, breach notification procedures, unique user IDs and passwords, restricted physical access and automatic workstation log-off.

2.11.2 CGI

CGI Health Insurance Exchange360 provides an integration framework that supports the integration and collaboration with external systems, such as the pending Federal Data Services Hub and the health insurance providers' systems (e.g., for accessing Qualified Health Plan data and enrollment requests). CGI Health Insurance Exchange360 leverages industry messaging standards and also provides interoperability capabilities that assist in mediating differences with external systems if differing standards are used. For example, CGI Health Insurance Exchange360 provides message transformation service capabilities to assist in the translation from one message format to another.

This solution includes a data exchange component that is being built as part of the SOA architecture to isolate the HIX from the external systems. Primary function of the data exchange component would be to provide a plug and play interface for any external provider who needs to interface with the HIX. This would ensure that external interfaces could be added easily and quickly by following standard interface rules. It also provides a secure Web services-based system interface enabling electronic interaction between the MO HIX and the Federal, State and Health Insurance providers. The data exchange component will be able to support both real-time as well as batch interfaces. The data exchange component consists of three components.

- **Federal Data Services Hub:** This data exchange component will support real-time interface with the Federal Data Services Hub to get income & citizenship information. It will also have batch interfaces to support submission of documents to CMS for verification, accept plan certification information from CMS and to send various reports to CMS. It will also perform audit and logging.
- **State Data Gateway:** This data exchange component will support both real-time and batch interfaces to numerous states systems as part of this solution. Since multiple state systems will have to change to support various other state projects this component will

isolate the HIX from those systems. In future if a different state system has to be accessed it will be easy to make changes to this component and not affect the overall HIX functionality. It will also perform audit and logging.

- **Health Insurance Carrier Gateway:** This data exchange component will support both real-time and batch interfaces with numerous Health Insurance Providers as part of this solution. This would include transactions like enrollment/disenrollment, ID card number, payments etc. It will also perform audit and logging.

As per the ACA, the Exchange will have to generate various reports for CMS, Health Insurance Carriers, Department of Insurance and Employers. In order to provide good customer service and increase self-service the user should be able to generate various ad hoc reports through the portal. This could be the last 10 transactions made, payments made, prior invoices, comparison of prior coverage to current coverage etc. The CGI Health Insurance Exchange360 has the ability to generate both online as well as batch reports. Portal reporting utilizes the reporting services to connect to the database to generate ad hoc as well as predefined reports. The data exchange component of the HIX is responsible for the batch data reporting to employers, CMS and Health Insurance providers. Various aspects of information management are addressed across many sections in our solution description.

2.11.3 Cognosante

Cognosante captures data based on the Information Model and Metadata that contains data elements and describes relationships and attributes of the data. Among other technical uses, metadata defines the information model and the way data is displayed for the users, with the reports, schedules, distribution lists and user security rights. Master Data Management and Data Quality Service are used to ensure the highest data quality standards to govern how the data is handled prior to reporting, such as de-duplication, standardization, cleansing, and transformation. Working in partnership with West Virginia, Cognosante would create the rules and Information Model to ensure all data elements are included to produce transaction data, reports, and information that contributes to program evaluation, continuous improvement in business operations, and transparency and accountability.

Cognosante ensures that the solution meets the federal guidance to produce and to expose electronically the accurate data that are necessary for oversight, administration, evaluation, integrity, and transparency. The generated reports can be automatically populated on designated federal repositories or data hubs, and have appropriate audit trails.

Data collection on user behavior metrics and quality of service for the customer experience is an important condition of receiving federal funds. For example, the Exchange is required to collect and report data on the types of problems and inquiries encountered by consumers. Cognosante ensures accurate information is captured, transformed, and presented in the most applicable way using business intelligence tools.

2.11.4 Cúram Software

Common Front End

Cúram HCR provides a seamless user experience via a unified, or common front end that spans users, programs, and channels across all required eligibility and enrollment processes in the health insurance exchange.

Our solution leverages the full functionality of Cúram Citizen Self Service (CSS) to allow external parties, such as consumers or assisted service representatives, to access triage, screening, application and account functions online. Cúram incorporates the new rules, scripts, and evidence required to support the changes in Medicaid eligibility and the new Health Care Reform products/programs, such as the Health Insurance Subsidy and Basic Health Plan. Cúram HCR is structured to assist consumers from plan selection to enrollment - a process that spans multiple functional areas such as eligibility and entitlement, shop and compare, enrollment, and premium payments.

Exchange Adapters
Cúram Software is including a number of pre-built connectors to integrate various SOA components in the business processes of the Exchange. Cúram HCR will provide interoperability with health benefit plan, provider display, fund aggregation and payment vendors, and other enterprise systems such as call center solutions and electronic content management systems. This approach provides states with a core system for all enrollment, eligibility, change of circumstance and account information while leveraging vendors who focus specifically on delivering other Health Insurance Exchange capabilities.

Business Intelligence and Analytics
Cúram HCR leverages the Cúram Business Intelligence (BI) solution to provide robust enterprise reporting capabilities and key performance indicators built specifically for health and human services enterprises. Cúram BI and Analytics offers a fully configurable BI solution scalable from program to enterprise consisting of embedded analytics, domain-specific dash boards, a complete ETL framework and tool-independent, predefined domain-specific data marts.

2.11.5 Deloitte

The Exchange intakes information and data but also requires dissemination of information to state and federal agencies, carriers, and other third party entities in order to validate the identity of individuals and employers on the Exchange, as well as successfully enroll them in their selected health plans.

Our user interface incorporates the UX2014 project wireframes and has been validated through regular review by software usability experts including a former director at the Massachusetts Health Connector responsible for user experience. JavaScript and AJAX are used to provide a modern, Web 2.0 user experience; graceful degradation of JavaScript functionality provides §508 compliance.

Our Exchange solution uses SOA and web services integration technologies such as JSON and messaging services (JMS) to interact with state and federal systems and third party systems. Integration with the Federal DSH and other state data sources is accomplished through its enterprise service bus (ESB). Industry standards based interfaces through use of ANSI X12 and integration is done using ESB that allows loosely coupled interfaces compliant with OASIS and W3C.

Finally, we use the HIPAA 834 transaction standards to facilitate transfer of user eligibility, enrollment, and disenrollment information between the Exchange and carriers.

2.11.6 Exeter

OneGate is designed to actively collect information that can be used by agencies to make business decisions based on performance. Statistics such as caseload size, number of complete and incomplete online applications, abandoned application data and service request resolution times, are all stored within various data stores in the OneGate solution. Accessing this information is simple; most of this information is available within the worker-facing OneGate Member Management component. Using OneGate Member Management, agency/authority users can perform ad-hoc queries using out-of-the-box filtering tools to access, track and view the relevant performance measures at multiple levels (i.e., statewide, regional, unit, worker, etc.). Simple reports can then be provided by exporting the results of these queries to XML or PDF format.

If more complex reports are needed to perform aggregate or detailed analysis of performance and usage metrics, OneGate's data stores can be integrated with the OneGate reporting solution (or a state's existing reporting solution) using Java database connectivity (IDBC) connections or web services. Users can then produce reports that will effectively capture, analyze and present the necessary information that is needed to optimize work efficiency, reduce bottlenecks and decrease online application abandonment.

OneGate can be implemented using OneGate's reporting solution or integrated with an existing reporting tool in order to produce reports based on the performance and usage information in OneGate Member Management and self-service customer portal system that may be important for internal consumption or for meeting federal or state reporting requirements.

OneGate provides a reporting component that includes standard reports based on transactional data. Reports can be routed and scheduled depending on the requirement. OneGate has a reporting component that can work with information from OneGate Screening, Intake or Member Management modules, legacy systems or other accessible data sources to produce formatted reports on a variety of information, including transaction data.

The OneGate reporting component allows users to create and edit reports in a very simple and quick manner. Within a few button clicks, a user will be able to create a report and edit its properties such as input parameters, data sources, templates and other metadata. Report templates can be created using a template builder application that has built-in support with Microsoft Office products.

Together with OneGate's enterprise service bus (ESB, service bus), reporting and business intelligence analytics can be conducted in conjunction with data from virtually any source possible. The service bus can be utilized to orchestrate and eventually push data into reporting data warehouse which can be directly integrated with the reporting solution. Properties of these data connections, such as security, accessibility and metadata can be managed within the reporting solution.

The OneGate reporting solution supports various output formats (e.g., PDF, XLS, XML, PPT, DOC). The reporting solution can be easily integrated with an external document management solution allowing freshly created reports to be automatically routed to this document management system.

2.11.7 Getinsured.com

As noted above, the Getinsured solution is based on open standards. There is an extensive set of reports that captures every aspect of system operation. These reports can be viewed online on the web or may be exported to third party systems. Methods of export from the system include export to CSV filed to interfaces through a web services. Similarly, several important forms of import can also be accomplished through CSV or through a web services. Details concerning the data storage capacity appear below.

The Exchange platform can also capture and move data to third party sites.

- A Getinsured landing page, for example, can be used to capture demographic information and dynamically share it with a third party system (e.g., to confirm Medicaid eligibility).
- The Exchange also links to external health plan carrier sites to dynamically load product brochures and other consumer marketing materials.
- Getinsured can also integrate with third party sites to enable a seamless end-user experience for eligible participants who want to apply for coverage. Consumers apply or sign-up for coverage on a Getinsured website, then enroll on a health plan carrier's website. The experience is seamless to the consumer.
- Getinsured provides single sign-on and branding of third party sites to enable a seamless end user experience.

2.11.8 LexisNexis

No response provided.

2.11.9 MAXIMUS/Connecture

Proprietary response provided.

2.11.10 Oracle

Oracle's Siebel Public Sector Case Management solution is designed so that departments can manage all interactions and service delivery options while providing role-based access to the appropriate users. In addition to providing multi-channel support, Oracle provides caseworkers with remote access, empowering them to complete information out in the field and compile that information upon returning to the office.

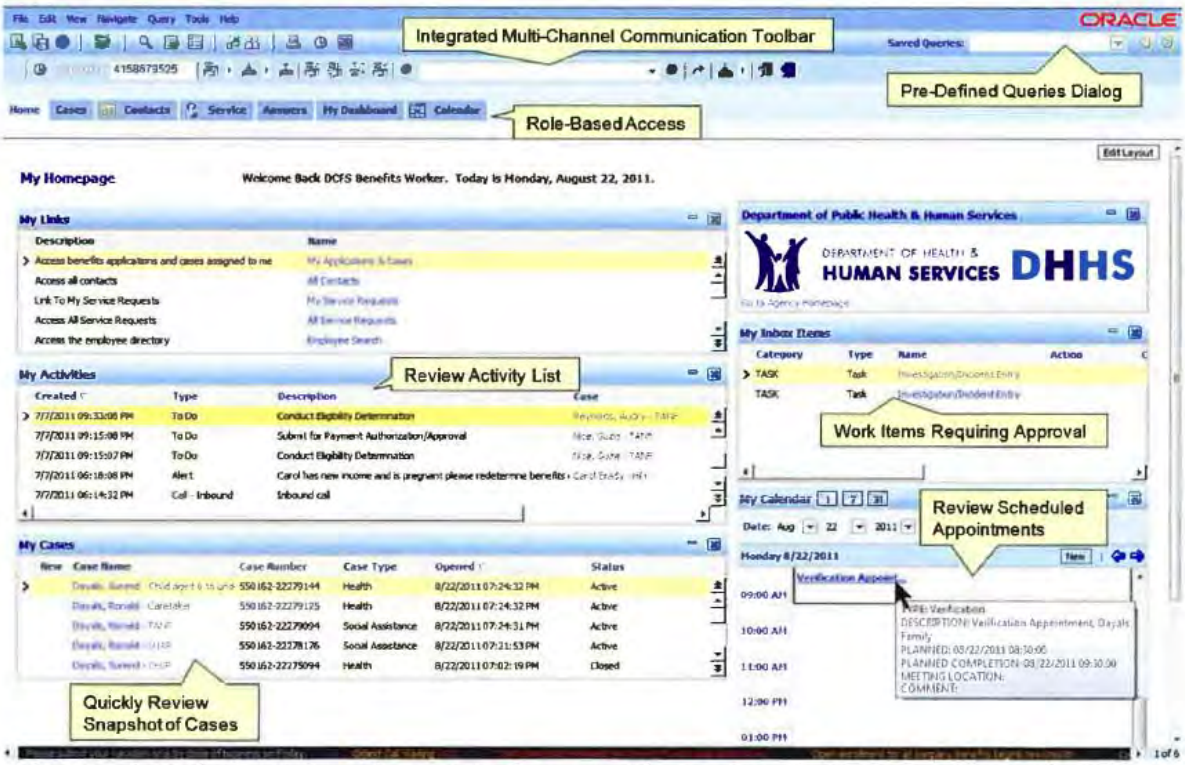
Oracle's Siebel Public Sector Case Management utilizes state of the art technology to deliver directed, intuitive navigation with robust capability in a true web-based interface. West Virginia caseworkers using Siebel Public Sector will benefit from the extensive development and evolution of the application user interface and intuitive business process built into Oracle's commercial off-the-shelf software solution. The Siebel Application Platform represents 16 years of best practices experiences from more than 5,000 customers (including 1,400 Public Sector customers) and more than 5 million deployed users worldwide. Siebel has received many awards, is widely recognized by top analysts as the global leader in enterprise case management, CRM & contact center functionality and is well recognized for having more customer seats deployed than any other COTS provider.

Exchange Worker User Interface

Oracle's Siebel Public Sector is an integrated Web-based application designed for use by administrators, front line workers, service providers, individuals and executives. The product contains intuitive visual tools that allow users to configure the User Interface without modifying core code.

The case exchange worker user interface provides many productivity enhancing capabilities such as:

- Drag and Drop list Columns
- Calculator Popup
- Auto-complete Picklist
- Calendar Popup
- Keyboard Accelerator
- Auto-save



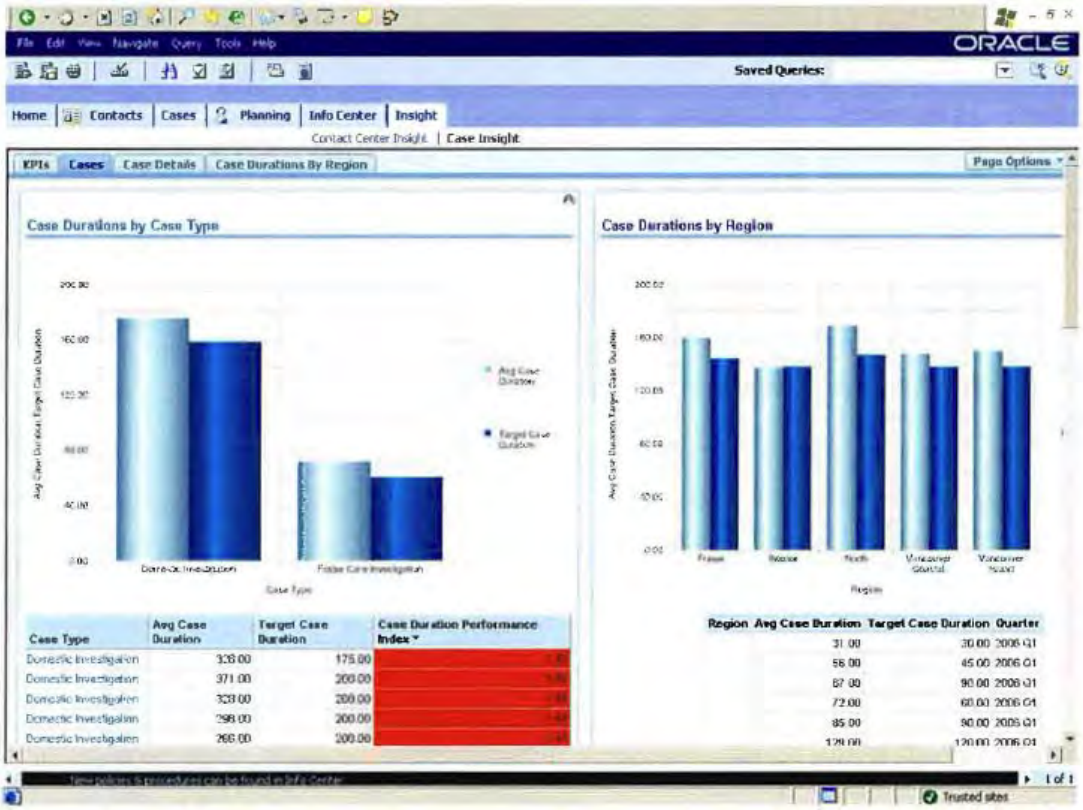
The Oracle Siebel web based user interface provides Exchange Workers with productivity enhancing features typically only available in thick client applications

The Oracle Siebel Public Sector Application provides an easy to use graphical user interface. It provides guided business processes and a task based user interface that can be used in both an on-line or offline environment. This unique technology offers levels of interactivity traditionally available in Windows® applications like dragging columns to rearrange their order, selecting a record to edit it, or clicking on the header of the column to sort it. This application has been developed over the last 15 years with the sole purpose to improve operational efficiency with an easy to use interface.

Integrated Reporting and Analysis
A key to driving better performance outcomes is the need to understand program status (real time and historical) from both internal and external data sources. Oracle's integrated Health and Human Services Solution includes easy to use, comprehensive, web-based reporting, ranging from online queries to standard reports and ad hoc queries to information on investigation workload, status, and trends that can be accessed through a prebuilt configurable or customizable portal. These capabilities will provide West Virginia with a means to ensure program compliance including monitoring, fraud detection, fraud mitigation, and reporting.

Further, embedded analytics provide closed loop analysis to measure and continuously improve outcomes. Key capabilities include:

- Segmenting and identifying those clients deemed to require special attention
- Monitoring program performance with pre-packaged KPIs and "what if" analysis of policy outcomes
- Identifying and sending real-time alerts regarding barriers to outcome attainment



2.11.11 Software AG

The solution provides a reporting component that displays stored solution data in the form of reports that help to monitor and manage the performance of HIX based business processes and system resources. Reports and dashboards can be based on both real-time and historical analysis on information. For instance, real-time information of exactly where a client is in the process at any moment can be provided through the use of built in portlets. In addition the ability to report on any data flowing through the system such as cycle times of each process step,

cycle time for applications by region, active member base, caseload budgets per office, etc. We will also enable a real time, holistic view of this information across systems, databases, applications, and people. The following are examples of an executive dashboard showing both historical and more real-time information being reported to users:

Sample Dashboard of Near Real-Time Application Indicators

Sample Dashboard of Historical Data

Furthermore, practically any data flowing through the Solution can be reported using any standard reporting/BI tool (Crystal Reports, MicroStrategy, SAS, etc). Data is captured based on a star schema that allows straight-forward construction of data reports with the ability to drill-up and down from key indicators. This provides flexibility to the Exchange should the state leverage a separate reporting solution.

2.11.12 Speridian

Proprietary response provided.

2.12 HARDWARE REQUIREMENTS AND TECHNICAL ARCHITECTURE

Describe your solution's hardware requirements and technical architecture.

2.12.1 ACS

Our HIX Solution Suite is delivered in a SaaS model, offering several benefits to the State. In our SaaS model, the systems are hosted on an existing infrastructure, minimizing the implementation timeframe, capital investment by the State and maximizing cost efficiencies from shared services.

Web Portal Platform
The HIX Solution Suite's Web front end is powered by the BENEFITFOCUS® Platform, built on Java 2 Platform, Enterprise Edition (J2EE) technologies. The primary interface method for this solution is via a Web browser, so there is little-if any-technical requirement placed on the end user. The software uses a tiered architecture design as shown in Exhibit 2-8, Tiered

Architecture Design, which includes separate presentation, application, business logic, public and java library, and relational database layers.

This solution is deployed to a shared multi-tenant production environment for live-user access. In addition, most carrier partners are provided access to a shared testing environment for release validation and testing. Some partners choose to have a test environment configured that is always available for testing and training purposes, even outside of the normal release and/or joint testing environment. We maintain numerous test and development environments for use during internal product development and individual implementations.

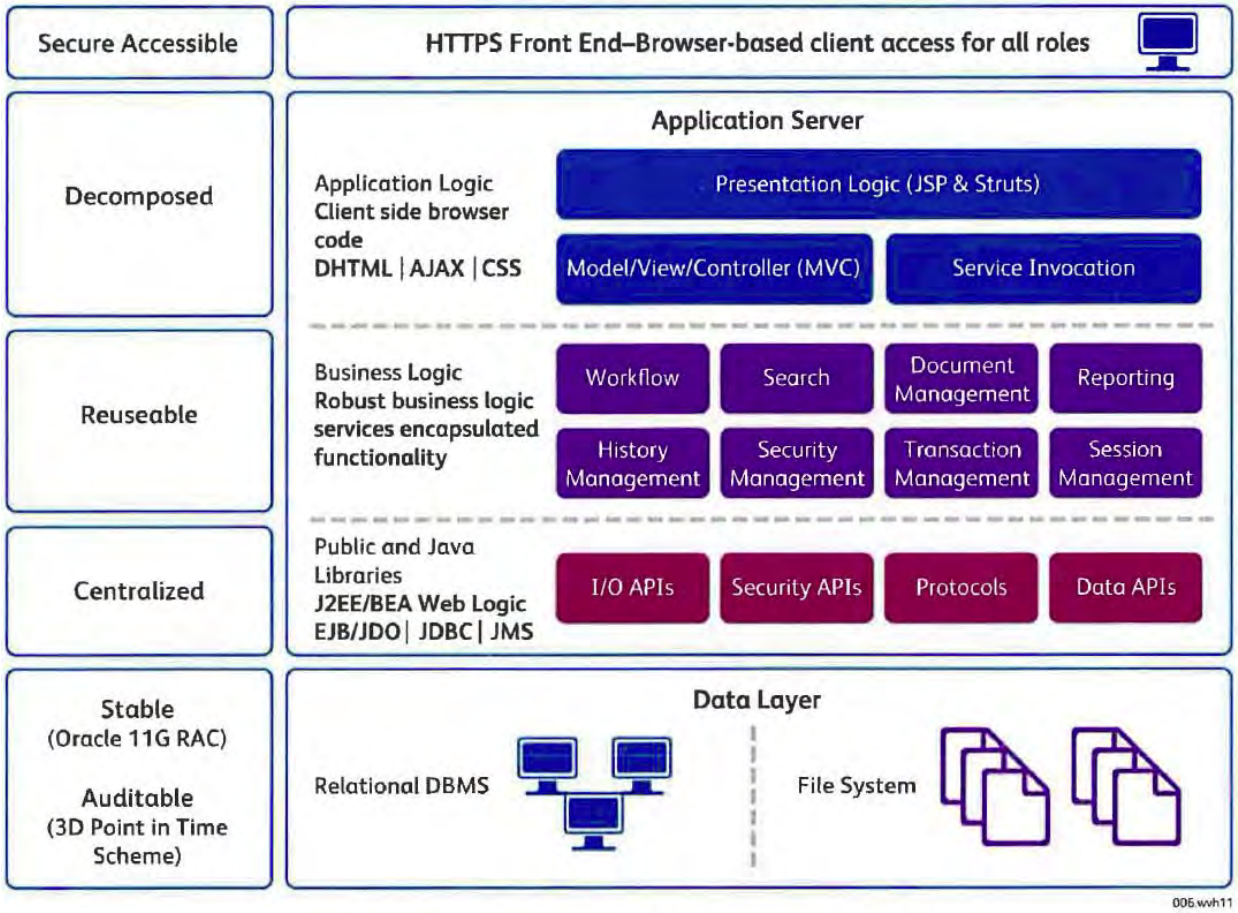


Exhibit 2-8. Logical Application Architecture: Multi-Tiered

Our HIX Solution Suite is deployed in a SaaS model with a tiered architecture approach.

The Web software components use a Model-View-Controller (MVC) framework. The presentation layer is composed of separate Web components with extensive use of client-side JavaScript and Dynamic Hypertext Mark-up Language (DHTML) technology to ensure a rich client experience. The BENEFITFOCUS® Platform runs on top of core application middleware. This core application provides the primary workflow and rules engine functionality, which are composed of J2EE technologies. At the data tier, Oracle11g Enterprise Edition serves as the Relational Database Management System (RDMS) and data store. The software server components access the databases via Java Data Base Connectivity (JDBC). The Platform is

developed using Java, JavaScript, Extensible Markup Language (XML) and various other technologies.

Membership System and Customer Support Technology
The Customer Relationship Management (CRM), membership system, and financial component of the HIX Solution Suite are hosted on Hewlett Packard and Dell x86 based systems with multiple blade servers in a highly scalable and fault tolerant configuration. Each blade server has a quad/quad core processor with 64GB of memory. The blades servers host multiple VMware ESX Virtual Machines (VMs) that are managed with VMware's vSphere Datacenter Software. The VMs running on the blade servers host all of our application software except our Database Management System, which does not run on a virtual environment. The VMs all run Microsoft Windows Server Enterprise edition and host the various third party applications and the HIX Solution Suite software.

2.12.2 CGI

CGI's Health Insurance Exchange360 was designed to support the goals of the ACA and state-based health insurance exchanges, unencumbered by limitations of existing legacy system implementations. From a software/technical solution perspective, CGI Health Insurance Exchange360 follows the issued guidance for Exchange and Medicaid Information Technology (IT) Systems; aligned with the Medicaid Information Technology Architecture (MITA) and its MITA Standards Reference Model (SRM).

Architecturally, CGI Health Insurance Exchange360 follows an open standards approach with a multi-tiered architecture designed on the Java Enterprise Edition (Java EE) platform. Java EE continues to be the premier modern architectural platform that is widely adopted by COTS vendors and heavily supported with Open Source options. The multi-tiered approach provides for isolation of presentation, application (business logic) processing and data layers to promote performance fine-tuning and scaling where it is needed (e.g., higher data inquiry requests may necessitate only the scaling up of the data tier with minimal impact to the other tiers) and to establish security zones for increased protection. This true open standards approach yields critical benefits to the State including:

- **Reduced Risk** - Proprietary architecture and embedded middleware components lack the flexibility, breadth of integration, and scalability required by the State Exchange. The native Java EE implementation reduces risk by providing true open-standards technology that will not limit the State during times of technology and/or business change. Adopting an open standards approach and avoiding specific vendor's proprietary platform and proprietary implementations provides crucial risk mitigation against vendor "lock" in the future.
- **Lower TCO** - CGI Exchange360 is architected on platform neutral, non-vendor-specific, standard technologies using Java EE. The CGI Exchange360 solution will be highly maintainable and cost effective, offering lower Total Cost of Ownership (TCO) through lower cost resources who are cheaper, easier to find and train in non-proprietary technologies if the State desires an on-premise hosted solution now or in the future. CGI Exchange360 follows MITA and other federal guidelines and recommendations for implementing an open standards-based rules engine to support rapid configuration and testing of business rules. Through the business rules management (BRM) approach, the State Exchange can be quickly configured to address changing ACA requirements when compared to traditional programming and related system development life cycle (SDLC)

processes. The lower cost of maintenance and operations (over proprietary approaches) will allow CGI to be cost competitive with our technology solution. Java EE knowledgeable resources are highly available compared to resources that must have proprietary skills. CGI Exchange360 can operate on low cost hardware such as Intel-based server blades using Linux or Windows.

- **Easier Administration** - Using an open standards approach allows the CGI Exchange360 solution to leverage a choice of Open Source and COTS technology components. Many of the typical activities for initial and ongoing maintenance are supported through straightforward configuration through a web browser - no need for specialized skills that are difficult to obtain and retain.

CGI's Health Insurance Exchange360 technical architecture is compliant with Federal Enterprise Architecture Framework (FEAF), and aligns well with the DHHS CMS Guidance for Exchange and Medicaid Information Technology (IT) Systems and Medicaid Information Technology Architecture (MITA) as displayed in Exhibit 6. These industry and federal guidelines promote the use of key standards that are also supported with the CGI Health Insurance Exchange360 Technical Architecture such as SOAP, XML, UDDI, WSDL, BPEL, SAML, and NIST security standards.

Representative Technical Architecture Capabilities	Technical Architecture Features
Web services and adherence to key frameworks and standards	• FEAF, MITA, and SCEA frameworks and standards • Open standards such as SOAP, XML, UDDI, WSDL, BPEL, SAML and NIST security • OTech standards and guidelines for flexibility in on-premise hosting should the State desire an alternative to Cloud Computing implementation • Messaging formats such as HIPAA 834 and 270/271
Scalability and optimized resource utilization	• Multi-tiered architecture • Clear separation between presentation, application, and database tiers enable horizontal and vertical scalability • Virtualization • Clustering solutions
Communication, Data, and Process Integration	• Use of ESB for reliable communication channels and protocols for integration • Synchronous and asynchronous communication operations
Fault Tolerance	• Redundancy to minimize single points of failure • Use of redundant components • Failure detection • Recovery and bypass mechanisms built into the solution • Auto-reconfiguration to minimize downtime
Fault Avoidance	• Use of highly reliable solution components containing data loss

Representative Technical Architecture Capabilities	Technical Architecture Features
	prevention features that are supported by both Open Source and Commercially Off-the Shelf (COTS) product alternatives (e.g., from HP and Oracle) • Mirrored data to a remote database instance • Preventive monitoring infrastructure for early detection of faults and failures
Environmental Independence and Disaster Recovery	• Use of redundant systems capabilities • System backup, recovery and restore facilities • Mirrored data to a remote database instance
Non-Disruptive Change	• Auto-reconfiguration and redefinition • Component add/removal through virtualization
Non-Disruptive Maintenance	• Modularized service solution supported by redundant infrastructure components and mirroring • Real-time maintenance patching and fixing capabilities • Concurrent file backup and reorganization
Data Availability	• Business Intelligence using Data Marts/Data Warehouses

Hardware requirements vary based on scope, scale and preferred implementation method, i.e., State hosted, vendor hosted, cloud-based.

2.12.3 Cognosante

As a Systems Integrator with no single 'out-of-the-box' solution, this section is not applicable to our response.

2.12.4 Cúram Software

Cúram Software does not mandate any explicit hardware requirements for running Cúram. This is because the hardware required to run Cúram is primarily determined by the hardware requirements of the operating system, application server and database products used in the system configuration. Cúram supports a range of commercial products across each of these categories of software, providing considerable choice in terms of both software, and by extension, hardware. Cúram is built on an n-tier, Java Enterprise Edition-compliant technical architecture. Using open standards technologies, the Cúram architecture is SOA compliant and readily facilitates integration with existing legacy or other systems.

Some of the key highlights of our solution's architecture are as follows:

- Consists of a homogeneous technology stack for all of its software modules which simplifies installation, deployment and maintenance.
- Provides a model-driven architecture that helps focus on the functional requirements of the system while enabling a platform-independent system to be defined.

- Vendor neutrality is provided through generic support for a wide range of platforms including AIX, HPUX, Solaris, Windows and zJOS.
- Cúram applications are based on open software standards and conform to the Java EE architecture using specifications such as Enterprise JavaBeans (EJB), JDBC, JMS, XML, Java Server Pages (JSPs) and Web Services.
- Enables configuration, extension and customization. Existing Cúram business and technical functionality can be composed and deployed as new functionality, or it can be extended or altered to suit the specific needs of a project.
- Facilitates interoperability with arbitrary legacy and/or external systems using a range of approaches, including built-in support for Web Services and its Enterprise Application Integration (EAI) Connectors.

2.12.5 Deloitte

The Deloitte HIX Solution is founded on design principles and guidelines in line with Industry best practices: leveraging current infrastructure and SOA framework to provide loosely-coupled, highly integrated services. Our solution is platform agnostic and clearly separates the user-interface and application presentation from the business logic, enabling an accelerated development and implementation schedule.

The HIX Solution has been developed on open-source platforms and frameworks that provide open, not proprietary, source code rights to West Virginia, along with lower ongoing maintenance and support costs. Compatibility with West Virginia's RAPIDS infrastructure enables reuse and leverage of current infrastructure and capabilities, both technical and human resources.

Being based on open-source operating systems (Linux) and open-source middleware (Jboss), Deloitte's HIX solution may be implemented on any hardware platform supported by the OS and middleware. Migration to other operating systems (i.e. MS Windows), or middleware platforms (i.e. Oracle Weblogic App Server) is facilitated by the use of open frameworks such as Struts 2: code migration requires a compilation of the framework on the new platform, not a code migration and potential code rewrite.

Deloitte understands the importance of building a solution that is implemented on open standards, layered, components-based, and built using SOA best practices. This architecture gives the HIX the opportunity to use leading COTS software, the flexibility to make changes to certain aspects of the solution without impacting the rest of the application code, and the ability to scale as needed. The Java EE platform provides the means to meet these goals through the extensive use of design patterns, standard APIs, and technologies such as Java Server Pages (JSP), Jboss, Struts 2, Spring, Hibernate, Enterprise Java Beans (EJB), and Extensible Markup Language (XML)-based web services to maximize value. Deloitte has experience in integrating benefits portals and legacy eligibility systems which have also utilized SOA model to provide integration. To achieve scalability, and robust reporting and analytics capabilities, the data layer is implemented in Oracle's 11g RDBMS.

Interoperability is largely accomplished through the Enterprise Service Bus (ESB), which is the central hub enabling the exchange of information via web services or legacy standards, which may exist in current West Virginia systems. Cloud computing resources, along with other data services and partners, can be quickly integrated through the HIX's ESB. The ESB also performs a role as central gatekeeper, securing data-partner access to and from the HIX.

Data-partner and user security is enabled through enterprise logging and identity and access management (IAM) solutions. Current state enterprise security systems, including Single Sign On (SSO) systems can be integrated via the ESB, web services, and the HIX Spring framework without requiring changes to the core Java functional code. For turnkey solutions, Oracle's IAM solution has been tested to work with the HIX Solution.

Compliance with Federal Exchange guidelines for HIX architecture and implementation are achieved through the HIX focus on SOA and use of a Business Rules Engine, aka BRMS. The BRMS enables the separation of business rules and logic, such as the rules governing income levels and eligibility for a premium tax credit, from the application code, allowing a change to such rules without requiring re-development or application downtime.

The user interface is designed to be §508 compliant. The user interface has been validated through regular review by software usability experts, with their suggestions incorporated into the development. JavaScript and AJAX are used to provide a modern, Web 2.0 user experience; graceful degradation of JavaScript functionality provides §508 compliance.

2.12.6 Exeter

Architecture

Exeter embraces modern best practices in OneGate's design, which helps ensure that the solution is as up-to-date as possible when federal and/or state policy change or are further defined. OneGate is built around SOA principles, allowing eligibility and other business rules to be maintained from a central repository and called via web services from various channels. This feature, in turn, helps ensure consistency in rule application across those channels and allows for easier maintenance of the rules when policy changes arise.

The diagram below provides a high-level overview of OneGate's architecture.

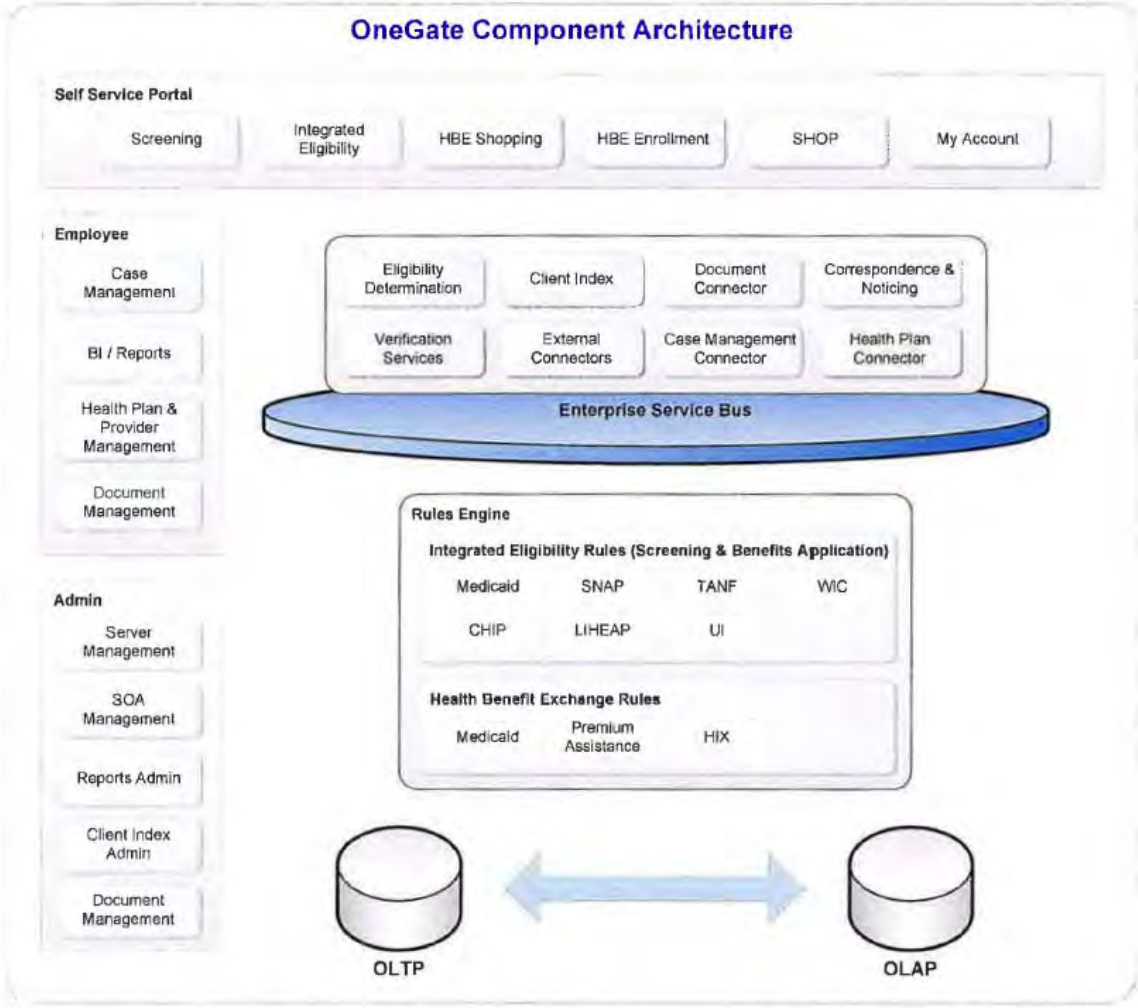


Figure 7: OneGate Architecture Overview

Service-Oriented Architecture

OneGate's SOA design provides Exeter with greater flexibility in meeting the needs of its clients and their constituents. OneGate uses Oracle SOA Suite, a collection of service-oriented middleware that provides the capability to connect individual components of the solution and to integrate existing components at the state. The ESB provides the standard functionality for message translation, transformation, enrichment and routing. Out-of-the-box, OneGate provides a set of service composites, written in BPEL, that communicate via Simple Object Access Protocol (SOAP) over HTTP/S. Through various adapters available from Oracle, OneGate will be able to integrate with legacy systems, allowing West Virginia to leverage existing functionality either temporarily or permanently, as the State proceeds with its phased modernization efforts.

Centralized Rules Engine

OneGate leverages Oracle Policy Automation (OPA) as the centralized rules engine and repository. Rules and policy are separated from core application code, which allows for changes in policy to be made without having to modify the application code. Rules are written using Microsoft Word and Excel, tools typically familiar to both functional and technical users. This transparency of policy helps facilitate rules maintenance; rules are not "locked up" in code that

typically is understood only by technical users. Using the integrated development environment (IDE), Oracle Policy Modeling (OPM), the rules can be compiled to machine-readable XML format. The rules are packaged into a zip archive, and can be deployed to the server, following standard deployment procedures. Out-of-the-box, the rules can be service-enabled, with standard SOAP operations exposed that allow other systems to perform determinations based on the rules. There are two high-level operations that are exposed as web services: assess and interview services. Assess service allows all data to be sent as input in the message body, and the output is the determination. Interview service is a more interactive process, in that a subset of information is provided to the service, and the rule base determines what other information it needs to process further. This latter functionality is used to render interactive interviews to the end-user, which provides streamlined interview capability. The engine knows the minimum amount of input needed to come to a conclusion based on the inputs provided.

Rules-Driven User Interface

OneGate provides a user interface framework built using Java portlet specification compliant code. The framework integrates with the OPA rules interview service and the framework is used to render the interactive interviews of the OneGate Health Benefit offering. The rules defined determine the questions that are displayed to the end-user. Question text can be parsed directly from the rule text, or it can be overridden at the screen level, giving the State full control over what is presented. In addition to the questions, help text/commentary can be included in the rules to provide the end-user with information and direction for each question. The user interface contains configurable hooks that can call external verification services, helping to streamline the end-user interview flow. Answers to questions can be saved to the database to allow for users to continue incomplete interviews. Knowing that there may be use cases where the data gathered should not be saved, OneGate allows for that feature to be turned off via a text file-based configuration.

Enterprise Case Management

OneGate Case Management is built on top of Siebel Public Sector. Out-of-the-box, Siebel Public Sector provides a configurable base application platform for customer relationship functionality focused on public sector agencies. OneGate has extended the functionality to incorporate additional fields for Medicaid and other HHS programs, capturing the data relevant for the new ACA rules. OneGate further extends Siebel Public Sector by providing additional business objects and services to handle on-demand external verifications and manual management of verification documents. Siebel includes configurable workflows and enterprise application integration facilities, which OneGate has leveraged to produce services that integrate with the external rules engine. The customer self-service portal and the Case Management system connect to the same rule base, ensuring consistent determinations and a single source of truth.

COTS Component List

The table below provides a list of OneGate components. It is important to note that not all of the components listed may be required for an implementation of West Virginia's Exchange. If selected to assist West Virginia with this initiative, Exeter and West Virginia will work together to gain a better understanding of the current infrastructure and the State will be able to select the necessary OneGate components that will help it meet its specific requirements, and leverage existing applications and technologies that the State is currently using or in which it has invested.

Product	Description
Oracle Policy Automation (OPA)	OPA is a natural language rules engine. Rules are written in Microsoft Word/Excel, and compiled to machine-readable code. Systems can connect to the rules engine via SOAP web services.
Siebel Public Sector	Siebel Public Sector is an enterprise case management solution, which provides a base platform that can be configured and/or extended to meet an agency's business needs.
Siebel Computer Telephony Integration (CTI)	CTI provides inbound. outbound and transfer call routing based on customer information.
Service-Oriented Architecture (SOA) Suite	SOA Suite provides service-oriented middleware components, which allow agencies to rapidly design, assemble, deploy and manage services. SOA Suite includes an ESB and administrative consoles that help improve maintenance and increase transparency.
Web Logic **Suite**	WebLogic Suite is an enterprise Java Application Server, which is a scalable, high performing and efficient Java Enterprise Edition platform (Java EE).
WebCenter Suite - Portal	WebCenter Suite is a portal server that implements the Java Portlet Specification and includes out-of-box integration with WebCenter Content.
WebCenter Suite - Content	WebCenter Suite for Content is a unified content/document management system that provides infrastructure and services for managing documents. images and rich media files.
Oracle Business Intelligence Enterprise Edition (OBIEE)	OBIEE is an enterprise business intelligence solution that provides standard reporting, ad-hoc reporting. Proactive intelligence and alerts, interactive dashboards, etc.
Oracle Customer Hub	Customer Hub provides master client index functionality that includes a common data model. and provides data consolidation, data quality (cleanse/enrich) and distribution tools for master data management.
Oracle Access Management Suite	Access Management Suite is an enterprise security architecture that provides flexible authentication, fine grained authorization, single sign-on, identity federation, proactive fraud prevention, etc.

Hardware Requirements and Hosting

OneGate is compatible with and has been tested to run using medium to low-end enterprise servers. Each of OneGate's components can be implemented as part of a machine cluster and can be completely virtualized. Depending on West Virginia's requirements and current infrastructure, these machines can be ported to a purely physical environment or to a mix of virtualized and physical environments. Figures 8 below illustrates how the OneGate system can be hosted for a system with a customer base of 800,000 and state worker count of 600. It is important to note that these diagrams represent estimates and that the actual hosting environment may vary depending on finalized sizing.

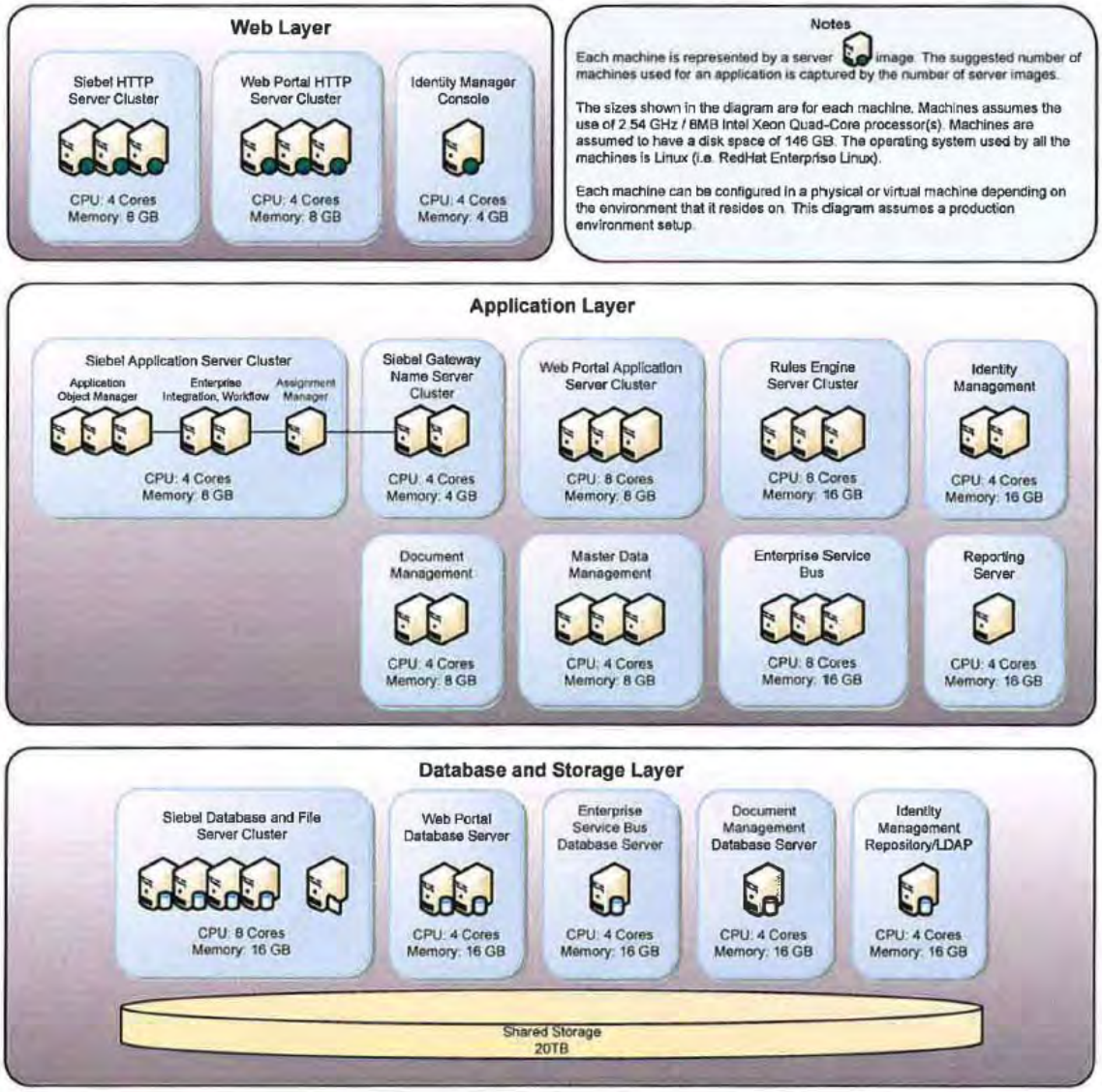


Figure 8: Hosting and Sizing Configuration

As depicted in the diagram above, each application can be implemented in a set of clustered machines. Every machine in these diagrams can either be virtual or physical. For a non-production environment, Exeter recommends using some virtualization to save on hardware costs, allowing West Virginia to reuse its physical servers for other endeavors once these non-production environments are not needed. Virtualization can also be used to quickly bring up instances and environments depending on need. For example, if additional test instances are required, existing virtual machines can be cloned to meet these needs. When using virtualization, to minimize processing loads and points of failure, Exeter recommends distributing each virtual machine of an application cluster between different physical servers. For a production environment, Exeter highly recommends the use of physical machines to ensure high performance at all times.

OneGate also offers a flexible design that allows all of its core components to run on multiple operating systems, if desired. Some of the applications require specific operating systems. Figure 9 shows a solution that is configured on Linux. Exeter built OneGate using standard design principles that allows us to easily deploy OneGate in multiple platforms with minimal modifications required.

OneGate components can be deployed as a cluster of machines to achieve load-balancing. This allows users to easily scale up and down each component by adding or removing machines (physical or virtual), depending on the current needs. The hardware specification of each machine will depend on the minimum requirements of each specific OneGate component as well as the load that each component needs to handle.

Exeter also recommends the use of a standby system that can be used as a backup system should the production instance go down due to a natural disaster. This standby system passively replicates the data of the production system allowing the system to be brought up in a separate location rapidly. This allows us to maintain a near to 100 percent uptime. The standby system can be built by reusing existing environments (e.g., development, training or test). Figure 9 below shows how the standby system can be implemented.

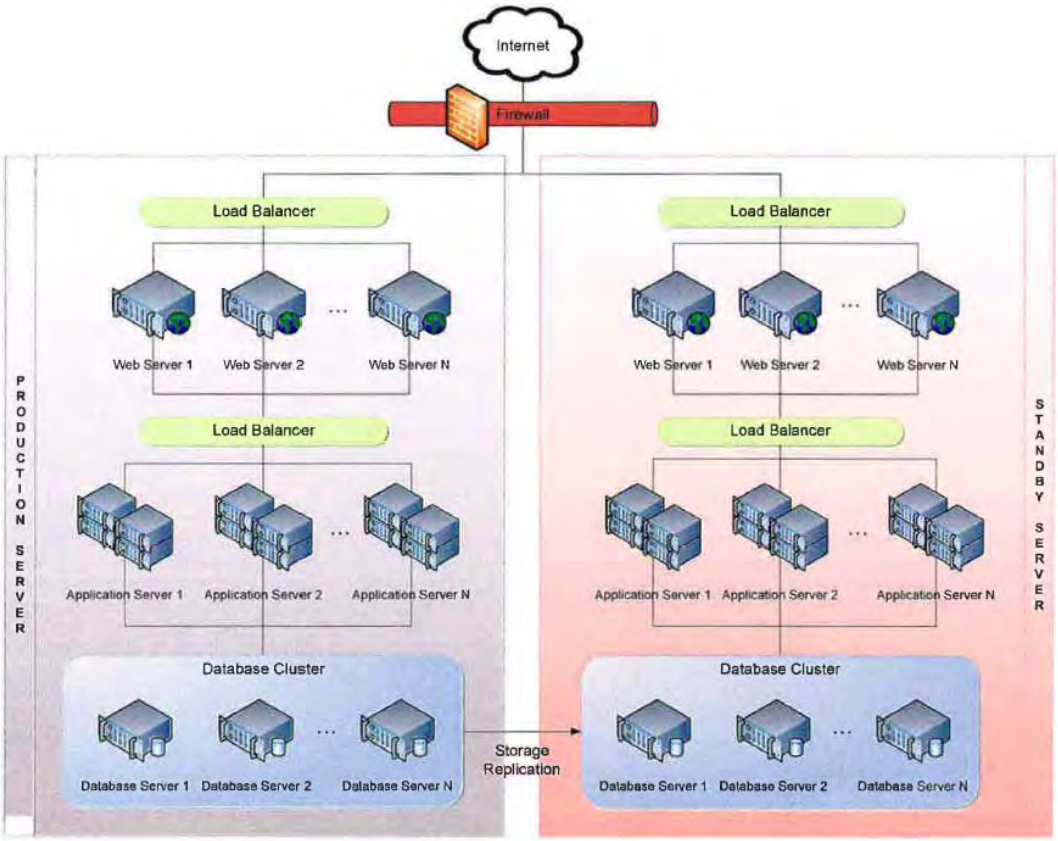


Figure 9: Sample Backup Standby System

Exeter works with each client to determine necessary hosting requirements based on the needs and existing infrastructure of each client. As part of this process, Exeter will work with West Virginia to assess the State's requirements in order to help West Virginia identify its hosting and infrastructure needs.

2.12.7 Getinsured.com

Software and Hardware Configurations
The platform requirements for a typical set of Exchange services are outlined below. Many of the hardware and software requirements overlap since the Exchange is set up as a set of web and XML-based services in the cloud.

The Getinsured system utilizes multiple dual or core 2GHz Opteron CPUs with 16Gb RAM. All machines run the Redhat Linux ES4 operating system, with PHP 5.2 installed. Storage requirements vary based on the system function as follows:

Two or more webservers with 4GB memory running Apache 2.0. These webservers can be scaled and specialized as needed - e.g., end users can be directed to a dedicated set of webservers, and enable customer service agents and administrators to access a separate webserver.

Load balancer to distribute webserver connections and provide automated failover in the event of a failure.

Primary database server with 16GB memory running MySQL 5.0 database server. Data provisioning will occur on this primary database server.

Replicated database server running MySQL 5.0. System administration functions such as reporting, backups and other read-only access will typically occur on this server.

Since end user access to the Exchange is browser based, all platforms that support any of the popular browsers will display Getinsured's Exchange technology for the end-user: Microsoft IE v6, v7, v8, v9, Google Chrome v3 thru v9, Mozilla Firefox v2, v3, v3.s, v3.6, v4, Apple Safari v3.1, v4.0, v4.1, vs.O, Opera v9 thru 11.

The software and hardware configurations for the Development, Test and Deployment (Production) environments are outlined below:

Reference Development Environment	Test Environment	Production Environment	Database Servers - Two (primary & replicated master-slave instances)
• CPU: Dual processor Intel I5 processor • Memory: 4 GB RAM • OS: Windows XP/Windows 7 • Web Server: Apache 2.0 • Database: MySQL Ver 14.7 or Oracle 11g • Language: PHP 5.2.4 • Smarty Templates • Javascript: prototype.js, JQuery • IDE: Eclipse • Issue/Bug Tracking System: Atlassian JIRA	• CPU: 2 processor, Dual Core Opteron 270 2.0 GHz • OS: RedHat Linux ES 4 64-bit • Web Server: Apache 2.0 • Language: PHP 5.2.4 • Database: MySQL v4.1.20 or Oracle 11g	• 4 web and application servers: • CPU: 2 processor, Dual Core Opteron 270 2.0 GHz • OS: Red Hat Linux Linux ES 4 64-bit • Web Server: Apache 2.0 • Language: PHP 5.2.4 • Rackspace CDN (based on Akamai)	• CPU: 2 processor, Dual Core Opteron 2214 2.2 GHz • Memory: 16GB RAM • Hard drive: 4x73GB SAS 10K RPM, RAID 5 configuration • OS: Red Hat Linux Linux ES 4 64-bit • Database: MySQL Ver 4.7 or Oracle 11g

Our test environment is a mirror of our production environment.

2.12.8 LexisNexis

No response provided.

2.12.9 MAXIMUS/Connecture

Proprietary response provided.

2.12.10 Oracle

Exchange Technical Architecture
Oracle provides a solution, which consists of proven technologies that are architected to work together, modular by design, and provide the necessary capabilities required to deliver a successful program. The diagram below depicts the reference functional architecture diagram, and corresponds to functionality provided by Oracle's solution.

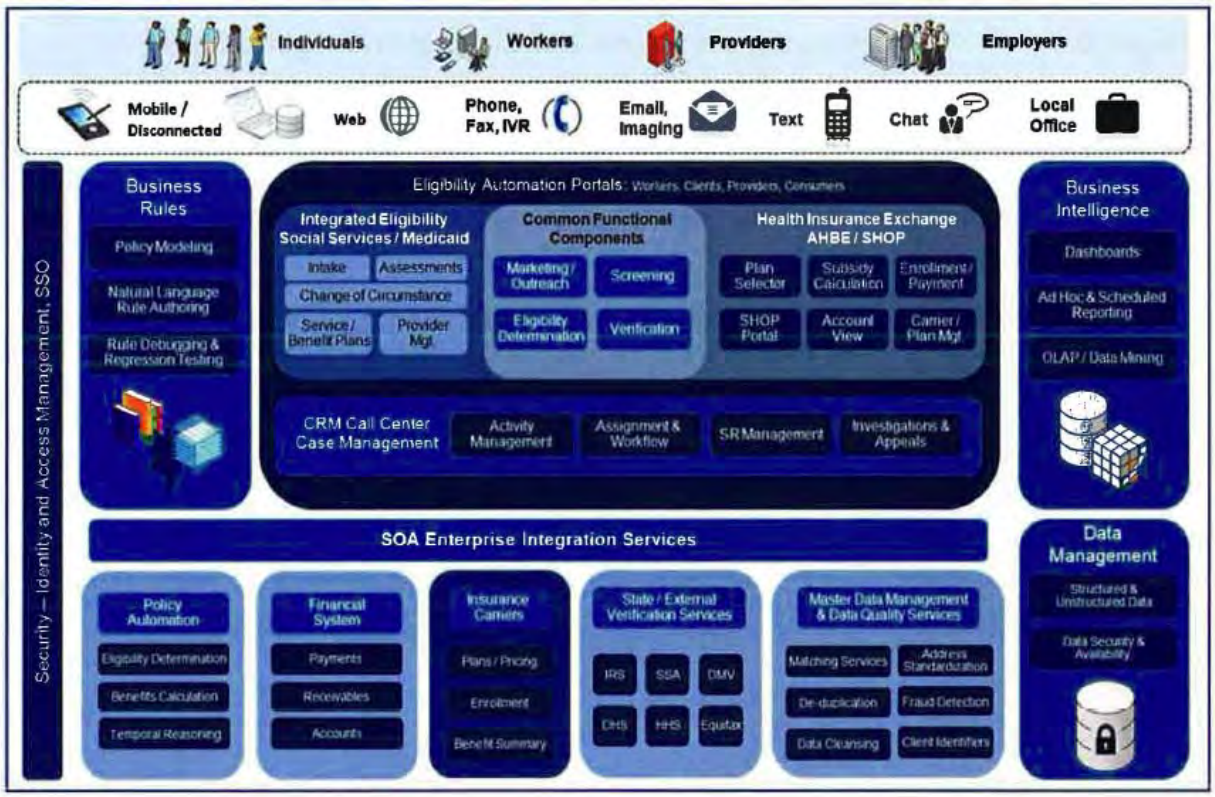
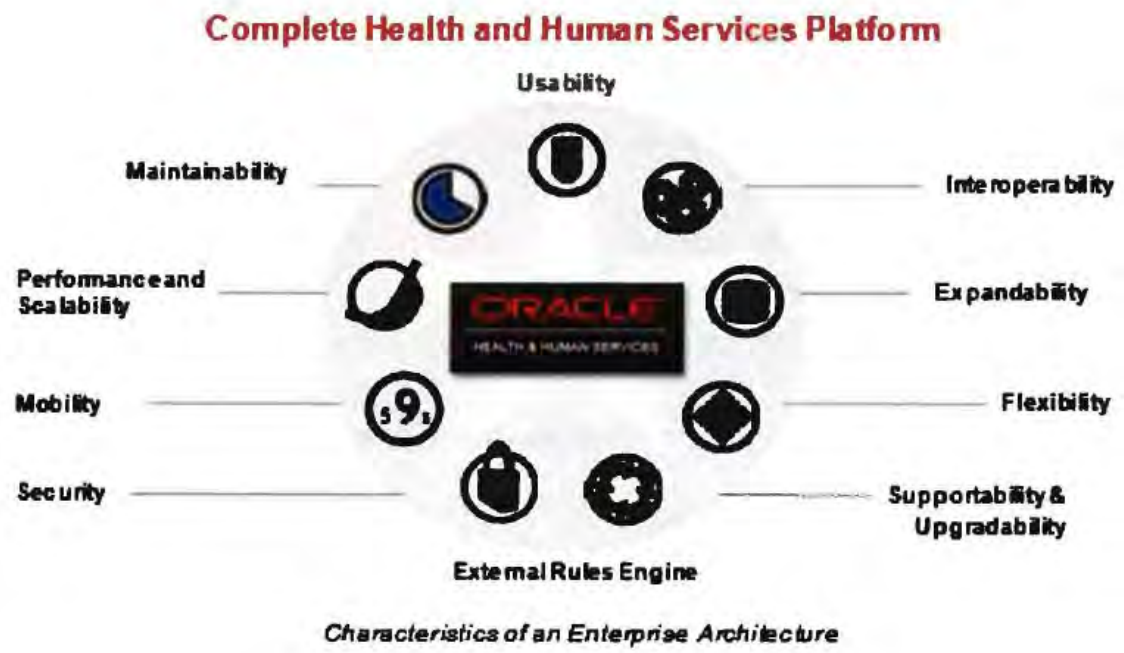


FIGURE 1: REFERENCE FUNCTIONAL ARCHITECTURE DIAGRAM

An application's architecture is probably the single most important factor in reducing the Total Cost of Ownership (TCO) of the solution. An optimal architecture is flexible, extensible, scalable, multi-tiered, and object oriented. It should centralize reusable business logic in an external, middle layer (rather than at the database level or hardcoded into the system) and support multiple channels and deployment options such as an employee portal, citizen self-service portal, business partner and provider portal, mobile disconnected web client, call center, wireless and handheld.



As many organizations know, developing such an architecture can be challenging, time-consuming, and perhaps most important, costly. Unfortunately, the cost of not developing a well-designed architecture is even greater. Maintenance costs of poorly architected applications are dramatically higher than those for well-architected applications, and performance, deployability, and scalability typically suffer as well. The end result is an expensive, ineffective system that delivers a poor user experience. Among the most important benefits that a packaged application offers is a scalable, tested architecture to meet West Virginia's needs. Application vendors must offer flexible and scalable architectures to evolve their products over time with confidence that new types of functionality and deployments can be supported cost-effectively. The Oracle framework's Smart Web architecture adheres to all of the design goals listed previously. Perhaps most importantly, the Smart Web Architecture is the application platform of choice that many public sector and commercial organizations across the world have chosen to enable the effective delivery of services. With more than 5,OOO customers and more than S million deployed users worldwide, the Smart Web Architecture will provide West Virginia with the world's most robust, multichannel health and human services platform available today.

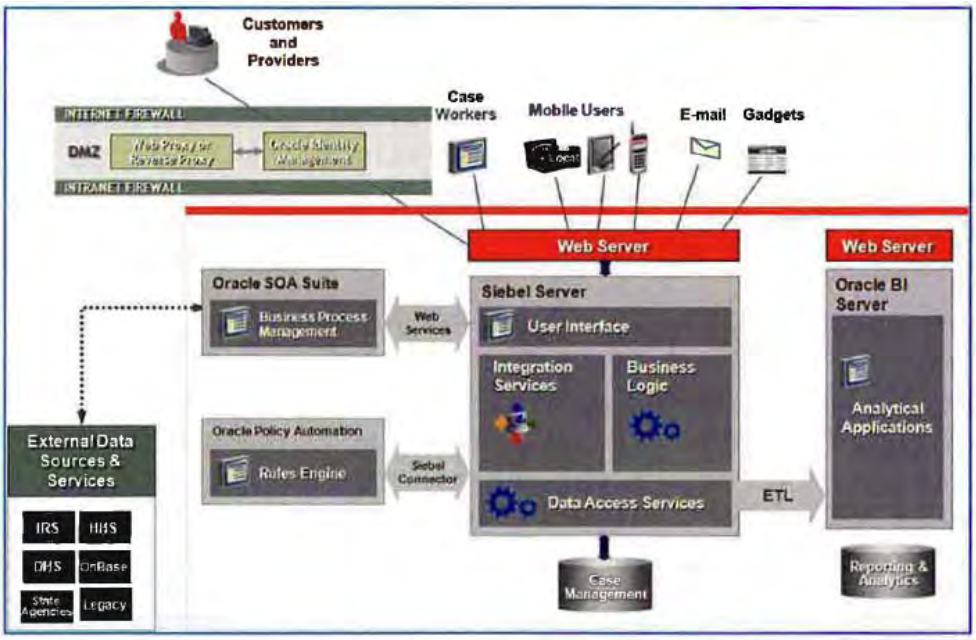
Oracle's proposed technical architecture for West Virginia's Health Insurance Exchange consists of an all-Oracle application and technology stack, that supports not only the Health Insurance Exchange requirements today, but can scale to meet future requirements of the Exchange, MMIS, and Integrated Eligibility (IE) modernization initiatives. Oracle's COTS applications and proven technology components provide West Virginia with the most comprehensive, integrated, flexible, scalable, and reliable SOA-based enterprise platform available on the market today. This approach of providing a comprehensive integrated solution benefits the agency by taking advantage of Oracle's years of extensive research, development and technical expertise in providing leading-edge technology and business solutions that will continue to grow with West Virginia for many years to come. The Oracle framework will enable West Virginia to leverage your investments in leading technologies. We have designed the solution architecture to support the needs of the caseworkers, the partner community, and the customers they serve. Following our best practice principles, the Oracle framework architecture is designed to:

- Promote "no wrong door" service delivery approach
- Eliminate time-consuming and redundant data entry.
- Decrease staff time required to enter applications manually, and to correct errors due to so many manual processes.
- Increase availability of performance metrics which can be used by management to facilitate improvements to key processes.
- Increase timeliness of application processing.
- Support for cross-agency collaboration, and extension of the system to other programs and processes

Multi-tiered Architecture

Central to West Virginia HIX system architecture are the enterprise-class COTS case management applications powered by Oracle's Siebel Public Sector suite, the world's leading case management, support and citizen relationship management (CRM) solution available today. The enterprise case management application layer includes integrated web applications portals that allow West Virginia to provide a multi-channel approach to managing a full 360- degree view of the citizen across channels and benefits programs.

The diagram below depicts the Oracle Framework architecture.



Oracle HIX Framework Architecture

The Siebel application supports industry standards related to the encryption of data to secure web communications and encryption of sensitive data such as password. The Siebel Smart Web Architecture ensures that information traveling between different processes remains private. This can be accomplished in three different ways: from the web browser to the web server, between Siebel server components and at the database level. Information between the browser and the Web server can be encrypted using the industry-standard SSL protocol and allows the application to encrypt certain data (passwords and logins) or even certain (or all) pages of the application such as the login page. Information between Siebel Server Components can be encrypted using SSL protocol, the MS-Crypto API, or RSA algorithms. This insures that as data is utilized across the enterprise, the data remains in an encrypted format as identified by the customer. At the database

level, to protect data that is sensitive even to database administrators, such as credit card numbers, the Siebel Smart Web Architecture supports the encryption of data fields using RSA algorithms and this is accomplished by changing settings via the Siebel Tools toolkit. Siebel provides the flexibility to utilize encryption standards in the format that the customer needs to ensure the security of their and their customer's data.

In addition, the Siebel Application can be used with the Oracle Advanced Security transparent data encryption (TOE) capabilities to further protect the Siebel CRM data in the database, backup media and across the network. This functionality is transparent to the application and allows for encryption of not only individual columns but entire application tables as well.

Web Clients

The Siebel web client combines the zero administration characteristics of a browser-based UI with the interactivity and low network utilization normally associated with a Windows-based application. The Siebel web client uses a JavaScript engine to maximize the interactivity of the UI and minimize the number of network messages and the amount of information that must be passed over the network. The Interaction Manager in the web client uses the browser Document Object Model (DOM) to minimize the amount of screen repainting and provides local processing of business object methods, ensuring a fast response time with minimal network requirements.

Web Server Tier

The Siebel web server provides an extension, the Siebel Web Server Extension (SWSE), which is a web server plug-in component that takes requests for a Siebel-generated page from the web server and passes that request to the Siebel Object Manager running in the Application Server. The SWSE is written as an SISNAPI extension for maximum efficiency. The SWSE works with other plug-ins and the web server to support single sign-on and load balancing of page requests across a web server farm.

Application Server Tier

The Siebel enterprise server is the process that hosts the Siebel OM, the Siebel Web Engine (SWE), and the Siebel Data Manager (OM). The Siebel OM handles the instantiation of business objects and logic based on definitions kept in the Siebel repository. The SWE is responsible for generating HTML, WML, and XML representations of the UI. The Siebel Data Manager (DM) uses the native database libraries to dynamically generate SQL optimized for the specific database to retrieve object instances. The Siebel enterprise server also contains other shared server processes, such as EAI, workflow manager, communications server, file system, and assignment manager.

Database Tier

The database server stores the business data in a set of predefined tables and provides that data to Siebel servers and dedicated clients upon request. The database manager generates optimized SQL that supports database connection pooling and multiplexing. A single Database Manager Session (DBMS) can support high numbers of very active concurrent users.

Security

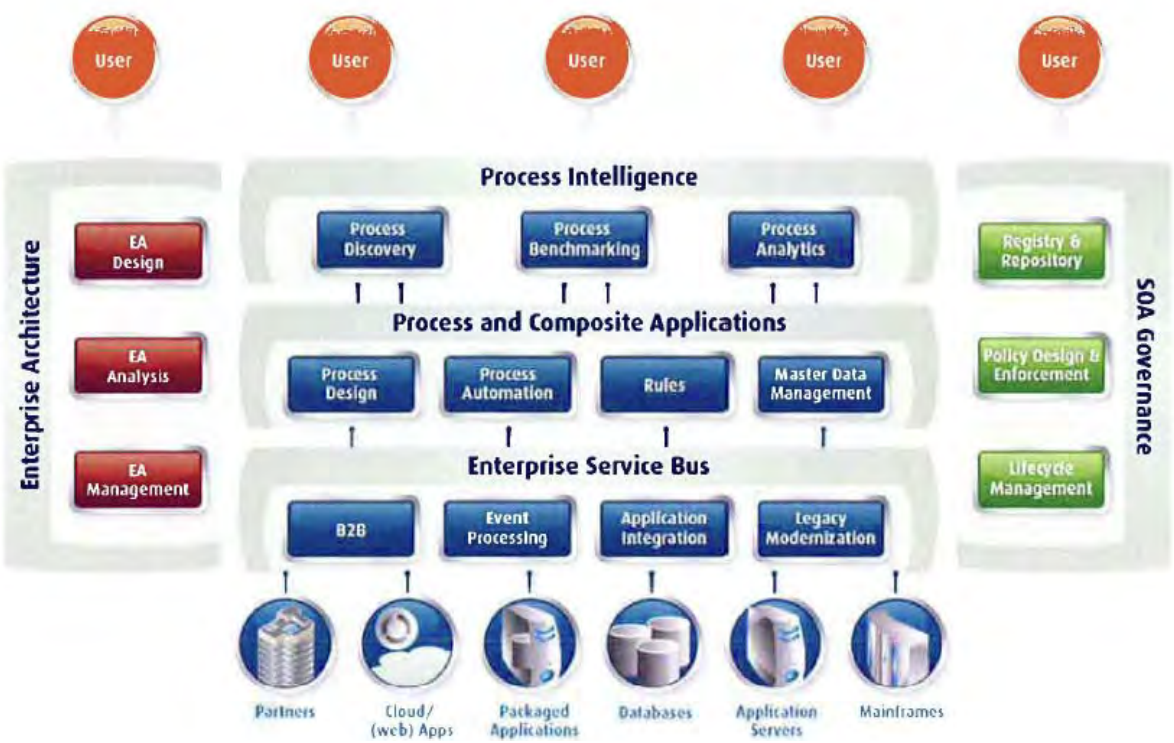
Oracle understands the crucial role of robust security within health insurance exchange programs, and both the applicability of federal and state security regulations, as well as the public concern about privacy and access to sensitive health and medical data. Our solution will use the robust security model provided by Oracle. The components of the security architecture include user authentication for secure system access, end-to-end encryption for data confidentiality, authorization for appropriate data visibility, audit trail for data continuity, secure physical deployment to prevent intrusion, security for mobile devices, and web browser security settings.

The Oracle solution provides several security controls that govern authentication and authorization in the application via a tiered security model as the diagram on right depicts. The Oracle solution's Defense-In-Depth - an infrastructure-based, holistic, enterprise-wide approach to security - is proposed to address the need for state standards security compliance. Our solution is specifically designed as such its applications, middleware, and data layer components are natively equipped to secure information; these data protection capabilities can be effectively applied to customer portal, provider portal, employee portal, case management, back office, and enterprise environments. Oracle's security solution is an enterprise provisioning solution built using the latest Internet architectural best practices, leveraging upon West Virginia's existing investment.

2.12.11 Software AG

Software AG's System Architecture embraces the core principles of a Service Oriented Architecture (SOA), based on web Methods Business Process Management (BPM), Integration Platform (ESB) and the Composite Application Framework (CAF). It supports distributed, loosely-coupled, services driven and process centric approach to delivering the functional and technical requirements for the Health Insurance Exchange. The solution architecture supports federated system architecture, a distributed peer component system that provides central management, development and deployment of business processes to support the HIX system.

The Software AG webMethods Platform includes the presentation layer, process layer, integration layer, Analysis Layer and Governance layer(illustrated in the Reference Architecture given below) that enables the configuration, deployment and execution of Insurance Exchange processes and transactions. The layers include components to accomplish the following: complete business process lifecycle for process design and business rules that can be used to govern the Exchange lifecycle, the composite application framework to design rich user interfaces, the ability to develop, invoke, manage and orchestrate services.



2.12.12 Speridian

Proprietary response provided.

2.13 BUSINESS AND TECHNOLOGY RULES

Please describe how your solution uses standard-based business rules and a technology-neutral rule repository. Are the business rules expressed outside of the transactional systems?

2.13.1 ACS

Section 1561 of the ACA, supported by Appendix D: Business Rules of the Electronic Eligibility and Enrollment Regulations states that the rules-engine must be transparent, with human-readable and configurable rules that facilitate the shopping, eligibility, enrollment, and billing aspects of the exchange. Our HIX Solution Suite is managed by a rules engine solution that currently supports the complex commercial business rules of some of the nation's largest carriers, employers, and state agencies, as well as the individual market.

The rules engine supports consistent, technology-neutral expression of rules. The solution is built on a principle of configurability rather than customization. All standard platform configuration changes are made by the ACS Team as part of the ongoing support service offering. All of the business rules that manage the user interaction, eligibility, plan offering, and rating information are housed in the HIX Solution Suite. These human readable rules are configured by non-technical users and are often utilized to enhance legacy carrier or state-owned systems. One example of this is the configurable "rehire rules," shown in Exhibit 2-9, Human-readable Rules Engine.

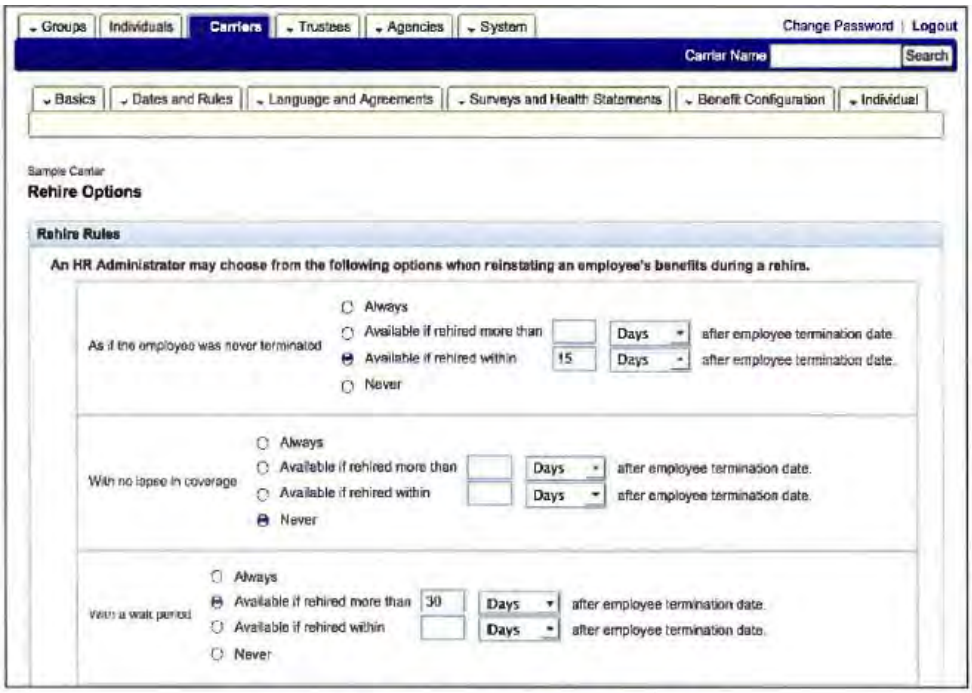


Exhibit 2-9. Human-readable Rules Engine

Rehire rules are just one example of the human-readable rules engine in action.

Transparency in the System. The sophisticated rules engine described above allows for the transparency of information required by the ACA to individuals and groups enrolling in benefits. Utilizing these tools, the ACS Team can configure all of the required federal-, state-, and carrier-based business rules into the system. This flexibility provides transparency to the user of the plans for which they are eligible and the reason they may not be eligible for others. As the rules and regulations change, the ACS Team can reconfigure (without custom coding) the rules to instantly be back in compliance. Other ways in which users of the Exchange would see the benefits of such a transparent system include:

- Eligibility decisions displayed in easy-to-understand descriptions using common language
- Links to federal and state web sites explaining eligibility rules configured in the workflow
- Summary Plan Descriptions as offered by the carrier
- Plan shopping tools and HSA contribution calculators
- Provider and prescription drug finders
- Video library terms, in both English and Spanish
- Custom video created by the state or commercial carrier

Extraction of Business Rules. Our HIX Solution Suite offers two options for extracting eligibility rules available today:

- The Group Information Extract communicates all business rules applicable to the active entity. This extract presents active business rules including, but not limited to:
  - Administrator contact information and decision maker status
  - Category and location eligibility rules
  - Benefit eligibility including type, plan name, product type, coverage levels, and effective dates
  - Age validation rules
  - New hire rules
- The outbound gMax XML file communicates all of the same information in an easy to transmit XML process. The gMax file is a proprietary file format that represents a standard in the industry for exchanging benefit information and eligibility rules.

2.13.2 CGI

Business rules engine is utilized in this solution to manage external and application specific business rules. Externalizing business rules from the workflow and application logic provides explicit rule visibility, effective centralized management by business owners, and immediate influence on the solution without incurring any development overhead. Our Health Insurance Exchange360 solution will externalize configurable workflow rules within a rules engine to simplify maintenance. It is expected that the rules engine will have rules specific to the federal rules (income, citizenship etc.), state specific rules, rules to categorize plans (bronze, silver, gold), rules for rating may be included after discussing with the carriers on their rating structure. The rules engine is built on a distributed messaging workflow pattern called a Saga. This allows independent rules to be designed, configured, and tested. The Saga is a logically distributed asynchronous workflow. Therefore, a Saga can be deployed physically separate and scaled independently from other business rules or Sagas. Saga state or workflow state storage is persisted in a technology neutral format as well. Each Saga is an independent component and can therefore naturally be reused or extracted for other external systems.

Business Process Management technology layer serves as the enabler for modeling, executing, and managing end to end processes. Exchange users initiate different Exchange Business Processes via their choice of channel. Business flows are depicted as the Benefits Exchange Business Processes layer. CGI Health Insurance Exchange360 treats both individual and SHOP business processes and functions as a single set of Exchange business processes to promote a higher degree of reuse sub-processes, of business services, and technical services. Our solution envisions business users defining processes/sub-processes and workflow using business friendly toolsets. The design approach will also result in identifying the users that participate in each of the process, their roles, the actions they take, the information that they want to see as well as systems that are used by the process. Process implementers connect each step of the process to business services, technical services available through the ESB and assign tasks to specific users. The BPM component also allows capturing Key Performance Indicators (KPIs) related to each process that will be monitored and reported on process analytics dashboards.

2.13.3 Cognosante

As a Systems Integrator with no single solution, our response includes our use of standard-based business rules and technology-neutral rule repositories. Rules are easily understood 'at-a-glance' and can be modified by designated business users to adapt quickly to changing policy or legislation.

2.13.4 Cúram Software

Cúram includes its own rules infrastructure, referred to as Cúram Express Rules (CER). CER consists of a Rules Editor and a Rules Engine:

• *Rules Editor* - The dynamic, Flex-based rules editor facilitates setting up and maintaining complex rules and the results associated with those rules. It provides intuitive support for the creation, maintenance and management of rules that are valid for specified time periods. This means that changes to rules can primarily be an administrative function rather than an IT/development function.

• *Rules Engine* - At runtime, the rules engine uses the rules (and rule sets) defined and allocated for each program or business process in order to perform such tasks as eligibility determination, triage, screening, assessments, workflow and many other rules-driven functions.

The CER infrastructure is designed to make rules creation and maintenance as easy as possible by ensuring that there is a clear separation between the rules themselves and the actual data (referred to as "evidence" in Cúram) that is evaluated by those rules. Furthermore, Cúram is consistent with the recommendations issued pursuant to section 1561 of the Affordable Care Act, because business rules are maintained separately from transactional code or infrastructure and stored in an XML format.

Re-use of Rules
Cúram promotes the re-use of business rules in several ways. For example, it is possible to invoke the Cúram rules engine externally via API specific calls. This is typically implemented by creating a Web Service to channel the communication. As part of the Cúram API, there is a class that allows external applications to interact with the Cúram rules engine via pre-configured operations.

2.13.5 Deloitte

Deloitte is developing and has implemented several statewide systems using standard and technology-neutral business rules engines. We are implementing our HIX framework in Minnesota and are using the OPA (Oracle Policy Automation) business rules engine; developing an integrated eligibility system for the State of Montana using the ILOG rules engine; have implemented eligibility systems for the Commonwealth of Pennsylvania, and the States of Wisconsin, Delaware and Colorado using Corticon; and are developing an integrated eligibility system for the State of New Mexico using Corticon.

Our recommended HIX solution for West Virginia would incorporate one of these standard and technology-neutral business rules engines to meet the health IT recommendation, and express the ACA rules outside the transactional system. But we would also advise reusing the State's assets in the form of the existing RAPIDS rules engine that currently determines welfare program eligibility. We can do this by integrating a standard and technology-neutral business rules engine with the existing RAPIDS legacy rules engine, via an enterprise service bus (ESB) and web service calls to both engines. For example, our solution could call the new rules engine to determine MAGI Medicaid and premium and cost-sharing subsidy eligibility, and then seamlessly hand off to the legacy rules engine to determine eligibility to cash, SNAP, and other benefit programs. The advantage to this approach is that framework pieces such as the Medicaid eligibility part of the current database are reused, yet the new rules engine provides the flexibility to manage changes in rules such as the specifics for MAGI income groups, which can be anticipated to further develop in the upcoming year.

The Federal guidelines for HIX architecture and implementation represent a great opportunity for the State to upgrade to a rules engine that provides a consistent, technology-neutral standard for implementing business rules without traditional hard-coding. Relevant COTS products promise to bring advantages such as the ease of use in modeling and deploying business rules without the need for traditional programming, and enhanced reuse capabilities such that rules can be written once and then applied across multiple applications and decision services.

2.13.6 Exeter

OneGate includes eligibility rules for health insurance exchange programs, including premium assistance tax credits, cost-sharing reductions, Medicaid and CHIP (with MAGI-based rules for Medicaid and CHIP), as well as for a variety of human services programs such as SNAP. The rules are built in an advanced rules engine separated from the transactional systems, which allows changes to be made to the rules without affecting other systems. The rules are authored and maintained in natural language, giving non-technical users the ability to read "programmed" rules and check them for correctness and adherence to policy and regulations. The rules engine is exposed via web services and can be called by a variety of systems, including legacy systems, which may be using distinct technologies.

2.13.7 Getinsured.com

In the proposed solution, GetInsured would use Drools Flow. Drools Flow (also called jBPM 5) is a Business Process Management workflow engine that can be used in conjunction with Drools Business Rules Engine. Drools Flow (jBPM 5) allows business users to describe the business processes and workflows as a composition of various tasks using a flow chart like UI. For

example, a typical Exchange workflow like Enrollment Processing can be described using such a tool.

The Getinsured system incorporates a business rules engine and management system to encapsulate variable business logic that is applicable to eligibility determination. This enables separation of business rules from the core system, and provides a way for rules to be managed and changed by non-programmers without requiring upgrades or new releases of the core modules.

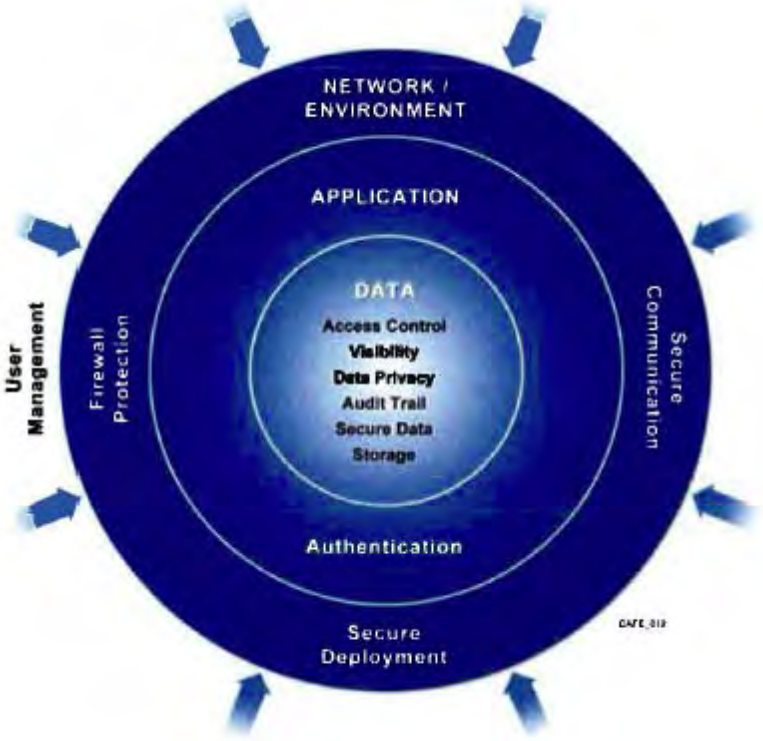
2.13.8 LexisNexis

No response provided.

2.13.9 MAXIMUS/Connecture

Proprietary response provided.

2.13.10 Oracle



Oracle Policy Automation (OPA) is a key component of the Oracle HHS solution. Oracle's policy automation solution consists of two products: Oracle Policy Modeling and Oracle Policy Automation. Oracle Policy Modeling provides a complete natural-language, rule-authoring environment that is fully integrated with the Microsoft Office suite. It includes debugging, regression testing, and what-if analysis for policy changes. The rules are then deployed to Oracle Policy Automation for complex benefit and eligibility determination. Built for service oriented architectures (SOAs), Oracle Policy Automation also includes guided interactive self-service questionnaire capabilities called Oracle Web Determinations. OPA has been developed over the last 20 years, and is geared specifically to the requirements of the government decision automation market.

One of OPA's key differentiators is the ability to rapidly transform large volumes of complex and rapidly changing policy documentation (statutes, regulations, policy manuals) into an executable form that can be called by the Oracle Siebel Enterprise Case Management and Financials components of the Oracle HHS solution or other enterprise software applications using a productized web service. In addition, OPA is significantly different from other rules engines in

the marketplace because OPA allows West Virginia's policy experts - not IT or development staff - to directly maintain determination rules that are automated within the solution. This policy ownership is achieved by storing the source version of all rules in familiar Microsoft Office Word and Excel documents. This allows policy personnel to work directly with rules, using familiar desktop software and not complex coding environments. The result is that Oracle Policy Automation allows policy experts to directly manage the business decision content of the Oracle solution for West Virginia, bridging the traditional communication divide between business and IT.

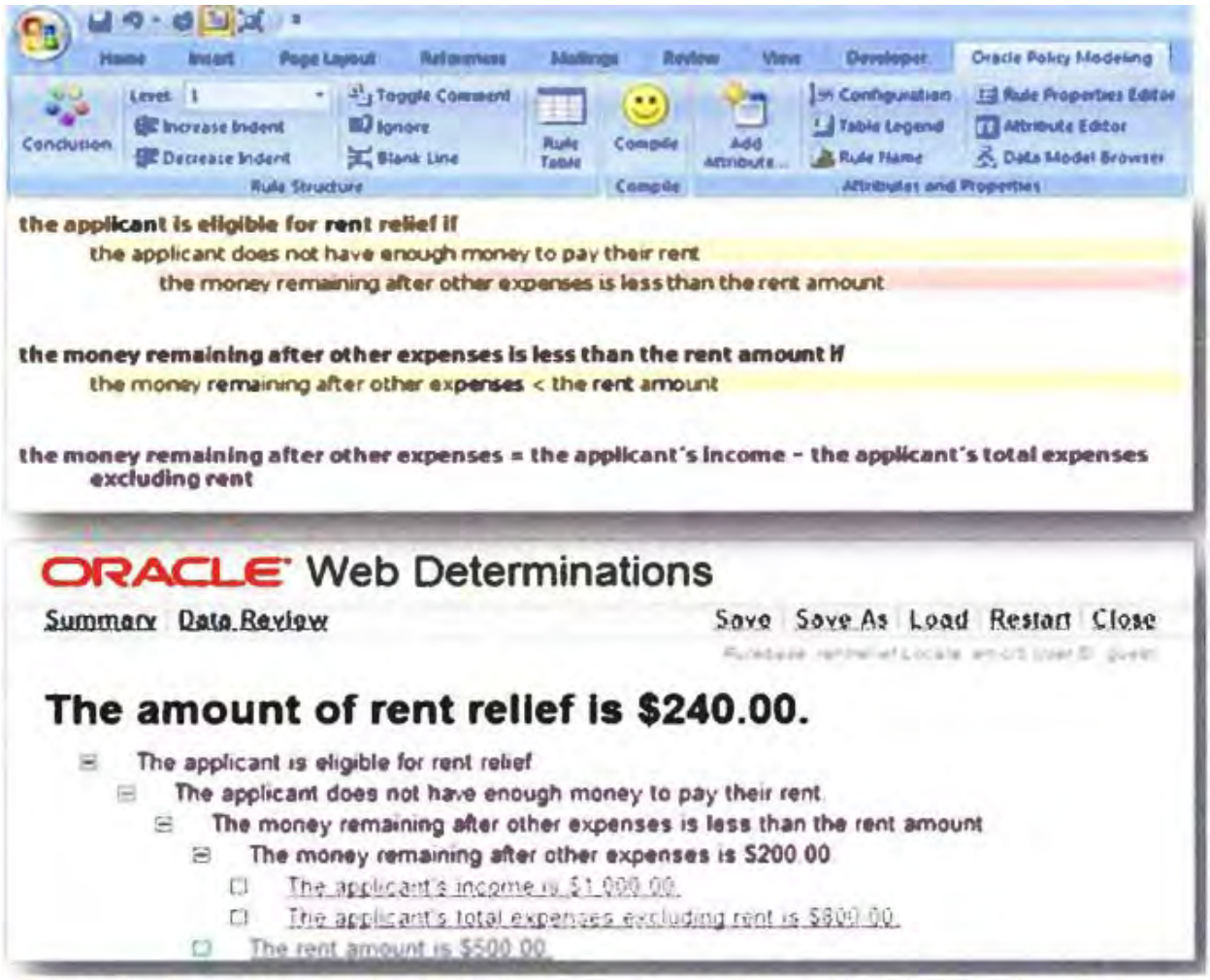


Figure: Business Rules in Oracle Policy Automation are authored in familiar desktop applications such as MS Word and Excel

Oracle Policy Automation is delivered out-of-the-box with multiple pre-built deployments, including a pre-built web service for Java and .NET, a pre-built connector for Siebel Public Sector Enterprise Case Management, and a pre-built dynamically generated web questionnaire (called Oracle "Web Determinations") which can be used for online social services eligibility screening and benefits applications. A single rule set can be deployed across multiple platforms and applications, ensuring consistency across applications and maximum reuse of rules within the agency.

With OPA organizations can realize significant benefits:

- Automate and document entitlement calculations including eligibility decisions, benefit determination, changes in client circumstances, and retroactive payment adjustments
- Easily manage changing policy rules and citizen circumstances to quickly and accurately determine eligibility and payment
- Rapidly transform complex policy documents and manuals into executable form
- Simplify rules by realizing the impact of changes to policy with what-if analysis (including legal/regulatory changes)
- Increase accountability and reduce appeals by documenting each step of a decision process
- Microsoft Office integration for natural language rule authoring and maintenance
- Reduce reliance on technical staff and adjust rules rapidly by allowing social policy experts to author rules
- Externalize all business rules so that they are not tightly coupled to anyone type of business application. By externalizing the rules, West Virginia can use OPA across all enterprise applications
- Patent-pending temporal reasoning logic to handle rapidly changing rules and customer circumstances; both retrospectively and into the future
- Business user regression testing and debugging
- What-if analysis for multiple policy change scenarios
- Seamless SOA integration

2.13.11 Software AG

Business Rules Engine, based on FICO, provides significant capabilities for enabling business to manage the content of rule-driven processes, and include many features that can be leveraged by the workflow and business processes:

- User interfaces designed for business managers, for business rule updates, reviews and authorization
- Additional Governance capabilities so that the management of the rule content can be controlled through versioning, role based access, release management, etc. in a way that is complimentary to the overall BPM but specific to the more rapid pace of change that often occurs for business rules.
- Real-time execution updates
- A single rule definition that can be reused across the enterprise including multiple deployment choices, such as J2EE, .NET and mainframe, in a service oriented architecture
- Multiple interfaces to different data sources (database, XML, Java, .NET, etc)
- Implementation of Score Models (Predictive Analytics), Decision Tables and Decision Trees for advanced decision management
- Rule analysis, verification and validation services, as well as testing, debugging, remote monitoring and simulation

The BRMS is an enterprise tool that supports business functions such as member eligibility and enrollment, claims processing functions, provider credentialing and enrollment, case management, fraud, and better coordination of care to reduce healthcare and insurance related costs.

2.13.12 Speridian

Proprietary response provided.

3.0 Privacy/Security

3.1 CREATING AND OBTAINING INTER-ENTITY AGREEMENTS TO SHARE DATA

Indicate how your solution would assist in creating/obtaining the necessary inter-entity agreements needed to share data of this nature (e.g. IRS, Department of Labor).

3.1.1 ACS

The ACS Team currently connects systems across the country to federal and state databases for citizenship verification, tax records, and public program participation. We have experience working with agencies at these levels to ensure certification of our systems and process to enable inter-entity agreements. For example, ACS has worked with states for more than 30 years to gain federal certification of new Medicaid Management Information Systems (MMIS) and is currently working with states such as Arkansas to implement Health Information Exchange (HIE) technology, bringing information from several state and private health sources together in one repository. Each of these efforts entails extensive coordination and cooperation between federal, state, and private agencies. ACS is a trusted coordinator and enabler of these efforts for our state customers.

Through our HIX Solution Suite, connection to the federal hub can be achieved in real time and is only dependent on the hub's readiness to accept web service calls from our system. Once the Center for Consumer Information and Insurance Oversight (CCIIO) and the Department of Health and Human Services (HHS) have defined the process by which states and vendors will be authorized for connection into the federal hub for verification, we will work with the State and HHS to institute any necessary interagency agreements to appropriately and securely share data.

3.1.2 CGI

Data sharing agreements will need to exist between agencies. It is likely that certain agreements are already in place between some agencies. CGI would like to examine those agreements and work with the State to examine modifications and new agreements that should be in place. As part of this research, CGI will consult with the state the data that must be exchanged and with whom, as well as the method and security and privacy involved with transmission.

3.1.3 Cognosante

As a Systems Integrator for West Virginia, Cognosante would bear the responsibility of ensuring that the selected solution confirms to the published standards and guidelines. This would include ensuring that the selected solution complies with all audit trail, security and privacy requirements as specified in sections 1104 and 1561 of Affordable Care Act.

Information systems containing individually identifiable information and/or Protected Health Information (PHI) are required to implement adequate protections to ensure the protection of sensitive data. The HIPAA Privacy and Security Rules specify privacy and security requirements that HIPAA covered entities must follow. In designing their information systems, agencies

should also be aware of State laws that impose additional restrictions on the sharing of sensitive health information.

The National Institute of Standards and Technology (NIST) has published a series of documents that provide guidance to Chief Information Security Officers (CISO). While the NIST special publications on security are compulsory only at the federal level, the special publications can serve as useful guidance to non-federal agency CISOs in the implementation of a security program aimed at the protection of both individually identifiable information and PHI. See the link to NIST's special publications: http://csrc.nist.gov/publications/PubsSPs.html; additionally, a guide to implementing the HIPAA Security Rule can be found here: http://csrc.nist.gov/publications/PubsFIPS.html

Finally, information systems containing tax return information must comply with the taxpayer privacy and safeguards requirements of Section 6103 of the Internal Revenue Service Code.

Other Standards
Under the Information Technology Management Reform Act (Public Law 104-106), the Secretary of Commerce approves standards and guidelines developed by NIST for federal computer systems that extend beyond security and privacy. IT development projects should consider and apply NIST standards as appropriate.

Business Relationship Management
The HIPAA Privacy Rule establishes national standards to protect individuals' medical records and other personal health information and applies to health plans, health care clearinghouses, and those health care providers that conduct certain health care transactions electronically. The Rule requires appropriate safeguards to protect the privacy of PHI, and sets limits and conditions on the uses and disclosures that may be made of such information without patient authorization. The Rule also gives patients rights over their health information, including rights to examine and obtain a copy of their health records, and to request corrections.

Currently, the HIX blueprints make no use of PHI. However, the Exchange will engage in the electronic transfer of sensitive personal information captured from individuals during the online application session, with the Federal Data Hub, and with other state agencies. Additionally, to improve understanding of health conditions and for understanding of prior healthcare out-of pocket costs during the enrollment process, it is conceivable and possible that the West Virginia Exchange would utilize PHI obtained from Medicaid or commercial insurance carriers to help consumers make more educated benefit purchasing selections.

Thus, establishing the appropriate framework of data sharing agreements is both prudent and necessary. Data Usage Agreements provide the framework for creating a trusted relationship amongst data exchange partners. Data Usage Agreements establish the guidelines for how sensitive data will be utilized by receiving parties, specifying that the data will only be used for specific purposes and disclosures.

In establishing the Data Usage Agreement, it is required to include the following information:

- To establish that the data will be used for research, public health or health care operations (further uses or disclosure are not permitted);
- To establish who is permitted to use or receive the limited data set;

- To provide that the recipient of the data will:
    - Agree not to use or further disclose the information other than as permitted by the data use agreement or as required by law[3]
    - Agree to appropriate safeguards to prevent use or disclosure of the information other than as provided in the agreement[4]
    - Report to the covered entity any identified use or disclosure not provided for in the agreement[5].
    - Ensure that any agents, including a subcontractor, to whom the limited data sets are provided agree to the same restrictions and conditions that apply to the recipient
    - Acknowledge and ensure that the information will not be used to identify or contact the individuals[6]

NHIN provides a model of a Data Usage Agreement that States could follow for their Exchange. The NHIN DURSA is a comprehensive, multi-party trust agreement that is being used by all participants in the NHIN Exchange. As a multi-party agreement, this model eliminates the need for negotiating point-to-point agreements with data exchange parties. While the NHIN DURSA provides a good starting point for a multi-party data sharing agreement it should not be used wholesale as such. The NHIN DURSA has many specific references that are not applicable to other Exchanges, including Health Insurance Exchanges.

3.1.4 Cúram Software

Proprietary response provided.

3.1.5 Deloitte

Proprietary response provided.

3.1.6 Exeter

In support of sections *1104/1561* of the ACA, OneGate takes into account the demands of federal and state security policies, including the Federal Information Security Management Act (FISMA), HIPAA/HITECH, OMB 06-16, and other governance built on the NIST SP 800-53 Security Controls. For all stated standards, OneGate either natively provides or allows for integrated solutions that meet:

- Related security controls for NIST SP 800-53, which also includes compliance with IRS 1075, HITECH and OMB 06-16;
- Integrated and available capabilities for protection, obfuscation and/or encryption of personally identifiable information. With Oracle, there is no product reliance on social security numbers as an identifier or data field;
- The flexibility and capability to provide authentication services for all assurance levels potentially sought under OMB M04-04; and
- The capability to protect PH data as required by OMB M06-16. The capability to protect PH data as required by OMB M06-16.

[3] 45 CFR Part 160
[4] 45 CFR Part 160
[5] 45 CFR Part 160
[6] 45 CFR Part 160

OneGate incorporates both role-based authentication/authorization and record-level security. OneGate has many components that are public, consumer facing, as well as state internal applications. All functionality is secured, providing customers the level of privacy that is required by law, and expected of any modem web experience. In addition to security provided by the hosting environment (i.e., physical and network security), OneGate provides configurable application level security for role-based authentication and authorization. The system can hook into a variety of authentication providers that may be present in West Virginia's current environment including, but not limited to, Active Directory.

OneGate provides full, configurable auditing capabilities to track data that has been inserted/updated/deleted, who performed the action and when the action was performed. Full reporting of the audit data is available and can be exposed to the appropriate authorized parties, using the reporting tools and features of OneGate. Users of the system can be locked out through the use of administrative tools if fraudulent activity is detected.

One of the core features of the OneGate HBE is the SOA-based architecture that allows it to interface with internal and external systems and agencies. Data that is interchanged with other systems is secured with transport layer and message level security, preventing eavesdropping of data and ensuring data integrity.

Data Share
OneGate's SOA infrastructure provides flexibility to integrate with a variety of systems, both internal state systems and external parties. The multi-layered architecture allows business services to be exposed as web services and incorporates secure and authenticated transmission of data with support for transport and message layer security. OneGate also supports standard message formats (i.e., XML, EDI) and has the capability to support additional custom formats.

3.1.7 Getinsured.com

Because the Getinsured solution maintains the highest levels of security to protection of PHI, appropriate use agreements with other entities of the state would be required to assure compliance with HIPPA, GLB and other federal regulations. By its very nature, the Exchange must interoperate with a range of other agency systems. Thus, if any of those systems are compromised, it would result in a de facto compromise of the Exchange as well. We are careful to ensure that our integration with unknown systems involves staging servers or limited interactions to reduce such exposure.

3.1.8 LexisNexis

Privacy is obviously of paramount importance when it comes to accessing health care and health benefit information for citizens accessing the Exchange. Having strong access controls built within the framework of the Exchange itself provides the required level of security to the environment itself.

3.1.9 MAXIMUS/Connecture

While developing and implementing a complete and robust Exchange solution, the Alliance will establish relationships with all relevant federal and state agencies and bureaus to gather the requirements and agreements necessary to establish integration points with the West Virginia Exchange. This includes integration with the Federal Hub and/or with federal and state agencies, including:

- Internal Revenue Service (IRS)
- Department of Homeland Security
- Social Security Administration
- West Virginia State Tax Department
- West Virginia Health Care Authority
- Various bureaus under the West Virginia Department of Health and Human Resources, such as the West Virginia Bureau for Families and Children and the West Virginia Health Statistics Center

The Alliance will obtain these inter-entity agreements through Memoranda of Understanding based on similar agreements we execute in other projects where electronic data is received from third patty databases for eligibility verification purposes.

3.1.10 Oracle

The modern healthcare information environment is complex, with information flowing between and among numerous interrelated and interdependent institutions. In this environment, state agencies must think and act in terms of a comprehensive information security program that incorporates protection around the data to prevent its use by unauthorized individuals. This includes creating and implementing granular, role-based, access control, authorization and authentication policies that help ensure that health information is properly secured and health care providers are compliant.

The Oracle Security Frameworks allows the State to implement a security solution that addresses these strict requirements. Oracle database security and identity management products provide a complete single-vendor defense-in-depth security solution. Some of the capabilities include:

- Identifies, classifies and assesses risk around data.
- Implements appropriate protection, such as strong encryption and data masking to prevent unauthorized exposure and at worst, malicious use.
- Monitors data access, with particular attention to the activities of privileged users, such as database administrators.
- Establishes individual and group roles, evaluating and adapting them as needs change.
- Create policies and workflow processes with clear responsibilities and accountability for provisioning and de-provisioning users, approving job changes, as well as application information and systems access authorization.
- Implements logging, audit and reporting capabilities around application and data access, administrative functions,
- Manages user and asset access activity and provisioning and de-provisioning.

The Oracle Security Frameworks includes a comprehensive suite of best-of-breed security products for Identity Management, Access Management, Directory Services, Database Security, and Audit and Compliance Reporting. This framework provides the ability to implement fine grain controls, robust monitoring, real-time alerts, transaction audits and compliance reporting from multiple levels within the security framework. HIPAA, HITECH, NIST, FIPS and other auditing and security requirements are addressed through the use of configurable controls, built-in out-of-box features, and pre-defined or user-defined reporting.

The Oracle Access Management products provide authentication, authorization, audit, fine grain authorization and fraud detection capabilities to support healthcare regulations. The products can be configured for with LDAP directories for authentication and authorization. The products can also be configured with a SAML based Federation server such as an Oracle Identity Federation server, which can serve as an Identity or Service Provider.

In addition hardware based tokens for authentication, Oracle also offers software based two factor authentication methods with fraud detection/prevention software which can detect and block unauthorized access to information in real-time.

Oracle Security Framework also includes the Oracle Virtual Directory (OVD) as part of the IDM Suite to provide various attributes in support of NIEM-based exchanges that adhere to the GFIPM standard. In addition, the OVD will virtualize disparate identity stores into a single logical LDAP view. OVD is commonly used to enrich credentials within Microsoft AD with identity information from other stores such as ERP and HR systems. This will allow West Virginia to re-use and integrate with existing identity stores.

Identity Federation technology provides an open standards-based approach for the propagation, mapping, and synchronization of credentials across domains. A component of IDM, Oracle Identity Federation (OIF) enables a cost-effective and secure solution to share identities across disparate organization units, integration partners, vendors and customers using standards-based technologies. OIF supports a variety of federation implementations including, trust, federation, attribute mapping, and role mapping.

To ensure standards-based interoperability, Oracle Identity Federation supports several profiles defined by open standards groups to ensure that message exchanges with other vendor implementations are successful out-of-the-box. Oracle Identity Federation supports the following profiles:

- SAML 2.0: Browser Artifact, Browser POST, Single Logout, NameIdentifier, X.SOg Authentication-Based Attribute Sharing
- Liberty ID-FF 1.x: Browser Artifact, Browser POST, Single Logout, NameIdentifier, Federation Termination
- SAML 1.x: Browser Artifact, Browser POST
- WS-Federation: Passive Requester
- Microsoft Windows Cardspace

3.1.11 Software AG

Please see details below in response C concerning data standards

3.1.12 Speridian

Proprietary response provided.

3.2 AUDIT TRAIL DATA AVAILABILITY

Describe the level of information available in the solution's audit trail and the process for Health Insurance Exchange utilization and reporting of audit trail data.

3.2.1 ACS

The ACS Team uses a highly normalized database structure and query procedures that adhere to industry best practices. A Structured Query Language (SQL) server is used to collect audit information for analysis and reporting. Database performance monitoring is facilitated via Oracle DBA tools and Quest Spotlight for Oracle to assure structured and efficient database performance.

Audit trails are embedded in our solution for all text input fields in the HIX Solution Suite (e.g., name, address, birth date, etc.). Users can view audit data for those records to which they have permissions via reports that can be launched from the Web interface. In addition, all logins are monitored and logged via audit trails that are stored in the database. During backup, audit trails are encrypted at rest and housed on a log-monitoring server within the data centers. Tape backups of the audit trails are made and stored at a secure offsite location maintained by Iron Mountain. Our compliance managers lead HIPAA, SAS 70/SSAE 16, PCI, and NACHA compliance activities including internal reviews, assessments, and audits.

3.2.2 CGI

Many techniques can be used to provide an audit trail. The data model for CGI's Health Insurance Exchange360 has tables built for audit that capture the old values and new values, who made the change, when etc that would provide an audit trail of changes to information. All of these activities can be reported on using Web forms or reports. Balance should be maintained between auditing and system performance as excessive and unnecessary auditing/logging can degrade application performance over time. This can be discussed during analysis/detail design to exactly define the scope of audit/logging activities.

3.2.3 Cognosante

See Section 2.3.a (Privacy/Security) above, as the SI for West Virginia, Cognosante would bear the responsibility of ensuring that the selected solution confirms to the published standards and guidelines. This would include ensuring that the selected solution complies with all audit trail, security and privacy requirements as specified in sections 1104 and 1561 of Affordable Care Act.

3.2.4 Cúram Software

Cúram auditing facilitates identifying who has accessed, updated or requested information; what data was accessed; and when it was accessed. Full before-and-after records are maintained for

all inserts, updates and deletes carried out, along with information about both the user and business object (program module or function) that acted on the data.

Cúram can also be configured to audit all database reads. However, if "read" transactions are to be audited, we recommend that a detailed transaction path analysis is carried out to assess the impact on database traffic and end-user performance within the production environment,

The following information is captured by the Cúram auditing service:

- Date and time - the date and time of the transaction;
- User ID -the ID of the user who invoked the transaction;
- Table name - the name of the database table(s) modified;
- Program name - the specialized function identifier (FID) of the function that invoked the transaction;
- Transaction type -online, batch or deferred;
- Key info - the key that was provided to this operation. (This may identify one or many records);
- Details of changed data - these details are logged in XML format;
- Operation type - create, read, update or delete.

Audit data can be subsequently processed to support tracking, investigations or problem analysis and for other general reporting purposes. In addition, workflow can be configured to perform certain actions - for example, generate an alert to a designated user - where a specific audit event occurs.

System level reporting and monitoring facilities are provided by the application server software deployed. Cúram currently supports IBM WebSphere, Oracle WebLogic and SAP NetWeaver application server products. Additional system access monitoring can be provided by third-party products.

3.2.5 Deloitte

Deloitte understands the importance of a robust audit trail that complies with HIPAA, IRS Publication 1075, and other applicable requirements. Our approach for West Virginia utilizes a combination of available native system capabilities to capture audit trails and Security Information and Event Management (SIEM) system capabilities to appropriately collect, correlate and monitor the defined events captured in the native systems audit trails. Our approach uses the SIEM tool for efficient logging, event correlation and reporting, and can be integrated into existing West Virginia assets to provide a holistic view of audit log activity across systems. Without a robust SIEM tool, West Virginia will not be able to efficiently and effectively capture, analyze, and correlate the large volume of audit log information that will be captured by the Exchange and related systems.

Our solution has capabilities to capture audit trails of the transactions (including read only) generated by the users. This is done through the transfer of security solutions and application logs to the SIEM tool. The audit trails capture the required details of the transactions including "who" caused the transaction (user id or system id), from "where" the transaction originated (IP address), "when" the transaction occurred (date and time) and "what" is the transaction doing (reading or updating the data field). The audit trails also captures transaction for image access.

3.2.6 Exeter

When designing OneGate, Exeter incorporated built-in audit trail functionality for quality assurance. Features include:

- Configurable audit trail capability for application data;
- Generated PDFs of application data provide hard copy audit;
- Configurable log levels for system events; and
- Audit reports created using reporting tools.

3.2.7 Getinsured.com

The Exchange Compliance Dashboard helps Exchanges avoid regulatory compliance issues because it aggregates useful legal information and evidence into a single tab-based interface. Although the Compliance Dashboard can be customized to a state's preferences, here are a few regulatory compliance modules that are available out-of-the-box. We pre-set these regulatory modules because their compliance is an industry standard and expressly recommended in CMS and CCIIO Guidance to State Exchanges.

3.2.8 LexisNexis

No response

3.2.9 MAXIMUS/Connecture

Audit trails and reports enable accountability and provide a means to verify compliance with federal and state requirements and performance standards. StateAdvantage provides an audit log of user access into the portal system. This audit log can be configured to collect user logins, user logouts, and failed system login attempts. A comprehensive list of user actions and consumer interactions is tracked by date and time within the history log for each person, family, and individual activity.

The Alliance's Network Operations Center (NOC) produces technology-related audit reports such as uptime, application CPU, Database CPU, and Web farm memory usage. The Alliance only grants access to security, traffic, and authentication logs onsite within Alliance offices. Access to all of the systems, including audit locations, is restricted via two-factor RSA authentication to Hosting Services personnel.

3.2.10 Oracle

Oracle maintains an Audit Trail that is easily enabled for any business entity (e.g. Broker registration approval, Plan Qualification, Certification, Investigation, Application) fields in the

solution. System administrators can use this screen to enable audit trail on any field in the system without any custom coding or system downtime. In this way, it can be who viewed, created, updated or deleted a field value or record.

Siebel Audit Trail will enable West Virginia to examine the full history of data within the Siebel system, which allows customers to see who has made edits to data and reverse changes if the data has been mistakenly or maliciously altered. The Siebel system records the changes that have been made to various data inside the application, keeping a log of the original value, the new value, who made the change, and the date and time of the change.

West Virginia may choose to audit all users or to limit the scope of auditing to those operations performed by certain responsibilities, positions, or employees. Siebel applications also allow customers to audit specific data fields or objects. Audit trail is useful both for maintaining security and for increasing visibility on the history of certain records.

To maintain data continuity and monitor activity on a Siebel site, Siebel Applications can maintain an audit trail of the following types of information:

- Date and time when a business component field has been changed
- Who made changes to a business component field
- What changes have been made to a business component field
- When a business component field or record was viewed or exported
- Who viewed or exported a business component field
- For Proposals and Correspondence generated using the Siebel Document Server, the name of the user who printed data, or print previewed data, and the data and time this occurred.

A more advanced use of Audit Trail involves a user who reconstructs records that existed at a certain point in time by doing complex queries. West Virginia can use Audit Trail to track data history in compliance with government directives, to analyze performance, and to improve service quality.

3.2.11 Software AG

Software AG will not be responding to this question.

3.2.12 Speridian

Proprietary response provided.

3.3 HIPAA COMPLIANCE

Describe how your solution ensures the privacy, confidentiality, and security of patient information from technical and functional perspectives. Include in your response details regarding compliance with Health Insurance Portability and Accountability Act of 1996 (HIPAA), transaction standards, standards and protocols adopted by the Secretary pursuant to Sections 1104 and 1561 of Affordable Care Act.

3.3.1 ACS

The ACS Team has been exchanging data with insurers, health plans, employers, brokers, consumers, and state agencies via privacy-compliant methods and secure protocols for more than 40 years. This experience, coupled with the latest in online security technology, provides an exchange solution in which participants can be assured their information is protected. Table 3-1 provides some of the tools and standards we deploy throughout our HIX Solution Suite, which align with adopted transaction standards and protocols pursuant to Sections 1104 and 1561 of the ACA. We continue to refine our solution as new and emerging standards and protocols are published.

Table 3-1 Privacy, Confidentiality, and Security within the HIX Solution Suite

Security Areas	Description
Standards-based data exchange	The ACS Team works with each of its data exchange partners to transmit data in compliance with required security standards. We provide secure data integration points with customer systems for both file-based integrations (secure FTP, SSL, PGP over FTP and FTP over VPN) and message-based integrations (WS-security). Data exchange is secured by way of VPN connections or transferred via SFTP or FTPS connection requiring SSL v3 or TLS; PGP over FTP can also be supported. All sessions use 168-bit TripleDES, AES-128, and RC4-128 (1 Ox4 bit RSAlMD5) for encryption. Remote access is allowed for a VPN connection using a two-factor authentication system. Externally, firewalls and strict access control lists are utilized to allow Web traffic to the Web servers only. PGP over FTP can also be supported.
HIPAA	All components of the HIX Solution Suite that house, interact, consume, or present HIPAA-related information have undergone extensive HIPAA-based testing to ensure protection of personal health information, security integrity measurements, and preservation of electronic standards. These certifications continue as new and revised standards and protocols are established. We are committed to meeting and exceeding applicable guidelines for security and privacy to ensure the most comprehensive Web-based solution. The ACS Team follows the HIPAA compliance guidelines for Security and Privacy and maintains strict controls to help ensure that all Protected Health Information (PHI) is kept confidential and secure. These controls include: • External firewalls and access controls are used to allow Web traffic to Web servers only. • ACS Team members have individuals responsible for security, privacy, and compliance with all HIPAA-related issues. • New and existing team associates are kept up to date on the policies and procedures established to ensure HIPAA compliance.

Table 3-1 Privacy, Confidentiality, and Security within the HIX Solution Suite	
Security Areas	Description
	• Team organizations perform nightly backups of the data and tapes are removed offsite.
SAS 70	The HIX Solution Suite data centers and software are SAS 70 Type II certified. A SAS 70 Type II audit is performed annually to reaffirm this certification by testing the software against ten independent controls that provide reasonable assurances of quality and risk in how the software is developed, tested and implemented, and how member data is accessed and stored. Each of the ten controls evaluates specific software functionalities for quality improvement and risk management. The controls test our software for implementation and upgrading procedures, security and encryption, and backup and storage capabilities. For example, Control 1 provides reasonable assurance that significant changes to existing software are authorized, tested, approved, properly implemented, and documented. With each implementation, the ACS Team complies with this control by adhering to a project life cycle methodology that includes planning, discovery, construction, testing, and deployment (implementation). The ACS Team pinpoints the inherent risks within the benefit administration marketplace by continually assessing and working to mitigate them through a continuous improvement process. We perform an annual business impact analysis that documents known risks and assesses any new risks within the environment. We document these risks in a disaster recovery and business continuity plan to help ensure risk mitigation where necessary.
PCI-DSS	All current facilities that will process payments are compliant with the Payment Card Industry Data Security Standard (PCI-DSS). The Web portal is a PCI-DSS Level 2 service provider. The most recent PCI Level 2 Service Provider audit was completed and all compliance measures against these requirements were satisfied in June 2011. It is PCI-DSS compliant with the complete separation for PCI data within its own domain. Based on authentication, a user can only access the data for which they are authorized. We have numerous call centers across the U.S. that currently handle payment processing for hundreds of government and commercial clients. Our third party vendor handling payment cards through the IVR for these call centers is a Level 1 Merchant with PCI Validation, first obtained in 2006. Their last audit was performed in March 2011 by an independent third party.
Data Centers	The HIX Solution Suite's hardware is hosted in two state-of-the-art secure hosting facilities. The data centers provide all physical access controls, such as security guards, mantraps, and biometric scanners.

Table 3-1 Privacy, Confidentiality, and Security within the HIX Solution Suite	
Security Areas	Description
	Both data centers are Tier IV and SAS 70 Type II certified. In addition to the physical security features of the data centers, we employ a robust set of architectural and operational security practices. The ACS Team provides 24-hour application monitoring. The software is configured for redundancy; so multiple servers are running simultaneously. Should one or more of the application servers fail, the others would share the responsibility while the offending server is remedied.
Information Security	We practice information security through defined processes, user awareness, periodic audits, and supporting IT infrastructure. Processes like incident reporting, change management, configuration management, firewall monitoring, separation of duties, employee checks, and referrals strengthen the security needs. Our information security, compliance and privacy staff manages a series of automated and custom tools to monitor all network devices and abnormal traffic, providing proactive avoidance of threats to the system architecture. The ACS Team employs multiple Intrusion Detection System (IDS) appliances to monitor all Internet connection points. These appliances are managed via a third party that monitors (Alert Logic) traffic 24/7 and alerts on events are reported to on-call engineers. Information Technology staff monitors and enforces the ACS Team's security program, following guidelines and requirements associated with the protection of PHI as outlined within HIPAA. All associates participate in security and privacy awareness training as part of new hire orientation and undergo industry accreditation programs and coursework. We incorporate multiple firewalls in the system to avoid access to secure information, including PHI. At the database level, the Oracle Database Management System exists behind a Cisco firewall and implements industry-standard security practices supported through Oracle including column-level encryption and intrusion detection. We use Symantec Endpoint Protection to provide antivirus and malware protection for hardware and software throughout the Enterprise Network. Virus signatures are updated automatically on a daily basis. Full system scans are scheduled weekly and run automatically.
Clean Desk Policy	The ACS Team has a Clean Desk Policy. Information security, privacy, and compliance representatives perform manual walkthroughs to ensure employees follow HIPAA procedure for the handling of PHI. Paper-based confidential or non-public information

Table 3-1 Privacy, Confidentiality, and Security within the HIX Solution Suite	
Security Areas	Description
	(NPI) must be secured in locked drawers when not in active use.
Document Security	Along with the ease of entering data online, our solution encompasses all avenues of application and enrollment. When documents are received via fax or mail, we scan and retain images of the documents within our HIX Solution Suite for ease of data entry by Exchange staff. Hard copy documents are stored and/or securely destroyed based on state-approved processes.
Identity and Access Management	The HIX Solution Suite supports identity and access management with Single Sign-On (SSO) integration. Using SSO simplifies the integration process and minimizes ongoing maintenance. The two main components of the SSO implementation are Security Assertions Markup Language (SAML) and Ping Federate Identity Management Server. Preferred SSO standards include SAML 2.0, and WS-Fed protocols. • SAML is an XML standard for exchanging authentication and authorization data between security domains. SAML facilitates the exchange between an identity provider (a producer of assertions) and a service provider (a consumer of assertions). • Ping Federate is a federated identity management server that utilizes SAML to enable SSO from many disparate sources. Utilizing these two components, we are able to easily integrate with many customer and partner sites and standardize most SSO processes.

3.3.2 CGI

In addition to compliant security practices, CGI Health Insurance Exchange360 supports privacy guidelines, aligning with the Patient Protection and Affordable Care Act Section 1561 recommendations for Fair Information Practices and Consumer Mediated Approach.

The application must keep track of what actions a user performed within the application. In particular, all access to Personal Health Information (PHI), Individually Identifiable Personal Information (IIPI) must be captured and recorded. If PHI, IIPI data is added, removed, or changed, the action must be tracked along with who and when the action occurred. Throughout the process audit details will be captured and managed separate from the functioning application. The Health Insurance Exchange logging requirements are extensive due to the need to audit healthcare transactions, financial transactions, and ensuring non-repudiation at many steps in the process. Security logging details will be kept independent of the application logging details. This will include the tracking of each IP address that attempts to authenticate, registration, and other standard security monitoring functions. Access to the logged data will be highly constrained and managed to the authorized security personnel and authorized operational personnel. Well-designed and consistent logging facilitates software servicing and

maintenance at customer sites by producing log reports suitable for analysis by end users, system administrators, field service engineers, and software development teams.

3.3.3 Cognosante

See Section 2.3.a (Privacy/Security) above. As the-SI for West Virginia, Cognosante would bear the responsibility of ensuring that the selected solution confirms to the published standards and guidelines. This would include ensuring that the selected solution complies with an" audit trail, security and privacy requirements as specified in sections 1104 and 1561 of Affordable Care Act.

3.3.4 Cúram Software

Our solution incorporates a role-based security infrastructure which provides a highly secure environment that can be deployed to enforce comprehensive authorization and access controls to protect confidential information. Please see *Item d* below for details about the Cúram Security infrastructure.

In addition to facilitating internal user security controls, Cúram enables selected functions to be made available to relevant external stakeholders. This can be implemented as a secure facility which requires an external user to be registered on the system and to gain access via login credentials. This approach enables such users to access whatever elements of their own information that an agency chooses to make available, as well as relevant functionality such as enquiry, maintenance of personal and demographic data, and other details.

The security infrastructure also allows access for the general public to be implemented. In this more general type of access, Cúram security would be configured to limit what would be accessed by such users.

HIPAA: Through its role-based security infrastructure, Cúram already incorporates various safeguards to ensure that sensitive data is secured from unauthorized access as required by the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule. Furthermore, we are planning to include additional support for HIPAA transactions like 834, 270, and 271 to support the eligibility and enrollment functions.

Section 1104 of the ACA: Our solution, which includes integration services to plan management and financial services partners, complies with administrative and financial standards and operating rules specified in Section 1104 of the ACA. Specifically, eligibility and financial information is provided to authorized parties/users in a secure manner. For example, eligibility information is available to providers via the Cúram-enabled interface to the MMIS, and eligibility, entitlement and financial information is provided to carriers via Cúram adapters and Web Services.

Section 1561 of the ACA: Cúram Software's co-founder and CTO, Ronan Rooney, is the only software company representative to be a member of the HIT Enrollment workgroup, and has helped develop some of the recommendation provided to support Section 1561 of the ACA. Our product already meets, or can easily meet, the recommendations around core data, verification interfaces, business rules, transmission of enrollment information, and privacy and security.

3.3.5 Deloitte

One of the key success factors of HIX hinges on its simplicity to provide individuals and small businesses with the ability to purchase health insurance coverage while protecting their sensitive personally identifiable information (PII) such as personal, health and financial information. Our objective is to offer security safeguards required by industry regulations such as (HIPAA, HITECH, PCI) while fostering consumer confidence and adoption of the solution. We support this objective by including foundational security components in our solution architecture such as identity verification, access management, strong authentication, vulnerability management and strong audit and logging capabilities, business continuity, data privacy, and the Affordable Care Act requirements.

An overall compliance program will be developed to handle the privacy and security requirements and the associated controls with which the HIX is required to comply. This program includes developing a comprehensive risk framework that rationalizes the federal, state and legal requirements so that the controls can be tested throughout the implementation of the project. This helps implement the necessary safeguards to protect the highly confidential Protected Health Information (PHI) and Personally Identifiable Information (PII) data of clients, providers, employees, and other State of West Virginia HIX users. The solution protects data through development and implementation, when it is stored, accessed, or used, and our approach allows for the maintenance of compliance with requirements on an ongoing basis. Our approach for the development of a customized and rationalized framework starts with our Risk Catalog proprietary tool (e.g., NIST, HIPAA, ACA, PCI, state breach laws, etc.) and the HITRUST CSF (Healthcare Industry standard framework) as our baseline, on which we then incorporate any remaining Federal and State requirements, which comprise the remaining requirements of the West Virginia security and privacy framework.

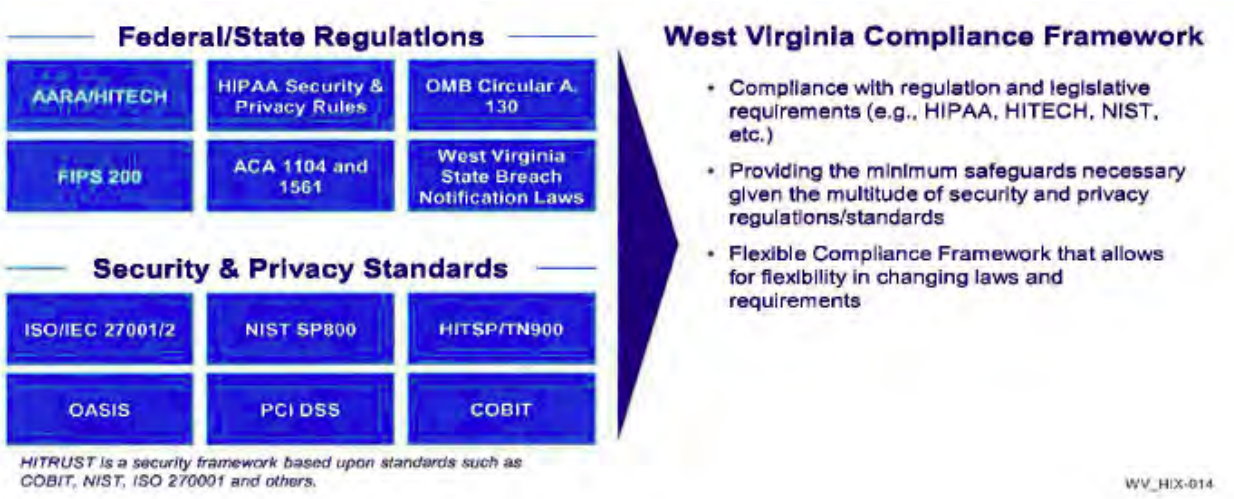


Figure 13. West Virginia Compliance Framework.

3.3.6 Exeter

In support of Sections 1104/1561 of the ACA, OneGate takes into account the demands of federal and state security policies, including the Federal Information Security Management Act (FISMA), HIPAA/HITECH, OMB 06-16, and other governance built on the NIST SP 800-53

Security Controls. For all stated standards, OneGate either natively provides or allows for integrated solutions that meet:

- Related security controls for NIST SP 800-53, which also includes compliance with IRS 1075, HITECH and OMB 06-16;
- Integrated and available capabilities for protection, obfuscation and/or encryption of personally identifiable information. With Oracle, there is no product reliance on social security numbers as an identifier or data field;
- The flexibility and capability to provide authentication services for all assurance levels potentially sought under OMB M04-04; and
- The capability to protect PH data as required by OMB M06-16. The capability to protect PH data as required by OMB M06-16.

3.3.7 Getinsured.com

The operation of any Exchange brings a range of security issues that need to be addressed. The Getinsured Exchange is designed with the following security issues in mind:

Physical security: Physical security is designed based on the existing body of literature required for Exchanges to be compliant with HIPAA, GLB and other federal regulations.

Communications Security: The operation of the Exchange requires secure data transmission to carriers, to HHS and to other state and federal agencies. All of this communication occurs through secure, encrypted channels with encryption standards consistent with HIPAA operational requirements.

HIPAA: The HIX requires the collection of consumer Personal Health Information (PHI) as defined by the Health Insurance Portability and Accountability Act (HIPAA), and will therefore be governed by the requirements of the act. In addition, PCI and other security standards may be applicable since financial and payment information will also be handled by the exchange. In February 2011 NIST has also published draft guidelines addressing security and privacy in cloud computing infrastructures that are likely to be applicable to this service. Getinsured has been a leader in proactively seeking HIPAA certification for its operations. Among the HIPAA rules and standards (promulgated by HHS) that will be incorporated into the West Virginia Exchange are:

HIPAA's Identifier Standards: The Exchange back office will have a searchable interface to display those Exchange transactions, employers or providers, if any, that have issues regarding their National Provider Identifiers (NPI) or Employee Identification Numbers (EIN), which are required under HIPAA for all standard transactions.

HIPAA's Privacy Rule: When administrators must disclose Private Health Information (PHI) that is necessary for Exchange payment and healthcare operations, the West Virginia Exchange will implement HIPAA's procedural and administrative requirements. For example, the WV Exchange will allow users to inquire about their PHI and file complaints when necessary. The Exchange will also provide the contact information for the Exchange's privacy official or department, which is responsible for managing complaints and recording them in a database for 6 years, as HIPAA requires.

HIPAA's Security Rule: Getinsured will implement various safeguards into the exchange in accordance with the enumerated administrative, physical and technical requirements outlined by the Security Rule.

Network Security: The network security measures around the Exchange, along with preparedness planning in the event of a breach, are critical components of the upfront security planning. Getinsured has access to the same identity theft protection measures that world-class financial services corporations today institute as a matter of course for breach response measures.

Application and Operational Security: In addition to the infrastructure requirements, software standards and protocols that need to be adopted to ensure security, there also needs to be stringent security constraints on the many back-office processes and personnel required to successfully execute them. Thus, roles in our systems are carefully delineated with day-to-day operators having only the ability to manipulate data elements on a "need-to-know" basis.

Cloud Computing Security: Getinsured is a leader in laying out security and other models necessary to support this mode of operation. We have operated our own exchange in the cloud since inception, and have implemented procedures to scale the platform and ensure the highest levels of security available today through the use of firewalls, intrusion detection, and secure tunnels for all administrative access.

Catastrophe Planning: How will the Exchange continue operations in the event of a catastrophic emergency? What capabilities are needed from the point of view of software systems, hosting and call-centers? Could such capabilities be shared by states? Could states act as fall-back centers for each other? Getinsured has cost-effective answers to these questions based on our experience with operating a functional and large scale commercial Exchange in the cloud.

3.3.8 LexisNexis

No response

3.3.9 MAXIMUS/Connecture

The Alliance has a Chief Privacy Officer who conducts yearly compliance training and continuous education with all of our staff. These annual exercises confirm and reinforce our compliance with technical standards and a process targeted to HIPAA compliance, informs employees of new standards and protocols, such as those promulgated by the Secretary under Sections 1104 and 1561 of ACA, and provides processes for employees to follow to meet the necessary requirements. We also help prevent privacy breaches caused by human error. Every employee must undergo new-hire orientation and training on HIPAA, PCI, and PHI, and is also required to review and sign a Privacy Compliance Program policy document that outlines employee responsibilities regarding protected health information. In addition, all employees must participate in an annual refresher training to reinforce privacy and security protocols.

3.3.10 Oracle

Over the years, Oracle has demonstrated a consistent leadership and interest in advocating for, maintaining, and enhancing standards as part of committees and work groups including NIEM, WC3 and HL7. Oracle's portfolio of solutions also includes the comprehensive identity management and security needed to secure data to authorized users. These solutions have been also been implemented in environments with users that have varying access needs and requirements. As paraphrased from the Office of the National Coordinator for Health Information Technology site, section 1561 parameters are the key design principles for Oracle's solution for Health Insurance and Medicaid Eligibility as described in a later section for utilizing NIEM, standards based verification interfaces, isolation of business rules, utilization of industry transaction standards, and robust security safeguards.

The products being provided under this proposal are, at the time of delivery, capable of providing comparable access to individuals with disabilities consistent with the applicable provisions of the Architectural and Transportation Barriers Compliance Board standards set out in 36 CFR Part 1194 (known as 'Section 508'), in effect as of the date of this proposal subject to the comments and exceptions (if any) noted on the applicable Voluntary Product Accessibility Templates (VPATs) (available at www.oracle.com/us/corporate/accessibility) for each product, when they are used in accordance with Oracle's associated documents and other written information, and provided that any assistive technologies and any other products used with them properly interoperate with them.

HIPAA and other required audit data will be centralized into the Oracle database via the Oracle Audit Vault product. The system also will leverage "security as a service" to simplify deployment, encourage re-use, and reduce development costs.

The Oracle Security Frameworks includes a comprehensive suite of best-of-breed security products for Identity Management, Access Management, Directory Services, Database Security, and Audit and Compliance Reporting. This framework provides the ability to implement finegrain controls, robust monitoring, real-time alerts, transaction audits and compliance reporting from multiple levels within the security framework. HIPAA, HITECH, NIST, FIPS and other auditing and security requirements are addressed through the use of configurable controls, built-in out-of-box features, and pre-defined or user-defined reporting.

In addition, the SOA Suite and its associated adapters (e.g. Healthcare adapter), supports realtime generation and consumption of HIPAA transactions - such as 834 enrollment requests and 270/271 eligibility inquiry requests/responses. Our solution also supports a non-coding approach to transforming data from one format to another, and this includes HIPAA transaction data as well as XML. As an example, SOA designers can specify that a message be transformed from a 270 request to a NIEM-based eligibility inquiry; and they can use a GUI-based drag/drop approach to mapping the corresponding fields (rather than custom-coding).

3.3.11 Software AG

At Software AG we believe that success around standards is defined by three leadership activities:

- Innovate new ideas and incorporate these capabilities into our products,

- Drive these innovations into new standards committees, proactively, even before the market demands it, and
- Once the standards have matured, re-implement those product capabilities in a standards-compliant manner.

To that end Software AG provides a HIPAA Module that has been tailored to meet and exceed the HIPAA requirements in the marketplace today. The HIPAA module has the following capabilities:

Support for ANSI X12 EDI and all HIPAA transactions - webMethods supports both real time and batch transactions and code sets, including out-of-the-box validation to Level 5, and capability to meet Level 1-7 of WEDI SNIP structured certification process.

Reliable trading partner transactions - Send and receive HIPAA transactions with your partners with full support for HTTP/S and S/FTP, or more full-featured reliable messaging protocols such as EDIINT AS1/AS2/AS3.

Secure messaging and communications - Have confidence that your messages are private and safely delivered. Supported security protocols for transport and message authentication include X.509 digital certificates and signatures.

Validation of standards compliance with a Claredi certified validation engine - All inbound and outbound HIPAA transaction payloads are processed by a validation engine that has been certified through Claredi test software (Claredi is the de facto authority for HIPAA transaction validation certification.)

Reporting capabilities - webMethods' HIPAA solution provides a detailed view into all trading partner metrics, such as average and total transaction volumes by day/week/month/location for each business partner.
Predefined business process templates - Sample business process templates are provided for each HIPAA transaction, including document flow, document types, error and exception handling, and business conversation processes - all of which help speed implementation.

Trading partner management - webMethods allows companies to configure their partners' network and specify partner-specific information and rules in an easy-to-use environment - NO CODING NECESSARY.

Workflow - For process exceptions and other situations, where a transaction cannot be 100% automated, webMethods provides seamless integration of workflow capabilities for human intervention. By bringing the right information, to the right person, at the right time, countless hours are saved by customer service representatives, purchasing agents, logistics managers, and invoice administrators.

Unified infrastructure management and monitoring - webMethods adds the capability to integrate to a comprehensive Business Activity Monitoring component for analysis and alerting of business and operational events related to HIPAA.

Figure 1 illustrates the sample architecture with an emphasis on HIPAA:

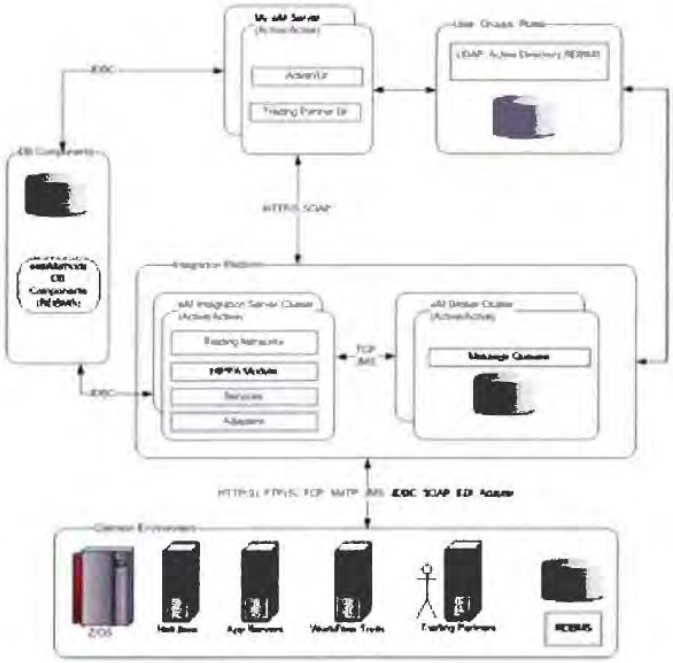


Figure 1

National Information Exchange Model (NIEM)
One of the chief recommendations from the HIT Policy Committee and the HIT Standards Committee per sections 1104 and 1561 of the Affordable Care Act is that states collaborate using the National Information Exchange Model (NIEM) and unified form to facilitate the enrollment process and common data exchange and develop interoperable and secure standards and protocols for enrollment.

The webMethods Solution offers a flexible platform for implementing NIEM compliant data exchange. Software AG's standards-based technologies provide the necessary interoperability to facilitate these health information technology enrollment standards and protocols.

At the core of the webMethods solution is the industry leading Enterprise Service Bus (ESB) that enables secure and efficient data exchange capabilities leveraging NIEM structures defined within Information Exchange Package Documentation (IEPD). Once defined the NIEM data structure is easily imported in the graphical development environment and leveraged as a data structure for the given exchange requirement

Pennsylvania Justice Network (JNET) utilizes our solution as the data exchange infrastructure to support their NIEM compliant, state-wide warrant search service providing secure access to more than 33,000 practitioners located throughout the Commonwealth's 67 counties, as well as federal and state agencies.

Accessibility
Software AG adheres to Section 508 standards and is committed to working with our customers as they evaluate their Section 508 compliance needs. Software AG's standards-based technologies provide the necessary interoperability to facilitate these health information technology standards and protocols.

The Solution is based on a strategy of heterogeneity and interoperability-meaning that the solution is built not only to interoperate with key technologies such as J2EE, .Net, COBOL, etc, but to leverage the strengths of those various platforms in constructing and assembling SOA-based applications. This allows agencies to augment their environments with capabilities where warranted, while retaining their existing investment in IT systems and development methodologies as desired.

The premise of this strategy is that change is constant. Compliance requirements, eligibility determination, interaction with systems and exchange standards should not require organizations to reinvent the wheel each time a change is determined. Rather, organizations should leverage a framework that maximizes their ability to consistently re-use services within projects, properly create and register new services from various application platforms into the overall SOA architecture, and ensure that changes to those services over time do not negatively impact applications previously built with them.

The goal of this Solution is to do just that in order to realize benefits such as faster speed to market, lowered integration cost, and lowered project cost.

3.3.12 Speridian

Proprietary response provided.

3.4 PRIVACY AND SECURITY FEATURES

Describe the fundamental privacy and security features of your system.

3.4.1 ACS

The fundamental privacy and security features of our solution are role-based permissions and data segregation. Role-based permissions restrict users from accessing screens, data, and functions other than those explicitly granted to them at the permissions level. For example, an employee cannot view HR administrator screens and cannot retrieve data not explicitly defined as accessible within the member role. HR administrators can see employer group screens and summaries.

In addition to role-based permissions, data segregation serves to restrict users without appropriate permissions. For example, data access can be restricted for a specified HR administrator to only the location(s) for which that HR administrator has direct responsibility.

Password Rules and Recovery
Each employee has a unique identifier for access to the HIX Solution Suite. By default, the HIX Solution Suite uses the following password rules:

- Must contain 8 to 15 characters (special characters are permitted, but not required)
- Must contain at least one capital letter and one lower case letter
- Must contain at least one number
- Cannot be the same as the user's old password
- Cannot have more than two of the same characters in a row
- Cannot contain the user's HIX Solution ID

For external users and consumers, the HIX Solution Suite currently provides both automated and telephonic password support. The automated password reset functionality is available on the consumer's login page. As Exhibit 5.2-1 demonstrates, the consumer is asked for their full social security number, last name, and date of birth. This step uniquely identifies the user in the system. A scrambled code is required to prevent automated scripts from accessing the system.

Exhibit 5.2-1. Resetting Your Password

Password reset requires SSN, last name, date of birth, and scrambled code.

Once the user is uniquely identified, they must provide proof of identity by answering questions pulled from their current account information. This may include hire dates, consumer (member) information, and/or a zip code. The final step of the process is answering a previously recorded "secret question" correct, before receiving the username and resetting the password.

3.4.2 CGI

Privacy and security are critical components to any architecture, especially with the Exchange's access and storage to personally identifiable information (PI!) and other sensitive data. Given this criticality, CGI followed a layered security architecture approach for our CGI Health Insurance Exchange360™ solution that is based on industry standards and government guidelines. In line with our design philosophy for interoperability and vendor/platform independence, CGI incorporates security solution components that can interoperate with major directories (LDAP), application servers, portals, business applications, databases, and operating systems. The security architecture in our hosted (cloud computing) implementation uses industry-leading network security products for infrastructure security. Our Security Architecture supports the following industry standards:

- NIST 800-63 Electronic Authentication Guideline
- NIST 800-95 Guide to Secure Web Services

- NIST 800-103 An Ontology of Identity Credentials
- OASIS Standards
- SAML - Security Access Markup Language
- WS-Security, WS-SecurityPolicy, WS-Federation, WS-Trust, WS-SecureConversation, WS-Policy
- XACML - Extensible Access Control Markup Language
- XML Encryption, XML Signature

Our solution supports industry practices for data protection, as summarized in the table below. CGI Health Insurance Exchange360 supports processing of sensitive data including data encryption, masking, and digital signatures in compliance with applicable standards and regulations such as IRS 1075. CGI Health Insurance Exchange360 recognizes encryption formats such as symmetric (DES, Triple DES, AES, RC4, Blowfish, CAST), password-based (symmetric encryption with user provided pass key), and asymmetric (RSA). Exhibit 7 highlights our data protection capabilities.

Exhibit 7: CGI's Health Insurance Exchange360 Representative Data Protection Capabilities

Solution Capability	Features
Data Encryption and Masking – Data at Rest	• Supports encryption of sensitive data in storage devices • Supports configurable encryption algorithms and formats, which does not require code modifications
Data Encryption and Masking – Data in Motion	• Supports two-way encryption of sensitive data transmissions for data integrity, confidentiality, and end-point authentication • Configurable encryption algorithm support does not require code modifications • FIPS140-2 compliant encryption protocol • SSL protocol support enables secure transmission between back-end applications and user registry
Electronic Signatures	Supports digital and non-digital electronic signatures and key management

3.4.3 Cognosante

See Section 2.3.a (Privacy/Security) above. As the-SI for West Virginia, Cognosante would bear the responsibility of ensuring that the selected solution confirms to the published standards and guidelines. This would include ensuring that the selected solution complies with all audit trail, security and privacy requirements as specified in sections 1104 and 1561 of Affordable Care Act.

3.4.4 Cúram Software

Proprietary response provided

3.4.5 Deloitte

The Deloitte Exchange solution offers extensive security functionality to support and meet the objectives of the State, such as identity and access management, audit trail and compliance management, message encryption, data security and the management of identity/access privileges. Our objective is to offer security safeguards required by industry regulations while fostering consumer confidence and adoption of the solution.

Security is implemented through an external security system, which includes an LDAP server, identity and access management services, and supports the use of SAML assertions for 3rd party identity assertions, such as the proposed CMS security service. Access control is accomplished through the assignment of roles, based on the HIX actors (e.g., individual, employer, navigator, etc.) and implemented at both the presentation and business logic layers. Application, operating system, database, and network logs are centrally maintained enabling unified log management, reporting, and threat monitoring.

Our Exchange solution offers the capability for individual, family/household, employer, employee, Navigator/broker, insurer, and health care provider to quickly and securely create and manage an account in this self-service portal. Our solution for web access manages access policies and access leveraging identity management solution. Clients can create and maintain a secure account that provides them access to various functions throughout the Portal.

Users who wish to create an account at the onset of the process are presented with a Web page collecting West Virginia-prescribed account details which can include name, user ID, password and PIN, and security hint questions and answers. Identity proofing techniques, such as Self-Service Knowledge-Based Authentication (KBA) and Self-Service Out of Band (OOB) are used to give the State confidence that the user performing an authentication is a legitimate use. The user is asked to create a simple account by entering their information and accepting the Exchange's User Acceptance Agreement. Our account management approach allows customers to change and update their password for their account. Users also have the option to reset the password, without worker intervention, if they have forgotten their user 10, password or PIN.

In addition to account creation and management, we will provide appropriate security controls and measures for authorized users. This is supported by our framework for identity and access management which provides facilities to authenticate the credentials provided by users and validates their identity. As part of this process, the application checks user credentials against existing exchange accounts to prevent users from creating multiple accounts.

The Deloitte Exchange solution includes functionality to track user activities within the entire system. These activities include user login time, accessibility during the session, session duration, etc.

Protection of data when it is stored, accessed or transmitted is enabled using encryption techniques. Our security framework offers secure communication and messages through use of SSL (secure socket layer) encryption and notification between accounts so data cannot be viewed in plain-text. When any account modification takes place, the Exchange will send and receive applicable HIPAA-compliant transactions and acknowledgments. Applicable stakeholders, such as the Federal government, insurers, Medicaid/CHIP agencies, individuals,

employers, and navigators/brokers receive customized notifications, allowing each user groups to be adequately informed.

3.4.6 Exeter

No Response

3.4.7 Getinsured.com

Getinsured uses ControlScan to conduct monthly PCI compliance scans, and have fulfilled all requirements for PCI compliance certification. All access to sensitive information requires a trusted SSL certificate for encryption. We use Godaddy as our third-party certificate authority. An audit of existing information security policies, procedures, standards and technical controls is performed quarterly to ensure adherence and test for vulnerabilities.

We use Symantec End point protection on all the Windows devices in the environment. All critical security events are sent to a central logging server. This data is backed up to tape nightly. We review log files at least once a month.

In terms of our hardening procedures for operating systems used in our datacenter, call center and within the enterprise, we do the following:

- All critical operating system patches are installed in a timely manner.
- Unneeded software is promptly removed from the system.
- Unneeded services are disabled.
- Periodic Network Vulnerability Testing Procedures are conducted on a monthly basis.
- Each internal network device and service is Nmapped quarterly.
- Public internet facing devices (servers/networking devices) are tested for vulnerabilities by an outside vendor quarterly.
- Encryption/Decryption of passwords and sensitive data in transit/database is done using an mcrypt library. We use the Advanced Encryption Standard (AES) rijndael_2S6 Algorithm. All web pages that need access to financial and medical/health history information are accessible via SSL only.
- We test for application-layer vulnerabilities on a quarterly basis.
- Security patches are updated regularly on production Linux servers at Rackspace, (including operating system, web server and database).
- Application development is consistent with XSS standards to prevent cross site scripting attacks.
- MySQL checks have been built into application code to prevent SQL Injection.
- Automated-alert emails are triggered when application errors occur, and application code is monitored for unscheduled changes that might occur due to code injection or other attacks.

3.4.8 LexisNexis

No response provided.

3.4.9 MAXIMUS/Connecture

The StateAdvantage platform incorporates secure user authentication, method-level authorization and integration with single sign-on solutions. StateAdvantage application security is managed within the application, and login/authentication information is stored in the database.

For program designs that require integration with single sign-on applications or portals, the StateAdvantage solution can support procedures with varying degrees of difficulty, including HTTPS Post, URL Parameter passing, SAML or third-party tools such as Netegrity's SiteMinder. StateAdvantage can also integrate with single sign-on applications/repositories such as LDAP, Active Directory, Siteminder and DirectorySmart.

The security model is role based. A role consists of a set of permissions that defines what a user or site visitor can or cannot do. StateAdvantage includes User Administrator and Permission Group Administration tools to allow our clients to self-administer access to the solution.

The process for authentication and authorization is as follows:

- Each incoming request is authenticated within the front-controller servlet.
- Once a user is authenticated, the user's permissions are checked before executing the requested processes. If the user is not authorized, a security exception is thrown. When the Java Server Pages render the HTML screens, the user's permissions are checked to determine appropriate functionality.
- Access to resources, such as quotes and renewals, can be based on a role hierarchy. The number of levels is configurable; the Alliance recommends a limit of three levels for optimal performance.

The Alliance applies security and privacy policies and procedures, including:

- Fostering a culture of security awareness, evidenced by our comprehensive staff training in HIPAA and other privacy rules
- Requiring staff to sign a Privacy Compliance Program policy document regarding protected health information
- Conducting initial and refresher training regarding privacy and confidentiality
- Performing regular system and archival audits
- Ongoing monitoring of adherence to HIP AA standards for electronic transactions
- Securing and authenticating self-service transactions and information look-ups over the web and through an IVR
- Safeguarding all email
- Employing state-of-the-art online security and comprehensive physical security for all our project facilities and data centers
- Ensuring conformity with all HIPAA security and privacy regulations, state regulations, and other federal security regulations
- Maintaining an audit log of all system access
- Establishing multi-level security for access to system resources

3.4.10 Oracle

To facilitate the privacy and security of personal health information (PHI), the Oracle HIX architecture includes security controls through the delivery, application, SOA and data tiers of the system. Given the relatively large number of HIX users (e.g. Customers, Employers) and need for strong security controls due to Personal Health Information, a robust Identity Management (IDM) infrastructure is required to facilitate compliance with HIPAA and to reduce call center requests through identity self service for maintenance activities such as password resets.

The IDM infrastructure also provides identity federation which focuses on secure data exchanges with external entities. This is relevant to HIX for secure interfaces with external entities such as insurance carriers or other government entities. The IDM system provides identity self-service functions for users such as secure creation of accounts. The IDM system is used to support internal users along with the external population such as customer, employers and insurance carriers. The secure account creation process integrates with SOA Suite to supply verification data for knowledge based authentication as part of the identity proofing process. The Oracle Identity and Access Management (IDM) Suite Plus allows enterprises to manage end-to-end lifecycle of user identities across all enterprise resources both within and beyond the firewall. You can now deploy applications faster, apply the most granular protection to enterprise resources, automatically eliminate latent access privileges, and much more. IDM Suite Plus is open standards based allowing integration with the variety of platforms deployed within the State of West Virginia such as Java and .Net applications. In addition, the suite provides federation capabilities based on Security Assertion Markup Language (SAML) along with other federation standards for integration with external entities such as the Insurance Carriers.

The Oracle IDM Suite Plus includes a full array of identity provisioning, identity federation, directory services, token services, authorization and authentication capabilities:

- **Oracle Identity Manager** - Comprehensive identity provisioning and user self service capabilities
- **Oracle Access Manager** - Course grained authentication and authorization
- **Oracle Identity Federation** - Security interoperability across different domains and organizations
- **Oracle Virtual Directory** - Virtualize disparate identity stores into a single logical LDAP view; common use case is to enrich credentials within Microsoft AD with identity information from other stores such as ERP and HR systems
- **Oracle Internet Directory** - Highly scalable LDAP compliant identity store ideal for the high capacity needs of citizen self service portals

The proposed HIX solution provides various methods to obscure feedback of authentication information during the authentication process. Oracle Adaptive Access Manager (OAAM) works in conjunction with Oracle Access Manager to provide a variety of means to protect against identity fraud, such as the use of challenge questions, device fingerprinting and virtual keypad. This technique can be used in replacement or supplement to hard token-based authentication. OAAM also provides for real-time risk assessment based on application access patterns. As a result, the solution increases authentication security in real time for high-risk situations. Together OAAM's capabilities for strong authentication and real-time access controls provide

further anti-identity theft and fraud protection. Oracle Adaptive Access Manager relies on standards-based technologies that include supporting components certified by the U.S. Department of Defense.

Oracle Adaptive Access Manager extends OAM with additional authentication capabilities along with risk based access controls. OAAM includes a powerful identity management-focused rules engine along with advanced information collection capabilities to initiate policies based on access patterns or heightened level of risk. OAAM helps safeguard Exchange critical data and provides additional security controls for both the system's internal and external user populations.

The Oracle HIX solution provides a highly flexible security framework that conforms to State Policy on Identity Management, provides role-based and/or attribute-based access management, and can validate user credentials and access privileges of any direct and indirect interface access attempts. The solution enables secure web services communication between the Exchange and other agencies adhering to the WS-I Basic Security Profile specification, and encrypts all confidential, sensitive, or personal data transmitted using web services.

As one of the major systems within Health and Human Services, the Exchange will play a critical role in achieving strategic objectives around identity federation. However, before such exchanges can be implemented, proper security must be in place. Identity Federation technology provides an open standards-based approach for the propagation, mapping, and synchronization of credentials across domains. A component of Oracle Identity Management, Oracle Identity Federation (OIF) enables a cost-effective and secure solution to share identities across disparate organization units, integration partners, vendors and customers using standards-based technologies. OIF supports a variety of federation implementations including, trust, federation, attribute mapping, and role mapping.

To ensure standards-based interoperability, Oracle Identity Federation supports several profiles defined by open standards groups to ensure that message exchanges with other vendor implementations are successful out-of-the-box. Oracle Identity Federation supports the following profiles:

- SAML 2.0: Browser Artifact, Browser POST, Single Logout, NameIdentifier, X.509 Authentication-Based Attribute Sharing
- Liberty ID-FF 1.x: Browser Artifact, Browser POST, Single Logout, NameIdentifier, Federation Termination
- SAML 1.x: Browser Artifact, Browser POST
- WS-Federation: Passive Requester

As part of a “defense in depth" strategy, Oracle Database delivers state-of-the-art capabilities to address rapidly emerging requirements in the areas of security, privacy and compliance. This reduces the risk of insider threats and complies with regulations such as HIPAA.

- Oracle Database Vault provides highly privileged user access controls, separation of duty, and the ability to control who, when, where and how applications, data, and databases are accessed.
- Oracle Advanced Security Transparent Data Encryption (TDE) makes encryption of sensitive data simple with no changes to the existing application code.

- Oracle Audit Vault turns audit data into a key security resource for the enterprise, providing consolidation, reporting, proactive alerting and protection of audit data.

3.4.11 Software AG

Privacy and Security - Security is an integral capability of the web Methods Suite. Strong security is both a critical requirement and an enabler for business integration. The webMethods Suite provides a broad range of security capabilities built in to the platform. The webMethods Suite is also in use by several U.S. Federal Government agencies and has gone through several security audits. In addition, third party security capabilities can be added to address particular needs.

Security standards capabilities:

- X.509 Digital Certificates and Signatures
- Non-repudiation. PKCS #7
- XKMS - XML Key Management Specification
- S/MIME - v2 and v3
- SSL - v3.0
- TLS - v1.0
- SAML

webMethods is also proactive in the security standards space, supporting

- PKCS, NIS
- PKI
- JAAS
- LDAP
- S/MIME
- JNDI
- SAML
- XKMS

Comprehensive Security Functionality:

- **Protecting information in transit.** The webMethods Suite supports industry standards including SSL that provide protection against eavesdropping within an organization or across the Internet. For highly secure environments where performance is also a must, web Methods supports nCipher's SSL hardware accelerators. For end-to-end partial document protection, third party products support the draft XML Encryption standard.
- **User authentication.** Unauthorized users can be kept out using webMethods username and password authentication or X.509 client certificates for high security environments. Authorized users can be defined within the webMethods Suite, in external LDAP or NIS databases, or in third party systems such as Netegrity SiteMinder or Microsoft Active Directory.
- **User authorization and access controls.** Top level controls on resources and services allow filtering on IP address, host name, and TCP port. Access controls can also be based on group membership. webMethods was one of the early leaders in the OASIS Security Assertions Markup Language (SAML) standards effort, which will provide standardized XML-based authorization decision making.

- **Proof of origin.** The webMethods Suite can provide proof of origin using digital signatures implemented with industry standards such as PKCS #7. Third party products can be used to add support for the XML Signature standard.
- **Logging and auditing.** Extensive records allow traceback in case of a compromise.
- **Public Key Infrastructure.** webMethods uses X.50gv3 digital certificates, and is one of the authors (along with Verisign and Microsoft) of the XML Key Management Services (XKMS) proposed standard.
- **Mainframe security compatibility.** The web Methods Suite integrates with mainframe security packages such as RACF and Top Secret.
- **Firewall friendliness.** HTTP and HTTPS traffic can pass through existing firewalls without reconfiguration. In high security environments, the Reverse Invoke capability can be used to allow communication without any inbound connection initiation.
- **Content Based Access Control.** Extensible access controls to prevent sensitive information from flowing to less secured backend systems.

Enhanced Security Assurances:

- **Security best practices.** Software AG supplies "security best practices" documents to assist customers in configuring their software with appropriate levels of security.
- **Penetration testing.** As a further level of confidence, webMethods hired an independent third party security testing company to test product security in a real-world configuration. The findings of the penetration test were used to strengthen product security and assisted in defining best practices.
- **Protection against buffer overruns.** More than 50% of software attacks are based on buffer overrun attacks, including nearly all attacks against web servers. As a Java application that is not built on insecure platforms like web servers, webMethods is immune to this class of highly dangerous attacks.

3.4.12 Speridian

Proprietary response provided.

4.0 Interoperability and Extensibility

4.1 LEVERAGING FUTURE PLANNED IT COMPONENTS

Describe how your system will have the capability to leverage future planned IT components that may be provided by the Federal government or leveraged from Early Innovator States.

4.1.1 ACS

The HIX Solution Suite was built specifically to leverage many different IT components, including Federal, State and vendor-provided tools and services. In order to be successful and useable by West Virginians as a central marketplace for health reform, the Exchange needs to integrate with existing and future state resources and programs. The ACS Team solution has incorporated interoperability with existing and as yet undefined systems and extensibility of our solution to other programs into the design of our HIX Solution Suite.

Modern Architecture. The HIX Solution Suite is built to the principles and methodologies of a Service Oriented Architecture (SOA). This methodology provides a way for consumers of services to seamlessly interact with Federal, State and enabling vendor systems. Most aspects of the HIX Solution Suite are developed to be shared with internal and external systems through an enterprise service bus (ESB). Regardless of the technology behind the disparate parts, the application is able to exchange data through a well-defined, shared format.

Through an architecture that makes the most of modern Web-based technologies, our HIX Solution Suite functionality is both flexible and extensible to provide secure Web-based access to information, workflows, and processes. This is supported by interaction with federal verification sources and state systems. The HIX Solution Suite Web portal was built to utilize XML schema to share data with multiple entities in the commercial and state markets, as well as other best practices for Web design, interoperability, and security. Currently operational features and functionality offer a single Web-accessible data hub for all information gathered to support eligibility verification and enrollment processes maintained by the Exchange. For instance, our XML schema-based "Max" family file format actively supports secure data sharing with data exchange partners.

Delivery Expertise. All three partners have significant experience leveraging and exchanging data with many different kinds of business partners. For instance, Benefitfocus currently exchanges data with more than 750 different data exchange partners. That includes payroll vendors, commercial carriers, eligibility systems, homegrown HIS systems and state-based entities. CHOICE Administrators currently exchanges data with 350 carriers nationwide. ACS State Healthcare contracts with 34 state government programs to integrate with existing state systems, develop new technology for government programs, and coordinate inter-agency relationships for these technology platforms. This experience and our modern architecture make it possible to integrate quickly with future planned IT components. If problems occur, our experience can be applied to solve the issue in a timely manner.

4.1.2 CGI

CGI's Health Insurance Exchange360's modular and open standards-based architecture provides the capability to leverage future planned IT components that may be provided by the Federal government or leveraged from Early Innovator States. Our solution complies with MITA standards and the Exchange Reference Architecture. CGI embraces the principles of reusing

existing assets when feasible to avoid duplication of effort and to control costs. We are a collaborative and flexible partner.

4.1.3 Cognosante

Cognosante, as a Systems Integrator, will make use of available modules from private vendors, Federal government, and Early Innovators. This is the purpose of the "blueprint" and the Logical Component Model. Acting as the SI, Cognosante will identify modules that provide functionality in line with the CCIIO blueprints and leverage these modules or components to complete the West Virginia solution. As no one vendor can provide all of the required modules, it is essential that West Virginia identify and work with an SI that can understand the landscape of available components and modules, and understands how to integrate these into a common SOA architecture to form the comprehensive Exchange.

Using the "blueprint" as a roadmap, Cognosante will identify modules and components that can be leveraged then integrated into the common framework to complete the required functionality of the Exchange. Cognosante's expertise with Medicaid, Eligibility, and MITA has also been sought after and utilized by CCIIO, as well as a number of vendors in the Health Insurance Exchange market. Over the past year, we have not only assisted Early Innovator and other States, but also worked closely with a number of product vendors to ensure their solutions are ACA compliant, plus meet CCIIO blueprint requirements. We know and understand the strengths and weaknesses of a number of vendor products and their product roadmaps. We also understand the differences between the current online health insurance shopping portals available today and the functionality required to build an Exchange Framework to fully integrate public health systems and seamlessly determine eligibility. Additionally, we are familiar with efforts being made under UX2014 to create a common, user friendly frontend environment for Exchanges. This underscores the need for West Virginia to pick a partner, like Cognosante, that is "agnostic" to vendor products and technology, and can help you create a modular, flexible, and agile solution using existing components to complete the design of the West Virginia Exchange.

4.1.4 Cúram Software

Interoperability
Cúram supports integration with all external systems that will encompass the Exchange. Cúram is SOA-compliant and provides out-of-the-box support for Web Services. Cúram HCR is designed to provide pre-built processes and interfaces, supporting the verification process using Federal, state, and third party data sources, including the anticipated federal data hub to be built for state health insurance exchanges. Adaptors/connectors supporting the Cúram HCR solution will address key areas of the CMS "Seven Standards" and conditions, including Interoperability. The Interoperability condition states that systems must ensure seamless coordination and integration with the Exchange (whether run by the state or federal government), and allow interoperability with health information exchanges, public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services. Our adaptors/connectors to support the Cúram HCR offering will address key interoperability areas, including:

Interoperability with Insurance Exchange: Cúram HCR delivers a data model capable of supporting all necessary ACA data elements as well as pre-built evidence, eligibility rules, entitlement rates, retroactive calculations, payment corrections, and financials for all health

insurance and social services based programs. In addition, Cúram HCR will provide interoperability with Health Benefit Plan, Provider Display, Fund Aggregation and Payment vendors, and other enterprise systems such as call center solutions and Electronic Content Management systems. This approach provides a core system for all enrollment, eligibility, change of circumstance and account information while leveraging vendors who focus specifically on delivering Insurance Exchange capabilities.

- *Software as a Service* (SaaS): The SaaS option allows the Cúram solution to leverage the prebuilt plan management functionality offered as a service to maintain the qualified health plans offered by the state Exchange. These offerings include services that allow for search, plan detail lookup, and plan comparison. The Cúram user interface is flexible to allow wide latitude in modifying the look and feel purely by configuration while leveraging the robust plan management functionality and carrier relationships supplied by the SaaS vendor using SOA.
- *eCommerce Software:* If the State chooses to use eCommerce software to manage the details of qualified health plans, using SOA, Cúram will integrate with eCommerce software based Health Benefit Plan functionality for user friendly shopping of the plans.

Interoperability with Call Centers: Cúram easily integrates with telephony systems in call centers to assist agents to quickly and effectively provide the required assistance to the caller. To enable the telephony system to route the calls to the most appropriate team or individual, Cúram interfaces provide information such as the organization structure and individual's skills including program specialty, licensure, and language, to the telephony system so that the call can be routed to the team or agent best qualified to provide call resolution. Cúram can also interoperate with Computer Telephony Interface (CTI) technology to reduce data entry via a "screen pop" function based on the user input allowing the agent to focus on assisting the caller.
Interoperability with Content Management Systems (CMS): If electronic verification of consumer information is not possible, the Exchange will interoperate with the CMS Verification Hub to upload, and manage electronic documents to support the verification operations. We have worked with many of our customers to integrate content management systems with Cúram, providing effective, consumer focused access to the content residing in the CMS. We are now collaborating with leading content management systems vendors to deliver prebuilt integrations that provide content management capabilities within the Cúram HCR solution. This integration will use SOA-based Content Management Integration Services (CMIS) and services specific to content management systems.

Adaptability and Extensibility
The Cúram Business Application Suite is built on an n-tier, J2EE technical architecture that allows Cúram -based applications to be robust, scalable and adaptable. Using open standard technologies such as J2EE, XML, JMS, and Web Services, the Cúram architecture is SOA compliant and readily facilitates integration with existing legacy or other systems.

As a component-based, SOA-compliant solution, Cúram fully supports a deployment model that allows organizations to modernize and transform systems incrementally with reduced project risk. The flexibility of Cúram provides organizations with implementation options by facilitating the deployment of selected functionality in a modular way over time, in line with the organization's business and technical strategy, budget, and program needs or, deployment of a solution to an organization regionally or to the organization as a whole. Because Cúram is an enterprise-level, integrated solution, it allows system components and functionality to be added seamlessly to arrive at an enterprise solution that can include interfaces with existing systems.

4.1.5 Deloitte

The HIX Solution will leverage future planned IT components primarily as web services integrated through the solution's Enterprise Service Bus (ESB). The Federal government has emphasized the use of Service Oriented Architecture (SOA) and web services to enable the reuse and sharing of components developed by the Early Innovator States. The HIX Solution has been designed as a SOA and can integrate external web services through its ESB, using an XML gateway to provide security and optimize performance. The HIX Solutions architecture and implementation align with both the CMS Technical Reference Architecture and the Exchange Reference Architecture, providing compatibility with future planned IT components.

4.1.6 Exeter

OneGate has the capability to leverage future planned IT components for West Virginia by using its robust integration framework. The framework is built using SOA best practices, which allows for flexibility and interoperability between systems over various protocols and message formats. The framework utilizes the Oracle SOA Suite, a modem, best-of-breed systems integration product, that provides connectivity between various applications. The Oracle SOA Suite adheres to industry standards and supports web service integration using SOAP over HTTP/S, and provides support for messaging using adapters for technologies such as JMS/ AQ, File/FTP and JCA/JDBC. It also provides features that allow for REST services calls, or API calls over HTTP/S using XML or JSON.

4.1.7 Getinsured.com

Getinsured is actively engaged in monitoring IT work in innovator states and with the UX 2014 project. As an example of work we have performed that complies with NIEM (National Information Exchange Model) requirements, we developed a model to support current and envisaged Federal Exchange requirements and source data availability. We propose a "Model-Driven Development" to design insurance exchange data model based on extensions to NIEM schema as shown in the example below that will allow reusability, standardization and distribution of the data model efficiently and effectively at the national-level.

Figure 4.1-1: NIEM Object Model

As shown above, the data management architecture includes the data structures required to support the varied ACA requirements and involve operational data stores, atomic data stores/dimensional databases, master data management, metadata/data dictionary repository, and data archives.

As an operator of an already functional exchange, Getinsured has served as a consultant to some states in their design specs for RFIs and RFPs. Getinsured believes that in the end, because of the exchange requirements of high functionality and interoperability, the solution provided through the technology of the Getinsured.com exchange will be a most flexible and cost effective solution. However, we will continue to monitor and observe as innovator states and the UX 2014 project progress.

4.1.8 LexisNexis

Our XML-based interface utilizes common, proven technology for doing system-to-system interfaces through Web Services. When working to provide identity management solutions within other enterprise applications, LexisNexis uses common, standard Application Programming Interface (API) guides to "fit" seamlessly within the applications themselves. We understand that the goal of the applications themselves is well beyond the scope of what we can provide, and we are flexible in our approach to integration, so that we can provide the necessary levels of security smoothly, without "bogging down" the intended goal of the system.

4.1.9 MAXIMUS/Connecture

In responding to this section of the RFI, we are mindful of your budget constraints and intention to build on current infrastructure. We appreciate your view that the most cost-effective and sustainable Exchange solution is one in which wheels are not reinvented and state employees can continue to effectively leverage their knowledge, skills, and expertise. Our solution extends and builds upon your existing investments in technology, personnel, and strategic planning.

Leveraging Future IT Components: We also concur with your view that the vendors who will be most supportive of your programmatic and technical design are those who have built positive relationships with other state government entities in which goals and deadlines have been met and the programmatic outcomes have reflected well on the state employees who are entrusted with them. The Alliance has this kind of positive track record.

StateAdvantage is modular, flexible, and adaptable to new technologies, including those that may be forthcoming from the federal HHS or Early Innovator states. We serve as a member of a Maryland Exchange Advisory Committee and we engage in detailed discussions with other Early Innovator States such as Wisconsin and New York. Because we are closely connected to the Exchange marketplace, the Alliance anticipates and responds to the continuously evolving Exchange landscape and our solution remains in an ongoing state of iterative improvement and refinement.

StateAdvantage provides a flexible business architecture that connects technology modules in a business logical and interoperable manner that mitigates implementation risks and quickly adapts to changing requirements. The StateAdvantage platform utilizes a component-based design that leverages an open, three-tier Service Oriented Architecture (SOA) using the Java™ 2 Platform Enterprise Edition (12EE). The open architecture allows for each module to seamlessly integrate with other modules, existing applications, and legacy systems, and creates the best likelihood for incorporating the ideas and innovations arising from the Early Innovator program.

4.1.10 Oracle

Leveraging assets from the Early Innovator states presents numerous advantages such as reduced cost and accelerating project delivery. Re-use of Exchange components is a central theme defined by CMS in an effort to reduce the overall cost of the program nationwide. Oracle provides several advantages customers in the area of asset re-use. First as the platform selected for the first Exchange awarded under ACA, Oracle is a leader in the development of reusable assets from the Early Innovator states. Second, our adoption of open standards and configuration centric approach to deployment facilitates sharing of components between states.

A key architectural principal of Oracle's technology is to embrace open standards. This focus promotes cross platform integration and transportability of system components. Open standards based components allows states to share assets in a more efficient manner than a closed proprietary implementation. Open standards will also enable states to use components provided by the Federal Data Hub. Some examples of the Oracle HIX system components that are easily shared:

- Enterprise service bus configurations
- Web service definitions
- Business processes models
- Business process execution definitions
- Business rule definitions
- Security control policies

Below are some of the open standards supported by Oracle technology that are salient to the Exchange architecture:

- Business Process Management Notation (BPMN): A graphical representation for specifying business processes in a business process model.
- Business Process Execution Language (BPEL): An OASIS standard executable language for specifying actions within business processes with web services.
- Service Component Architecture (SCA): SCA provides a model for composing applications that follow Service-Oriented Architecture principles.
- eXtensible Access Control Markup Language (XACML): A declarative access control policy language implemented in XML and a processing model, describing how to interpret the policies.

A COTS-based solution ultimately increases re-use through economies of scale. Oracle has noticed a shift to COTS solutions for enterprise financials, human resources (HR) office automation and e-mail systems because the industry has recognized the relative maturity and subsequent savings from packaged offerings. Asset re-use is fostered by a COTS based approach by the following aspects:

- Innovation - Receive the benefit of research and development funding. Oracle spent over $4 billion on research and development in the last fiscal year.
- Shared services - Extensibility of the platform to support systems and programs across the organization. Siebel and Oracle Policy Automation can support programs beyond AHIX and SHOP. Oracle technology can be leveraged across systems for shared services such as business intelligence, document imaging, SOA and BPM.

- Skill sets - What skill sets are available to maintain the custom/transfer versus COTS offering? To keep the system up and running, agencies must be able to access these skill sets for 10, 15 and up to 25 years.

4.1.11 Software AG

A key benefit of Software AG's solution is webMethods' ability to deliver seamless interoperability across various disparate applications. Software AG's flexible, ready-to-grow, integration platform is secure, auditable and standards-based; and because our integration platform "speaks" every technology, WVOIC can easily connect with and leverage new IT components as they are brought forward by the Federal government or Early Innovator States.

4.1.12 Speridian

Proprietary response provided

4.2 LEVERAGING EXISTING STATE CALL CENTERS

Discuss the pros and cons associated with leveraging existing State call centers (including functionality, time to implement, and cost).

4.2.1 ACS

Cost savings is paramount for many states today, and West Virginia is no exception. While leveraging existing State call centers may be appropriate for some Exchange functions, the total cost and implementation timeframe for such a solution may not be as attractive.

Typically, State call center employees are usually experts in specific state programs. They answer questions related to Medicaid, SNAP, CHIP, or other programs on a daily basis and often provide general customer assistance and application support to consumers. These centers have helped consumers for years and are a source for subject matter expertise that cannot be discounted.

There are many service, cost-efficiency and Exchange-specific functionalities that must be considered when choosing to use existing state call centers or the ACS Team call center solution, including:

• **Commercial insurance knowledge**. Providing callers with information and assistance for Medicaid/CHIP and other state programs is very different than providing the support for employers, employees and Brokers. The ACS Team has the knowledge and experience to serve both populations.

• **Technology enhancements.** In a traditional call center, the State would need to make a significant investment in infrastructure to provide automated solutions expected under the Exchange, such as web chat, NR automations, pay by credit card, etc. These technology enhancements, as well as future innovations, are incorporated into our offering and pricing. The ACS Team solution removes the burden on the State to "keep up with the latest" in customer service support.

• **Incentive for high performance**. Under the ACS Team solution, our call center employees are incentivized, through pay-for-performance compensation, to provide high-quality, efficient

service to the caller. Each employee takes ownership for achieving personal and project goals. This means that not only are customer service metrics higher, but that our call centers achieve significant cost savings over traditional call centers. This is not always possible in a state-run call center.

We recommend establishing a call center specifically for Exchange customer service. Even if West Virginia decides to set up separate Exchanges or coordinates with another state for a regional Exchange, a single call center is likely the most efficient and effective option to ensure consumer satisfaction.

4.2.2 CGI

As your partner, CGI would welcome the opportunity to analyze leveraging existing State call centers for the Exchange with West Virginia. The analysis would include an inventory of State call centers including functionality, existing assets, capacity, and demographics of existing call center staff. Based on our experience with public sector health program call centers, we have compiled a short list of pros and cons for the State's consideration:

Pros

- Potential to utilize underleveraged staff for new program
- Potential to utilize staff already familiar with end customer and complimentary programs
- Potential to utilize existing call center infrastructure including telephony, software, hardware, and call center processes
- Call staff become generalists; may be a benefit if customer has cross-program inquiries
- Potential for cost savings if existing assets can be leveraged

Cons

- Typically, all existing state staff is fully utilized so new resources would need to be brought on
- Call staff become generalists; customers can become unsatisfied if call center staff is not able to answer detailed questions.
- Unless the State has excessive extra capacity on existing technical and software platform, it is usually necessary to purchase the extra capacity limiting the cost saving benefits
- Potential for additional costs without the benefits of leveraging existing assets if not available.

4.2.3 Cognosante

Cognosante will work with West Virginia to understand current call center capabilities. Additionally, we will work to understand current capabilities of the Ombudsman Office and how this can be integrated into the call center functions to ensure that consumer assistance for both the commercial and under-served population is integrated into the Exchange.

4.2.4 Cúram Software

Cúram readily integrates with telephony systems in call centers to assist agents to quickly and effectively provide the required assistance to the caller. To enable the telephony system to route

the calls to the most appropriate team or individual, Cúram interfaces provide information such as the organization structure and individual's skills including program specialty, licensure, and language to the telephony system so that the call can be routed to the team or agent who would be best qualified to provide call resolution. Cúram can also interoperate with Computer Telephony Interface (CTI) technology to reduce data entry via a "screen pop" function based on the user input, allowing the agent to focus on assisting the caller.

4.2.5 Deloitte

West Virginia already has in place 2 regional call centers for integrated eligibility. Often, call center workers use eRAPIDS to answer inquiries and record reported customer changes. Leveraging an existing call center such as this will have several benefits such as a reduced implementation time frame, cost savings, and the ability to leverage knowledge about existing programs. We suggest that West Virginia augment the existing call centers with industry experts, such as eHealth, to handle questions posed by new stakeholder groups, such as brokers, navigators, employers, and insurance carriers. By expanding the current call centers with the industry expertise of eHealth, customers can use the call center for all of their Exchange and/or benefits inquiries.

Although West Virginia's current call centers are fully staffed and operational, there is some concern that they would not be able to handle the volume of calls during peak times, such as open enrollment periods. During these periods of a higher volume, some of the questions may be outsourced to other vendors, such eHealth or they could be redirected to brokers or navigators, to appropriately handle all inquiries. Many of the states we work with have also seen positive results from implementing a voice response unit (VRU), which can provide answers directly or allow calls to be routed appropriately based on the type of question. Furthermore, to ease concerns about current call center staff not having extensive enough knowledge on the Health Insurance industry, training would be provided to current employees to create a more robust knowledge base.

Leveraging an existing West Virginia call centers will allow for a more robust, streamlined call center that can be implemented quickly and at a reduced cost. Above all, the customers inquiring about the Health Insurance or other programs will have access to knowledgeable employees who can respond as quickly and accurately as possible to customer inquiries.

4.2.6 Exeter

OneGate can leverage existing State call centers using the OneGate integration framework.

- Pros of leveraging existing call centers:
  - No need to procure a new call center, which will minimize costs;
  - Minimal reconfiguration of system settings and business processes, which will minimize application configuration time; and
  - The State is familiar with existing call center software features, thus there is no need for training. This will minimize training time and costs.

- Cons of leveraging existing call centers:
  - Integration time might increase if the existing call center is not compatible with the case management solution. Adapters have to be procured and configured in the framework to support the existing call center.

To fully assess the pros and cons, Exeter will need more information to understand the technology used for the State's call centers.

4.2.7 Getinsured.com

West Virginia has indicated an initial desire to perhaps utilize the expertise of the staff within the CAP program of the OIC as the "call center" for the Exchange. While Getinsured stands prepared to support that decision should it become final, Getinsured also supports the need to augment the staffing of that division to be better prepared to handle the influx of information requests when the Exchange goes live. It has been the experience of Getinsured that between 60-65 per cent of persons who initially engage via the internet to purchase health care coverage finalize the purchase after talking with an operator of our call center. We believe this to be commonly expected for enrollment of a population with the acknowledged health care literacy challenges faced in West Virginia. The average length of call can be expected to be approximately 15 minutes if the caller finalized the transaction. The program narrative for the Level I grant application indicated that the center currently handles approximately 100 calls per day. When you also consider the additional duties the CAP may assume with implementation, the likelihood of providing the "world class shopping experience" for West Virginians is diminished without additional investment in staffing.

Getinsured is offering to (1) train state workers for the CAP in the nuances of commercial health insurance plan offerings so they can be responsive to caller's inquiries, and/or (2) provide back-up coverage for week-ends and high volume times when the CAP is overwhelmed with inquiries. Getinsured also believes there is some economy of scale to be developed in a state with unique call center needs that could be a shared expense with other similar states by a regional approach to the call center. Getinsured has experience in developing on-screen scripts based on caller area code information to customized the interaction in a seamless fashion. This process could also include the "soft transfer" of callers to more specific call center operators either in the state where the call originates or with a specific carrier.

4.2.8 LexisNexis

No response provided.

4.2.9 MAXIMUS/Connecture

While there may be others, there are two call centers that OIC may consider to leverage to support Exchange operations: the Medicaid managed care enrollment broker call center located in the Department of Health and Human Resources, and the Ombudsman call center located in the Office of the Insurance Commissioner. The Medicaid managed care call center serves Medicaid consumers in a limited scope - assisting them in choosing a health plan and primary care provider. The Ombudsman collects and receives consumer complaints, grievances, and appeals. Both call centers perform limited scope that overlaps with the full scope of services required of the Exchange call center. To present a consistent user experience for West Virginians, the Alliance recommends combining each of the relevant call center functions into a single call center, recognizing that the Ombudsman call center may be continued to handle more complicated situations that were first received and triaged by the Exchange call center. A single access point minimizes the risks of consumer frustration misunderstanding and also promotes a fuller level of operational integration among the various government-sponsored

programs, and implements modem infrastructure designed to support the volume of the Exchange population.

A single, centralized Exchange call center ensures that every caller receives excellent customer service and consistent follow up regardless of their issue. Pros and cons of the primary call center options are presented in Exhibit 4-1: Call Center Pros and Cons.

	OPTION: Separate Call Centers	OPTION: Combined Call Centers	Best Choice
Functionality	***Pro:*** Users who are familiar with the existing consumer intake points see no changes. ***Con:*** Some West Virginians do not receive good service and are not helped on the first call.	***Pro:*** A consumer receives the needed help and support without having to understand the differences between the primary programs and functions. ***Con:*** May be initially confusing to those that are used to the existing call center design.	✓ **Combined Call Centers.** ***Reason:*** Existing users will quickly appreciate the new focus on fully integrated customer service. CSRs can be cross-trained to assist customers in other areas during busy times.
Time to Implement	***Pro:*** Call center currently available, no implementation delays. ***Con:*** No improvement in service.	***Pro:*** Once implemented, West Virginians will receive better service. ***Con:*** Short implementation delay. Existing CSRs need re-training.	✓ **Combined Call Centers** ***Reason:*** A new, more holistic approach is likely to produce sizable gains in consumer satisfaction over the long term.
Cost	***Pro:*** Costs are predictable and accounted for under the current budgeting framework. ***Con:*** Budget uncertainty until bids are received in response to procurement.	***Pro:*** High probability of improved efficiency and greater economies of scale, including the benefits of a fully modernized technology platform. ***Con:*** Budgetary impact cannot be fully assessed until procurement is staged.	✓ **Combined Call Centers** ***Reason:*** Our experience handling tens of millions of phone calls throughout the country gives us confidence that a combined call center environment is less costly and more efficient over the long run than separate operations.

Exhibit 4-1: Call Center Pros and Cons: *While there are arguments in favor of either approach, we believe the best overall solution is a consolidated call center in which consumers have no chance of selecting the "wrong door."*

4.2.10 Oracle

One of the major components of the Oracle HIX solution is Siebel, which Gartner rates as the highest performing solution set for CRM Customer Service Contact Center software in their most recent magic quadrant review (see below):

Implementation of Siebel in the West Virginia HIX allows the State to benefit from:

- Pre-built public sector Siebel software that is tightly integrated into the Oracle HIX solution
- Workflow management for HIX
- Speed of implementation
- On-going R&D for improvements, enhancements, and ease of upgrade

Siebel can be implemented with a variety of call center hardware and architecture, and utilizing existing call center staff. This alternative would provide the least overall risk to the project.

4.2.11 Software AG

No response provided.

4.2.12 Speridian

Proprietary response provided.

4.3 LEVERAGING EXISTING STATE INTERNET PORTALS

Discuss the pros and cons associated with leveraging existing State Internet portals (including functionality, time to implement, and cost).

4.3.1 ACS

Leveraging existing State portals is an efficient and cost effective choice easily supported by the ACS HIX Solution Suite. The State has developed robust State Internet resources that should be leveraged in conjunction and coordination with the Exchange portal. For example, the West Virginia Bureau for Medical Services (BMS) portal provides access to a wide variety of resources including MediWeb. The "No Wrong Door" model of our HIX Solution Suite would include information on and access to resources on other State Internet portals. On a small scale, this is the same approach that we took with the State of Maryland in VIRTUAL COMPARE, accessed at https://virtua1compare.benefitfocus.com. Leveraging existing portals can be accomplished via a range of integrations. Providing "off-ramps" to sites and services, such as those offered on the BMS site, could be accomplished through a simple link on the Exchange portal. An automated interview process could also drive this on the Exchange site; the process would identify eligibility and/or interest in programs or information provided on another State portal. While simple links may be the appropriate solution for "off-ramping" to some resources, eligibility for subsidy and/or Medicaid and WVCHIP will occur as part of identifying an off-ramp action or further integration as desired by West Virginia. As our HIX Solution Suite is Web-service enabled and offers an externally accessible open API, active integration with other portals can be a seamless experience for the consumer.

As long as the Exchange Solution has the capacity for effective integration and the state system(s) have open accessibility for integration, there are very few disadvantages to leveraging existing and known State Portal resources. One area of concern could be the inefficiency of duplicated functionality between the Exchange Solution and existing State sites. In that case, an assessment of the associated costs and consumer experience should be conducted to identify the best way and best system to offer the functionality. An additional concern could be an inconsistent consumer experience between portals. However, if the existing State portal is of current design this should not be a significant issue, as our HIX Solution Suite enables branding and configuration to maintain a smooth transition.

The timeline to implement will vary based on the level of integration desired. Due to the flexibility of the HIX Solution Suite, links, off-ramps or data gathering in the Exchange portal and passing that information to another State portal will not add significant time to the project. If the State requires bidirectional data feeds, those requirements would add some complexity and need to be scoped for impact to the implementation timeframe.

4.3.2 CGI

As your partner, CGI would welcome the opportunity to analyze leveraging existing State portals for the Exchange with West Virginia. The analysis would include an inventory of State portals including functionality, existing assets, capacity, and technology. Based on our experience with public sector health program portals, we have compiled a short list of pros and cons for the State's consideration:

Pros

- Potential to leverage existing assets and thus potentially reducing cost and time to implement;
- Potential to group like-programs on existing portal; and
- Potential to leverage existing development resources and internal processes.

Cons

- Potential for security concerns, data co-mingling; and
- Tethering to other programs may take more effort for upgrades, site modifications

4.3.3 Cognosante

Understanding of the "as is" capabilities and comparing these to the desired "to be" state, identifying existing gaps, and associating costs with these gaps are necessary process states in evaluating if current solutions are viable starting points or can be utilized within the Exchange. As the SI, Cognosante will review the Gap Analysis of IT capabilities and understand the capabilities of the current Medicaid Web Portal and other DHS portals. There are a number of questions that must be understood:

- Does the current portal support both medical and human services eligibility and enrollment activities?
- Does the portal support or provide a user friendly interface?
- Can application forms be easily updated or appended?
- Does the portal allow for flexibility of multiple entry points, such as plans, employers, small business employees, and individual consumers? Are the needs of each actor in the Exchange supported?
- Can the SHOP portal be easily separated from the Individual shopping portal?
- Does the portal support multiple languages? Does this include all documentation, materials that can be downloaded from the site?
- Does the portal support multi-media? Live-Chat? Video content? Computer Based Training (CBT)?

The use of exposed services and open APIs would allow certain Exchange functions to be incorporated into the state's existing Internet portals. The services would allow the functionality to be placed where it is needed.

4.3.4 Cúram Software

Cúram HCR provides a seamless user experience via a common front end that spans users, programs, and channels across all required eligibility and enrollment processes in the health insurance exchange. By providing not only full service support, but also assisted and self-service support, external parties such as consumers or assisted service representatives will have online access to a wide range of functions from plan selection to enrollment. This functionality is supported out-of-the-box and provides processes which span multiple functions including eligibility and entitlement, shop and compare, enrollment, and premium payments. It also supports the ability to include not just the programs covered by the health insurance exchange, but other agency-specific programs and programs such as Food and Cash

Assistance which are available through optional Cúram Solution modules. Any additional such programs can be implemented either initially or incrementally over time.

Cúram Software has an outstanding record of innovation by assisting consumers to take full advantage of the out-of-the-box capabilities of Cúram in modernizing services in record time. These 'quick wins' provide the shortest time to value and immediate visibility of the organization's commitment to bring change and modernization to public services. The modularity of the Cúram business architecture provides a variety of choices when deploying features and functions of Cúram. Its flexibility enables organizations to use a phased deployment strategy and to seamlessly integrate external system functions into Cúram over time.

However, Cúram does not preclude leveraging existing state Internet portals. For example, Cúram provides the capability to build portlets that will expose Cúram services in external portals. However, it is important to note that this approach would likely require considerable effort in terms of both time and cost to implement depending on various factors such as the number of external portals involved, the technologies used, and the services to be offered. On the other hand, the Cúram HCR solution incorporates a common front end out-of-the box that spans users, programs, and channels across all required eligibility and enrollment processes in the exchange.

Cúram Software would welcome the opportunity to discuss this aspect and the options available in more detail with West Virginia OIC at a later stage.

4.3.5 Deloitte

West Virginia's existing self-service portal, inROADS, is perfectly poised to be leveraged as part of the Health Insurance Exchange solution. inROADS currently provides citizens of West Virginia 24/7 access to screen, apply, and review for benefits online. Additionally, Community Partner organizations of West Virginia can use inROADS on behalf of West Virginia citizens when additional help is needed in performing any of the online functions, similar to the concept of a navigator. inROADS also includes the My Benefits Account portal, which allows citizens to create an account through which they can check the status of their current benefits, view previously received benefits, and manage upcoming appointments. Using an existing self-service portal, such as inROADS, for the Health Insurance Exchange has several benefits:

- Fully operational and expandable application - In addition to being a proven and familiar self-service portal, inROADS is also highly expandable. Since its' implementation in 2003, it has undergone 12 significant releases to add additional programs and services. As part of its next major release, which includes Medicaid expansion, DHHR plans to execute a technology refresh of inROADS. This release will move inROADS to the same architectural framework used for the eRAPIDS integrated eligibility system.
- Integrated with eRAPIDS - inROADS fully integrates with the integrated eligibility system. Information entered in inROADS is sent via an XML interface to eRAPIDS for processing and eligibility determination. Recent enhancements to eRAPIDS enhance this interface and the worker inbox feature. The enhancement makes the processing of online applications and reviews even easier for county office workers.
- Integration with other HHS Programs - Using inROADS will allow users of the Health Insurance Exchange to easily apply for other HHS programs when needed. Many people eligible for tax credits will also be eligible for other programs of service, such as SNAP,

which are offered through inROADS as well.

Some states are concerned that there is a stigma associated with state-based programs of assistance and that consumers may transfer that connotation to the Health Insurance Exchange if the two are accessed through the same portal. However, our solution addresses this by dynamically altering the look and feel of each page based on the context of the user's session and how they access the portal. This way the same application and data store can be used to support the exchange and the DHHR portal, but the consumer perceives them as separate. This similar concept was implemented in Pennsylvania when they leveraged their self-service portal, COMPASS, for the PA High Risk Pool application. COMPASS and the High Risk Pool utilize the same data repository but have different user interfaces.

As a familiar customer self-service portal built on proven, highly customizable technology and fully integrated with the existing West Virginia eligibility determination system, inROADS is an ideal portal through which to support Health Insurance Exchange requirements. Given the tight implementation timelines, building the exchange to be integrated with an existing portal will reduce the overall implementation effort. Additionally, it will allow for greater cost savings as the technological foundation is already in place and fully integrated with the back end eligibility rules engine. West Virginia's existing Medicaid and CHIP eligibility, enrollment, and management systems (e.g. RAPIDS, inROADS) will provide the foundation for a successful Health Insurance Exchange implementation.

4.3.6 Exeter

OneGate can leverage existing State internet portals using the OneGate integration framework. Exeter's existing portlets are built on industry standards and can be easily displayed in a different portal technology.

Potential pros of leveraging existing State internet portals:

- No need to purchase a new portal technology, which will minimize costs;
- State-specific content does not need to be moved to a different portal technology. This would minimize implementation time; and
- State IT staff would be familiar with the technology and can extend it with new content with little or no training. This would save on training time and costs.

Potential cons of leveraging existing State internet portals:

- Depending on the existing portal technology, the technology used might be noncompliant with the Java portlet standards. Moving the pre-built OneGate portlet features, such as interview and self-service screens, may require additional implementation and conversion time and costs; and
- The existing portal technology may not be extendable for future business use cases that West Virginia may wish to adapt in the future.

To fully assess the pros and cons, Exeter will need more information to understand the technology used for the State's internet portals.

4.3.7 Getinsured.com

Getinsured understands the that West Virginia has an exchange web-site that currently supplies information to stakeholders and other interested parties to the health care exchange implementation. It is also understood that the site will serve as the Exchange Portal once the implementation begins. While this may seem to be the most logical solution, it should be noted that any web-address can be programmed to point to a new address quite simply. If consumer feedback indicates the current URL is not intuitive for WV consumers, there may be a better URL the state should deploy. Just as the federal government has migrated from firstgov.gov to usa.gov, sometimes a change makes sense. Getinsured supports the decision of the state and would encourage the state to explore finding a URL that will be easily remembered to maximize users, whether it remains the current web-site or a new one developed by experts in the marketing arena.

4.3.8 LexisNexis

No response provided.

4.3.9 MAXIMUS/Connecture

We recommend a new Exchange web portal accessible by computers, tablets, and mobile phones rather than adding Exchange functionality to the existing Information Network for Resident Online Access and Delivery of Services (inROADS) portal. The Exchange portal will not replace inROADS, which can still be used for Food Stamp benefits and other non-health insurance-related programs. We recommend that inROADS include a link to the Exchange portal and that the Exchange portal include a link to inROADS.

The advantages of a new portal include:

- Information and transactional capability specifically designed for the new Exchange functionality.
- An emphasis on health literacy so that language and navigation are built from the ground up to be.
- understandable and culturally acceptable to West Virginians
- Hierarchical decision-making essential for a choice-driven Exchange, a requirement that is less important for a human service benefits portal principally based on categorical eligibility criteria.

We see no arguments in favor of leveraging inROADS to include Exchange functionality. InROADS does not provide functionality that the Exchange needs and would need to be highly customized to fill the needs. In the Alliance's years of experience providing online marketplaces to the health insurance industry, we often are called in to replace many costly implementations that failed due to trying to transition a current asset into something it is not. In the case of InROADS, the solution does not include the functionality needed to support the Exchange, and the technology is already dated, which would shorten its lifespan.

4.3.10 Oracle

Oracle's HIX solution takes advantage of Oracle Web Logic for Internet portal access to the HIX. While this is Oracle's preferred implementation, our HIX solution can be integrated to other Internet Portal software. Without detailed requirements and further investigation, it is not know whether integration to existing State Internet portals would save West Virginia money or time to implement, as integration with existing tools could result in comparable or larger level of effort.

4.3.11 Software AG

No response provided.

4.3.12 Speridian

Proprietary response provided.

4.4 INTEGRATING INFORMATION AND PROCESS FLOWS

Describe how the solution may integrate information and process flows with such business partners as health plans, small businesses, producers, the Federal government, Navigators and others.

4.4.1 ACS

During the initial discovery period of the contract, the ACS Team will meet with the West Virginia technology and business teams to determine what existing resources complement the procured HIX Solution Suite. Integrations with other systems are typically handled in one of three ways:

• **HIPAA-standard formats:** The 834-5010 for enrollment information is only one of many HIPAA standard formats that have been developed and refined since the law was passed.

• **Web-services:** Our HIX Solution Suite is Web-service enabled. The HIX Solution Suite can exchange real-time messages with modern solutions. Systems can also take advantage of the API and SDK, as described in Response Section 4.h, APIs, SDKs and other Tools.

• **File-based messaging:** The application can extract appropriate data to be sent in batch transactions at various times throughout the day.

Currently, tools utilized in the HIX Solution Suite exchange enrollment data directly with over 40 health carriers and thousands of employers. Several state governments including the State Health Plan of North Carolina and the State of Iowa (employee benefits) are current clients and use components of the HIX Solution Suite. Our extensive experience in these types of integrations will save a tremendous amount of resources and ensure aggressive timelines can be met.

4.4.2 CGI

CGI's Health Insurance Exchange360 provides an integration framework that supports the integration and collaboration with external systems, such as the pending Federal Data Services Hub and the health insurance providers' systems (e.g., for accessing Qualified Health Plan data and enrollment requests). CGI Health Insurance Exchange360 leverages industry messaging

standards and also provides interoperability capabilities that assist in mediating differences with external systems if differing standards are used. For example, CGI Health Insurance Exchange360 provides message transformation service capabilities to assist in the translation from one message format to another.

4.4.3 Cognosante

The process of horizontal integration of components usually entails the establishment of an integration framework of specialized components dedicated to communication between other components. This method allows for a reduction in the overall number of interfaces to only include those between functional components and the integration framework.

The common business and technical support components include components - such as an Enterprise Service Bus (ESB), a business rules engine, and a workflow engine - that would commonly become part of the integration framework. It is the task of the ESB to expose resources (functional components) as services and translate from one interface to another, manage the flow of information, and orchestrate component interaction. The use of an integration framework and horizontal integration methodologies allows for greater modularity – one component can be replaced with another vendor's solution without disturbing other component interfaces.

It is normally the task of the SI to design and construct the integration framework. Cognosante would work with the State to select the most appropriate common business and technical components, in line with the logical architecture for the Exchange.

As described in the *Guidance for Exchange and Medicaid Information Technology (IT) Systems,* the Exchange must achieve seamless integration with Medicaid/CHIP. As required in section 1413 of the ACA, the Exchange must simplify and streamline the determination of Medicaid/CHIP eligibility and enrollment. The Exchange must be fully integrated and interoperable with state, public, private, and Federal interfaces.

The *Guidance for Exchange and Medicaid Information Technology (IT) Systems* call for:

1. System Integration that provides an integration of process flow and information flow with business partners, and apply a modular, flexible approach to systems development using open interfaces and exposed APIs.

2. Service Oriented Architecture using web services methodologies for system design to ensure standards-based links to partners and information at federal and state levels

3. Isolation of Business Rules from transactional code, accessible in both human and machine readable formats

4. Appropriate controls to provide Security and Privacy protection of enrollee and patient information

5. Efficient and Scalable Infrastructure, supporting the federal Cloud Computing strategy through Platform-as-a-Service and Infrastructure-as-a-Service approaches

6. Transparency, Accountability, and Evaluation leveraging COTS business intelligence functionality

7. System Performance to ensure quality, integrity, accuracy, and usefulness of information.

It is clear that both the State, through its blueprint for the Exchange, and CMS, through its *IT Guidance,* require a complete and seamless integration of independent modules that provide the major functionality for the Exchange. For the State, these modules comprise the functional components.

Cognosante embraces this approach, and will partner with the state to support the selection and incorporation of best-of-breed functional components. Cognosante is vendor-agnostic toward potential vendors of functional components, and as such provides the State with an unbiased partner to help select and incorporate components. We also understand the State's desire to select those components, rather than have a single SI make its own selections for the State. Only through State-involvement in the selection process, with the unbiased support of an SI like Cognosante, can the State ensure it incorporates those functional components that truly best meet the State's needs.

4.4.4 Cúram Software

Interfacing with Business Partners
Cúram Software has established partnerships with leading vendors delivering aspects of a complete end-to-end Exchange solution including health plan management. Our preferred partners have a history of carrier plan data collection and content management around the loading of health plans for sale in their shop and compare websites. We are currently in the product development stage of utilizing a SOA approach to share data with leading shop and compare vendors to provide a seamless user experience from eligibility to enrollment in qualified health plans. Additionally, by utilizing a SOA approach to the shop and compare portion of the Exchange, we are open to interfacing with preferred partners that the State may be in discussions with to provide shopping and plan management functionality for the State.

Our solution will rely on our partner(s) to address interfaces with SERFF and SIRCON. Our preferred partners have been active advisors providing consultation to the NAIC throughout the planning and implementation discussions that have been taking place around Health Insurance Exchanges since the ACA passed in the spring of2010.

Interfacing with Required Federal Agencies
Cúram HCR will provide a streamlined application process to collect and verify consumer and household information, including e-verification through trusted sources. Our solution is designed to integrate and interface with the IRS, SSA, and the Department of Homeland Security through the Federal Data Services Hub for purposes of verifying household composition, income, citizenship, and immigration status. In addition, the system is designed to exchange eligibility and enrollment information with the Federal government and insurers.

Cúram capabilities which include a variety of interfacing mechanisms like Web Services, Java Messaging Service (JMS), and file transfer protocols, support integration with the Federal agencies under health care reform. These interfacing mechanisms allow the state-based exchanges and other human services programs to interact with other solutions, Federal and otherwise, to exchange data using a standards-oriented, secure robust solution.

4.4.5 Deloitte

Leading-practice information and process flow integration is accomplished through well-defined web services. Use of web services allows highly-integrated, loosely-coupled interoperability. The interoperability is highly integrated through the use of WSDLs and XML, which define and format the data to be exchanged. The interoperability is loosely coupled through as-needed connections over the Internet (transmission coupling) and the backend system data formats are abstracted and mapped to WSDL definitions (data definition coupling). Implementing web services allows business partners to advertise their method of interoperability and avoids custom point-to-point integration methods. Updates may occur to backend systems for either data partner, but the change is transparent to the other data partner.

The HIX Solution is designed as a SOA. As such, the preferred information integration method is well-defined web services, integrated through an ESB to enable security and service management. Deloitte recognizes that legacy systems exist and there are requirements to interact with such systems. The use of an ESB enables data transformations of information sent via proprietary or legacy interfaces to enable the use of such data. The use of data standards will facilitate the integration of data. The HIX solution focuses on ANSI X.12 standards, the 834 (enrollment) and *270/71* (eligibility) data formats. The X.12 standards are mandated by HIPAA and updated by the HI-TECH act. The X.12 standards are widely implemented in the healthcare industry and public sector, providing a common data interchange format.

Process flows will be facilitated through the use of a business process manager and services orchestration. Where possible, well-define web services will be used in conditional sequences ("orchestration"), potentially across different business actors. This will enable the automated processing of data and tasks in alignment with industry-standard SOA and the CMS Technical Reference Architecture, Exchange Guidance and CMS Blueprints, and MITA principles.

Custom interactions, more likely with smaller stakeholders such as small employers or individual brokers and navigators, are facilitated through proprietary data exchanges using a variety of predefined formats, such as CSV spreadsheets, or text files. The exchange of data can be done as an extension of the user interface, enable through "upload" or "download" buttons, or be processed through a "store and forward" electronic gateway, potentially as SFTP transaction or FTP via HTTPS. Upon up or download of files, the data can be transformed via ESB services, and then orchestrated through web services and workflows to accomplish the required tasks.

The primary point of data integration with the Federal government will occur with the Federal Data Services Hub (DSH). Current plans for the DSH call for standards-based transactions enacted primarily through web services or web-service orchestrations. Some transactions, such as periodic rosters of HIX participants, may not be suitable for transacting via web services due to data volumes and relatively high resource utilization for web services. The DSH is considering implementing ETL and data transformation tools that would facilitate such "bulk" data transfers. The HIX Solution would integrate such tools into its service orchestration and workflow management to accomplish the retrieval and submission of the data.

4.4.6 Exeter

Exeter understands that, in any system, interfaces to external systems are required to automate and streamline business processes. To support this requirement, OneGate includes an ESB, which provides centrally managed services that remove the point-to-point dependencies of

stand-alone web services/interfaces. In addition to the ESB, base services are provided out-of-the-box for OneGate, allowing for external calls on exposed methods. These services provide a starting point for integration development and can be easily extended or modified depending on West Virginia's needs. These pre-packaged services make extensive use of all industry standards (e.g., XML, SOAP, BPEL) to easily adapt these services with any implementation. Through translation/transformation features, messages can be converted to expected formats of the target system(s) (e.g., HIPAA EDI X12, NIEM).

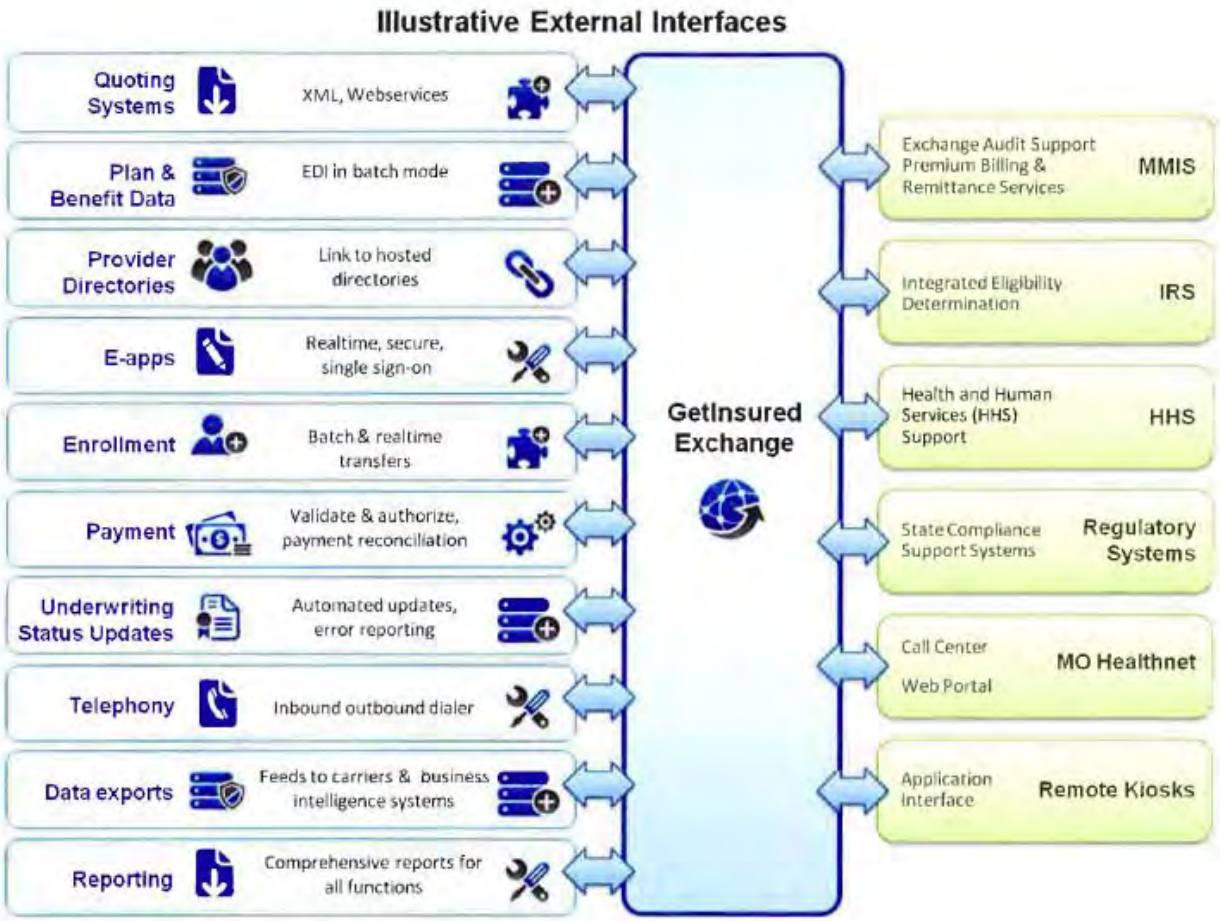
As new ACA regulations are solidified with regard to the Federal Hub, the SOA-based design of OneGate currently has the flexibility to interface with external federal agencies (e.g., Social Security Administration, Internal Revenue Service and Department of Homeland Security). Base services are provided out-of-the- box to help jumpstart any automated federal interface implementation.

4.4.7 Getinsured.com

Interfacing with the Federal Data Hub: In its May 2011 IT Guidance for Exchanges, HHS plans to consult with states in designing a Data Services Hub to verify the citizenship, immigration and tax information that is provided by Exchange shoppers. Such a Federal Data Hub will share data with the SSA, DHS and the IRS and deliver verified information to Exchanges, Medicaid and CHIP agencies. Getinsured's Exchange interface will be highly compatible with the Federal Data Hub because the Hub expressly plans to employ SOA principles. In its May 2011 IT Guidance, HHS recommended employing Web Services/Service Oriented Architecture methodologies for Exchange system design, development and linking information at federal, state and partner levels.

Interfacing with State and Partner Systems: As alluded to, HHS also recommends that state employ Web Services/SOA Architecture for partner relationship because it ensures standards-based interfaces to link partners at both federal and state levels. Such open architecture standards, HHS recognizes, will make it easier to Exchange information. Again, Getinsured supports this open source approach and will apply it to any partnerships that are necessary for West Virginia's Exchange development. We also will apply an open source approach when interfacing with WV state legacy systems such as Medicaid, state unemployment and state child support databases.

The B2B Gateway: A Getinsured Exchange can seamlessly integrate with existing portals in a variety of ways. Getinsured can integrate with landing pages or other third-party sites, which feed data entered on those pages directly into the Exchange database to enable quoting or eligibility confirmation. Whether Getinsured develops these sites, or they are provided by a third party vendor, Getinsured can readily integrate with them. The following figure illustrates some of the ways in which the Exchange platform integrates with external portals.



The Exchange platform can also capture and move data to third party sites.

- A Getinsured landing page, for example, can be used to capture demographic information and dynamically share it with a third party system (e.g., to confirm Medicaid eligibility).
- The Exchange also links to external health plan carrier sites to dynamically load product brochures and other consumer marketing materials.
- Getinsured can also integrate with third party sites to enable a seamless end-user experience for eligible participants who want to apply for coverage. Consumers apply or sign-up for coverage on a Getinsured website, then enroll on a health plan carrier's website. The experience is seamless to the consumer.
  Getinsured provides single sign-on and branding of third party sites to enable a seamless end user experience.

The following figure shows an example of existing integration between the Getinsured Exchange and the Humana electronic application portal (an example of linking to a third-party portal on a single screen).

[Figure 4.4-1 7 is considered proprietary to Getinsured.com and therefore is not included in this document.]

4.4.8 LexisNexis

No response provided.

4.4.9 MAXIMUS/Connecture

The Exchange brings together a number of government agencies, small businesses, navigators, consumers, and public and private insurance carriers. The intersection of our solution with these partners is illustrated in *Exhibit* 4-2: *Business Partner Integration.*

Business Partner	Alliance Integration Features
Health Plans	▪ Self-service online tools for health plans to post benefit and rate information ▪ Rating algorithms to enable health plans to present quality-related features & performance ▪ Presentation flexibility to enable qualified health plans to integrate their logos or branding identities into the comparison shopping screens ▪ Electronic linkages to carrier software solutions and systems to enable the reliable and secure exchange of enrollment data.
Small Businesses	▪ Enables small businesses to provide tax-subsidized insurance benefits to their employees ▪ Minimizes administrative and HR costs typically associated with a health insurance benefit ▪ Interactive tools, including a calculator, to enable an employer to estimate premium costs, consider contribution levels, and compare benefit packages ▪ Multiple options for enrolling employees, including integration with standardized HR and benefits administration software packages
Producers (brokers and agents)	▪ Similar online experience to small business owners and individuals ▪ Easy-to-use interface with step-by-step instructions that guide them through the application, shopping, and enrollment processes ▪ Search capabilities for current and past customers ▪ Online training and certification
Federal Government	▪ Receipt and application of electronic information related to income and citizenship ▪ Multiple ways to match records, name, date of birth, and the last four digits of the person's social security number ▪ Specific algorithms or integration protocols are not practical or realistic at this time, given the absence of information from the federal government about how the Hub will work or when it will be delivered in its initial testing phase.
Navigators	▪ Similar online experience to small business owners and producers ▪ Online training and certification courses ▪ Online authorization and credentialing to assist consumers with their applications, renewals, and enrollment selections ▪ Search capabilities for current and past customers

Exhibit 4-2: Business Partner Integration. *The Alliance solution anticipates and responds to a variety of functional integration points with the Exchange's primary stakeholders and business partners*

4.4.10 Oracle

Integration of external systems is a key component of many of the business processes associated with the Exchange. For example, the Exchange will need to integrate with external systems during the initial enrollment process to verify user identities (knowledge based authentication) and supplied demographic data. In order to facilitate end user experience, these interfaces must be reliable, performant and secure. The West Virginia landscape is supported by many systems based on a diverse set of technologies. In addition to State systems, the Exchange will also need to integrate with other partners such as the Federal government (federal data hub), and insurance carriers.

At a high level, integration can be divided into two capabilities areas; the first area relates support for message protocols, transports and formats provided by Oracle SOA Suite. The second area relates to ensuring data quality and completeness through Master Data Management (MDM).

Oracle SOA Suite

The Oracle SOA Suite provides an industry leading platform to support Exchange integration through capabilities such as enterprise service bus (ESB), business process execution language (SPEL) and support for web service security. The capabilities of Oracle SOA Suite are critical to the West Virginia Health Insurance Exchange via the following capabilities:

- Support heterogeneous system environment through technology adapters for VSAM, CICS,DS2
- Out of the box support for industry specific formats such as HIPAA X.12 and Health Level 7 (HL7)
- Support for National Information Exchange Model (NIEM) based messages proscribed for integration with the federal data hub
- Single platform for real-time (ESB) and long running batch (BPEL) based interfaces
- Comprehensive web services security with capabilities such as Digital Signatures, Security Assertion Markup Language (SAML) and transport level security policies

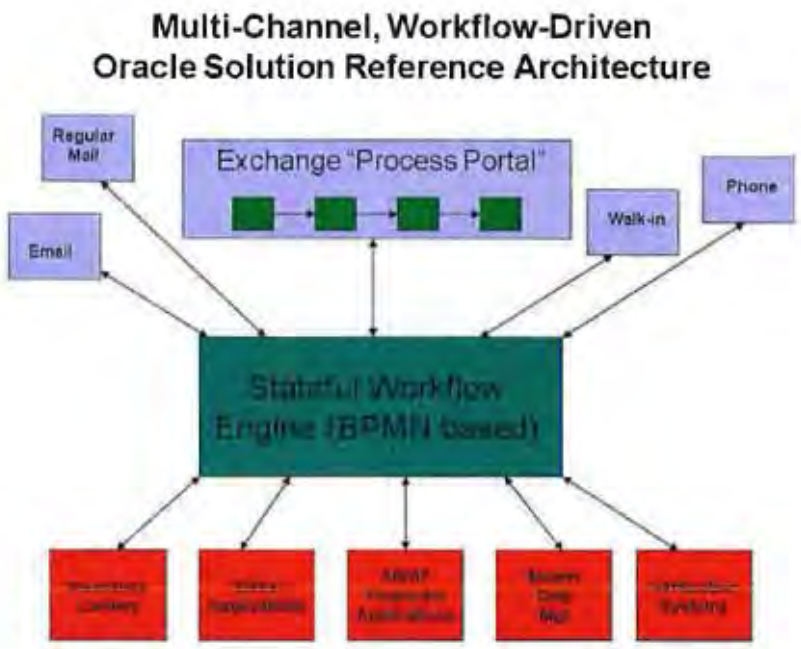


FIGURE: MULTI-CHANNEL, WORKFLOW-DRIVEN ORACLE SOLUTION REFERENCE ARCHITECTURE

Oracle Service Bus (OSB) is a lightweight, scalable and reliable Enterprise Service Bus (ESB). It is designed to connect, mediate and manage interaction between heterogeneous services, legacy systems, ERPs and other ESB instances across the enterprise. It is more than a mere messaging engine; it is the communications medium that connects all assets of the enterprise

SOA and provides industry standard interfaces to the enterprise as a whole, not just to specific applications.

The key to the OSB's value in a SOA is the concept of "mediation". The OSB can translate and transform message formats, integration technologies and security schemes to provide the loose coupling between systems. By mediating the interactions of disparate systems, the OSB provides much of the promised agility of SOA.

Oracle Service Bus is the strategic enterprise-level ESB platform within the Oracle SOA Suite.OSB offers the following capabilities to promote service re-use and operationalize the Exchange SOA:

- Service virtualization to facilitate change management
- Routing (Static / Dynamic) a critical component of directing traffic to proper business service
- Shape (schema) transformation to address message formats
- Protocol (transport) switching to integrate between legacy and modern systems
- Service lifecycle management (versioning, registry integration etc.) automatically synchronized with Oracle Enterprise Repository and Service Registry.
- Security policy enforcement and mediation through the support of multiple policy providers
- Service Result Caching, through embedded access to Oracle Coherence an in memory grid, to eliminate latency time
- Auditing
- Parallel Processing
- System fault isolation and recovery

The Oracle Services tier provides a rich set of business service to integrate across the Exchange and with partners. Oracle's Siebel and PeopleSoft products can auto-generate web services proxies for each of these interfaces for incorporation into business processes. The Exchange rules engine (Oracle Policy Automation) along with its middleware components such as document imaging is also fully web service enabled.

Oracle BPEL (Business Process Execution Language) Process Manager is a tool for integrating system to system based business processes across the enterprise. This product provides a comprehensive, standards-based and easy to use solution for creating, deploying and managing cross-application business processes with both automated and human workflow steps - all in a service-oriented architecture. Its native support for standards such as BPEL, XML, XSLT, XPATH, JMS, JCA and Web Services makes this an ideal solution for creating integrated business processes that are truly portable across platforms. Aside from its support for industry standards, Oracle BPEL Process Manager is a powerful integration tool for the enterprise. Its ability to connect to external systems and process, mixed with its support for a variety of presentation technologies makes it an ideal tool for defining and implementing business process logic.

Oracle's solution was designed to fully support integrated eligibility as well as insurance exchange. We leverage Oracle Policy Automation to support any number of complex and interrelated business rules. In addition, because we base our solution on a highly robust and general SOA/BPM platform with out-of-the-box support for approximately 25 different protocols, we easily support the Federal guidelines regarding connectivity, messaging and standards (including healthcare-related standards) and provide a single Business Process Platform with

which to orchestrate people, systems and documents into processes that can be monitored and optimized in real-time.

The Oracle BPM Suite is a solution component that architecturally sits on top of the Oracle SOA Suite. The combination of these two products is quite powerful in that they are pre-integrated by Oracle for both design-time and run-time. The SOA Suite provides out-of-the-box connectivity (enterprise application integration or EAI) and service orchestration for most any application or system available. Exposing and using services revolves around two cores capabilities: enterprise service bus for mediation and Business Process Execution Language (BPEL) engine for choreography. An Enterprise Service Bus (ESB) is a critical component within the SOA Infrastructure category that integrates with all other components within the architecture. An ESB forms the basis for a shared services platform and is the stepping stone to effective governance.

A complementing capability to Oracle SOA Suite is our investment in NIEM tools and pre-built assets. For messages that adhere to NIEM (e.g. NIEM 2.0 or 2.1, for example), Oracle fully supports NIEM and can both invoke NIEM services as well as generate NIEM services. Oracle is also investing significantly in the NIEM model and supporting technologies. For example, Oracle is a member of the NIEM NTAC, the IJIS ITAC, and a sustaining member of IJIS. Master Data Management complements the HIX SOA by providing data governance and quality capabilities. From a Health Insurance Exchange (HIX) vantage point, MDM will provide the ability to develop a single and complete record for an individual from data within the HIX combined with other systems. Oracle's enterprise master data management (MDM) suite of products consolidates and maintains complete, accurate, and authoritative master data across the enterprise and distributes this master information to all operational and analytical mm applications as a shared service.

4.4.11 Software AG

Business Process Management
The webMethods Solution unites leading BPM and SOA capabilities to bring West Virginia a comprehensive set of fully integrated tools for automating and managing processes. In a collaborative environment, business and IT can work together to design, simulate, test and deploy processes and information sharing that spans all users (health plans, small business, producers, Federal Government, other agencies, etc..) -then in real-time monitor those processes. Features include:

• **Process Modeling:** All stakeholders work on a single executable version of a process model. Simply drag-and-drop elements and documentation into any new process. This streamlines development and keeps teams working better together. You can graphically depict a process as you're designing it and then share it with many stakeholders. Visual "swim lanes" illustrate how you organize and categorize activities throughout the process.

• **Rich Simulation:** Make your process the most efficient by building a usage scenario to simulate outcomes and identify potential bottlenecks. You can input data such as resource requirements, step duration and cost to create your simulation.

• **Integrated Business Rules Management:** The BPMS integrates a robust, industry-leading business rules management solution from FICO (formerly Fair Isaac). Stakeholders in both IT and business can define and change rules that drive processes whenever market, regulatory and operating dynamics shift. Separating rules from your applications increases your agility.

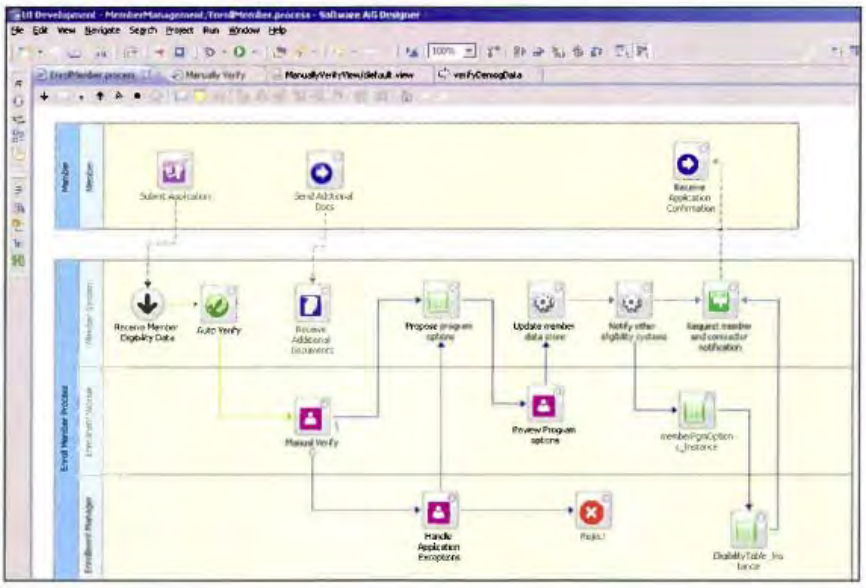
• **Enterprise-class Process Management:** The BPMS is ready to grow right along with your enterprise. Our enterprise-class orchestration environment manages complex processes with high volume, performance and scalability.

• **Task Management and Workflow:** With the BPMS, you can use a full set of task management and workflow tools to increase people productivity, improve accountability and reduce bottlenecks. Basic and advanced task routing assigns process tasks to people, groups, and/or roles. You can use business and individual calendars to efficiently route work to people available to perform process tasks. You can customize task in-boxes and integrate them seamlessly with many popular e-mail systems. If tasks aren't completed by a specific time or someone isn't available to perform them, you can escalate or automatically delegate the task to someone else.

• **Task Analytics** help you improve how process efficiency, accountability and visibility. Staff can see prioritized tasks while managers can more effectively visualize and coordinate workloads.

• **Ad-hoc, Dynamic Workflows:** Task owners can create new, ad-hoc tasks and then manage and monitor them like any other workflow. Stakeholders are notified of these ad-hoc tasks right away. Frequently occurring, similar ad-hoc tasks can be identified and may be incorporated into automated workflows.

• **Robust Document & Form Support:** Certain business processes, such as case management, involve forms and documents. That's why the BPMS supports Microsoft InfoPath and Adobe forms and has built-in document management capabilities. People can read and write to pre-existing forms and business processes can be triggered by a form's arrival.



4.4.12 Speridian

Proprietary response provided.

4.5 AVOIDING DUPLICATION OF COSTS, PROCESSES, DATA, AND EFFORT

Describe how the solution will work to avoid duplication of costs, processes, data and effort between State agencies.

4.5.1 ACS

At its core, the purpose for the Exchange is to provide an easier, cost-effective, consumer-oriented marketplace for the uninsured to access health insurance coverage options. Part of this concept is the avoidance of duplicate application efforts for consumers and a more streamlined application process overall. Our HIX Solution Suite can assist West Virginia in bringing this concept into reality by providing a single entry point for applications. Whether the consumer chooses to use the Web portal, send an application through the mail or fax, or call our customer service representatives, the ACS Team can be the single point of entry for all application data. This streamlines the process for the consumer while also reducing costs for West Virginia by taking advantage of our cost-effective document management solutions. Whether the information coming in ultimately results in an Exchange application and/or the data is forward to a state agency for case management, as in the case of SNAP, the process of handling the application intake, data entry and document management is streamlined through our Solution.

4.5.2 CGI

CGI recognizes that states have varying philosophies for implementation of their State Exchanges. With this in mind, CGI would expect work with West Virginia to confirm intake methods, potentially consolidating disparate systems. The process would include confirmation the system of record for eligibility. In some cases call center functions can be consolidated to take advantage of economies of scale.

4.5.3 Cognosante

CMS has now required the use of APIs in Medicaid systems for enhanced funding. Cognosante strongly recommends that OIC adopt a similar requirement. These open interfaces allow for modular construction and allows for a module to be replaced in the future without impacting other systems and lowers the overall cost of ownership.

4.5.4 Cúram Software

Cúram HCR is built on a foundational layer called the Cúram Enterprise Framework (CEF). CEF contains core business and technical services, as illustrated below, upon which all Cúram -based solution rely.

Cúram Enterprise Framework

In addition, CEF incorporates the Cúram consumer-centric, multi-program social services specific data model, the Cúram Administration Suite, Cúram Documentation Center and the Cúram Application Development Environment.

On top of this foundational layer, Cúram Enterprise Modules can be deployed to provide additional business functionality relevant to many different health and human services programs that can be added optionally to a Cúram solution. Lastly, Cúram Solutions are program specific solution modules which address support for specific business areas - for example, Health Care Reform - as well as a wide range of programs, for instance, Medicaid, CHIP, TANF, and SNAP. Cúram Solutions contain pre-built business content such as eligibility rules, workflow processes, evidence collection scripts, screens and data model additions applicable to the specific business area and/or programs.

This modular approach promotes sharing and reuse between and within states by leveraging a common foundation that supports enterprise-wide processes and by providing packaged business processes designed, developed and tested for health and human services solutions including the ACA.

4.5.5 Deloitte

Our approach and solution is intended to maximize the use of existing State assets, organizations and business processes. By reusing the RAPIDS suite of applications the HIX project benefits from many existing components, such as the existing Medicaid Self Service, My Benefit Account, Correspondence, Reporting, etc. The project also benefits from an existing account team with a proven software development lifecycle. The team has solid relationships with the State IT organization and operations resources that can be leveraged to support both agencies. Our solution also takes advantage of this opportunity to advance the overall enterprise architecture in addition to satisfying the requirements for the HIX.

4.5.6 Exeter

OneGate incorporates an integration framework, which supports centralized data sources between different State agencies, and includes a master data management solution that could be used to cleanse, de-duplicate and standardize the data used by various State agencies. The master data management solution can accomplish the following:

- Integrate with virtually any data source;
- Propagate cleansed data to all data sources; and
- Avoid processes related to cleansing data and ensure that the data matches on each State agency system.

Further, OneGate entices State agencies to unify their systems and save on maintenance costs. For example, health insurance agencies, HHS and other benefit systems can be encapsulated in one system.

Additionally, since OneGate can be implemented in phases, states do not need to consolidate all of their systems of records at the same time. Interfaces can be built on top of the OneGate integration framework to sync up data in near-real-time or batch during the initial phase. In the end, the system will be consolidated in a centralized system of record, avoiding additional costs and duplicative processes.

4.5.7 Getinsured.com

One of Getinsured's core philosophies is to leverage existing technology and operational processes/workflows whenever possible. We do however expect and accommodate client-specific requirements. Although interfaces and XML feeds, data sources, health plan carrier products, eligibility requirements, and business rules will vary across clients and states, our core platform code and customer service center processes are robust and can be built upon as we scale the solution.

- Getinsured's SOAP-based architecture is modular and extensible and allows us to scale and provide some customization to customers without needing to make costly and complex changes to our platform. We can inexpensively and quickly modify business rules, health plan products, and interfaces without needing to modify source code and "reengineer the system."
- Getinsured will identify and develop Centers of Excellence among state agencies and systems to take advantage of best practices as states learn how to develop health information exchange capabilities. Getinsured will dedicate resources, provide programmatic and change management expertise as we engage all stakeholders to develop a comprehensive, end-to-end view of consumer, provider and other workflows. Input from these client groups will provide a direct and strong source of input to our product and program development enhancement roadmaps.
- In Getinsured's data strategy, master indexes and cross references for specific data types are defined. Data is assigned primary ownership and can be disseminated to other systems for read-only use. Data structure is carefully defined and stratified in our data warehouses to maximize extensibility and scalability.
- Where multiple systems can exchange data, Getinsured will establish semaphores and protocols to transfer ownership and control as needed.
- Core logic is implemented in one place. It is then referenced and reused through web services or standardized workflow components.

Our programmatic implementation approach allows for a phased approach with systematic implementation of manageable elements of scope. This coordinated approach, in cooperation with the West Virginia DOI, HHS, third party consultancies, and other parties, will prevent inefficient and costly re-work.

4.5.8 LexisNexis

No response provided.

4.5.9 MAXIMUS/Connecture

StateAdvantage provides a technical platform that can exchange data across multiple state, provider, and health plan systems. Its modular, flexible design enables easy integration with other systems as they currently function, thus reducing costs and minimizing duplication of data entry on multiple systems.

Any entity with appropriate online security authorization can leverage or apply its data and functionality without having to replicate it within their own system. This streamlines Exchange processes, avoids redundancies, and reduces overall cost.

Our platform includes a configurable rules engine that enables the Exchange to perform eligibility determination for all individuals, regardless of their eligibility status for Medicaid/CHIP/subsidy. Alternatively, the system can collect eligibility and enrollment data and pass it electronically to a legacy system if West Virginia decides to maintain separate eligibility systems for different programs.

4.5.10 Oracle

The Oracle solution has the ability to integrate with state eligibility and Medicaid claims processing systems that may be in place in West Virginia. One of the strengths of our overall solution is that it provides true Enterprise capability. Each component - individually or together - can be utilized to serve similar functions for other business program areas and automation needs across the State of West Virginia. The migration to these Oracle tools can be done in phases, allowing the State to benefit from Enterprise solutions as the resources are available to do so. This allows the State to benefit from shared technologies and architecture - lowering total cost of ownership, facilitating shared services and costs across programs, and leveraging the knowledge and skills across the State workforce.

4.5.11 Software AG

Web Services Management
web Methods ships a unique Web services management capability that allows for mission critical SOA-based applications to be successfully assembled and deployed. webMethods provides support for location transparency at the Web service level. A common problem with large Web service deployments is that individual endpoints hard-code the locations of Web services within their application code (via WSDL). As infrastructure changes over time, organizations are then faced with the problem of having to re-work all Web service endpoints to re-point them to new addresses. web Methods solves this problem by virtualizing Web service endpoints centrally-new WSDLs are generated with addresses managed by the Web service platform, and these are then routed to the actual physical end-point by the webMethods platform.

In addition, webMethods provides runtime systems management capabilities such as load balancing between services, failover between services, enforcement of security at the Web services layer for any Web service communications, and the creation of service level agreements on a per-Web service basis.

4.5.12 Speridian

Proprietary response provided.

4.6 LESSONS LEARNED RELATED TO ADVERSE SELECTION

Please describe the lessons you have learned with regard to adverse selection (the disproportionate purchase of health insurance by the least healthy individuals) that you feel would be beneficial for the State to consider.

4.6.1 ACS

In our experience, states should consider three key drivers when working to improve adverse selection within their Exchange: policy considerations, operational considerations, and outreach and communication.

Policy considerations. From a policy perspective, states should consider aligning their open enrollment with the annual open enrollment period recommended in the ACA. A "rolling" open enrollment period, allowing individuals to enroll at any time during the calendar year, provides the undesired opportunity for individuals to enroll for coverage when he/she anticipates needing medical services and then to terminate coverage after services are received. An actuarial study showed that when Massachusetts allowed rolling enrollments, it added a selection load of 2.6 percent to the cost of small group premiums with the merger of the individual and small group markets. Massachusetts has subsequently imposed an annual open enrollment period of July I-August 15 for individual enrollment.

Secondly, states should consider allowing bifurcated waiting periods for individuals and small businesses (SHOP), even if the state decides to merge the individual and small group markets. Small businesses could still enjoy the option of no waiting period while individuals could have waiting periods of 30-90 days. In tandem with an annual open enrollment period, separate waiting periods for individuals will dramatically reduce the opportunity for adverse selection.

Thirdly, state exchanges should consider requiring that employee enrollment in their SHOP exchanges be limited to the actuarial value tier of the "benchmark" plan design chosen by their employer. The recent NPRM from CMS suggests that employees could have the flexibility to enroll in any medal tier available, irrespective of the tier chosen by their employer. If for example the employer's benchmark plan is from the Silver tier, this could result in higher utilizing employees picking Gold or Platinum tier coverage while lower utilizing employees selecting Bronze tier coverage. This could potentially destabilize the risk pool in the account.

Operational Considerations. Operationally, the Exchange needs to contract with vendors experienced in properly administering the eligibility, re-certification and enrollment criteria of health plans. West Virginia will be best served to have seasoned, experienced underwriters to ensure that all groups, enrolled employees, dependents and individuals meet the Exchange's published criteria and rules. Carriers will be asked to provide true group pricing based on the Exchange's published criteria and rules. Allowing nongroups or unqualified individuals to enroll in a group program at group rates will result in carrier losses, which in turn will be charged to legitimate groups and enrollees in the form of higher premiums. Inconsistent eligibility and enrollment verification can result in adverse selection, which not only unnecessarily penalizes health plans but will discourage their on-going participation in the Exchange.

Outreach and Communications Considerations. To attract balanced member utilization, it is essential to employ a broad and strategic outreach and communication campaign. This campaign needs to focus on both "retail" outreach to individuals and families and "wholesale" outreach and training of insurance Brokers and Navigators. The retail campaign builds awareness of the benefits and favorable customer experience of using the Exchange. The wholesale campaign trains Brokers and Navigators in the details of health reform and the enrollment process in the Exchange. A broad communication plan helps bring a broad mix of enrollees which helps assure balanced mix of utilization.

ACS Team partner, *CHOICE* Administrators, has direct experience in managing SHOP Exchange selection issues. *CHOICE* Administrators has operated the successful small group California Choice Exchange program since 1996, with up to 10,000 subscribing employer groups. This private exchange program operated at the same time and in the same market space as the California State Exchange (HIPC/ Pac Advantage). The latter failed largely due to adverse selection. Both California Exchanges had nearly identical carrier and benefit offerings which leads to a valuable 'lessons learned' review of the competing selection approaches.

We have developed proven Broker recruitment, training and monitoring processes. The West Virginia Exchange should seek to harness Broker Support and arm Brokers with effective sales tools for Exchange selling, which will be new and different. This process is not a one-time roll-out, but requires careful and on-going attention. Our Broker training and monitoring program will be extended to address the unique needs of Navigators as the State defines the new Navigator category, and ideally should be shared with other Medicaid and CHIP enrollment arms to ensure continuity.

4.6.2 CGI

Adverse selection represents one of the greatest challenges a state may face around the implementation of an Exchange. Based on our current work and a close study of other exchange efforts across the country, CGI has identified a number of important points to consider when looking at adverse selection. The most important objective of the Exchange in this regard is to draw in, and retain, those individuals that will bring 'good' risk to carrier insurance pools. Unfortunately, these are often the people who least need insurance: young, no chronic conditions, no history of health concerns. Outreach and ease of use are two important tools; making state residents aware of what is available in and of itself can pose significant challenges. The processes that support the shopping and purchase experience need to be accessible to a wide range of users and find the right balance between offering choice while at the same time not overwhelming. Finally, the important of subsidies in drawing in health residents should not be understated. In Massachusetts, despite dire predictions of adverse selection within the Commonwealth Care program, the population closely resembles those of a traditional commercial pool.

4.6.3 Cognosante

West Virginia needs to consider the impact of how plans are presented within the Exchange and the impact of offering equal benefit packages and pricing both outside and inside the Exchange.

- Carriers should be encouraged or legislated to offer the same benefit packages and pricing inside and outside of the Exchange to discourage adverse selection
- Adverse selection can occur within the Exchange with a disproportionate number of higher-risk patients selecting certain plans over other plans. West Virginia should consider allowing or legislating that plans within the Exchange create a common risk pool and share risk within the Exchange
- West Virginia should consider the use of prospective and retrospective risk adjustment
- West Virginia should consider appointing a board for examination and oversight of risk within the Exchange. Risk adjustment board members should be comprised of carriers, small business owners, consumer advocates, and government agencies

Cognosante recommends that OIC consider four ways to protect against adverse selection:

1. Increase participation and pool sizes

2. Minimize the number of unique pools

3. Analyze the impact of pre-existing conditions of pool entrants

4. Utilize reasonable deductibles and coinsurance payments from consumers to participate in the cost of care which involves the consumer in the health care purchasing decision

The best defense against adverse selection is to increase the participation in the Exchange which increases the size of the pool that lowers risk by spreading it out across the pool population. The initial targeted groups may include:

- PEIA (Public Employee's Insurance Agency)
- AccessWV population
- Small Businesses (through SHOP)
- CHIP

Minimize the number of pools - An increase in the number of individual risk pools increases the risk of adverse selection in each pool. The Exchange should work to keep the number of risk pools to a minimum by grouping businesses and other populations in a smaller number of large pools.

The Exchange should analyze the impact of pre-existing conditions from programs like AccessWV and CHIP. The prior review of such conditions will reduce the uncertainty of the pool's utilization rates.

The OIC should explore the utilization of reasonable coinsurance and deductibles to involve the program members in the health care purchasing decision. These first-dollar decisions will help prevent unnecessary utilization of services. This approach could also be matched with a Health Savings Account (HSA) that allows members to manage and control their expenditures. This approach also rewards members with better health practices by allowing the HSA funds to roll over to future years.

4.6.4 Cúram Software

Adverse selection can be key to the success or failure of any health exchange. The ACA, as written, only allows for limited underwriting to take place in the health exchange individual market based on age, geography and tobacco use, also known as, modified community rating. This clearly puts the issue of managing the accuracy of the data collected around the health of communities. In addition, the matter becomes more complex due to the traditional underwriting that takes place outside of the exchange and in the various employer marketplaces.

A health exchange can attempt to address the problems that arise out of the potential adverse selection and ease the concerns of participating insurance carriers by implementing a risk adjustment mechanism. It can also be advantageous to consider both a prospective risk adjustment mechanism that assigns risk scores based on geography at the time of enrollment, as well as a retrospective risk adjustment mechanism that addresses the issue 6 months following the end of the calendar year in which claims have been adjudicated.

It is essential for the state health exchange to bring the parties that will be most responsible for implementing these types of risk adjustment mechanisms early on in the design process. The stakeholders most likely to implement and operate the business processes around adverse selection include the managing board of the exchange, the insurance department, the participating carriers and the financial services administrator.

While the implementation of prospective and retrospective risk adjustment mechanisms is not a core competency of Cúram Software and our solutions, we have addressed the issue by bringing on key personnel who understand the problems, including a resource who worked directly for the health exchange in the State of Utah, which uses both risk mechanisms. In addition, we have partnered with several of the leading health care financial services administrators in the marketplace in order to complete an end-to-end solution. These partners and our own in-house expertise can help the State when it comes to addressing the issue of adverse selection.

4.6.5 Deloitte

Proprietary response provided.

4.6.6 Exeter

Since 2010, Exeter has invested thousands of man hours and has leveraged the experience of subject matter experts to develop OneGate. Throughout this process, Exeter has learned that:

- Customers are more likely to purchase insurance if the system presents all required application information clearly and comprehensively;
- Customers tend to commit fraud to avoid costly premiums. The system must detect and deter fraudulent information submission (states may mandate penalties and sanctions for fraudulent information submission); and
- To encourage people to purchase insurance, the system must contain an integrated health benefits exchange. Health insurance programs should be integrated with health insurance assistance programs such as Medicaid, CHIP and tax credits to provide the user all his/her options in his/her shopping experience. Individuals who are in need of insurance will obtain information regarding affordable programs and be able to compare plans and prices within the Exchange.

4.6.7 Getinsured.com

Strategies to avoid adverse selection in an unknown market utilizing a new marketing tool have offered states a new challenge in their design of their exchange. Although the ACA has several provisions to assist in avoidance of the well-known and labeled "death spiral", still unknown is how effective any of these may be when implementation kicks in and enrollment begins. There are some "knowns":

• To encourage enrollment in health insurance, the ACA provides, (1) the elimination of pre-existing conditions; (2) individual mandate; and (3) federal subsidies to help pay for coverage.

• The ACA requires insurers to spread "risk pools" over enrollees inside and outside the exchange.

• The ACA establishes separate "markets" for individual and small groups, one inside the exchange and one outside the exchange.

• The exchange will likely attract enrollees with great health needs due to (1) low-come persons seeking comprehensive coverage and minimal cost-sharing; (2) those not previously covered will seek coverage through the exchange; and (3) those in former high risk pools may move to the exchange if the high risk pool is eliminated after 2014.

Strategies to off-set these knowns will rely on policymakers in each state responding to their insurance markets and carrier behaviors. Initially, the rating refinements in the small group market and the requirement that premiums for the same plan in the exchange match those outside the exchange will offer some relief. The ACA risk adjustment program is designed to level the playing field for carriers who enroll populations with expensive medical conditions.

In addition, the temporary "reinsurance program" operated at the state level, and the "risk corridor" program will help in this area. Again, it is difficult to predict premium levels for a new plan being offered through the new marketing tool of the state exchange. Rate reviews and the ability of OIC staff to control issuer activity will be key to implement these key components of the ACA at the state level.

Some states are considering other measures to help stabilize the risk pools. These include considering requirements that only issuers offering plans on the exchange can offer plans outside the exchange.

The ultimate strategies for avoiding or reducing adverse selection must include the following:

- Provide incentives to distribute enrollment of unhealthy consumers between the Exchange and the outside market.
- Reduce opportunities for issuers to compete over favorable risk in the individual and small group markets.
- Increase the number of issuers participating in the exchange to increase enrollment, drive down administrative costs and achieve sustainability.
- Provide an exchange where consumers can shop based on price, quality, service, and other innovative efforts rather than mere coverage options that result in adverse selection.

4.6.8 LexisNexis

No response provided.

4.6.9 MAXIMUS/Connecture

The best approach to protect against the challenges associated with adverse selection is clearly communicate the value of the health coverage for all-both healthy and unhealthy consumers; and to raise the health levels of West Virginian low-income families through education, yearly physicals, and health-improvement programs. The Alliance will work with the State to determine the best ways to communicate the importance of health insurance, the best ways to use the insurance coverage, and to encourage West Virginians to take better care of their health. We apply health literacy guidelines to health education campaigns and take a positive approach to health education. We stress the benefits of a healthy lifestyle ("look better, feel better, live longer") while not neglecting to warn of the results of making bad lifestyle choices (such as unwanted pregnancies, smoking, and expensive drug and alcohol habits).

We recommend that spiritual health also be a focus of West Virginia health campaigns. Catherine Stoney, Ph.D., and Program Officer in the Division of Extramural Research and Training with the National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health (NIH) noted: "We've seen some evidence that religious affiliation and religious practices are associated with health and mortality - in other words, with better health and longer life. Such connections may involve immune function, cardiovascular function, and/or other physiological changes."

Our StateAdvantage solution makes it easy to seek health insurance coverage and provides online tools to foster optimal health and to appropriately utilize the health system. We can build upon this foundation and adopt additional approaches to further address this need.

4.6.10 Oracle

The key for a successful exchange lies in attracting enough healthy, "low-risk" customers into the pool. Without a wide-enough pool of customers, the exchange can become a magnet for the unhealthy which, in turn, leads insurers to raise premiums above open-market levels, or simply compels them to leave entirely. Prior exchanges have not included tax relief so health individuals have been able to get better products outside the exchange. WVA exchange will offer tax relief that comes through buying insurance through the exchange. Under the reform bill, people earning less than 400 percent of the poverty level who buy insurance through the exchange will qualify for tax credits which will bring both high and low risk individuals into the pool.

4.6.11 Software AG

No response provided.

4.6.12 Speridian

Proprietary response provided.

4.7 PROTECTING AGAINST ADVERSE SELECTION

Describe how your solution and/or implementation will help to protect against the challenges associated with adverse selection.

4.7.1 ACS

Our HIX Solutions Suite incorporates proven, effective approaches to preventing adverse selection. This is achieved through the operational experience of *CHOICE* Administrators in administering SHOP exchanges since 1995 and working with a broad variety of health plans and their administrative procedures and processes. Secondly, our solution has proven experience training Brokers and Navigators. We have trained over 10,000 Brokers in California, over 1,000 Brokers and 500 community outreach workers in Massachusetts, and hundreds more Brokers across the

Our HIX Solutions Suite makes enrollment easy and simple which encourages both the attractiveness of the Exchange to potential individuals and small businesses, as well as to assure a broad base of enrollees.

country.

To best guard against and deal with adverse selection our HIX Solution Suite includes support for the following:

- Organization and implementation of comprehensive Outreach and Marketing programs (Individual and SHOP) to assure the broadest most balanced mix of enrollment.
- Training and monitoring of Brokers and Navigators as well Medicaid and SCHIP enrollment channels
- Development of enrollment and sales tools designed to simplify and support the enrollment process
- Coordination with the State's Risk Adjustment vendor to ensure a secure, private, accurate and dynamic data exchange, or bring to the State our recommendations on Risk Adjustment
- Coordination and communication with the carriers to assure a high comfort level with the process

Additionally, our HIX Solutions Suite employs risk adjustment processes with sophisticated risk adjustment models and resources. These processes are capable of coordinating multiple carrier experience data to support risk corridor and risk adjustment services used by the State of West Virginia to monitor and manage enrollment selection.

4.7.2 CGI

Bringing healthy individuals into an Exchange is a critical success factor. Managing adverse selection has posed numerous challenges for states that have built and implemented Exchanges in the past, as evidenced by the experiences of Tennessee, New Hampshire and Utah. As per our response to 4.6, we believe outreach and a positive customer experience are critical to avoiding adverse selection. To that end, we have put significant focus on both tools that the State and Navigators can utilize when working with prospective customers. Our user experience, which is based on commercial and subsidized program best-practices, is designed to make the entire process as informative and simple as possible. Given that for many, health insurance is a 'grudge buy', finding the balance between educating the consumer and a providing an accessible shopping experience is critical. We also recognize that in order to reach residents who have not previously had insurance, Navigators will play an important role. To that end, giving those individuals and organizations who work with people to help them secure insurance tools and reports is another key piece in addressing risk selection.

Finally, CGI draws on the powerful reporting and business intelligence capabilities available through our solution to provide a flexible reporting platform. The goal is to be able to marry the collected eligibility and enrollment data with claims data, as appropriate, to provide the Exchange insights into who is purchasing insurance.

4.7.3 Cognosante

See section 2.4g above.

4.7.4 Cúram Software

As outlined above, while the implementation of prospective and retrospective risk adjustment mechanisms is not a core competency of Cúram Software and our solutions However, we have addressed the issue by bringing on key personnel who understand the problems, and we have partnered with several of the leading health care financial services administrators in the marketplace in order to complete an end-to-end solution.

4.7.5 Deloitte

Proprietary response provided.

4.7.6 Exeter

OneGate will help to protect West Virginia against the challenges associated with adverse selection in the following ways:

- OneGate interviews present the factors that affect health insurance costs in a clear and comprehensive manner for applicants;
- One Gate has a built-in verification framework that can be utilized to require verification in key information submitted during application;
- One Gate provides a sanctions component that can be integrated with an application that allows states to flag individuals that have submitted fraudulent data as sanctioned and impose penalties to them;
- OneGate is not only a HIX solution; it is a health benefits exchange solution. It integrates all forms of health benefits, including Medicaid, CHIP, Health Premium Assistance and health insurance programs;
- OneGate incorporates a "no wrong door" policy. Applicants can view all their options from one place using different application mechanisms; and
- OneGate's integrated rule base allows applicants to view expected monthly payments of an individual while taking into account benefits assistance programs. For example, users will see their monthly costs as the insurance premium reduced by the premium assistance amount. This would entice users to purchase a plan if they know how much they are paying.

4.7.7 Getinsured.com

The avoidance of adverse selection for the exchange will depend on the success of many strategies, some already in place and others yet to be determined. Getinsured can assist with this process in two ways: (1) by providing an exchange with consumer transparency that both educates and assists the consumer in seeking coverage that includes quality, service and price controls, rather than merely looking for the best coverage based on their perceived health status; and (2) by providing an exchange that attracts carriers to participate through ease of use in the expanded market.

4.7.8 LexisNexis

No response provided.

4.7.9 MAXIMUS/Connecture

No response provided.

4.7.10 Oracle

The Oracle HHS Solution's Siebel Marketing & Campaign Management component supports Outbound Communication/Marketing. This component of our solution will allow West Virginia to notify prospective applicants and current members about new benefit packages and population health initiatives.

In addition it provides West Virginia with the ability to:

- Analyze member data and develop outreach campaigns for targeted populations
- Create information packages that takes into consideration language, culture, or reading comprehension barriers
- Identification of underserved and currently served populations in need of services or access and create campaigns specific for them
- Create marketing campaigns around existing plans or new benefit packages

4.7.11 Software AG

Web Methods Business Events - Continuous, high-throughput event processing At the core is a proven and scalable CEP engine (Complex Event Processing), optimized for high throughput and low-latency event processing. The engine can continually monitor thousands of event streams and tens of thousands of events per second looking for complex correlations, patterns and sequences among them and then taking action when it finds them. The event engine's innovative approach to event stream processing, which isolates it from network latency issues, guarantees predictable, traceable, repeatable and correct results every time.

The entire webMethods suite is based upon an Event-Driven Architecture (EDA). Elements of the webMethods suite can both consume and produce events for use by other elements. Use this architecture to produce dependable, reactive and scalable integrations and applications that can span every part of your business.

web Methods Business Events can non-intrusively tap into these event streams to look for event correlations and sequences of interest, such as process conditions, bottlenecks, problems or opportunities, and then take action on them. Since web Methods is an "integration" suite, you're not limited to only events flowing through webMethods. You can easily tap into other event buses, sources and applications to help give you global and holistic insight into what's happening across your organization.

4.7.12 Speridian

Proprietary response provided.

4.8 APIs, SDKs, AND OTHER TOOLS

Describe the Application Programming Interfaces (APIs), Software Development Kits (SDKs) or other tools available for third-parties to extend the functionality offered by your solution as well as the ability for State technical support or administrators to create and modify forms, menus, rules and reports.

4.8.1 ACS

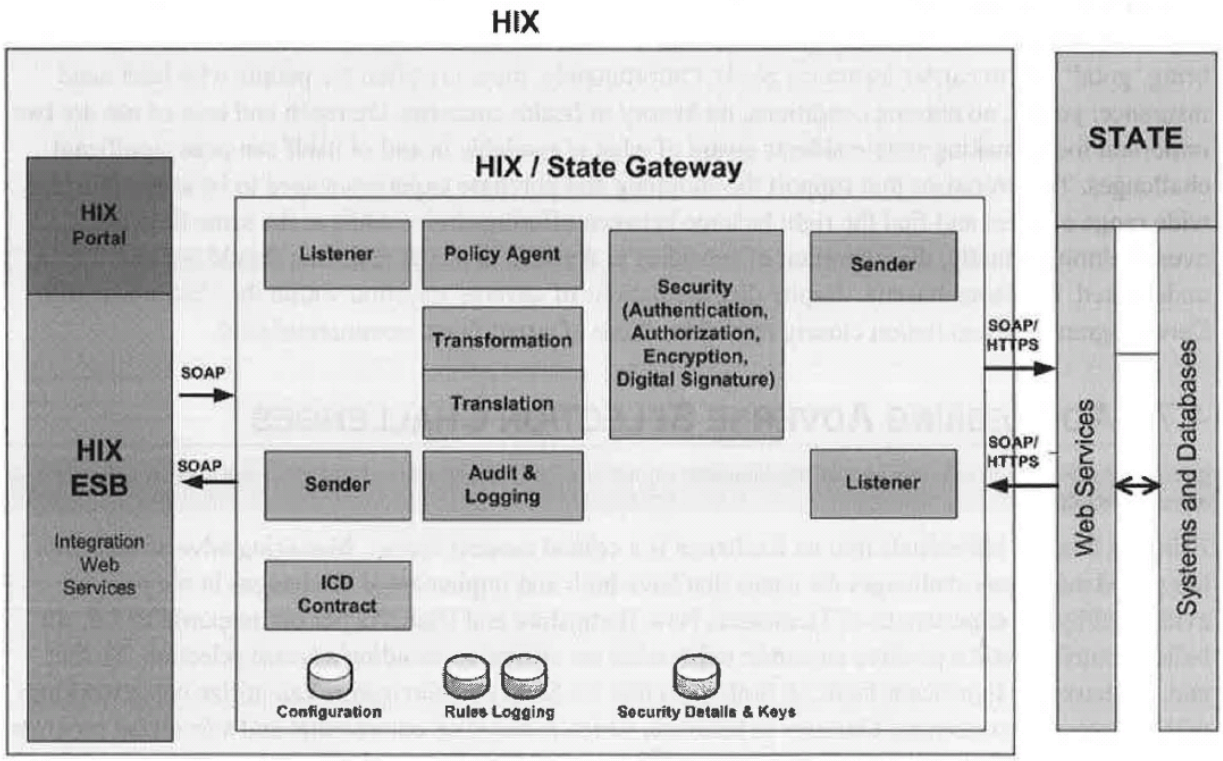
The HIX Solution Suite is enabled by a service-oriented architecture (SOA) and delivered via SaaS. We offer an API that allows us to open our solution to third-party sources in compliance with Exchange requirements.

The BENEFITFOCUS® API and the BENEFITFOCUS® Software Development Kit (SDK) within our HIX Solution Suite allows others to plug in to our industry leading technology. The API is in use by some of the benefits industry's largest companies, including Aetna, Allstate Insurance and NASCO. We have created this real-time, standards-based API to be available in two formats. The first format conforms to the WS-* standard, using SOAP over HTTPS to deliver XML data. The second uses RESTful services, which deliver data in the lightweight JSON format that has emerged as the industry standard for web development.

The HIX Solution Suite provides the State's administrative staff with access to an innovative "what you see is what you get" (WYSIWYG) interface to modify the look and feel of the site, online information repositories (like FAQs) and so on. Reports and rules can be created and modified by non-technical users through our administrative toolset. No coding is typically required.

4.8.2 CGI

CGI's Health Insurance Exchange360 contains API, SDKs and other tool for third parties to extend the functionality offered by OUT solution. The intent is for states to maintain and control the exchange not the vendor. The modem technology underpinnings help both IT and business-minded staff maintain this enhanced control.



4.8.3 Cognosante

Cognosante does not represent any single vendor or solution. Cognosante is agnostic to technology and vendor based solutions. Our goal is to help West Virginia design, procure, and eventually implement the best solution possible for the State. We understand, and actively promote, the value of a modular -based solution. We will work closely with West Virginia to design a blueprint that is modular, flexible, agile, and, as importantly, one that is based on and adheres to federal standards and addresses West Virginia's vision for healthcare reform.

The advantage Cognosante offers is that we are engaged with a number of systems vendors, helping them understand the requirements of the ACA, and ensuring their systems meet the modular, MITA-based requirements put forth by CCIIO in the *"Guidance for Exchange and Medicaid Information Technology Systems."* We know and understand the strengths and weaknesses of a number of vendor products, and their product roadmaps. We also understand the differences between the current online health insurance shopping portals available today and the functionality required to build an Exchange Framework to fully integrate public health systems and seamlessly determine eligibility. From our experience, no single vendor in the market today currently has all of the required components developed and functioning. This underscores the need for West Virginia to pick a partner, like Cognosante, that is "agnostic" to vendor products and technology, and can help you design a framework that is modular, flexible, and can integrate a combination of vendor and existing components to complete the design of the West Virginia Exchange.

4.8.4 Cúram Software

Proprietary response provided.

4.8.5 Deloitte

The HIX Solution is designed as a SOA. This enables the publication of Solution defined, loosely coupled, highly-integrated services. Certain COTS components may be combined to provide a service orchestration for use by other parties, including other State systems. For example, the ability to combine a service for provider-search functionality, along with geolocation services to provide a map to the provider(s) of interest. Such services, or service orchestration, are published in a services registry compliant with the UDDI standard. As such, they can be accessed and used by anyone given permission. Such permission can be administered in the registry or as part of an enterprise security solution, such as Oracle's Access Manager.

State technical and administrative users may modify forms using business process management tools such as jBPM for workflows, or document and forms management tools using Adobe ADEP or similar applications. Business rules changes, potentially caused by changes in HIX regulations, can be implemented via rules engine development tools, such as Corticon, OPA or iLog. Rules engines allow rules to be modeled in plain English using word or excel documents, and then modeled to see how the change would impact the current rules outcomes. Once the rules changes have been assessed and approved, the update can be scheduled to take place at when statutorily required, enabling the system to be operational at all times and avoiding redevelopment in Java to accomplish the goal.

4.8.6 Exeter

OneGate can be configured or extended using browser-based administrative functions, developer tools and/or integrated development environments. User, role or system-wide configurations can be made to OneGate Case Management using administrative screens from within Siebel, for users with the proper authorization. Additional configurations, and/or extensions can be made using Siebel Tools, a proprietary tool provided by Oracle that allows for configuration/extension of components in the entire stack, including applets, views, business components, business services and workflows. The developer tool provides point-and-click configuration with panels of configurable attributes. Additional tools are provided to help state implementers to import and manage application data in bulk, including system data (e.g., picklist, lookup values and transactional data, such as citizen data).

Configurations to public-facing portal components can be made in text-based configuration files, and/or through web-enabled administrative screens. Release/deployment management features are included via web-based administration applications. The user interface supports visual themes that allow the State to layout and style the application according to state-specific requirements. The system supports multiple languages using internationalization (i18n) and localization (110n) features configured through file based property files.

An integrated development environment, Oracle Policy Modeling (OPM), is available to help create, manage and test rules. The actual rules are written in Microsoft Word or Excel allowing rule authors to leverage familiar features such as spell check, styling, table of contents and more. A Microsoft add-on provides rule styling and rule validation features. A compiler is

integrated and confirms the validity of the rules, allowing the rules engine to properly parse the rules. OPM provides intuitive point-and-click functionality to set up rule entities, traverse rules and rule linkages, debug/test rule functionality, and generate rule reports. In addition, based on the current rule set, OPM can generate translation files, which are Excel files that allow for text to be translated. The rule authoring tool additionally provides what-if analyses and regression testing capabilities to help the agency/authority anticipate the effects of a change in policy and to ensure that the rules provide the proper eligibility determinations when new, modified or updated policies are incorporated.

OneGate's service-oriented architecture includes an ESB component which includes service composites that connect various components and services. Composites can be extended/configured based on West Virginia's existing or future architecture. Oracle provides an integrated developer environment, JDeveloper, along with additional plugin, SOA Composite Editor. This environment provides visual and drag-and-drop tools to orchestrate service composites. The server application provides the monitoring, deployment and logging features for administering the composites in the State's environment.

The table below shows development tools that require purchasable licenses from Oracle:

Product	Description
Oracle Policy Modeling (OPM)	OPM provides an integrated development environment for rule bases that manages rule base objects and provides management, debugging/testing and reporting features.
Siebel Tools	Siebel Tools provides an integrated development environment, which enables developers to configure, extend and develop business objects, services, workflows and user interfaces for Siebel business applications.

4.8.7 Getinsured.com

Getinsured Exchange solutions support interoperability among systems because they can be extended and customized in a number of ways:

- File handling and XML protocols can be extended and customized by inheriting from Getinsured classes to create specialized file handlers for integration.
- Much of the end user look and feel can be customized or cobranded through the use or extension of existing style sheets.
- The platform includes a Business Intelligence tool (Crystal Report) that can be used for extending existing reports or creating new custom reports.
- Features of the Exchange that commonly require customization based on insurance carrier are parameterized and the system includes point-and-click administrative interfaces to modify system behavior. Example: a carrier field underwriting policies can be used to display warnings or guidelines to the enrollment agent.
- The Exchange solution includes a library of common customer service email templates which can be modified and implemented as needed.
- When business requirements require customization of the exchange from GetInsured standard SaaS platform, we are able to specialize specific modules or programming logic without impacting the core programming in human and machine-readable formats.

System integration and data synchronization however are only part of the solution to implement a successful Exchange. Coordination of end-to-end workflows across multiple partners that incorporate disparate data sources will provide an intuitive, friendly, and seamless end user experience.

This RFI calls for an innovative and open standards based approach for the state of West Virginia to build its health insurance Exchange. We believe that this could be accomplished in one of the following ways:

Getinsured.com could provide all of the deliverables for this module and others described in this proposal through a Software-as-a-Service (SaaS) model. Such a model is very consistent with the existing infrastructure being currently deployed at Getinsured.com. Furthermore, this SaaS deployment could be launched through a private hosting service or on a federal or state run cloud.

4.8.8 LexisNexis

No response provided.

4.8.9 MAXIMUS/Connecture

To enable third-party functionality with StateAdvantage, the Alliance provides Application Programming Interface (API) tools including Plan Advisor, Products, and Rating APIs. Third-party participants use online self-service tools to extend the functionality of StateAdvantage modules to include their service offerings (such as users, products, applications, and rates). State technical support staff and administrators use StateAdvantage Software Development Kits (SDK) to modify forms, menus, rules and reports. Some of these tools are detailed in *Exhibit* 4-3: *StateAdvantage APIs.*

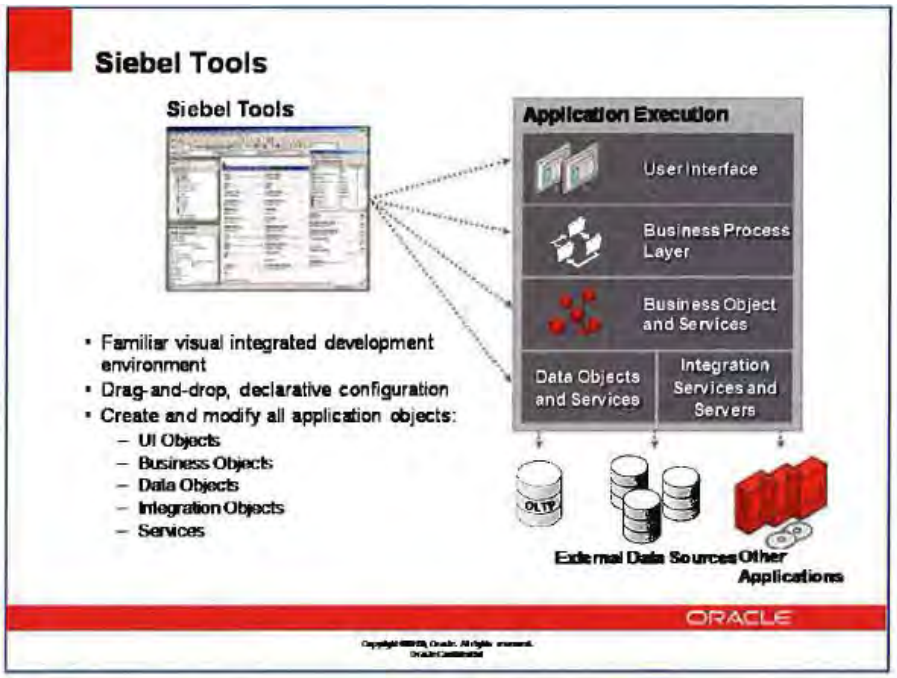
API Tool	Affected Functionality
Rate Administration	• Carriers can automatically update their rates via a standard integration or to enter them directly with web-based administration tools • No advanced technical skills are needed to configure the application, change content, or adjust the rating rules • Updates and revisions are quick and simple, minimizing associated administrative cost • Authorized state agency users can review and approve rates prior to online publication
Product Server	• Users maintain products, plans, networks, and benefits options • Users can apply rules for provider availability and network selection
Application Configuration	• Easy for users to maintain fields, business rules, and content • Authorized users make changes to applications, test them, and promote them to production
User Administration	• Controls how a particular user or type of user can access StateAdvantage • The system administrator can view a list of users, as well as view/edit profile/login information, assigned roles and their

API Tool	Affected Functionality
	status, and the assigned permission groups for a selected user
Permission Group Administration	• An authorized system administrator uses this tool to manage the groups associated with one or more permissions • Each role has a default permission group, which is assigned to a user with that role
Login and Forgot Password	• Enables secure authentication with a User ID and password • Lets users who forget their password to retrieve them by entering their User IDs, email addresses, and answers to security questions

Exhibit 4-3: StateAdvantage APIs. *Our suite of online self-service tools allows authenticated entities and individuals to cost-effectively and easily modify core functionality.*

4.8.10 Oracle

Oracle proposes an integration solution that is premised upon the concept of re-usability, open, industry-standard, and agility. Wherever practicable, we will base our integration solutions on a SOA-based framework and re-use as many integration objects and distributed architecture that upon which West Virginia is currently operating.



Customer modifications to the out-of-the-box application are declaratively configured in Siebel Tools, a metadata-driven configuration toolset. With this approach, customer configurations are implemented by modifying metadata properties of object definitions rather than by employing traditional programming such as writing software code.

Siebel Tools is a single, integrated, team-based, multi-user distributed development environment for Siebel Applications, including Siebel Public Sector. Siebel customers use Siebel Tools to rapidly configure all aspects of the Siebel Application - the look and feel, behavior, and workflow - without modifying application source code or SQL. It also includes all the facilities needed for a team of developers to work cooperatively at all of the levels of the platform, including check in/checkout of component sets, component import and export, wizards for automated simplified configuration, and drag-and-drop graphical WYSIWYG Web client UI editors. Siebel also offers APIs and internal scripting tools that allow modifications to the internal and external data programmatically. Along with any changes and additions made, the application is 100% upgradeable.

Oracle's Siebel Tools is a declarative configuration tool, not a programming environment. Oracle's Siebel Tools can create and modify the object definitions (metadata) that define the application. The Siebel Developers work within the Siebel Repository which is the set of tables within the Siebel database that contains all the meta data (data about data) that describes the configuration specific to each customer. This allows developers to check in/checkout projects, work on them and do unit testing remotely then check back into the repository. Once a release is complete a single repository file called an .srf is compiled that includes all the configuration changes and is deployed after testing to the Siebel Servers to utilize for referencing and interaction with the users. This approach allows for the Siebel "Build Once, Test, Deploy everywhere" approach to be an effective development and deployment strategy for software development in that the single file can be used to reference all objects utilized within the Siebel Application (UI, Workflow and Business Processes, and Data Schema changes across all Siebel entities including mobile and wireless devices.

Oracle's Siebel Tools provides a single, integrated development environment for application configuration and customization across all layers of the architecture:

- User Interface Objects for the User Interface Layer
- Business Objects for the Business Object Layer
- Data Objects (logical and physical) for the Data Layer

Siebel objects are declaratively configured using Siebel Tools in a graphical drag-and-drop environment in which objects are created or modified simply by setting their properties, which are, in turn, executed by the Siebel Application Platform.

When new releases of Siebel are delivered, the Siebel Application Upgrader is used to automatically migrate configuration changes to the new version. This benefits organizations by providing a smooth upgrade path that accelerates the deployment of the most recent versions while preserving prior investments in customizations and integrations. No other vendor of packaged applications software provides the ability to upgrade so easily and cost-effectively, and our application upgrade process has successfully carried forward thousands of Siebel implementations across all of our supported industries.

Workflow

Siebel Tools provides the interface to create and modify workflows, called the Siebel Business Process Designer. After workflow processes are designed in the Siebel Business Process Designer, they are tested using the Process Simulator. Testing the workflow processes before migrating them to the production environment verifies that resulting actions are accurate and useful and the results are exactly as wanted. After workflow processes are designed and debugged, they are written to repository tables for deployment from the administrative interface in the run-time client.

The Business Process Designer has three types of workflow processes that characterize runtime behavior:

• **Long Running Flow.** A long-running workflow process is a persistent workflow that can last for hours, days, or months.

• **Interactive Flow.** An interactive workflow process navigates the user across Siebel views.

• **Service Flow.** A service workflow process executes a set of operations upon event invocation.

Workflow can be invoked in three ways:

• **Workflow Policies**: Workflow Policies are database triggers that invoke a workflow process when a policy violation occurs. The violations are written to a database table. The Workflow Monitor Agent reads from the table and invokes the Workflow Process Manager Server component to execute the workflow process. Processing invoked by Workflow Policies is not real-time.

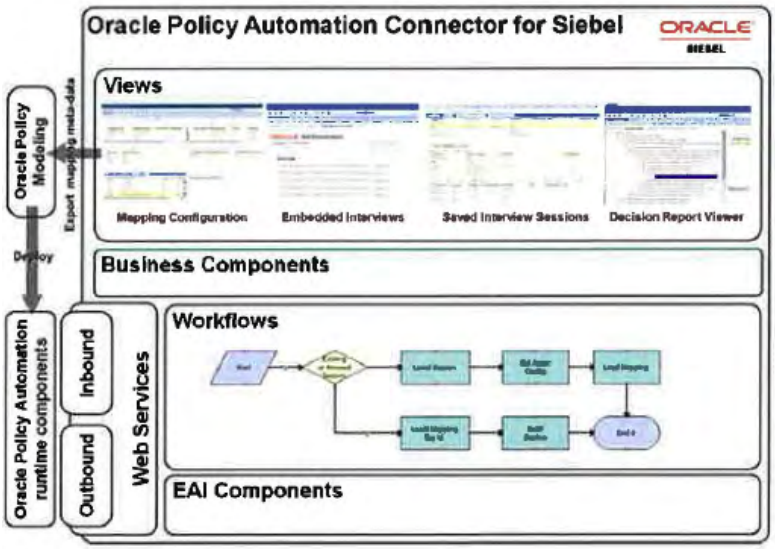
• **Events (as described above):** Run-time events and User events

• **Script:** Scripts can call Siebel Workflow programmatically as a business service.

Using scripts, one can invoke Workflow from an external system. The Workflow Process Manager Server component provides APIs for such programmatic invocation. The Interactive Flow capabilities of Siebel Workflow can be leveraged for approval and escalation processes as well as to facilitate integrations to other systems.

Rules Authoring

Oracle's rules authoring solution consists of two products: Oracle Policy Modeling and Oracle Policy Automation. Oracle Policy Modeling provides a complete natural-language, rule-authoring environment that is fully integrated with the Microsoft Office suite. It includes debugging, regression testing, and what-if analysis for policy changes. The rules are then deployed to Oracle Policy Automation for complex benefit and eligibility determination. Built for service-oriented architectures (SOAs), Oracle Policy Automation also includes guided interactive questionnaire capabilities.



Oracle Policy Automation Connector for Siebel Public Sector enterprise case management provides an out-of-the-box SOA-based integration between the OPA Determinations Server and the Siebel Public Sector case management web services framework. It allows rules modeled in Oracle Policy Modeling to be quickly and easily integrated with the Siebel data model and deployed so case workers and eligibility specialists can invoke the OPA rules engine seamlessly and transparently from the case management system. The benefits to West Virginia are that the integration is productized and supported by Oracle; as new rules are developed they are easily integrated into the case management application; and as new software versions are released the connector will not require re-configuration.

Oracle JDeveloper for SOA, Java, Web-based Applications
Oracle provides a comprehensive development tool called Oracle JDeveloper that delivers a consistent user experience when developing database, SOA, Java, Content, Security and web-based applications. Oracle believes that JDeveloper provides the smoothest and most complete experience for developers. Oracle allows developers to extend the development environment by using extensions. Oracle provides extensions for many of their products which install product specific pallets into JDeveloper to be used when creating applications.

Reports and Forms
Oracle Business Intelligence Enterprise Edition Plus (OBIEE) is another pillar of Oracle Solution for Social Services. OBIEE will extend the agency's reporting capabilities substantially. OBIEE, based on open standards, enables IT staff and developers to create data models against practically any data source and use the Reporting Module APIs to build custom applications leveraging existing data sources and infrastructure. OBIEE can query or accept data from practically any data source - databases, packaged applications, web services, HTIP feeds, or file data sources. OBIEE provides a wide array of graphical charting, and visualization capabilities, and extensive ability to configure and personalize reporting dashboards. In addition, there are a significant number of prebuilt dashboards, reports, and metrics. OBIEE includes a complete data warehouse (OlAP data model) prebuilt ETI processes for moving data from the OlTP environment into the OLAP environment, and an ad hoc query tool that allows all authorized users to generate their own reports.

4.8.11 Software AG

No response provided.

4.8.12 Speridian

Proprietary response provided.

5.0 Implementation

5.1 ANTICIPATED IMPLEMENTATION TIMEFRAME

How long do you anticipate from the time the contract is signed before the system would be made operational? Using the table provided below, please provide a best, expected, and worst case estimate. Describe the assumptions you have used (e.g., the level of customization required, leveraging existing State systems versus implementing new State systems for all three estimates).

5.1.1 ACS

Because many components of our HIX Solution Suite are easily configurable and already operational today, implementation of our total solution is less costly and time-consuming than would be expected from vendors who are new to the marketplace. However, there are several factors that must be discussed with the Office of the Insurance Commissioner in order for the ACS Team to implement a quality solution for West Virginia:

- Availability of West Virginia staff, systems, carrier resources and third-party vendor resources to support the Exchange implementation
- Enrollment paths and processes required for Individual and Family Plan (IFP) and Group enrollees (universal applications, redirects or carrier/product specific applications)
- Readiness of carriers to participate in the Exchange
- Requirements for passing user demographic, health data, and online tracking information (user ill, etc.) to other State and Federal agencies
- Requirements for data consistency/uniformity among the various member plans and modules
- Receipt of Federal guidance on outstanding requirements
- Approved operating policies from the State

These variables require West Virginia resources, third party vendors and participating plans to work collaboratively with the ACS Team in the implementation of the West Virginia Exchange. We have provided ranges for implementation timing in Table 5-1, but will need to clarify specifics for the West Virginia Exchange to provide more accurate information.

Implementation Time		
	Number of Months	**Rationale**
Best Case	9	Should West Virginia require minimal to no customization of our HIX Solution Suite, have carrier contracting and participation well underway, and have Modernized systems to which our Solution can connect, this would be the best case scenario. This case also includes use of existing

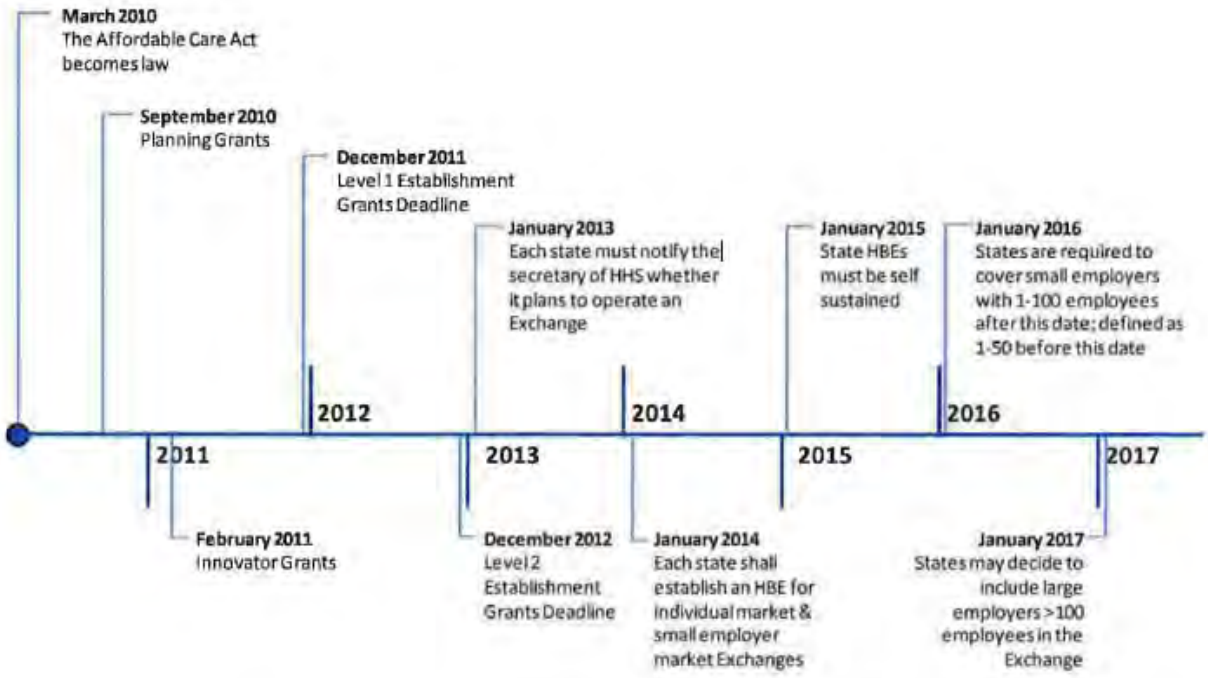
Implementation Time		
	Number of Months	**Rationale**
		ACS Team business process solution centers (call center, document management, financial services, etc.) and assumes CMS guidance is provide prior to/early in the implementation.
Expected Case	12	Should there be normal customization of our HIX Solution Suite and work with carriers on plan design and contracting has not started, this would be the most likely time-frame for the HIX Solution Suite to be ready for certification. This case includes some use of ACS Team centers to provide SPO solutions, while some new centers would be established in state.
Worst Case	24	This worst-case scenario would be realized should West Virginia or CMS require functions not currently designed in our HIX Solution Suite (those above and beyond the requirements for an ACA compliant exchange). This time frame could also be impacted by difficulties in building a QHP network to serve the Exchange and/or requiring that vendors outside of the ACS Team supply portions of the Exchange service, requiring additional interoperability to be designed. Delays in CMS guidance and rules could also impact the time frame.

5.1.2 CGI

Proprietary response provided.

5.1.3 Cognosante

As a Systems Integrator, Cognosante will ensure that implementation dates are in line with, and meet key Federal implementation, certification and go-live dates. Figure 3 provides an overview of key dates.



Implementation Time		
	Number of Months	**Rationale**
Best Case	TBD	The implementation timeline will vary based on the type and complexity of the solution selected.
Expected Case	TBD	The implementation timeline will vary based on the type and complexity of the solution selected.
Worst Case		

While the Federal timelines are known, as the SI, Cognosante can select vendors currently on a development schedule that will meet the required deadlines.

5.1.4 Cúram Software

Proprietary response provided.

5.1.5 Deloitte

Following are the key assumptions for the below estimate:

The existing DHHR systems (inROADS, eRAPIDS, RAPIDS and RAFT) will be leveraged
SERFF and SBS systems will be leveraged for Plan and Broker Management

- The proposed and final Federal regulations and guidance stand.
- State will operate a single Exchange through which individuals and small employers will access health care.
- The Exchange will perform payment aggregation function for individuals and employees and will outsource this function to a third party administrator, such as U.S. Bank.
- A third party administrator will be contracted to process risk adjustment payments sent to and received from carriers.
- All claims data will need to be aggregated from carriers whether they are offering product on the
- exchange or not.
- Carriers will submit data via a standardized format and will provide a link to their provider directory.
- The existing Medicaid eligibility engine will be supplemented with a COTS rules engine, such as Corticon or Oracle Business Rules. The initial release of the business rules engine will only include the logic associated with MAGI and newly defined Medicaid categories. Additional categories will be moved to the rules engine incrementally over time.

	Implementation Time	
	Number of Months	Rationale
Best Case	12	Thin Exchange that takes advantage of existing State assets.
Expected Case	18	Robust Exchange that takes advantage of existing State assets.
Worst Case	24	Robust Exchange that is developed independent of existing State assets.

Figure 15. Implementation Time and Rationale.

5.1.6 Exeter

For a project of this size and scope, Exeter intends to establish a project management office (PMO), which will be jointly led by the Exeter Project Manager and the West Virginia Project Manager. The PMO will be responsible for the establishment of project management structures using the components of Exeter proven Framework^{SM} methodology and project management approach and will allow the two teams to collaborate and manage the West Virginia Exchange project as a single management team focused on project coordination and success.

A large and critical component of Exeter's approach to large system design and implementation projects is the development and utilization of project management mechanisms to track project progress against stated goals and objectives. In the course of developing, implementing and

deploying technology solutions for many clients over the years, Exeter has developed an effective and comprehensive project management approach which will be used throughout this engagement with West Virginia. Exeter's project managers employ these processes in a participative, consensus-oriented manner with our client's project team and other key stakeholders to obtain and maintain buy-in and commitment to the project. It is important to note that these activities and deliverables are modified and augmented based upon the needs, culture and organizational constraints of each client and project. This allows Exeter to bring best practices in project management to each project, while still remaining flexible in order to adapt to client requirements and constraints. Exeter will work closely with West Virginia to develop a project management approach that will meet West Virginia's specific needs and is appropriately scaled to account for the size and complexity of the State's planned engagement.

Exeter's project management approach involves rigorous tracking of schedules, tasks, issues, risks and opportunities. Exeter comes to every project prepared to deploy its methodology, which typically consists of the following components:

- Integrated program planning,
- Plan management, tracking and monitoring;
    - Issue management;
    - Risk management;
    - Opportunity management;
    - Scope management;
    - Data management; and
    - Change management and communications monitoring.

Exeter believes that a consistent, disciplined approach to project management is essential to resolving issues in due course while they are most manageable, as well as identifying, managing and mitigating risks and adjusting tactics to maximize value.

OneGate is built on a solid foundation of tested COTS products. Exeter, with its expansive domain and systems development and integration expertise, has spent a number of person-years extending and integrating the core components to provide a reliable, modern and feature-rich solution that accelerates time to market. The solution can be implemented in a matter of months rather than years.

Implementation Time

OneGate's COTS component-based, modular, service-oriented architecture, in addition to pre-built accelerators, will allow West Virginia to drastically reduce implementation time from years to months. Exeter's approach to system implementation favors a phased approach, which produces targeted functionality in shorter time frames, and reduces risk. OneGate's flexible architecture allows for the phased approach, leveraging existing state systems where appropriate. The pre-built rules for health insurance exchange, and Medicaid eligibility, enables West Virginia to quickly implement eligibility functionality, while the external, flexible, configurable rule platform allows for ease of incorporating State-specific functionality. As with any implementation, there are several factors which may affect the implementation time line, some of which may include the current state infrastructure at West Virginia (i.e., what components can be leveraged) and dependencies on external sources (i.e., the status of the Federal Hub).

5.1.7 Getinsured.com

Implementation Time		
	Number of Months	Rationale
Best Case	8	Most Exchange components are already developed. It should also be possible with a phased approach to provide demonstrations to citizens at local state and county fairs within 3-4 months.
Expected Case	12	Engagement with the state to understand state specific needs, some federal regs and interfaces may not be available until summer 2012, plan availability from carriers. It is possible that HHS may not release many important regulations for Exchange development in time.
Worst Case	18	Additional delays may be introduced because of complexities of interfacing with state systems.

5.1.8 LexisNexis

Just as we have integrated in enterprise-level applications within Banking, Insurance, Government, and Legal industries, we understand that the focus of the implementation project is the establishment of the Exchange. Our teams are expert in working within that overall Project Management approach to provide identity management and authentication without adding undue Implementation strain or risk. The fact that our interfaces with these systems utilize common, proven technologies and straightforward API guides simplifies the process.

5.1.9 MAXIMUS/Connecture

The Alliance has a significant track record of successful implementations, including new projects and the takeover of existing ones. In each case, we have brought up our projects on time, within budget, and in a way that cemented rather than strained our professional relationships with our clients.

	Number of Months	Rationale
Best Case	15-18	▪ Procurement document is fully realized with the primary technical and operational policies unambiguously documented and described ▪ Eligibility processes rely on vendor solution rather than partial or full integration with existing Medicaid legacy system and offline processes ▪ Technology and operational requirements are fully integrated into a turnkey solution ▪ Authenticated, real-time access is provided to necessary verification databases at the state and federal level in a timely manner ▪ Health plans have the necessary technology to interface with our system ▪ The Federal Hub is operational as promised
Expected Case	18-20	▪ The procurement document is reasonably complete although questions remain in relation to undecided or pending state or federal policies ▪ Mission-critical federal guidance is delayed or is only partially released pending further stakeholder input ▪ One or more fundamental aspects of the existing Medicaid eligibility process are retained, requiring integration with the vendor solution ▪ All state based verification sources ready for real-time integration ▪ The Federal Hub is operational as promised
Worst Case	20-24	▪ Major holes in the procurement document must be filled through extended contract negotiations and downstream change orders ▪ The Federal Hub is delayed or rolls out with numerous integration challenges ▪ Principal design and operational policy decisions by the state or federal government are delayed or unexpectedly change ▪ Integration with partner systems encounters numerous problems that are difficult to resolve without hands-on facilitation by the State ▪ Funding and/or political disagreements make it difficult to move forward definitively

5.1.10 Oracle

Oracle has established a tentative timeline of 15 months for implementation of our solution. Due to the nature and aggressive implementation timelines for the Health Insurance Exchange, this time line should be considered to be both the “best" and "expected" timeline in order to implement by October 2013. A "worst" case timeline would result in implementation after that date, and would not be recommended.

This section is intended to highlight Oracle delivery capabilities and is not intended to provide the basis for our pricing estimate.

Timeline
An implementation timeframe for the West Virginia Health Insurance Exchange is dependent on a number of factors that will be better understood during the full RFP process. In general terms, Oracle believes that a 15-month implementation timeline is anticipated for our HIX solution, but individual circumstances for each implementation vary. Please see section 9 A for details associated with this projection.

5.1.11 Software AG

Partners are an important component of Software AG's business model in order to deliver top-quality solutions and services to help our government clients realize the value of SOA & BPM in support of HIX and eligibility based solutions. Software AG operates in 39 states working with partners to deliver robust systems including West Virginia, Georgia, Pennsylvania, Louisiana,

and numerous others. The following is a sample list of partners experienced with Software AG solutions:

- Deloitte
- Capgemini
- CGI
- ACS
- Dell
- IDS Sheer
- Lockheed Martin
- CSC
- Satyam
- TATA Consulting Services
- Accenture
- EDS

5.1.12 Speridian

Proprietary response provided.

5.2 IMPLEMENTATION SERVICES INCLUDED IN PRICING

Indicate implementation services that are typically included in the standard pricing and those that can be purchased on a fee basis.

5.2.1 ACS

We deploy a standardized PMM to manage all implementation services as part of our HIX Solution Suite. Our PMM is founded upon American National Standards Institute (ANSI) and Project Management Institute (PMI) principles and guides our managers with effective, consistent, and proactive management practices. We recognize the premium that the Office of the Insurance Commissioner (OIC) places on performance excellence, and our approach to service delivery has always centered on exceeding performance requirements by following a structured and disciplined methodology.

Consistent with the PMBOK Guide - 4th Edition, our PMM addresses the nine recognized knowledge areas of integration, scope, schedule, quality, resource, risk, communication, procurement, and cost, providing for a proven, process-based management discipline. Equally important, our project management process is grounded in practical experience gained from valuable lessons learned concerning what works and what does not on innumerable small and large-scale healthcare and IT projects.

During the implementation, the ACS Team works closely with the state and any of its designated vendors to coordinate implementation, educate stakeholders about the solution, and outreach to employers and consumers. Actions and activities that are supported within our implementation services include, but are not limited to:

- Implementation status meetings
- Broker/Navigator training
- Media campaign planning and execution
- Integration planning with other state agencies and/or vendors
- Carrier coordination and training
- Employer Outreach and training
- Coordination of user acceptance testing

5.2.2 CGI

Proprietary response provided.

5.2.3 Cognosante

The implementation services will vary based on the solution selected and the State's requirements.

5.2.4 Cúram Software

Proprietary response provided.

5.2.5 Deloitte

The answer to question *5.d Implementation Approach* below describes our typical set of system implementation services. However, the standing up of a viable exchange requires a well-defined business, organizational and operating model for the Exchange that the technology platform serves to enable. Deloitte is prepared to offer its clients either an aggregate or componentized approach to providing advisory and delivery services for the business, organizational, and operational solutions needed to fully stand up an exchange, as follows:

a. Organizational design of the Exchange entity including functional staffing model, roles and responsibilities, job descriptions, compensation model and levels by position type, sourcing options, and reporting relationship mapping
b. Business model definition (within the context of the Strategic Vision). This includes leveraging our accelerator set of key considerations by every business area.
c. Using Deloitte's business solution and accelerators, design and implementation of every required business functional component, including business process models, and staffing model based on activity volumes and drivers.
d. Product design and pricing (including extension of portfolio to non-metallic health products)
e. Customer service model, including service approach (e.g. tiering), queuing configuration, organizational model and sourcing options.
f. Carrier engagement and plan management.
g. Market assessment and organization, including adverse risk selection assessment and mitigation program development.
h. Financial management and pricing options assessment to achieve financial self sustainability.
i. Developing program for Exchange branding, member outreach, complimentary PR and messaging approach. Design and execute segmentation, profiling, value proposition messaging by cohort and direct targeting campaign as needed.
j. Define marketing approach to attracting employers to utilize exchange and by being "easy to do business with". Remove barriers to accessing the exchange and create a "pull" strategy. Define role, compensation and model for brokers leveraging our market experience and data.

Develop and implement a model for processing and aggregating premium payments for health and potentially other new ancillary products. Whether the Exchange builds and hosts functions or outsources to Deloitte teaming partner or another bank or entity.

5.2.6 Exeter

Exeter offers its clients a broad range of IT strategy and implementation planning services. Exeter works with each client to determine the type and level of services that they require for the engagement based on the projected schedule, budget and objectives for the project.

The following is a high-level list of services Exeter provides to its clients for a project of similar size and scope to that of West Virginia's anticipated engagement. Exeter would be pleased to discuss potential pricing options for such services with West Virginia.

- Project oversight (executive steering committee)
- Project planning/management and fit/gap analysis
- Base configuration
- Data migration
- Testing services
- Support/training/knowledge transfer
- Integration and implementation services
- Customizations

5.2.7 Getinsured.com

The Getinsured.com engagement mechanism with a state typically includes a full service array of project planning, design, test-plan development, prototype review and roll-out and deployment services.

Additionally, our team can also provide the following:

- Content maintenance post launch.
- Customer service for end-customers.
- Training and management of existing state call-center resources to services health insurance Exchange needs.
- Health insurance carrier and broker/navigator on-boarding, management, training and support.
- Change-orders to the technology specification on an hourly fee basis.

5.2.8 LexisNexis

No response provided.

5.2.9 MAXIMUS/Connecture

Our proposed cost model includes a one-time implementation fee that includes configuration and testing of all modules, set-up of all self-service tools, development and testing of integration points, initial set-up of all users (internal, carriers, Navigators/brokers, system administrators), initial loading of all insurer/health benefit plan products and rates, and planning and execution of training sessions. Additionally, implementation involves a number of other components that include hardware and equipment, facility build out, staff recruitment, hiring and training, and development of training manuals, project management documents and quality management

tools. To promote accountability and protect the State's interests, our payment methodology is tied to agreed-upon project milestones and deadlines.

While it is axiomatic that a turnkey solution will cost more than several modules, it is important to view this cost holistically in relation to any other vendors involved in a modular solution. We are reasonably confident that a turnkey solution will maximize affordability through efficiencies and economies of scale that are simply not achievable with the involvement of multiple vendors, some of whom may be competitors with one another.

5.2.10 Oracle

Implementation services that can be procured on a fee basis and are NOT included in the standard pricing include, but not limited to:

- Implementation Health Check
- Disaster Recovery
- Post Production Support / Operation & Maintenance
- Upgrade Analysis Project team and end-user training
- Data archiving/purging processes
- Upgrade Execution
- Performance management services, including tuning and performance testing
- Organizational change management

5.2.11 Software AG

No response provided.

5.2.12 Speridian

Proprietary response provided.

5.3 RECOMMENDED TECHNICAL AND END USER TRAINING

Describe the recommended technical and end user training/education including documentation, approaches, modules offered, and services that would be offered.

5.3.1 ACS

As part of our operational planning, we work with West Virginia to indentify users of the Exchange and ensure users are provided with the appropriate level of system and exchange process training. System documentation, online videos, and training modules are already available for many components of our Solution, and we continue to improve them so that these tools are effective in assisting Exchange user groups.

Our approach is to provide information to the user as they need it, at the point in the process where it assists them in making decisions. As our HIX Solution Suite is user-centered, the Solution assists the user as they navigate through the portal. For example, as a user is accessing the Web portal, they are provided with online help in the form of short videos and/or documentation to assist them in navigating the system or understanding terms. On-line videos offer additional information on specific terms or concepts to assist an applicant through the Web

portal. Our customer service representatives are trained to provide on-the-spot training and assistance to users through both phone and Web chat support.

Additionally, we provide in-person training for state/county staff as well as Navigators/Brokers as needed. Information on our full training program can be provided in response to a request for proposal.

5.3.2 CGI

(Additional proprietary response provided but not included below.)

CGI will tailor our set of standard communications materials for the State Health Exchange outreach efforts to individuals. All outreach and marketing materials will be branded with the State Health Exchange logos and will be approved by the State prior to release and distribution. Our standard State Health Exchange communications, outreach and training work products include:

- Communication Plan including sample press releases, newsletters, and targeted communications,
- Health Insurance Exchange Presentations for Eligible Navigators
- Health Insurance Exchange Presentations for Eligible Brokers
- FAQ's,
- Training Plan
- Training Materials
- Training Presentation

CGI has created baseline solution training materials that can be tailored for West Virginia's unique requirements. After updating the training presentation, CGI will conduct one webinar for Eligible Navigators and one webinar for Eligible Brokers. West Virginia can record these webinars and make them available to providers on West Virginia's website for future educational and training purposes.

As Navigators and Brokers are presenting to groups they may log their presentation information into the State Health Exchange in their personal account for tracking and reporting. For navigator groups which will be funded by grants, this information will be critical to aid determining the effectiveness of the navigator organization. In addition to giving presentations, the navigators and brokers will also be able to create accounts for individuals and facilitate their enrollment. In doing so, the navigator and broker may need to assist the individual after the initial session to complete the determination process or their enrollment in a health care plan. Both navigators and brokers will have the ability to track the determination and enrollment status of individuals that they have engaged in the State Health Exchange.

5.3.3 Cognosante

The training functions can be tailored to meet the needs of the West Virginia Exchange staff and users. The training requirements will be determined when the solution has been finalized.

5.3.4 Cúram Software

Proprietary response provided.

5.3.5 Deloitte

Deloitte will have responsibilities and is committed to provide the appropriate training and material to all stakeholders involved. Deloitte currently has an excellent relationship with DHHR and works collaboratively to provide the end users with the most efficient and effective training for the RAPIDS Suite of applications. For the HIX Deloitte, the State and State Training Team work together on numerous tasks to confirm the end users are provided the following:

- **User Documentation** - Deloitte provides training materials tailored to the various DHHR and OIC stakeholders to meet the needs of each group. Deloitte also provides additional materials to those end users that are not involved in the Instructor Led Training sessions. All end users, participating or not participating in the Instructor Led Training sessions will receive a User Guide, Help Text and Quick Reference Guide tailored to meet their needs for application utilization. The user documentation will be available on the HIX website and will contain the appropriate documentation that relates to the corresponding portal. For example, the User Guide, Help Text and Quick Reference Guide for Carriers will only be available on the Carriers portal.
    - User Guides detail each screen of the application, explaining how it should be utilized and tips for additional assistance.
    - Help Text provides a description of the intent of the screen as well as a detailed description of each field.
    - Quick Reference Guides provide the end user an immediate answer to navigating a screen. The Quick Reference Guide includes the steps used to maneuver the screen without the screen shot and tips.
- **Training** - Deloitte provides a variety of end user training options including support for Instructor Led Training and web based training. As a first step each stakeholder group will be evaluated to determine what they need to be trained on and the best mechanism for imparting that training, as well as their own set of documentation segmented into the various business process. For example, state workers may be best trained in a classroom environment, whereas Navigators, who may be more transient, could be better trained through eLearning.

5.3.6 Exeter

A key feature of Exeter's strategy includes helping our clients to develop an effective training strategy and plan. Major training tasks typically conducted as part of an implementation training effort include:

- Analyzing training requirements;
- Designing the training program, courses, classes and schedule;
- Developing training materials as necessary;
- Providing training sessions and labs;
- Evaluating the effectiveness of training; and
- Modifying the training materials and curriculum for future use based on feedback.

Exeter's solution also includes ongoing knowledge transfer to help ensure that state agencies are able to use and maintain OneGate once Exeter's role is completed. While the primary focus often is on training the end-users on how to use the system, Exeter recognizes that a far more critical need is transferring the knowledge from our team members to the client staff who will maintain the system. Exeter has put in place a highly efficient methodology for our time-proven knowledge transfer process, which helps transition the product from Exeter to West Virginia with low risk.

Furthermore, Exeter provides online and printed guide documentation based on the state's requirements, including user guides, installation guides and administration guides. Exeter user guides will provide in-depth explanations and tutorials regarding how to use OneGate, and contain troubleshooting and best practices for users to make best use of OneGate. Exeter installation guides will provide guidelines needed for database and system administrators to perform an initial OneGate installation, scale additional instances or reboot existing instances. Exeter administration guides will provide OneGate maintenance and configuration procedures.

5.3.7 Getinsured.com

Getinsured has experience in offering training materials and sessions for:

- Exchange operators
- Navigators/Customer Service
- Regulators
- Exchange Oversight and Governance

For example, if a state requests, Getinsured are willing to organize, recruit and/or train the human resources that are needed to run the Financial Management Dashboard. This can be done quickly and because of the at-scale knowledge and training experience we can impart, state Exchanges will only need a handful of accounting administrators to efficiently manage the dashboard. Such efforts will encompass all Exchange financial and administrative services, which includes accounts payable and receivable services, premium billing and remittance services, and Exchange audit support. In the call center, our navigators and licensed staff are required to complete a comprehensive training program and have at their disposal tip sheets, user guides, FAQs, and other support materials that make it easy for them to find the help they need when they need it. Internal escalation policies clarify support channels. All calls are monitored and our operational managers follow a rigorous call quality (QA) program to prevent errors and ensure that we deliver a consistent service-heavy customer experience.

Currently, Getinsured requires brokers and Exchange administrators to complete online and in-person training courses that are based on curriculum specific to their desired role on the Exchange. Upon completion, they must also pass an examination that is tailored toward their specific Exchange role (>85 percent correct is passing). To account for future innovations to Exchange software and technology, we also conduct periodic continuing education classes and reexaminations.

5.3.8 LexisNexis

No response provided.

5.3.9 MAXIMUS/Connecture

The Alliance provides a full range of services through the entire implementation lifecycle including requirements gathering and documentation, process design, systems integration, Train the Trainer classes prior to User Authentication Testing (UAT) planning and testing, training for designated administrators for the state of West Virginia, and post-production support.

For reasons of cost-effectiveness, a positive and unified consumer experience, and greater overall accountability and management transparency, we advocate a unified approach to all required Exchange services. We believe the benefits of working with a single, highly qualified, and well-equipped vendor will outweigh any risks associated with the level of contractual commitment this would require. From a practical standpoint, it will be difficult at best, and very risky at worst, to implement a web portal and business processes in which major functionality is transferred "behind the scenes" to multiple vendors.

But if West Virginia OIC explores a more modular approach, our StateAdvantage platform can be implemented in that manner with one or more of the following functions integrated with one or more other systems. In that situation, a key decision will be which company provides the "human touch" that is essential through a multi-channel communication strategy that includes a call center and mail processing.

- **Application Intake and Eligibility Determination:** These two functions are inextricably linked. They also include annual renewal during which a person's eligibility for ongoing participation is reevaluated based on updated income information. Linkages to external verification databases, including the Federal Hub, will reside in this module. The module also includes appeals processing and eligibility status updates based on changes in family size, pregnancy, and immigration status.
- **Enrollment:** A range of operational deliverables that begin with confirming a person's eligibility to enroll and that then proceeds to health plan comparison shopping, selection, and enrollment. For ongoing members, the process repeats annually during open enrollment.
- **Premium Processing:** This includes a range of billing and premium collection options ranging from highly automated and electronic to "old school" paper billing and receipt of money orders and checks. It would also include premium aggregation and health plan remittances for employers and possibly individual aggregation at the Exchange, depending on strategic design.
- **Account Maintenance:** This functionality includes customer service management (CRM), maintenance of all records associated with a case, and audit trails that are necessary for compliance and oversight purposes.

In a modular environment, customer service will be distributed among each of these primary modules. A person who initiates an application over the web, enrolls over the phone, and mails a check will interact with multiple online and offline systems and channels. If different vendors are involved at each phase, the opportunities for an unsatisfactory consumer experience increase exponentially.

A similar risk applies to separation of the SHOP and American Health Benefit Exchange functionality. If different modular systems are used for each, similar opportunities for frustration

and lost coverage will occur as West Virginians move between small business employment, being out of work, becoming self employed, or working for employers that do not offer health insurance.

5.3.10 Oracle

Oracle recognizes the importance of education and training to a successful implementation. A major focus of the project plan and project management will be to provide the appropriate education and training, when and where needed, utilizing the appropriate teaching techniques and competent instructors. To meet this objective, Oracle offers two types of training: technical training and end-user training. We separate training requirements for implementation project teams and technical teams from the day-to-day functional business users, to assist in all employees getting the most appropriate training for their job roles.

Technical Training
The technical training component of the overall training plan is addressed by Oracle curriculum courses, which have been developed to learn the products that comprise the solution. These courses have been designed by skilled curriculum developers and experienced instructors that know the product as well as adult teaching methods. The technical training plan addresses the following concepts:

- Hands-on, role-based training on any product or technology proposed
- All technical aspects of the installation of the software (including a demonstration with documentation of the install).
- All technical aspects of the support of the software, including: training on stopping and starting of the software modules, training on the restarting of stopped modules, training on the Contractor's software error handling process, training on troubleshooting and configuration optimization, training on the Contractor's problem tracking system.
- Comprehensive demonstration on the technical capabilities of the software
- Develop and maintain the necessary training materials to effectively facilitate technical training. The medium for the training materials should be electronic and paper upon request. All training material must be approved by the State.

Oracle approach has two components to our response for training both your project team and end users within the State organization. The first includes training from Oracle, which is outlined in the following section. The second component is leveraging a Train-the-Trainer approach in conjunction with the User Productivity Kit to maximize your project resources during the implementation.

Oracle is focused on understanding your key business requirements and creating a custom training plan that addresses the training required to obtain the skills and knowledge needed to optimize your investment. The Oracle training plan is a working document that will assist you in planning, budgeting and gaining the approval for necessary education upfront. When you are ready to commence training, this training plan provides the peace of mind of knowing that a defined, approved plan is in place, ready for execution.

End User Training
End user training is quite different from technical training since it is customized based upon the configured solution to meet West Virginia specific needs. The objectives it attempts to achieve are the following:

- Provide training in accordance with an Implementation Strategy/Schedule that is approved by West Virginia.
- Develop the necessary training materials to effectively facilitate end user training. The medium for the training materials should be electronic and paper upon request. Training material must be conducive to the training vehicle (i.e. face-to-face training will require printed material, Interactive Video Technology (IVT) training will require electronic links to training material). All training material must be approved by West Virginia.
- Train the end user using various efficient methods, including but not limited to: onsite training, face to face training, and train-the-trainer, Video on Demand (VOD) and Interactive Video Technology (IVT). Provide interactive video training within the software for users to consult on demand
- Maintain training materials and keep them up to date based on changes in the software

Train-the-Trainer
In order to deliver hands on instructor-led training, a training environment will be created through a collaborative effort of Oracle and the State's functional, security, technical, and training teams. Oracle curriculum developers will then input sample training data into the training environment for hands-on instructor-led training sessions. West Virginia's technology team is typically responsible for refreshing and maintaining the training environment until new and refresher end-user training concludes. The Oracle User Productivity Kit (UPK) will enable future end-user Health Insurance Exchange System training to be conducted using the hands on, interactive computer-based process and procedure training. Thus, a training environment will not need to be maintained.

Using the materials developed during the content development phase, Oracle education consultants will prepare and deliver a Train-the-Trainer program to prepare the State's internal trainers for the delivery of the training program. This program will include:

- Training the State's internal trainers on the customized version of the Siebel Case Management application as it would be trained to an end user, allowing the training team to model our approach.
- Transfer of knowledge to convey leading practice, Oracle concepts, new business processes and knowledge to the State's internal trainers.
- Sharing of leading practices on creating an effective classroom and an appropriate learning environment.
- Sharing of leading practices on classroom communication to enable the State's internal trainers to encourage student involvement and student interaction. The program includes instruction on non-verbal behavior, listening skills, questioning techniques, how to manage difficult behaviors, interpreting body language, and general presentation tips.
- Train-the-Trainer delivery will be hands-on, task-based and interactive, and include instructor teach-backs.
- Each user must have access to the Siebel (either a local-based or server-based training environment) for the completion of exercises.

- Training content and delivery will highlight the benefits of the new application as they apply to each user group/business process.
- Teach-backs for each trainer will be included in the workshop to practice their delivery skills.

5.3.11 Software AG

No response provided.

5.3.12 Speridian

Proprietary response provided.

5.4 IMPLEMENTATION APPROACH

Describe your implementation approach, including the nature of the relationship with the client.

5.4.1 ACS

When beginning a new project, one of the first plans created and reviewed is our Communication Plan. Communication during an implementation is critical to the success of the project. We believe in having an open, honest and transparent communication throughout the implementation and operation of our projects. The ACS Team establishes a SharePoint site specifically for our client and for the ACS Team to use in sharing information about project status, changes, and documentation. Additional information on our PMM is provided in Response Section 9.0, Project Management.

5.4.2 CGI

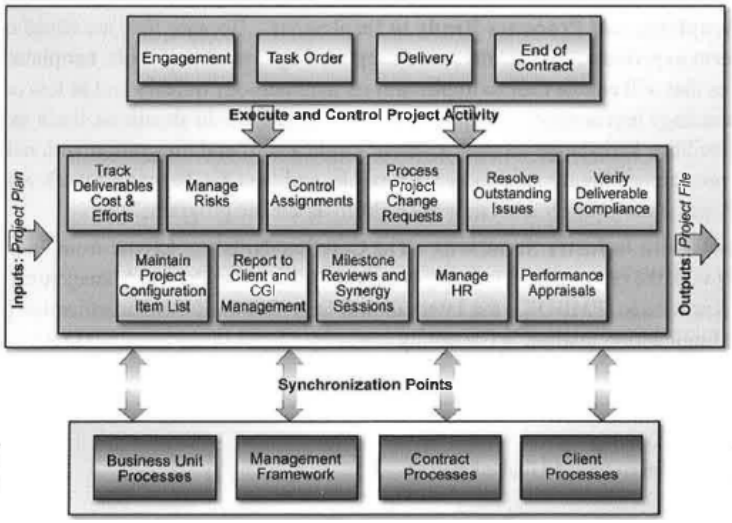
We believe that a successful Health Insurance Exchange will require a strong partnership between the state and its vendors. CGI has completed thousands of successful engagements that underscore this concept - we call it our Client Partnership Management Framework (CPMF). The CPMF is a carefully managed blend of rigor and flexibility, and interfaces well with Oracle's own rigorous project management approach and ties closely with our system development lifecycle methodology. The flexibility built into the framework allows it to be adapted to the specific needs of an individual project System and provides for continuous process improvement. All CGI state and federal engagements are facilitated successfully using this framework, which is a Capability Maturity Model Integration (CMMI) Level 3 compliant and International Organization for Standards (ISO)-900Icertified suite of tested methods and demonstrated processes. It is organized consistently with the Project Management Institute's Body of Knowledge (PMBOK) process groups, covering the full spectrum of project management disciplines. These certifications mean that CGI members go through necessary training and put into practice the disciplines they have learned on all projects. This gives CGI's project managers a solid structure to facilitate project delivery such that each phase of the project is carried out according to a proven series of processes and with a uniform approach to quality, thus reducing project risk.

CPMF is consistently refined as a result of our experience in managing information technology projects for over 30 years. Our work with ACA and MITA requirements has allowed us to continue to evolve the model. Given both the complexity, and often-times lack of definition, around many projects reminds us of the importance of a holistic management approach, no matter how large or small the project may be. To that end we have integrated disciplines and methodologies - those associated with project management, implementation, and quality - and support them with an effective governance structure. This model will be particularly important in those instances where key functionality will be implemented in phases: the approach that West Virginia contemplates. The CPMF is integrated with our project implementation and quality processes to support careful coordination of all project activities.

As part of this rigorous process, CGI has implemented a Client Satisfaction Assessment Program (CSAP) program. The CSAP measures clients' satisfaction with our delivery projects on an ongoing basis. During the last year, CGI received an average score of 9.0 out of 10.0 from over 2,500 signed client assessments. CGI's high client satisfaction record demonstrates our excellence in meeting our clients' needs in the 10 assessment categories: understanding requirements, meeting requirements, quality of results, commitment, schedule, availability, customer focus, administration, value, and loyalty.

At CGI, we have a strong commitment to quality -a commitment that leads to business results for our clients. Our quality system represents a common language across CGI, and our passion for operational excellence plays a key role in promoting consistent service delivery. It governs every phase of our projects, from preparing proposals to delivering service. Exhibit 8 depicts a high level picture of our CPMF and its components.

Exhibit 8: Client Partnership Management Framework (CPMF)



The CPMF is intended to accomplish the following:

- Guide CGI management and members through the efficient management of the delivery of CGI services to our clients.
- Facilitate synergy and effective communication among all the contractual stakeholders (CGI management, members, client and suppliers/subcontractors), by giving them a common frame of reference.

- Provide CGI management teams with a practical, efficient, and immediately workable set of processes to support all engagements, from proposal preparation to contractual completion.
- Foster member productivity by clearly identifying the deliverables and the activities needed to produce them.
- Facilitate quality control by taking the relevant aspects into consideration, by improving quality of services, and by being cognizant of related compliance requirements.
- Support the effective synchronization of delivery, management, quality assurance and other related processes.
- Assist management's decision-making by formulating the right questions at the right time, and by providing pertinent information through an accurate framework of check points.
- Provide for improved long-term contract and client satisfaction management.
- Deliver a rich set of documentation that supports the detailed project plan, solution business and technical designs, data conversion, quality management, change management, test, and communications plans.

Project Management

Within the CGI CPMF, CGI offers a best practices project management approach designed to meet the needs and objectives of West Virginia. Highlights of these strengths include:

- **Comprehensive, Practice-Based Methodology** - CGI's methodology is based on CGI Project Management Standards. Drawing on its experience with hundreds of large-scale projects in dozens of industries, CGI developed these Standards as the foundation for achieving high-quality project results and promoting exceptional productivity within and across teams.
- **Tools, Templates, and Processes Ready to Implement** - Because they are based on direct project management experience, the Standards are supported by a wealth of tools, templates, and procedures that will enable CGI to implement its methodology quickly and at low cost. By making our methodology less abstract and more applicable to real-world situations, these same materials can also facilitate knowledge transfer to West Virginia staff and integration with existing West Virginia procedures. Finally, our tools are flexible, and the CGI Team will work with West Virginia at project inception to select and tailor the right tools for the program.
- **Consistency with Industry Standards** - The CGI Standards are derived from, and therefore, are consistent with the principles of industry standards such as the Project Management Institute's Body of Knowledge (PMBOK), the International Organization for Standardization (ISO), and the Software Engineering Institute's Capability Maturity Model Integration (CMMI).

5.4.3 Cognosante

As the prime contractor and SI, Cognosante takes full responsibility for the outcome of the project. It is our responsibility to ensure that the solution meets the Federal guidelines.

Project management is a shared responsibility between Cognosante and our clients. We have a long history of close working relationships that result in successful projects.

It would be our approach to work with stakeholders including GOHELP and other organizations to educate the State's population on the Exchange and the resources available to them.

5.4.4 Cúram Software

Proprietary response provided.

5.4.5 Deloitte

Deloitte provides a customer focused implementation approach which allows continuous feedback to confirm all business and technical needs are met. Deloitte creates a plan to manage and provide a smooth implementation and has a standard methodology that discussed implementation that will apply to the HIX portal. The implementation plan will guide the release; identify the sequence of events, and internal and external dependencies for a successful implementation. Included in the plan for implementation are:

- **Technical deliverables** - System configurations, interface development, data conversions, application checklists, framework scripts, and property file configuration and migration, security, and database structural changes.
- **Release Details** - Deloitte and the State hold preliminary meetings to discuss release dates, go live support and duration.
- **Attainable timelines** - Deloitte and all the Stakeholders will collaborate to determine the timeline for training and implementation. Each team brings questions, suggestions and comments to the table to confirm the end users will receive ample training and testing time.
- **Applicable training sessions** - Deloitte will deliver Train-the-Trainer sessions to the various departments such as, DHHR, OIC Brokers and Navigators, the State and any other department that may provide training on the new system. Deloitte will provide these sessions through Instructor Led Training sessions.
- **Go Live Support** - A key component of any successful Training and Implementation program is effectively providing support to users in the field before, during, and after go-live. Through our work with large scale technology implementation projects, we have learned that providing support through the use of a help desk decreases the risks associated with system adoption.

Deloitte will also work with you to establish a centralized Help Desk that is designed to respond to and resolve questions, concerns, and technical issues that arise from the user community. We will base the size of the Help Desk on the estimated call volume and our experience in providing user support for systems of a similar size, scope, and user base.

Communication with all stakeholders concerning implementation is an important area addressed by Deloitte. Some of the key strategies we use to engage each stakeholder group include:

- Communicating through the corresponding HIX portal timely information for each stakeholder group (i.e. consumers, carriers, employers, broker/navigators), for the purpose of informing and educating them with regard to the accessible functionality, enhancing understanding, curbing rumors and speculation, as well as reducing uncertainty.

- Operational reporting to manage employee and client expectations while promoting awareness of the project benefits and impacts; for example, through reports that that tell a carrier how many consumers have selected each of their plans across each of the different groups (silver, gold, etc.)
- Stakeholder feedback forums for two-way communication to engage user communities in a dialog where their questions can be answered, and achieve stakeholder buy-in and promote ownership by specifying their roles in making change happen and generating enthusiasm and excitement about the change.

5.4.6 Exeter

System implementations are a core focus of Exeter's business and in Exeter's experience, system adoption is the key hallmark of project success. Therefore, Exeter's practice focuses heavily on the program management services necessary for system investments, such as an Exchange system, to deliver increasing value over the years, including assessing an agency's readiness for change, the transitioning of users and departments to new processes, the training of users on new systems and the management of governance issues and change controls in perpetuity.

With more than 27 years of experience designing and implementing solutions and systems for the public sector, Exeter has developed a refined development and implementation approach, known as the Exeter Framework^{SM}. Key phases of the Exeter Framework are described as follows:

1. **Initial assessment:** The Initial Assessment phase forms the backbone of the OneGate implementation in order to develop a shared understanding of the project goals, structure, time line and roles.
2. **Requirements gathering and analysis:** For an implementation of an Exchange, the project team gathers and analyzes functional and technical requirements to develop a detailed scope for the project plan. This may include, but is not limited to, relevant state and federal policies, customer and state-facing systems features and workflows.
3. **Design updates to OneGate:** The pre-configured HHS rules and configuration in OneGate is designed to accelerate the implementation of an Exchange. Additional State-specific requirements will be identified and incorporated in the overall OneGate solution to meet the State's requirements. The project team will then identify how OneGate's HHS features and functionality can meet the State's needs, including out of-the-box OneGate features, minor configurations to OneGate or additional extension to OneGate.
4. **Enhancements to OneGate:** Based on approved specifications and requirements from the Design phase, enhancements to OneGate will commence. This phase may include updates to the policy rules, system configuration, third-party extensions, interfaces, data conversion and reports. In conjunction with development, Exeter complies with the Exeter Framework^{SM} principles, and any client specific requirements documented in the project's methodology.
5. **Change management:** State agency-specific requirements will typically drive changes to the current state and the associated users of the eligibility solution, and Exeter will coordinate with the state agency to identify how to best implement these changes and analyze their impact.

6. **Testing:** The Testing phase encompasses multiple levels of testing, including functional/business process validation, unit testing, performance testing, system integration testing, regression testing and user acceptance testing. Upon completion of testing, resolution of issues and the establishment of a timetable for identified future enhancements, Exeter and the State sign off and proceed to rolling out the approved solution.
7. **Transition:** The Transition phase is the period during which OneGate is officially and completely rolled out to the State's end-users. This phase can be organized in many ways depending upon client needs (e.g., West Virginia's desired phased implementation). Exeter provides online and printed guide documentation (i.e., Word, PDF, etc.) that includes user guides (in-depth explanations and tutorials on how to use OneGate), installation guides (guidelines needed for to perform an initial OneGate installation, scale additional instances or reboot existing instances) and administrator guides (maintenance and configuration procedures).

The Exeter Framework incorporates an enterprise view to ensure that enabling technologies are aligned with state business processes and technologies. Our requirements and design approach reduces cost by utilizing available data to administer the program more effectively. Finally, OneGate's design and Exeter's implementation methodology creates an environment that supports flexibility, adaptability, and rapid response to changes in programs and technology.

5.4.7 Getinsured.com

In partnership with the West Virginia OIC during design, development, configuration, and implementation of the Exchange platform, we will follow a Systems Development Life Cycle (SDLC) framework. We currently abide by SDLCs for developing and refining our private Exchange.

SDLC approaches can be integrated with several different project planning philosophies and the discussion below concerning RAD lays the framework for how the Getinsured team proposes to integrate early and intensive design with iterative approaches and prototyping/testing.

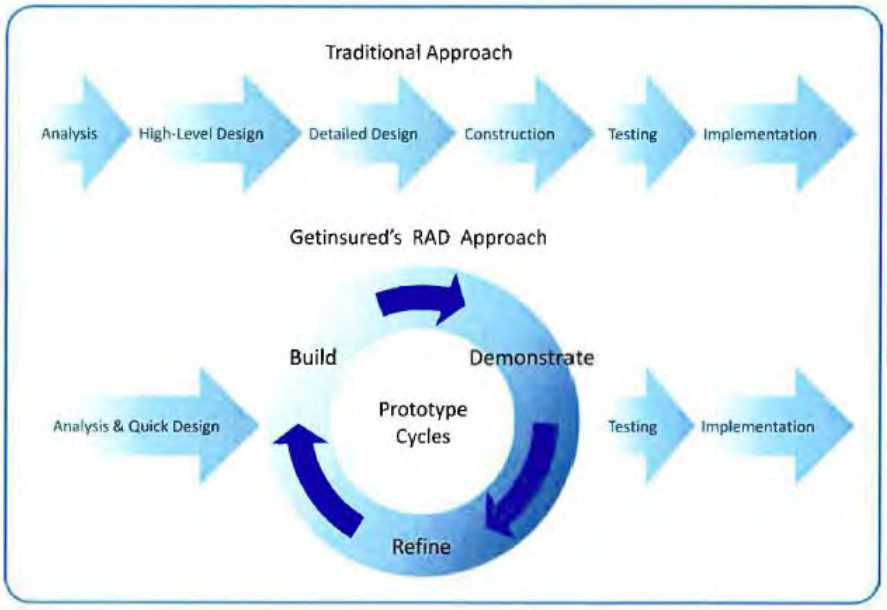
GetInsured Exchange system development would follow the Rapid Application Development methodology for faster development, testing and delivery of a high quality system at a relatively low investment cost. Such an approach would do the following:

- Concentrate on essential system elements from user viewpoint and rapidly iterate to provide the ability to rapidly change system design as demanded by users, thus producing a tighter fit between user requirements and system specifications.
- Project Risk: Generally produces a dramatic savings in time, money, and human effort and project risk by breaking a project into smaller segments and providing more ease-of-change during the development process.
- Aims to produce high quality systems quickly, primarily through the use of iterative Prototyping (at any stage of development), active user involvement, and computerized development tools. These tools may include Integration Development Environments (IDE), Database Management Systems (DBMS), version control systems (CVS), project

management tools (JIRA), documentation tools (Confluence) and object-oriented techniques.

- Active user involvement is imperative in the RAD/Agile approach to development. With RAD/Agile approach, GetInsured iteratively produces production software, as opposed to developing throwaway prototypes during extended design cycles.
- GetInsured produces documentation necessary to facilitate future development and maintenance.
- Our process engenders a greater level of commitment from stakeholders, both business and technical, than Waterfall, Incremental, or Spiral frameworks.
- Users are seen as gaining more of a sense of ownership of a system, while developers are seen as gaining more satisfaction from producing successful systems quickly.

A Depiction of the Getinsured Rapid Application Development Approach



5.4.8 LexisNexis

No response provided.

5.4.9 MAXIMUS/Connecture

The Alliance has successfully carried out some of the most complicated, time-sensitive, and visible Medicaid and CHIP implementations in the country. An overriding feature of each project has been the customization, testing, and deployment of a comprehensive system to meet all primary functional requirements. We also carry out each of the primary offline functions in a manner that is flexible, responsive to ongoing client input, and based on standardized methods that we know work well.

Through these experiences, we have developed a number of management and operational practices that have become part of our overall implementation toolbox. Some of these are highlighted in *Exhibit 5-1: Alliance Implementation Best Practices.*

Best Practice	Impact
Build strong working relationships between Alliance functional leads and our state counterparts	Ongoing transparency into each specific aspect of implementation
Weekly updating of the project plan to identify any tasks or dependencies that are at risk of falling behind and adversely affecting other downstream deliverables	Ongoing understanding of the implementation's progress in relation to the final "go-live" date as well as any major interim milestones or tasks such as systems testing, hiring, and training
Close contact between the program experts and the system developers	All primary program elements are fully and accurately captured in the underlying algorithms
Ongoing and iterative internal testing of system customization as it is initially completed	Problems are discovered and addressed much sooner and before they begin adversely affecting other aspects of the overall system
Early design and refinement of correspondence and online templates	Sufficient time for linguistically suitable translation and testing within a mock production environment
Job fairs that bring a large number of applicants to a "quick hire" environment based on interview and screening tools	Efficient and reliable identification of suitable, motivated, and capable applicants
Customer service training based on numerous "real life" examples that are initially developed in discussions with state staff	Front-line staff begin their responsibilities with a practical understanding of the most common application, eligibility, enrollment, and premium payment questions and concerns
Co-location of the client staff during the final weeks of the transition	Maximization of the opportunities for real-time decision-making and problem-solving

Exhibit 5-1: Alliance Transition Best Practices. *Through many high-profile implementations, the application of these tools and methodologies has made the Alliance successful*

The Alliance uses the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK®) to govern all of our projects. As part of our planning process, we work closely and collaboratively with our clients to establish goals and objectives set to incremental periods within the project schedule. As part of our AGILE approach to Software Development, we perform iterative joint application design (JAD) sessions during implementation to confirm, reaffirm, and accept our progress towards the objectives.

All members of the implementation team are expected to help identify risks and issues and their plans for mitigating or preventing them. We foster a culture of "no surprises." Communication is regular and recurring in the form of standing status meetings and interim conference calls, e-mails, or other agreed upon communication methods. We establish issue escalation protocols at the outset of the implementation to make certain that the client has an open and accessible line of communication with the Alliance.

5.4.10 Oracle

Oracle believes that the success of every project is driven by close alignment of vendor and State staff, trust between the two, and open, honest communication. In fact, many project management experts believe that effective Project Managers spend 90% of their time communicating, of which 50% is spent communicating directly with the project team. Oracle has a philosophy of “no surprises” which means that we provide clear and accurate communications to the State's project stakeholders and team members. Information will be prepared and delivered to stakeholders and the project team in a timely fashion.

These communications mechanisms will provide the means for the Oracle project team to build a relationship of trust and cooperation and to manage our common expectations for scope,

schedule, cost and performance. This cooperative relationship is particularly critical in an environment where new technology is being introduced to support a mission-critical business function that supports a wide variety of stakeholders - employees, contractors, and other government agencies, and when aggressive timeframes require a well documented plan and effective decision-making by all involved.

5.4.11 Software AG

No response provided.

5.4.12 Speridian

Proprietary response provided.

5.5 TESTING APPROACH

What is your approach to testing?

5.5.1 ACS

The ACS Team employs a rigorous testing methodology for application development and network security maintaining federal regulatory compliance while achieving industry-specific certifications for privacy and security.

Application and Product Development. Each aspect of the HIX Solution Suite is thoroughly tested by a team of quality assurance professionals and a battery of automated testing before it is released to our clients. The process for the development and implementation of new features to augment core application functionality and subsequent quarterly enhancements includes developer testing, feature/issue testing, and user acceptance testing, as well as performance, parallel and regression testing. Our software development life cycle (SDCL) also includes the following testing methodologies and objectives:

- Smoke Testing
- Security Testing
- Automation Testing
- Negative Testing
- Functional Testing

A core differentiator for the HIX Solution Suite is that most features and functions have been in production for at least 11 years. As opposed to systems that are currently being built, our systems have been through countless rounds of testing to provide West Virginia with a solid, proven solution.

Enterprise Network Integrity and Penetration Testing. The ACS Team maintains a defense-in-depth strategy that provides multiple layers of security throughout the enterprise network. Crucial elements of this strategy are the internal and external third-party testing that occurs daily, monthly, quarterly, biannually, and annually. Additionally, we contract with White Hat Security (www.whitehatsec.com) to provide penetration testing services. The testing simulates

an attack that is intended to expose the strengths and weaknesses of an application's security controls by highlighting risks posed by actual exploitable vulnerabilities.

SAS 70 and PCI-DSS Certification. The SAS 70 tests ten independent controls that provide reasonable assurances of quality and risk in how the software is developed, tested and implemented, in addition to and how member data is accessed and stored. The PCI-DSS assessment tests our ability to process card payments, prevent credit card fraud, hacking and various other security vulnerabilities and threats. PCI-DSS applies to all organizations that store, process or transmit cardholder data - with guidance for software developers and manufacturers of applications and devices used in those transactions. Any company processing, storing or transmitting cardholder data must be PCI DSS compliant.

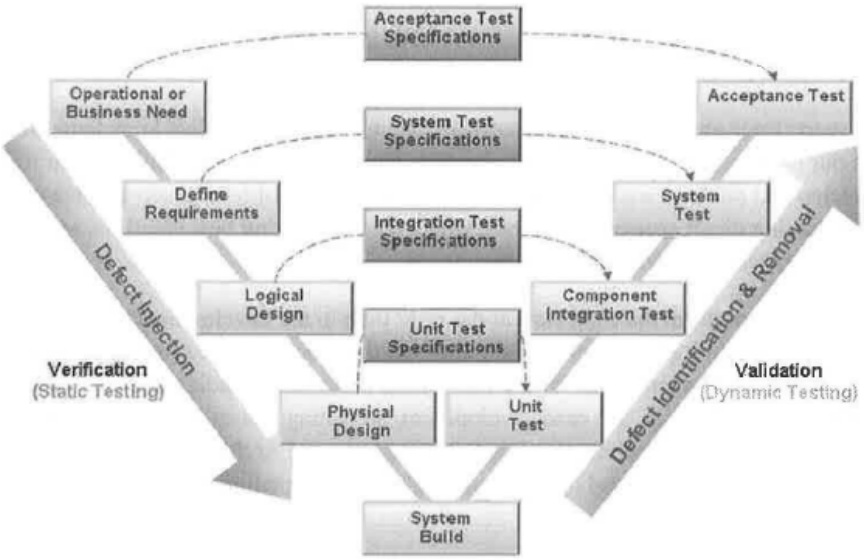
5.5.2 CGI

CGI's approach to comprehensive and effective testing methodologies uses proven approaches addressing testing goals, process, and methodologies. Key areas of focus in improving performance and results include:

- Early Defect Detection
- Comprehensive Test Coverage
- Automation to Accelerate Testing

Early Defect Detection
CGI recognizes that early defect detection is critical to shorter test cycles, fewer regression tests and timely delivery of quality solutions. The V -Model approach shown in Exhibit 9 emphasizes the need for a testing focus starting with requirement analysis where defects can be introduced. The test team participates in requirement analysis sessions to gain an understanding of the business objectives of the system and to provide input leading to testable requirements.

Exhibit 9: Clarity in Requirements Improves Early Defect Detection



Finding defects sooner in the development lifecycle results in a significantly lower total project cost, and reduced software deployment time lines.

- **Higher Quality** - Automated re-use of testing components, independent verification and validation, requirements coverage, and data-driven metrics all combine to improve the quality of testing and the maturity of the test organization. Finding defects sooner in the development lifecycle results in a significantly lower total project cost and reduced software deployment time lines. The earlier in the development cycle that a defect is detected and corrected the less costly it is to fix. This is also known as the "1:10:100 Rule", as shown in Exhibit 10. Caught early, defects can be corrected and eliminating the cascade effect. This is a key to an effective and successful testing effort and a focus of the CGI Team.
- **Improved test coverage and throughput** - By executing our methodologies and continually measuring the key metrics and performance indicators, the CGI Team can accurately measure both the effectiveness and impact of test cycles to identify opportunities for continual improvement. These processes and frameworks have been applied in many past engagements and capacity and utilization improvements of 25 percent or more are common.

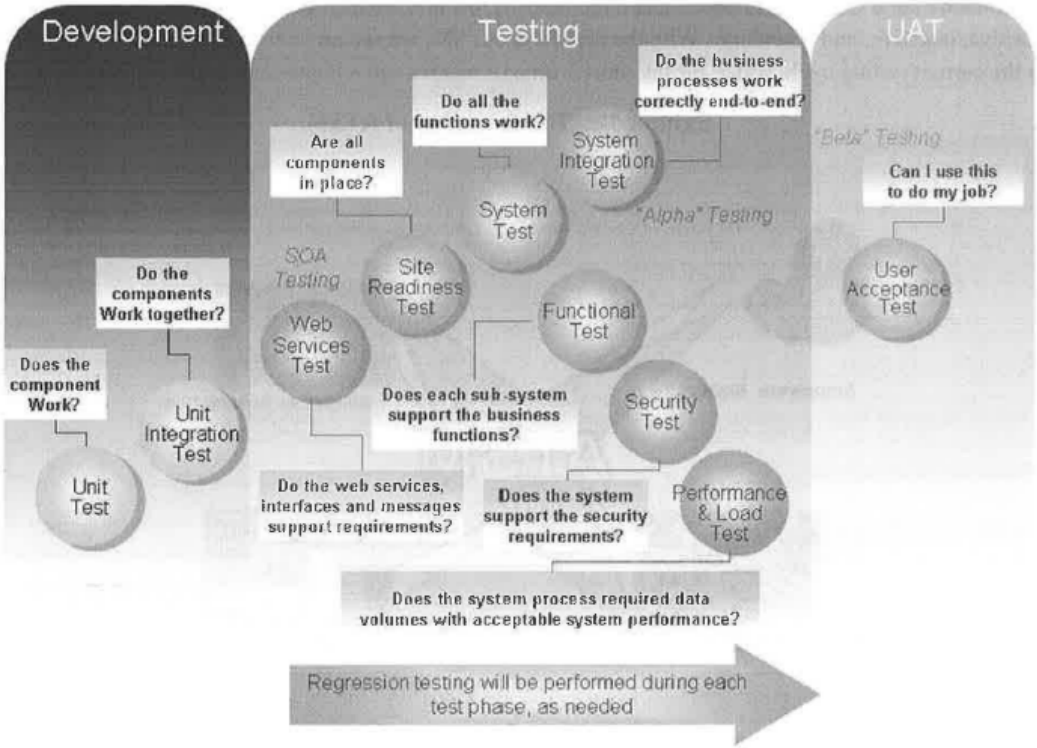
Exhibit 10: Benefit of Early Detection in Relation to Cost of a Defect

Phase in Which the Error is Found	Cost Ratio
Requirements	1x
Design	3-6x
Coding	10x
Development Testing (Unit Testing)	15-40x
Acceptance Testing (SQT)	30-70x
Operation	40-100x

Comprehensive Test Coverage

CGI's testing experts track emerging trends in software testing services, conduct knowledge sharing sessions across our centers, review engagements, analyze lessons learned, and challenge our team members to develop and publish new concepts to enhance the quality of testing services we provide. Our clients benefit by having direct access to thought-leaders, learning testing best practices, and the ability to introduce the concepts within their specific environments.

CGI organizes testing to perform the right tests at the right time in the development and test cycles, as shown in Exhibit 11, with multiple streams cycling through the process at the same time. The framework includes specific processes and templates for the full testing lifecycle, including testing strategy, test planning, requirements traceability, test case development, all testing phases (integration, system and other specialized testing such as web services in a Software Oriented Architecture (SOA) strategy, multisystem integration, user acceptance, and operational readiness), automation strategies, reporting, and quality metrics.



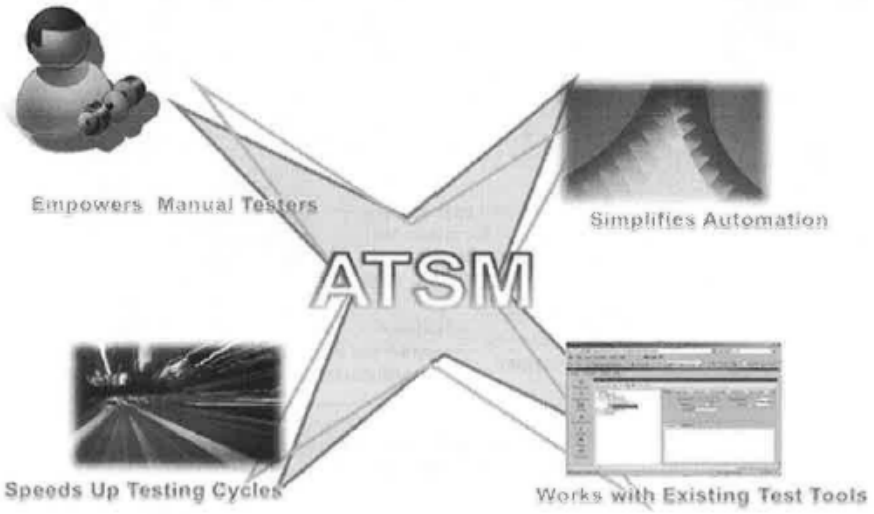
CGI promotes automation to the forefront of testing, instead of regression only, enabling a reduction in execution time, increase in reusability, and increase in test coverage. Our innovative Automated Test Service Management (ATSM) approach provides clarity and traceability around test conditions and enables durability and reusability of test cases utilizing sophisticated data substitution methods.

Automation to Accelerate Results

Our approach introduces automation at the beginning of the test cycle, creating a foundation for manual testers to facilitate automation while preparing their initial test cases, rather than treating automation as a methodology for regression testing only. In typical keyword framework approaches, automating early requires a great deal of rework, manually updating Microsoft Excel files, object names and data names as changes are made to the code. With our innovative approach, automation leverages dynamic data substitution at runtime, globally updating test scripts through a centralized repository. By advancing automation to the forefront of testing, testing cycles are reduced, regression testing simplified, standardization is achieved, and the quality and clarity of test cases is improved.

CGI is an innovator and leader in test automation and our ATSM tool allows our delivery centers to create automation with zero coding knowledge and without the help of automators. We take this innovation into every testing engagement and our methodology is aimed at proving that the application under test functionally solid from end-to-end. The three units of test that we incorporate into our strategy are positive, negative, and boundary. With the benefit of ATSM, we see up to 80 percent automation levels in the current testing cycle which means shorter time to market and a higher percentage of defects found.

Exhibit 12: The Benefits of ATSM



5.5.3 Cognosante

Since the inception of Cognosante, our management of projects and the development of project work products have been driven by national best practices and industry standards. Our project managers and project staff are trained in, and adhere to, the applicable project management, quality, technical, and health privacy and security standards including HIPAA and Capability Maturity Model Integration (CMMI) standards. We also have projects that have utilized International Standards Organization (ISO) 9001:2000, Institute of Electrical and Electronic Engineers (IEEE), and the National Institute of Standards and Technology (NIST) standards methodologies.

5.5.4 Cúram Software

Proprietary response provided.

5.5.5 Deloitte

Deloitte brings a unique philosophy to testing - we focus on using testing processes to validate quality, not to introduce quality. Our experience in using our Playbook for planning and executing successful testing allows us to apply lessons learned and best practices towards future testing efforts. We bring specific experience in working with the State of West Virginia to conduct testing efforts on a large implementation project. Our involvement on the WV RAPIDS project demonstrates our collaborative approach to testing - we work side-by-side with State staff to validate that the application meets all requirements. Our testing approach encourages a collaborative environment built on the ideals of constant communication that ultimately result in successful testing.

Each of the testing phases included in our Playbook focuses the testing effort on a broadening set of testing goals, beginning with the verification that a unit of code is sound and integrates with other coded units of functionality, and concluding with business oriented testing that

confirms the readiness and usability of the functionality for production. Each testing phase we follow is described in the below table.

Testing Phase	Focus of Testing
Unit, Integration and Systems Integration Testing	• Conducted by Deloitte • Tests conducted on the system from the individual component level, to each module within itself, to the complete, integrated system • Evaluates and verifies that the system complies with all requirements
Performance and Security Testing	• Conducted by Deloitte and the Office of Technology • Checks that the system is secure and performs under peak load • Validates the system operates regardless of demand for services and is not vulnerable to security breaches
Accessibility Testing	• Conducted by Deloitte • Compliance with Section 508 of the Americans with Disabilities Act (ADA)
User Acceptance Testing	• Conducted by State staff • Applied on the entire application from a user and system perspective • Serves as the final confirmation of a production-ready system
Beta Testing	• Conducted by external users • Performed when the system is feature complete • Focuses on reducing impacts to the users and improving usability

Figure 16. Testing Phases and primary focus.

Throughout all phases of the testing efforts, defects within the system will arise and be documented in a software tool built to properly identify, track and manage issues found. Deloitte then works with the State to resolve defects based on their severity, priority, and their impact on business use. Our approach to defect management is grounded in a well defined process centric approach which provides the State with transparency and accountability for managing and resolving defects at each phase of the software development life cycle. Using direct inputs from the State staff, we determine the appropriate resolution, consulting SMEs as required for clarification, and allocate the necessary development resources to expedite issue resolution. Our procedures follow the complete SDLC to avoid any further discrepancies or issues in the testing environments that may impact system use, by complete verification and validation of additional changes. Before a testing cycle reaches completion the number and severity of defects must meet the established exit criteria.

Our solution is compliant with Section 508 of the Americans with Disabilities Act (ADA). With each release, we test the compliance through COTS tools specifically used to check compliance. Our solution's user interfaces adheres to the standards and guidance for specific user interface components such as banners, logos, symbols, text, and layouts.

Performance testing is particularly relevant for the WV HIX system as the intended users are individuals in the general public who expect a responsive system. We understand that testing the application to make sure it supports the number of users during peak times is a critical step in the overall testing process. We have implemented high volume, high performing applications on a number of similar engagements where we have used technology to meet the performance demands of our clients in high transaction volume environments. Load testing is conducted on individual modules as they are built and on the integrated system as a whole in order to build confidence that the system performs under peak volume conditions. Performance testing is also used to validate the security of the system and validate that the State is protected from malicious volume attacks. As personal and private information for every user is contained within

the system, it is of upmost importance to address that the client information is protected and stored securely.

In addition to multiple phases of testing conducted by Deloitte and State staff to confirm that the system meets all requirements, we understand the value in collaborating with potential external users during this time. As the system will be used not only by State staff but also by navigators, brokers and consumers, it is crucial to conduct usability testing to gather feedback from individuals who will have continual use of the solution. Beta testing is conducted as the last phase during our testing cycle and utilizes focus groups of selected users to test the earliest release of the system. This phase of testing is essential to determine the efficiency of the system and to discover areas where improvement is possible.

The collaborative testing efforts between Deloitte, the State and selected external users result in an application that is ready to be successfully delivered in production. At this stage in the process we present the State with a system that has been tested to comply with all specifications and has been designed to help create a positive response from all users.

5.5.6 Exeter

The Exeter Framework[SM] methodology includes a thorough and well-balanced approach to testing. The testing process starts with early planning during initial planning and system design activities and continues to be an integral part of the implementation lifecycle until go-live and stabilization. The aim of testing is to ensure that the system will meet all of the users' requirements. The focus is not only on finding and fixing bugs, but also on ensuring that the system under development incorporates all the features required to provide the user functionality and performance.

Level of Testing	Description	Prerequisites	Output
Level 1 - Unit Testing (UT)	Verifies the logic, computations, functionality and error handling of a unit of the software component or a module.	▪ Technical and functional specifications where applicable ▪ Individual components of the application built and configured on the development instance	▪ Individually tested components of the application

Functional/Business Process Validation	Validates the state's or agency's business processes, through front end testing.	▪ Unit-tested application components ▪ Operational test instance populated with test data	▪ Individually tested user interfaces of the application ▪ Functional test results ▪ Error reports
Level 2 - System Integration Testing (SIT)	Verifies the correct functioning of the system within the context of interdependent application modules and supporting peripheral systems.	▪ Application components that have successfully passed unit testing and functional validation ▪ Operational test instance mirroring the production instance populated with test data	▪ Operational and fully integrated application ▪ SIT results ▪ Error reports
Level 2 - Load and Performance Testing	Subjects the system to expected production data volumes and processing load within the context of concurrent users, network latency and bandwidth expected in production.	▪ Fully integrated application that has successfully passed SIT ▪ Operational test instance populated with test data	▪ Load-tested system able to handle data volume and concurrent users expected in production ▪ Performance test results
Level 3 - User Acceptance Testing (UAT)	A round of testing performed with client users to verify the functionality of the implemented system is what was expected and necessary.	▪ Fully integrated application that has successfully passed SIT and load and performance testing ▪ Operational test instance populated with test data	▪ Application approval by end-users
Pre Go-Live Production Verification	A non-invasive testing of the production environment to verify all prerequisites for go-live has been met, and that the production installation procedures have been completed.	▪ Fully configured Production Instance loaded with data from last round of data conversion	▪ Operational application in production
Level 4 - Stabilization during Post Production Support	A mutually agreed-upon period of time (30 days) after go-live where the system is closely monitored for errors.	▪ Operational application in production	▪ Fully operational application in production with an agreed upon criteria of performance (e.g., no high-severity errors, no medium-severity errors, no more than 10 cosmetic errors.)

5.5.7 Getinsured.com

a. Need for Iteration

The development and deployment of a Health Insurance Exchange is a large project with challenging timelines. Even if a SaaS model is adopted and commercially available, off-the-shelf services and components are used wherever possible, the deployment of a working system will require numerous integrations with systems that are likely to evolve over the period of the implementation. For example, the evolving nature of guidance from HHS and other entities, lessons that will be emerging from early innovator states, and the concurrent development of

key infrastructure components like the HIE will demand greater flexibility and more iterative development techniques.

Similarly, on the back end integration and operational aspects of the exchange, there will be a need to develop flexible workflows and start with loose integration with carriers and other agency systems that can become increasingly sophisticated and automated as those capabilities evolve and standards are established and refined.

Thus, this team recommends the use of iterative and incremental design and prototypes and against a large "big bang" approach to this project. Our recommendations and the project plan will follow this philosophy.

b. Piloting and Prototyping

Getinsured strongly advocates for piloting and prototyping of solutions. We would suggest, for example, that West Virginia consider following the Wisconsin example of providing a mock-up exchange for consumers to test drive and provide immediate feedback. The Health exchange core functionality is well understood and can be defined as a set of services and user-interfaces that can be stood up on a much faster time-line. The model would resemble the health benefits exchange to the extent information is available concerning the health benefits plan and would provide users with an opportunity to interact as though making a real life insurance purchase or enrolling in Medicaid (using existing eligibility at the time). The contractor would propose having the beta-test widely available to the target stakeholder groups for practice and refinement during the soft roll-out period of the contract.

c. Release Schedule

Getinsured will develop with the West Virginia Exchange a standard regularly scheduled release schedule for updates and improvements to the platform. Getinsured will follow a change order process for defining, prioritizing, sequencing, and providing cost estimates for exchanges to the exchange over time. In a SaaS or exchange-as-a-service model Getinsured will release updates to end users on a predefined scheduled, except in the case of urgent Severity I errors. In a traditional software model, Getinsured will coordinate with the WV Exchange to receive and update the software on its internal servers.

d. Enhancement Roadmap and Follow up Releases

Getinsured implements a well defined change order process that enables Exchange operators and stakeholders to request enhancements or changes to the system. Requests will be managed through an open source ticketing system, which is used for prioritizing, sequencing, and providing cost estimates. Changes are implemented and tested based on target releases. Getinsured will develop with the WV Exchange a standard regularly scheduled release schedule for updates and improvements to the platform. In a SaaS or exchange-as-a-service model Getinsured will release updates to end users on a predefined scheduled, except in the case of urgent Severity I errors. In a traditional software model, Getinsured will coordinate with the West Virginia to receive and update the software on its internal servers.

5.5.8 LexisNexis

No response provided.

5.5.9 MAXIMUS/Connecture

The Alliance approaches testing on many different levels to deliver a technology solution that is reliable, properly scaled to the estimated program volumes, and programmatically and functionally sound. In addition to usability testing conducted during development, we conduct quality assurance (QA) testing, and performance testing during implementation in addition to the standard testing that takes place during product development. Each of our client projects are implemented utilizing a proprietary, structured project management and systems development methodology, designed by the Alliance specifically for delivery of Exchange solutions. Each project will be managed through a series of phases that ends with User Acceptance Test (UAT).

During QA testing, the configured aspects for each product module and component of the system are internally tested to confirm that the completed solution performs as expected and required. Our clients have significant input into our test plan, schedule, and test cases.

Although the client is primarily responsible for the UAT phase, Alliance resources remain very involved. The client coordinates resources, provides a test plan and schedule, creates detailed test cases, logs results and communicates status. The Alliance Business Analysts and QA Analysts continue to test the application and work with the technical team on code fixes and migrations. Train-the-trainer is typically conducted prior to UAT kickoff so that client resources are fully prepared for testing.

We also plan and execute performance testing as part of implementations. The performance test includes both transaction speed based testing and capacity/peak volume testing. We use the production environment for production testing for initial software installations and the configuration/development environment (which is set up to look just like the production environment) for performance testing after we go live. The Alliance uses third party tools including LoadRunner and JMeter.

5.5.10 Oracle

Oracle's approach to testing will start with rigorous Unit, Integration, System, and Performance test and will end with final User Acceptance Test which will be performed by West Virginia staff with Oracle assistance. We use a proven implementation and testing approach including traceability that makes requirements trace directly to a test or group of tests and each test will trace to a requirement or group of requirements.

- Benefits from this approach include:
- Improved quality and reliability
- Reduction in the amount of rework
- Reduction in the cost of problem correction
- Efficient testing by focusing on the objectives of the tests
- Requirements traceability, allowing informed decisions
- Improved risk management
- Delivery per the schedule
- Success criteria determined, encouraging a focused effort

Entry and exit criteria will be defined for each stage to help determine the solution's readiness from one stage to the next. The approach requires that activity in one stage must be completed before moving on to the next stage. Ultimately, prior to Production Verification, State testers will verify the system complies with requirements as documented in the business requirements document during User Acceptance Test.

A key concept inherent in the V-Model is that development and testing processes must be structured and repeatable. It is essential that the stages of the V-Model, and the processes to complete each stage, are well defined, structured, and standardized. Processes that are not repeatable are not measurable, and therefore do not easily lend themselves to improvement.

The following defines Oracle's approach to each level of testing. Appropriate test environments should be maintained for testing in either a logical or physical model:

- **Unit** - Each stage of the testing process is a building block for the next stage of testing, beginning with Unit Test. Unit Test, the lowest level of testing, includes testing each unit (programs, modules or sub-systems) of the software component's logic branches, field level business rules, maximums, minimums, field formats, file structure, error and exception handling etc. Unit Test is designed to verify that individual application components have been configured on-line with detailed design specifications. The idea is to focus on a relatively small segment at a time and verify the solution against its detailed design. Because the solution is a COTS solution, basic Unit Testing has been conducted exhaustively by the vendor. However to validate West Virginia's unique configuration Unit Test plans will be documented by the developers and unit test evidence and results will be published.

- **Integration** - During Integration Test the Oracle team will verify the assembled COTS components are connected and configured correctly in order to process transactions end-to- end. Integration testing is conducted after Unit Test and before System Test. The goal of integration test is to progressively test larger groups of the solution components in order to verify connectivity and validate the configuration works according to the detailed design. By assembling and testing the solution incrementally, defects are contained and easier to identify and resolve prior to System Test. Once the complete system is fully integrated end-to-end transactions, or threads, will be executed to verify that the solution is set up properly. Integration test also tests the interfaces to various other systems are correctly connected to the solution and working properly. The Integration Test Plan will identify the test scenarios that will need to be executed in order to address West Virginia's HIX requirements.

- **System Test** - System Test continues to verify that the HIX addresses the functional and technical requirements. In this phase, testers execute test scripts that are step by step instructions on executing a business process using converted production data. The purpose of System Test will be to test the integrated solution in order to validate that the solution will address the business requirements.

  A key piece of documentation that is used during testing is the Requirements Traceability Matrix (RTM). The RTM plays a vital role in testing to verify the system performs as expected based on West Virginia's HIX business requirements. Traceability exists between the test phases, test conditions, and test scripts. Using the RTM, the

Oracle team can verify each requirement has been addressed in the test plan. Without an RTM, it becomes difficult to determine if all requirements have been included in the test effort in order to consider testing complete.

Other important artifacts developed include test conditions, test scenarios, test scripts, defect logs, and test execution results. Each of the artifacts created during the phase is reviewed with West Virginia to verify completeness and acceptability. The test team will work with KHPA personnel, business analysts, testers, and subject matter specialists to identify realistic test scenarios and scripts to validate functionality. We develop test conditions to be included in the test scripts using requirements confirmed during the Analyze/Design Phase. This allows the team to verify the testing of requirements and provides full requirements traceability. After we define the test conditions and scenarios, we prepare our system test scripts. Scripts include a combination of functional instructions as well as technical instructions to allow the test to be repeatable as needed. The test scripts will be stored in the test management tool and specific scripts will be used for automated regression testing.

- **Interface** - During Integration Test Oracle will verify the different COTS components are connected and configured correctly in order to process transactions end-to-end. Integration testing is conducted after Unit Test and before System Test. The goal of integration test is to progressively test larger groups of the solution components in order to verify connectivity and validate configuration works according to design. By assembling and testing the solution incrementally, defects are contained and easier to identify and resolve prior to System Test. Once the complete system is fully integrated an end to end transaction, or thread, can be executed to verify that the solution is set up properly. Integration test also tests the interfaces to various other systems are correctly connected to the solution and working properly.

- **User Acceptance Test** - Oracle can support User Acceptance Testing by creating the initial test scenarios, building detailed testing scripts, determining expected results, establishing testing procedures and protocols and managing the UAT defects to resolution. The State test team will review and approve all test scenarios prior to test script creation and testing and potentially add additional test scenarios if needed.

  User Acceptance testing (UAT) will consist of three types of testing:

  1. Structured Data Test
  2. Operational Readiness Test
  3. Disaster Recovery Test

- **Performance/Load Testing** - Prior to system implementation, performance testing of the West Virginia HIX solution is performed as a collaborative effort between the State and Oracle team. Performance testing is an iterative process that examines and maintains/enhances system performance, stresses the new system's capacity to add data, users, and user activity. The Oracle test team will incorporate performance testing into integration and system tests. Performance tests will be designed to stress the system's capacity in relation to data volume, number of system users, and concurrent user activity focusing on the most time-sensitive functions. Performance tests will be conducted during non-peak hours to preserve efficiency.

5.5.11 Software AG

No response provided.

5.5.12 Speridian

Proprietary response provided.

5.6 INTELLECTUAL PROPERTY

Discuss the nature of your proposed solution from an intellectual property perspective. Do you retain all rights to all source code and enhancements? Please discuss how your source code is maintained and secured/escrowed.

5.6.1 ACS

Our HIX Solution Suite is provided under a Software as a Service (SaaS) model. Consequently, any fees charged by the ACS Team do not represent any perpetual license or ownership rights to intellectual property or software or services. As such, we do not engage in "work for hire" or custom code development, nor would the HIX Solution Suite be subject to mandatory licensing, title transfer, or source code escrow. We retain all rights with respect to the source code and any enhancements to the software functionality. Any enhancements/customizations that we make to the system will be considered part of our HIX Solution Suite and the rights to those enhancements/customizations will belong to the contributing member of ACS Team: ACS State Healthcare, Benefitfocus, or *CHOICE* Administrators.

5.6.2 CGI

CGI's Health Insurance Exchange360 includes licensed components, open source components, and components that are public domain. Licensure requirements and source code security are handled on a component basis.

5.6.3 Cognosante

Our approach of using best of breed COTS products with a modular design limits the State's exposure to vendor imposed limitations of the use of intellectual property.

5.6.4 Cúram Software

Proprietary response provided.

5.6.5 Deloitte

For our base solution, Deloitte has an option where we will provide the State with the full source code. Deloitte will maintain the base source code and provide enhancement releases on a regular basis. The State will own all enhancements performed specifically for the State and enhancement source code. For 3rd party components, individual agreements would need to be negotiated with those parties.

5.6.6 Exeter

Exeter retains ownership to all OneGate product source code, but, as is customary for COTS IP, provides flexible licensing and maintenance terms. States have the option of extending and maintaining their own business rules sets, or contracting with Exeter for ongoing rules updates.

5.6.7 Getinsured.com

Getinsured would propose to build an Exchange solution for the state as follows:

- All major software components that are currently part of the Getinsured platform could be procured by the state on either an end-user license or a SaaS basis. In either scenario, the state would continue to benefit from bug-fixes and enhancements that the company would make on a continuing basis to the platform. The company would also provide help-desk services, including mission-critical 7*24 services needed to support the platform.
- Components developed specifically for the state of West Virginia would however be owned by the state of West Virginia. The company would provide the state with a fixed hourly rate for any change-orders or provide fixed price bids on larger projects.
- Exchange operations, content, customer service (or customer service management) can also be set-up and run independently by Getinsured.

5.6.8 LexisNexis

No response provided..

5.6.9 MAXIMUS/Connecture

The StateAdvantage solution is based on software products that already exist. The Alliance licenses its software on a usage basis and retains its intellectual property rights in the software, including without limitation the source code for the software. The Alliance offers its clients the ability to have a copy of the software in production for a client deposited with a third party escrow agent. The Alliance typically uses Iron Mountain to escrow software.

5.6.10 Oracle

Oracle understands that leveraging assets from the Early Innovator States presents numerous advantages such as reduced cost and accelerating project delivery. Re-use of Exchange components is a central theme defined by CMS in an effort to reduce the overall cost of the program nationwide.

As general guideline, Oracle retains ownership and intellectual property (IP) rights to Oracle deliverables, work products, and properties. The customer receives a license to use programs and service deliverables for their internal business use. As an example, for the State of Oregon, Oracle received internal approval to provide the State with joint ownership rights to a subset of deliverables. All other deliverables were and will be provided in accordance with Oracle standard. Oracle looks forward to the opportunity to further discuss IP matters with the State.

5.6.11 Software AG

No response provided.

5.6.12 Speridian

Proprietary response provided.

6.0 Operations and Maintenance

6.1 SUPPORT AND MAINTENANCE

Describe the level of support and maintenance required for your proposed solution. Include your description of the types of services required to keep the solution operational, staff resource requirements by technical and non-technical personnel as well as by module, hours of operation for support, support contact methods, whether support is outsourced, and any other information that may be valuable to the State.

6.1.1 ACS

Within our SaaS model, the level of support required from both technical and non-technical state staff is minimal. The ACS Team takes care of all configuration, ongoing policy or rules changes, technology upgrades, and maintenance of the system. We would partner with State resources to document new business functions that the Exchange needs to support based on policy or regulation changes; but the work to configure, test, implement and deploy those changes is handled by the ACS Team. This innovative approach means that valuable State resources are available to work on strategic direction for the programs, focus on other social service areas, and provide policy direction.

The technology is hosted, monitored, and managed within secure data centers. Our full-time staff performs all maintenance required for the HIX Solution Suite. The components of the HIX Solution Suite are operational and have been continually refined and improved based on years of user research and client input. Current clients take advantage of new features multiple times per year without costly and time consuming software "upgrade" projects and without internal IT resources. This enables insurance carriers, employers, consumers, and other users to always use the latest technology, thereby avoiding future costs and challenges often associated with software maintenance.

Other types of services required to keep the solution operational include, but are not limited to:

- Data center and technology operations, maintenance, and development
- Exchange business rules maintenance, including federal and state policy changes
- Software and hardware resource management
- Information security management, including at the administrative, physical, and technical levels
- Business continuity and disaster recovery management
- Business processes for call center, document management, premium processing, etc.

6.1.2 CGI

CGI offers full maintenance and support for the solution and infrastructure. As part of infrastructure maintenance and support, CGI maintains active maintenance contracts with hardware and software vendors. The maintenance contracts obtained provide the level of support from the manufacture that allows CGI to maintain the agreed to Service Levels between CGI and West Virginia.

CGI engineers receive updates and bulletins automatically from the manufactures and review them to determine their applicability to the on-going support of the solution infrastructure. If a maintenance update or patch is vetted to be applied to the solution, the Change Process is followed and once approved is scheduled to take place within the agreed to maintenance change window for the solution. If a critical patch or update is received that could impact the integrity of the solution, an Emergency Change process is initiated and upon approvals the emergency change is implemented. West Virginia, as part of the Operational Framework (OF), would be a participant in the Change Management process and approval.

In addition to information obtained from the manufactures of the hardware and software for updates and patches, is the operation and performance maintenance. The information obtained from the monitoring process provides information used to trend growth and identity areas where additional resources should be applied to maintain optimum performance. The architecture design for the solution will utilize virtualization as greatly as possible. In a virtualized environment, system resources can be added or removed as necessary without impacting operations. This is why virtualized environments are the foundation for Cloud Services, where clients use computing resources for short periods of time.

Security and protection from unknown disasters is another component of on-going maintenance and support. CGI's Security Operation Center (SOC) is maintaining a watchful eye on CGI tools that inspect and identify potential threats to the solution from outside sources. CGI designs the network with firewalls and intrusion detection devices providing the security levels required by West Virginia. The SOC is constantly validating the level of protection in place is defeating all incoming cyber attacks that occur on a daily basis in today's world.

Protection from the unknown disaster and being prepared for it is another aspect of infrastructure maintenance. A Disaster Recovery Plan (DRP) once develop becomes a living document for the HIX System. Changes and updates to the system need to be incorporated into the plan so they are adequately covered in the event of a disaster. The normal growth of a system and the amount of data to be recovered is reviewed on a regular basis as recovery time to load backed up data could potentially change and adjustments may be necessary to the DR site to accommodate.

6.1.3 Cognosante

As the SI for West Virginia, Cognosante will provide oversight to vendors of Exchange vendors and the solution to ensure acceptable levels of service and performance are maintained. Cognosante recognizes this as one of the primary functions of the SI, to provide direct oversight and management of the Exchange vendors, relieving West Virginia of the administrative burden of this task. Similar to the MMIS environment, Cognosante will work with West Virginia Exchange stakeholders and Board of Directors to create Service Level Agreements (SLAs) for the Operation and Maintenance of the Exchange. Types of SLAs will include, but are not limited to:

- Transaction Processing times
- System Response times, including Web Portal
- Data Quality Standards
- Call Center response times
- System performance and "up time" measurement

- Reporting of potential PHI, security, or policy breaches
- Levying of vendor fines for non compliance
- Production of standard reports
- Tracking of key performance metrics

As the SI, Cognosante will be responsible for oversight of vendor contracts and ensure vendor compliance with established and agreed upon SLAs.

6.1.4 Cúram Software

Proprietary response provided.

6.1.5 Deloitte

The level of support and maintenance required begins with a core team of management, business and technical resources, such as an application manager, business analyst, system administrator and DBA. Their first responsibility is to protect the stability and performance of the production environment. The core of the base level of support is performing corrective, adaptive, and preventive software maintenance across each of the component parts of the HIX. This includes performance monitoring and tuning, software upgrades for underlying COTS products, and the addition, deletion, or modification of data elements within system reference tables.

However, the agency also needs to fulfill Federal and state mandated policy/system changes, improve existing processes and functionality, and achieve new initiatives. These system enhancements require additional requirements definition, design, development and testing in order to deploy to the HIX user community. In a standard maintenance model, Deloitte proposes that the agency maintains a pool of hours per contract year, to be leveraged at their discretion for the purpose of implementing required policy changes and desired enhancements to the HIX. This Software Modification Pool (SMP) of hours augments the base level of support and offers the OIC the complete flexibility to manage required changes to the HIX over the life of the contract.

If the OIC decides that they prefer a packaged solution model then federally mandated system changes, as well as other enhancements, would be delivered as part of regular maintenance releases or upgrades to the HIX Solution. Those upgrades would be installed similar to any other packaged software release. The complexity of deploying the upgrade would be a factor of the level of customization that is made to the solution baseline. Under this model, State specific enhancements or customizations would be supported through a separate agreement. That being said, there is a third alternative which is to combine the first two models resulting in a packaged software model with a smaller maintenance team.

6.1.6 Exeter

Exeter has a variety of support and maintenance levels for the OneGate product, which include periodic patches to the OneGate software as well as periodic product version releases. The scope of software maintenance and support activities will vary depending upon the level a state agency selects with the understanding that selection of a level is based on the agency's specific needs, requirements and budgetary limits. For example, some agencies may want a more

hands-on approach, while others may want to conduct software maintenance and support activities in-house.

Patch and new version releases may contain support for newer third-party components as well as issue resolutions. New release versions will also contain new OneGate functionality. A state agency has the option of requesting Exeter's assistance in applying released patches or new versions of the OneGate software. Exeter also provides additional support services for the upgrade of the third-party components used by the OneGate product, such as Siebel and OPA.

Additionally, Exeter will assist our client with reviewing its existing long-term support organization for the new Exchange system upon conclusion of end-user training, and help to define its support organization.

6.1.7 Getinsured.com

The Getinsured.com solution is flexible in the sense that states can choose how much or how little they wish to be involved with the support and maintenance of the Exchange.

At one end of the spectrum-the state can totally out-source all of the Exchange components, maintenance, enhancements, operations and customer support services to our team. We are experienced at doing this, because we manage our own private Exchange operations today.

At the other end of the spectrum- the state can simply license our technology components and run all of the Exchange itself.

6.1.8 LexisNexis

Once the work to accomplish the initial interface and integration is complete, the communication between the Exchange and LexisNexis is operational and the LexisNexis production manager will ensure continued improvement and application updates over the evolution of the solution and shifts within the industry/environment.

6.1.9 MAXIMUS/Connecture

For a West Virginia Exchange implementation, we will deploy a full-time Project Manager and key staff who will coordinate and facilitate day-to-day project activities with their state counterparts. Contact information and an issue escalation process are documented within the Alliance's Customer Support Guide that we deliver to each of our clients early in the implementation phase.

The Alliance's Hosting Services team is also available to provide any technical assistance that may be required. Their main responsibilities include:

- Execute all application and database releases for QA, UAT, Configuration and Production
- Support the Alliance's servers and applications with a focus on improving the overall performance and security of the Alliance's operations
- Provide 24/7 systems monitoring

In addition, the Alliance offers client phone-based and email support during regular business hours, with on call support and accessibility after-hours 24/7 for escalation purposes. Our business hours for help desk support typically are 9:00 a.m. - 5:00 p.m. Eastern.

The Alliance's superior technical support can resolve a full range of technical issues from scheduled upgrades to unscheduled outages. In a hosted solution, the Alliance conducts routine, preventive maintenance on the software and hardware. Our maintenance efforts are scheduled in advance and during off-peak time to limit the impact to system availability. In an installed solution, our client is responsible for routine, preventive maintenance on software and hardware, and we are available to assist, if needed.

The StateAdvantage product team iteratively develops upgrades to keep the software current with the latest rules, program requirements, and general Exchange trends. In addition, we highly value our clients' input and encourage clients to submit Product Enhancement Requests through a web-enabled ticket tracking system. The Product Management group works with our Release Steering Committee to determine what features and functionality will be added to the StateAdvantage suite based on customer demand, priority and system impact. When a new release is imminent, the project team works with each affected client to implement those that will be most beneficial.

To decrease total cost of ownership, the Alliance provides a variety of web-based, self-service maintenance tools, as previously described in *Section 4.H: Tools to Extend Exchange Functionality.*

6.1.10 Oracle

Oracle advocates the State, through the tight collaboration between your IT staff and business stakeholders and Oracle to form the integrated project team, to attain self-sufficiency in maintaining and operating the Exchange as this model represents the most optimal total cost of ownership of the Oracle HIX solution.

As the knowledge transfer process occurs among the team members, Oracle Consulting Managed Services provide an innovative, flexible approach to maintaining and improving your Oracle HIX solution. This portfolio of services covers many essential post-implementation functions for maintaining and improving your applications and technology infrastructure and is suited to the customer who is not ready to move to a full outsourcing solution. The State can effectively manage its IT budget and balance your project priorities by choosing the services you require - when you need them, and for as long as you need them. By supplementing your IT staff with Oracle's global team of specialists, proven methodology and tight integration across Consulting, Support, Development and Education, you benefit from expert system management and lower total cost of ownership.

As part of the service, Oracle performs functional helpdesk activities including Technical Assistance Request (TAR) management and business system management. Oracle Consulting will work with you to:

- Establish and build process management procedures and a knowledge management repository based on your system and business processes.
- Triage, troubleshoot, and correctly route Oracle Applications specific issues.

- Provide a single point of contact to work with Oracle Support to fix standard product issues.
- Coordinate with third-parties to fix issues integral to Oracle Applications through resolution.
- Provide recommendations for repeated issues including impact analysis to customizations.
- Analyze impact of Oracle product upgrades and patches on customizations; provide recommendations, and minor modifications to customizations and general guidelines for testing.
- Develop and maintain a business continuity plan for your support processes.

Oracle Consulting Managed Services can be purchased stand alone or in conjunction with one another for greater value and efficiency. The services within the portfolio include:

- Database Administration (DBA) Services - enable you to decrease database administration costs with off-hours, specialty instance and peak period DBA assistance without sacrificing performance or availability.
- Functional and Technical Helpdesk Services - improve the quality and reduce the cost of supporting your systems with a proven method and approach for quick resolutions to your application issues and requests.
- Enhancement Development and Support Services - manage and maintain any customizations or extensions (CEMU's) that you have made to your environment including custom applications built using Oracle's COTS development tools.
- Testing Services - provide you with a full service testing solution including the development, maintenance and ongoing execution of automated regression and performance test scripts to ensure that you can update and upgrade with confidence.
- Non-Production Hosting and Support - provide immediate access to the infrastructure and support necessary to envision, architect and implement complete Oracle solutions without adding to their total cost of ownership.
- Technical Upgrade Services - provide you with a rapid and cost-effective upgrade for either a major or point release

As a software vendor, Oracle provides comprehensive maintenance support services for all Social Services products that include 24/7 toll free support via our Global Support Center and Oracle MetaLink, Oracle's online support service. With Oracle, you have access to the individuals who built your Siebel products and who continue to maintain and enhance your software. We actively maintain approximately 700 representative environments in our support labs to assist with complex troubleshooting and diagnostics-and we can quickly create a new environment and troubleshoot for a client with unique system configurations. In addition, we maintain a knowledge base of more than 400,000 systems, which addresses 97 percent of customer inquiries. Our advanced tools for customer care include collaborative support, multi-vendor support and new releases, Performance Monitor, and Diagnostic Framework tools that assist you with reducing the cost and effort needed to maintain your applications.

Ongoing Applications Support

Oracle Support Services provides technical and operational experience to help customers maximize their investment. We have 6,000 support professionals around the clock and around the globe to address customer concerns. Oracle leads the industry with the most comprehensive and flexible support policy, our Lifetime Support Policy, which is simple and

predictable. Our support policy covers your entire technology stack, from database to middleware to applications-an industry first, only from Oracle, introduced on September 19, 2005. Oracle Support Services enables customers to know up front how long their Oracle products will be supported.

Oracle Support Services - Features and Benefits

Feature	Benefit
Continuous Product Enhancement	Information-driven applications with advanced technology and product enhancements to provide optimal system performance
Major Product Release	Enhancement to Siebel Public Sector products Remain competitive and keep productivity up while you improve your business efficiencies Information-driven business processes that connect and automate your business
Technical Support	Access problem-solving assistance, technical knowledge, self-service support tools, existing fixes and updates, and available workarounds
Updates, Fixes, and Security Alerts	Reduces the risk of downtime
Tax, Legal, and Regulatory Updates	Makes sure that systems are up-to-date with the most current tax, legal, and regulatory updates.
Third-Party Certifications	Secure your systems with support for third-part components, including databases, application servers, browsers, and operating systems Reduces the risk by running mission critical applications on a supported technology platform
Global Support for Rapid Resolution	Anytime, anywhere access to an award-winning support model, with a commitment to industry-leading support practices
Global Support Center	Support from 17 major hubs around the world, in any of27 languages, including English, French, German, Italian, Dutch, Japanese, Mandarin, Portuguese, and Spanish Direct access to Oracle specialists with over 7,500 highly skilled support professionals and more than 20,000 technology and application developers worldwide
24/7 Support for Mission-Critical Issues	Fast, accurate resolution, resulting in maintaining production schedule
Oracle Customer Connection	Quick access to product, technology, and support information Leverage the internet for immediate access-24/7 support

6.1.11 Software AG

As part of the Software AG product maintenance contract, WVOIC would have Software AG's Standard Maintenance and Support Services, which assist you with any incidents or issues, provide you with fixes and updates, as well as give you access to self-service help. Software AG also offers a new optional Premium Support Services. Software AG's Premium Support Services help you proactively guard against issues and incidents and enable you to continuously improve your operations. The Premium Support Service portfolio utilizes the comprehensive Global Support expertise, deriving from experience in supporting Software AG customers around the world. Premium Support Services can assist you in ensuring your Software AG environments are stable and efficient, and your projects run smoothly and stay in budget. Software AG Global Support Services' extra net, Empower gives you access online 24/7 to manage incidents, get product information, find fixes and connect with our Knowledge Center and many communities.

Our full set of support services ensure you have the right service for every situation.

6.1.12 Speridian

Proprietary response provided.

6.2 APPROACH TO ESTABLISHING A CALL CENTER

Please describe your approach to establishing a call center for ongoing customer service in support of the Exchange. Is your solution outsourced? Do multiple call centers exist, and where are they located?

6.2.1 ACS

Customer service representatives may be the primary contact a consumer has to the Exchange; therefore we provide full call center services as part of our HIX Solution Suite. This service is not outsourced but is core to ACS' business. With over 240 call centers nationwide, we understand how to effectively manage call volumes and ensure high quality customer service.

Our customer service representatives (CSRs) are typically assigned user permissions to allow them to service all users of the Exchange with the following:

- Process telephonic enrollments
- General exchange eligibility
- Assistance with processing life events
- Ancillary benefit inquiries
- Application inquiries
- Location of government eligibility offices
- Web navigation
- Address for applications and payments
- Unbiased enrollment support
- Credit card and ACH payment processing
- Premium calculation questions
- Account information updates
- Premium payment inquiries
- Life change events
- Group plan questions
- General exchange information
- Product and eligibility questions
- Renewals

Because the HIX Solution Suite is Web-based, the systems do not pose the accessibility issues commonly associated with mainframe and client-server based systems. For individuals with the appropriate security authorization, it is accessible using only an Internet connection and a recent version of a supported Web browser.

Call center services can be established in West Virginia or supported out of one of our Call Centers of Excellence based in the United States. With more than 30 call center environments across the country, we have the capacity and staffing needed to support the Exchange marketplace. Our Call Centers of Excellence are located in the following cities:

- Tallahassee, FL
- Ridgefield, MS
- Henderson, NC
- Helena, MT

Each of these centers offers strong workforce availability, state-of-the-art facilities and the infrastructure, security, telephony, and best-practice business processes for serving West Virginia.

6.2.2 CGI

Trained support specialists will be available to assist the individual during all phases of interaction with the exchange. At the core of the CGI's Health Insurance Exchange360 business solution is the CGI managed Exchange Call Center. The Call Center incorporates services such as traditional call receipt services in all languages indicated by the State, mail and fax receipt and processing services, integration allowing receipt of electronic files or data as required for interaction with other State healthcare programs and state of the art active contact tool to maintain communications with Exchange customers. The central tool used by the Call Center

staff to assist customers of the State Exchange is the CGI Health Insurance Exchange360 suite of products.

When a customer of the Exchange engages the Call Center, by phone, for assistance with obtaining health benefits, the Call Center operator will ask the individual if they would like to complete their application over the phone, receive a packet via email/mail/fax, be referred to a local Navigator or walk-in location or be directed to the self-help portal. If the customer chooses to move forward with a phone application, the operator will ask whether the customer is looking to acquire a Personal/Family healthcare plan or is a small business owner looking for a group plan. If the answer is a Personal/Family healthcare plan, the operator will ask a series of eligibility related questions and will simultaneously be entering that information into the CGI Health Insurance Exchange360. The CGI Health Insurance Exchange360 will make a data request to the Federal Data Services Hub maintained by CMS for information verification. Upon verification, CGI Exchange360 will indicate to the operator whether the customers, or any family members, are likely eligible for Medicaid or SCHIP. The operator will then proceed to facilitate the user's enrollment into a healthcare plan. Upon completion of the enrollment the operator will inform the customer that they will be receiving a welcome package in the mail and that they can also access a printable version by going to their account in the health exchange web portal. Their user account was created as the support specialist was performing the eligibility verification and enrollment.

The user will also be able to get general questions answered and issues resolved through chat, standard telephony and case management methods. If the individual's issue is not resolved during the session with the support specialist, a case will be created that will allow the support team to track and resolve the issue. Upon resolution, the individual will be contacted via their preferred method (phone, mail, email, or text) and will then be able to access the portal to view a notification with full details regarding the issue resolution.

Live Chat will be available, provided via the Call Center phone operators who will have simultaneous access to the customer's file, with the customer's permission.

6.2.3 Cognosante

As described, Cognosante will evaluate the current capabilities, including the capabilities and plans for the Ombudsman Office. As the SI, Cognosante would engage in reviewing of the current Call Center capabilities, with guidance from West Virginia, would incorporate the requirements for an integrated Call Center into the final RFP or locate a vendor with the required capabilities.

6.2.4 Cúram Software

Proprietary response provided.

6.2.5 Deloitte

Our suggested solution for call center support is to augment the existing DHHR Call Centers with the industry expertise of eHealth. DHHR Customer service workers currently support phone and mail in support for redeterminations, case maintenance activities and inquiries. They assist citizens with changes in circumstances and resolve issues regarding eligibility and benefit

issuance. However, new stakeholder groups, such as brokers, navigators, employers and insurance carriers will need specialized support for which we would suggest routing calls to the eHealth Customer Care Center.

The eHealth's Customer Care team specializes in all major health markets and can answer a broad range of stakeholder questions. They have a full-service Customer Care Center of highly trained customer service representatives that can provide consumers with transparency of information about a broad array of health insurance plans. The center provides 24/7 access to information via a toll free number, online chat, email, fax and through social media sites.

Figure 17. Live Expert Advice Available 24/7.

eHealth has 200+ employee Customer Care Centers located in Gold River, CA and Salt Lake City UT. We suggest using these resources to answer specific stakeholder inquiries and to augment State staff during times of expected high volume, such as the HIX annual enrollment period.

6.2.6 Exeter

OneGate client management capabilities are built upon Oracle's Siebel Public Sector CRM product, a pre-eminent call-center support environment. States have two dimensions on which they can design call center functions: (a.) maintaining an in-house call-center function, or outsourcing the call-center functions; and (b.) making use of OneGate's integral case management environment (Siebel Public Sector), or interfacing the OneGate screening, intake and enrollment functions to a different case management environment. Exeter will be pleased to help West Virginia identify the call center provisioning strategy that best meets its Exchange needs.

6.2.7 Getinsured.com

At minimum, the ACA requires Exchanges to operate a toll-free telephone hotline to respond to consumer requests for assistance (1311(d)(4)[B]). However, Getinsured's experience with enrolling individuals in commercial health plans indicates the level of customer service provided will be critical to the success of the Exchange. The incorporation of interactive Web 2.0 technologies into Exchanges is important for Exchange efficiency and customer experience, in addition to supporting interoperability with new technologies on the horizon. As discussed in 1.4a, Getinsured is prepared to either augment call center support for the state of West Virginia or completely operate the call center operation for the state.

Getinsured can provide extended hours of operation (e.g., Saturday hours), overflow call support when call volume is high to prevent high call hold times, or receive all participant calls for the Exchange program ourselves. We will work with West Virginia to develop a customer service model that best unifies the existing and potentially expanded call center locations.

6.2.8 LexisNexis

No response

6.2.9 MAXIMUS/Connecture

A strategically sound call center design recognizes and accommodates the educational, cultural, and linguistic characteristics of the target population(s). A single call center for application, enrollment, ongoing coverage changes, appeals, and general information and education will significantly reduce the likelihood of mistakes, missed deadlines and incomplete consumer actions.

The following illustrative example demonstrates how our call center approach seamlessly interacts with our self-service technology options during the initial application and enrollment phase:

- The marketing campaign provides the initial incentive for the consumer to investigate the coverage options available through the Exchange
- Information on the website, while useful, is not enough; she calls the toll-free number
- After speaking with a CSR, she goes back to the website and chooses to download the application and fill it out when she has time rather than complete it online
- Unfortunately, the paper application contains several errors by the consumer that result in it being pended for missing and incomplete information
- After a letter is sent outlining the steps that are required to complete the application, the consumer reaches the call center with the required information
- At the time of this contact, all relevant contact information is verified and the CSR confirms that every step is now complete
- Based on her satisfactory experience with the call center, the consumer decides to enroll over the phone, particularly so that she can receive help in choosing from among the numerous plans available to her family that she already knows about from the website
- She makes her initial premium payment with the IVR and, based on the information provided during this call, she later sets up an automatic monthly credit card charge through the website

As this scenario indicates, it is possible and even likely that many consumers will alternate in how they interact with the Exchange through the mail, over the phone, and on the web. The call center is, in many respects, the glue that holds these disparate interactions together because it combines IVR self-service and highly personalized encounters based upon a database that contains all of a caller's information, history, and program status.

Accordingly, we encourage the following elements in the overall call center design:

- Complete array of information and education, application intake, eligibility screening, health plan and provider choice facilitation, enrollment, premium payment, appeals and grievances
- Online functionality that links consumers to the call center when additional assistance is needed (such as Click to Chat)
- Full-featured IVR that is fully integrated with the underlying eligibility and enrollment system
- Automatic "screen pops" for our CSRs to avoid consumers having to provide the same authentication information more than once during a call

- Skills-based call routing so that callers are directed to the CSRs that are best trained and properly credentialed to handle their needs based on IVR information provided at the beginning of the call

Our general practice is to locate a project-specific call center in the state where the services are being provided. For our government agency clients, we locate the call center very close to the key agency contract management or oversight staff. This enables a high degree of accountability, professional relationship-building, and mutual problem-solving. We currently have 28 call centers nationwide with a health and human services focus.

6.2.10 Oracle

Oracle works with a vast network of qualified partners to establish and provide ongoing customer service in support of the Exchange. Oracle and our partners' call centers are located across the United States as well as globally to ensure the Exchange's customers receive 24/7 support. We welcome the opportunity to further discuss the State's call center requirement in order to provide the most value added service delivery options to the State.

6.2.11 Software AG

Software AG will not be responding to this question

6.2.12 Speridian

Proprietary response provided.

7.0 Financial/Total Cost of Ownership

7.1 OVERALL COST MODEL

Please describe your overall cost model to purchase, implement, and operate your described solution.

7.1.1 ACS

We have developed our HIX Solution Suite as a complete exchange solution for state clients. It is provided in a SaaS model, offering West Virginia the advantage of "leasing" our solution as opposed to purchasing the technology/software and developing an exchange solution from the ground up. This not only means a faster time to implement, but also reduces the monetary and human resource investment on the part of the State in order to implement the Exchange.

While the scope of this RFI does not provide enough details for us to offer a firm price to West Virginia, our pricing may include operational and cost details such as a one-time implementation fee, carrier set-up fees, operational maintenance/customer service fees, and group set up and renewal fees. However, the ACS Team is flexible in how these fees are structured and can work with West Virginia on the best model for the Exchange. Typically, we encourage a model that provides a low up-front implementation cost for the State, with a sliding scale of per member per month fees, based on the volume of participants.

In addition, our solution can include optional elements to enhance the Exchange. These optional services may include COBRA Administration, Flexible Spending Account Administration, Health Reimbursement Arrangement Administration, Direct Bill Administration, Retiree Exchange Services, Outreach/Materials Management and Customized Video Development.

7.1.2 CGI

Proprietary response provided.

7.1.3 Cognosante

No response provided.

7.1.4.a Cúram Software

It is not possible for Cúram Software to provide detailed pricing information for implementation and operational costs at this time. Further information on the state's existing systems, functional and technical requirements, and project approach would be needed to develop detailed pricing information. Usage of Cúram is granted through a license agreement that is purchased by our customers.

7.1.4.b Cúram Software

Proprietary response provided.

7.1.5 Deloitte

Proprietary response provided.

7.1.6 Exeter

Exeter has designed OneGate to be a cost-effective and competitive alternative to existing eligibility solutions in the marketplace. OneGate components (i.e., Health Benefits Exchange, Screening, Benefits, Intake, Case Management, etc.), can be implemented independently, and the underlying technology and architecture is secure, scalable, industry standard and cost effective. OneGate's modular design and SOA principles allow states to implement the system in an incremental manner and in line with their modernization efforts.

OneGate's alignment with the ACA and additional state and federal policies, workflow and processes will provide West Virginia with an accelerated implementation timeline thereby reducing cost. In addition to the structural cost advantages of OneGate's implementation, Exeter looks forward to providing West Virginia with an exceptionally cost-competitive proposal for the OneGate license and support that complements West Virginia's Exchange system goals.

Based on Exeter's extensive implementation expertise, Exeter understands that time is valuable for significant state-level implementation efforts. The OneGate COTS solution is specifically designed to allow states to accelerate implementation time and reduce risks, as compared to traditional approaches. OneGate provides a clear line-of-sight from project concept through completion, providing a cost competitive option, which is especially valuable for states with limitations on implementation budget or internal labor capacity.

OneGate has the following high-level cost components:

1. Host infrastructure (if on-premise): Modest investment in Intel-based servers and disk storage;
2. Embedded third-party software (Oracle and open-source components): Oracle components based on most competitive state Oracle pricing;
3. OneGate HHS domain solution license: Affordable and based on selected components. OneGate software will be licensed, in addition to a standard software maintenance agreement, with a negotiated service level agreement; and
4. Vendor implementation services and the cost of state subject matter experts: Because of the pre-built rules and functionality, implementation services compared to other solutions can be significantly reduced.

Please note that maintenance pricing for items 1-3 above is well within industry norms.

Also, please note the following:

- For Exeter OneGate's optional Case Management functionality, an Oracle Siebel Public Sector license is required. OneGate also has the option to interface with a premium cloud based (SaaS) solution if desired by the state.
- OneGate's service-oriented middleware utilizes Oracle SOA Suite, which requires licenses from Oracle. SOA Suite requires a Java EE application server and database (e.g., WebLogic Application Server and Oracle/SQL Server database).

OneGate's modularity and cost-effectiveness also allow West Virginia to choose an option for open source products if desired by the State. The OneGate components that leverage open source products include the customer portal and document management system.

7.1.7 Getinsured.com

The Getinsured.com solution consists of two components:

1. Software and related help-desk services. These can be purchased in two very distinct ways:
   a. A SaaS/BPO model
   b. A License and maintenance based model.
2. End-user customer support services for residents and employers. These can also be purchased in two distinct ways:
   a. An end-user based PMPM model that assumes that call center services are provided directly by Getinsured licensed employees.
   b. An end-user based PMPM model that assumes that call-center services are provided by state-based employees under the guidance, training and licensure of Getinsured management.

7.1.8 LexisNexis

LexisNexis is flexible in the methodology for reimbursement, from "per-click" to number of those accessing the Exchange. Within the scheme of the Exchange itself, our services will be a very small component and will be worked out as a cost element within an overall Prime Contractor's bid.

7.1.9 MAXIMUS/Connecture

We understand the context for these questions as well as their intent. West Virginia OIC wants to gather a range of Exchange costs as a basis for a Level 2 grant application. This information will also be useful for Exchange sustainability analyses and budgeting for a future procurement.

Although we would be glad to provide the information you are requesting at a sufficiently meaningful level of detail if we could, this is not possible because there are too many unanswered questions at the federal level as well as the state. Many of the pending federal rules will have a significant potential cost impact. An obvious example is how the MAGI standard will be applied to Exchange, Medicaid, and CHIP eligibility. At the state level, there are a number of major strategic decisions that will affect cost such as whether a single eligibility system will be used across all programs or if the Medicaid legacy system will continue to be a platform for some or all of the affected health insurance programs.

The Alliance looks forward to providing the kind of cost information the State seeks as these, and other, important issues are meaningfully and substantively addressed in the coming months.

Sections A-F
Our proposed cost model includes an Annual Software Module Usage Fee; an Implementation Fee to set up the platform, necessary integrations, and infrastructure to conduct business

processes; a Hosting Fee (if Hosting by the Alliance is requested); and a monthly technology and staffing charge for business processes and operations.

Annual Software Module Usage: To achieve the greatest flexibility, interoperability, and cost effectiveness within the Exchange technical infrastructure, we propose a one-time implementation fee plus a "usage fee" or annual licensing model for each StateAdvantage module. A "usage fee" or annual licensing model gives the State the right to use our software for the term of the agreement and mutually agreed renewal options. The annual software usage fees include license fees, maintenance fees, and software support, as well as upgrades and new releases of the software. The fees are derived from expected program volumes and each module's scope rather than the number of users or a calculation tied to transactions or activities. A licensing model allows the State to adapt its technology to a changing environment through the implementation of StateAdvantage product releases and upgrades available from federal and/or state policy clarifications, evolving program needs, and iterative improvements based on actual consumer, health plan, and stakeholder usage. This is evidenced by the fact that our existing clients who launched their solution seven or more years ago have a portal as current as those who implemented within the last year.

Implementation Fee: The one-time implementation fee includes configuration and testing of all modules, set-up of all self-service tools, development and testing of integration points, initial set-up of all users (internal, carriers, Navigators/brokers, system administrators), initial loading of all insurer/health benefit plan products and rates, and planning and execution of training sessions. Additionally, implementation involves a number of other components that include hardware and equipment, facility build out, staff recruitment, hiring and training, and development of training manuals, project management documents and quality management tools. To promote accountability and protect the State's interests, our payment methodology is tied to agreed-upon project milestones and deadlines.

Hosting Services Fee: Hosted solutions maximize availability, redundancy, and security of StateAdvantage. This includes production environment, monitoring and reports, access to configuration environment for self-service upgrades, access to rate modeling environment for actuaries/underwriting, and initial and ongoing set-up of all users: internal, brokers, system administrators.

For any ongoing operations, such as call center, navigator management, application processing, we offer volume-driven pricing that involves a combination of fixed and variable costs.

7.1.10 Oracle

Oracle provides customers with the flexibility to deploy their HIX in a hosted model, on premise through our pre-engineered hardware platforms or a hybrid model depending on their needs. Unlike other vendors who solely offer a hosted solution, Oracle provides the State of Missouri with the ability to start the HIX project using a hosted model and later migrate to an on premise solution if they so chose. Some customers prefer the simplicity of a turnkey hosted solution while others plan on utilizing their HIX deployment as the foundation for strategic initiatives such as enterprise private cloud or internal "as a service offerings" within their state data centers.

For example, an Oracle HIX customer has contracted with Oracle On Demand to support their initial development and test environment while finalizing plans as to the model for the final

production environment. This approach allows the customer to start the project quickly and run system development efforts in parallel with the infrastructure design.

Oracle looks forward to the opportunity to further discuss with the State our pricing approach to ensure we provide the most cost-effective and best-value options for your HIX program.

7.1.11 Software AG

Software AG will not be responding to this section as we are only providing a partial "technology" response to this RFI and would look to work either directly with the State or with a Systems Integrator (SI) and would formulate a pricing proposal at a later date accordingly.

7.1.12 Speridian

Proprietary response provided.

7.2 TOTAL EXPENDITURE ESTIMATE

When thinking about the total expenditure for the future Exchange as it relates to hardware, software, and implementation services, would a fair estimate for your product be: 10% hardware, 35% software, and 55% implementation services? Would you allocate these percentages differently and if so, how would you allocate them and why?

7.2.1 ACS

Typically there are no infrastructure costs for the State in our pricing model. All costs to implement, customize, and operate the Exchange are covered in the Implementation costs and in an ongoing per member per month (PMPM) or per contract per month (PCPM) basis.

7.2.2 CGI

Proprietary response provided.

7.2.3 Cognosante

No response provided.

7.2.4 Cúram Software

It is not possible for Cúram Software to provide detailed pricing information for implementation and operational costs. Further information on the State's existing systems, functional and technical requirements, and project approach would be needed to develop pricing information. Cúram Software would welcome the opportunity to discuss this aspect and the options available in detail with West Virginia OIC at a later stage.

7.2.5 Deloitte

Proprietary response provided.

7.2.6 Exeter

See section 7.1.6.

7.2.7 Getinsured.com

See section 7.3.7.

7.2.8 LexisNexis

No response provided.

7.2.9 MAXIMUS/Connecture

See section 7.1.9.

7.2.10 Oracle

The following is how Oracle looks at many of their COTS solutions that would apply to an HIX implementation. We appreciate that West Virginia has already taken this into consideration, but allow us to restate:
Total Expenditures State 30%, Oracle Product 70% (assuming the hardware is within the Oracle percentage in either a Hardware or hosted model). Within the States percentage would be training 5%, implementation support 20%, and ongoing maintenance and support 5%. For the Oracle Product it would be 10% hardware, 25% software, 65% implementation services. The main delta would be the confirmation of those requirements specific to West Virginia and change management the drives towards user adoption and State self-sufficiency related to ongoing maintenance.

7.2.11 Software AG

No response provided.

7.2.12 Speridian

Proprietary response provided.

7.3 ESTIMATED TOTAL COST

Using the table provided below, please estimate (best, expected, worst case) total costs for hardware, software, and implementation for a State similar in size and population to West Virginia. Please describe the assumptions you have used (e.g. the level of customization required, leveraging of existing State hardware such as servers, computers and of existing State systems versus implementing new state systems, etc.) for all three estimates.

Total Hardware, Software, and Implementation Costs		
	Dollars	**Rationale**
Best Case		
Worst Case		
Expected Case		

7.3.1 ACS

Because there are no infrastructure costs for the State, the total costs for implementing and deploying our HIX Solution Suite are based on the decisions West Virginia makes about the structure of the Exchange, the level of customization needed, and the components that the state wants the ACS Team to implement. Table 7-1 provides rough estimates on implementation costs for our solution. Based on final decisions and discussions with the State, we would be happy to submit more accurate pricing.

Table 7-1. Total Infrastructure and Implementation Costs		
	Dollars	Rationale
Best Case	$2,000,000	No infrastructure costs. Should West Virginia require minimal to no customization of our HIX Solution Suite, have carrier contracting and participation well underway, and have modernized systems to which our solution can connect, this would be the best case scenario. This case also includes use of existing ACS Team centers for business processes (call center, document management, etc.).
Expected Case	$5,000,000	No infrastructure costs. Should there be normal customization of our HIX Solution Suite and work with carriers on plan design and contracting has not started, this would be the most likely time-frame for the HIX Solution Suite to be ready for certification. This case includes some use of ACS Team centers to provide BPO solutions, while some new centers would be established in-state.
Worst Case	$10,000,000	No infrastructure costs. This worst-case scenario would be realized should West Virginia require functions not currently designed in our HIX Solution Suite today (those not required for an ACA compliant exchange). This time frame could also be impacted by difficulties in building a QHP network to serve the Exchange and/or requiring that vendors outside of the ACS Team supply portions of the Exchange service, requiring additional interoperability to be designed.

7.3.2 CGI

Proprietary response provided.

7.3.3 Cognosante

No response provided.

7.3.4 Cúram Software

Proprietary response provided.

7.3.5 Deloitte

Proprietary response provided.

7.3.6 Exeter

No response provided.

7.3.7 Getinsured.com

A SaaS and BPO model.
With the SaaS approach, the state would pay Getinsured for the Exchange as follows:

a. Up-front costs would be paid only for implementation services such as project planning, design and test reviews etc. The state would not pay for any up-front costs associated with software or hardware. These costs are detailed in Table 2.
b. Once the Exchange is operational, the state will pay a monthly fee that will include all costs for software licensing, hardware, software maintenance, hardware maintenance, hosting and networking services. These costs are detailed in Table 3 and include the following modules: Individual MAGI based eligibility, Shopping Portal, Enrollment, Plan Management, Broker/Navigator management and SHOP, on a combined basis.
c. The state may also choose to contract with Getinsured for a range of operational help-desk and content development and management services associated with the support of carriers, brokers and Exchange employees on a day-to-day basis post-launch. These costs are detailed in Table 4.
d. Change-orders specific to the state can still be implemented using an hourly fee of $100/hour.

This model is appropriate for a state that wishes for Getinsured.com to provide a full-service approach to building and maintaining the Exchange.

Break-down of costs:

[Table 2 is considered proprietary to Getinsured.com and therefore is not included in this document.]

With the license based approach, the state would pay for the Exchange as follows:

- Up-front costs would be paid only for implementation services such as project planning, design and test reviews etc. These costs are detailed in Table 2.
- Once the Exchange is operational, the state will pay an upfront cost for licensing various Exchange modules and an annual maintenance fee on those modules. All hardware, hosting

and operational services will be procured by the state separately. These costs are detailed in Table 4.

- Change-orders specific to the state can still be implemented using an hourly fee of $100/hour.

This model is appropriate for a state that wishes to leverage Getinsured.com's software platform but otherwise run its own operations.

Break-down of costs:

[Table 3 is considered proprietary to Getinsured.com and therefore is not included in this document.]

End-user customer support services may be built out using two approaches:

1. Getinsured can help run the services directly out of its own customer assistance centers. With this approach, Getinsured will provide the licensed health insurance personnel necessary for plan selection, enrollment, post enrollment customer service and renewal. We anticipate that these services may be provided on a PerMember-Per-Month (PM PM) basis at a rate roughly between $6 and $8 PMPM.

2. Getinsured can also provide the technology infrastructure, management and training but leverage existing state or other third party call-centers. In this instance, we anticipate that the state would pay Getinsured between $1 and $2 PM PM for all associated training, call-center CRM software, carrier integration and related support services.

3. The Getinsured customer assistance model can be integrated between Medicaid and commercial health plan enrollment loosely or tightly. We believe that it would be in the state's best interest to create specialized pools of call-center staff to service these very different populations -- but it is equally important to ensure that each agent may seamlessly transfer an end-user to another support center if needed or service the resident's needs entirely if needed.

Break-down of associated go-live costs not considered annual software maintenance fees.

[Table 4 is considered proprietary to Getinsured.com and therefore is not included in this document.]

7.3.8 LexisNexis

No response provided.

7.3.9 MAXIMUS/Connecture

See section 7.1.9.

7.3.10 Oracle

Estimated Implementation Costs	Dollars	Rational
Best Case	17M	Based on Oracle estimating model for other States similar to WV, with variables based on the total HIX scope including financial management, implementation phasing, # of interfaces, # of reports, security requirements.
Worst Case	30M	Same as above
Expected Case	20M-25M	Same as above

7.3.11 Software AG

No response provided.

7.3.12 Speridian

Proprietary response provided.

7.4 ESTIMATED ANNUAL SOFTWARE LICENSE MAINTENANCE COSTS

Using the table provided below, please estimate annual software license maintenance costs (best, expected, and worst case) for a State similar in size and population to West Virginia. Please describe the assumptions you have used (e.g., the level of customization required, leveraging existing State systems versus implementing new state systems, etc.) for all three estimates.

Annual Software License Maintenance Costs		
	Dollars	**Rationale**
Best Case		
Worst Case		
Expected Case		

7.4.1 ACS

Our HIX Solution Suite does not include license maintenance costs, as provided in Table 7-2.

Table 7-2. Annual Software License Maintenance Costs		
	Dollars	Rationale
Best Case	$0	No license maintenance costs
Expected Case	$0	No license maintenance costs
Worst Case	$0	No license maintenance costs

7.4.2 CGI

Proprietary response provided.

7.4.3 Cognosante

No response provided.

7.4.4 Cúram Software

Proprietary response provided.

7.4.5 Deloitte

Proprietary response provided.

7.4.6 Exeter

No response provided.

7.4.7 Getinsured.com

No response provided.

7.4.8 LexisNexis

No response provided.

7.4.9 MAXIMUS/Connecture

See section 7.1.9.

7.4.10 Oracle

Overall costs of the hardware & software product components making up the Oracle HHS solution can vary based on the licensing metric types and numbers of licenses being purchased. For instance, products from the hardware & software can have pricing based off named user counts, data volume, enterprise licenses, processor-based licenses, agency operating budget, etc. In addition, Oracle typically works with our customers to formulate the most cost effective licensing approach based upon budget, project scope, procurement vehicles and other factors relevant to the overall business drivers for our customers aligned with Oracle's license policies.

In the case of HIX opportunities, we are working with our customers on unlimited and/or enterprise license agreements which can provide a combination of perpetual or timed-based unlimited deployment licensing approaches.

Oracle values our partnership with the State of West Virginia and would want for us to further develop our relationship beyond being an ERP and core technology vendor. Oracle is prepared to seek ways to leverage your previous investments in Oracle software and services and to help drive efficiencies and cost savings across your strategic IT initiatives.

As Oracle learns more about the State's specific requirements and what it ultimately needs to comprise a complete solution, we will be able to provide more accurate price responses.

7.4.11 Software AG

No response provided.

7.4.12 Speridian

No response provided.

7.5 COST MODEL AND APPROACH TO ONGOING OPERATIONAL SUPPORT

Please elaborate on your cost model and approach to ongoing operational support (services provided after go-live, that are not covered by annual software maintenance fees)? What are the options West Virginia will have to choose from and how will these options impact costs?

7.5.1 ACS

The model for supporting ongoing maintenance of the system and operations of business processes components of our Solution (i.e. call center, document management, etc.) is a PMPM or PCPM model, as discussed above. This has been an effective approach for our team in providing our HIX Solution Suite components today to commercial insurance consumers, brokers and carriers.

Options that West Virginia may choose which could impact cost are: whether to implement all components of our HIX Solution Suite, as detailed in Response Section 2.a, Exchange Functionality; if the Exchange is implemented in phases; and if other states will be part of a regional solution with West Virginia.

7.5.2 CGI

Proprietary response provided.

7.5.3 Cognosante

No response provided.

7.5.4 Cúram Software

As a COTS product, Cúram is structured to allow customers to perform their own operational support. Cúram Software offers classroom training courses and a full set of documentation to that end. We can also provide operational services to assist the State, including helping to design and develop enhancements.

7.5.5 Deloitte

Proprietary response provided.

7.5.6 Exeter

Exeter has a variety of support and maintenance levels for OneGate, which include periodic patches to the OneGate software as well as periodic product version releases. The scope of software maintenance and support activities will vary depending upon the level a state agency selects with the understanding that selection of a level is based on the agency's specific needs, requirements and budgetary limits. For example, some agencies may want a more hands-on approach, while others may want to handle software maintenance and support activities in-house.

Patch and new version releases may contain support for newer third-party components as well as issue resolutions. New release versions will also contain new OneGate functionality. The State has the option of requesting Exeter's assistance in applying released patches or new versions of the OneGate software. Exeter also provides additional support services for the upgrade of the third-party components used by the OneGate product, such as Siebel and OPA. Additionally, Exeter will assist the State with reviewing its existing long-term support organization for the new Exchange system upon conclusion of end-user training, and help to define its support organization.

7.5.7 Getinsured.com

Getinsured believes that the cost estimates we have provided include the build-out of an Exchange for West Virginia that is comprehensive and very likely at a substantially lower cost than other alternatives. We are basic our approach on (a) maximally leveraging our existing infrastructure and (b) amortizing our investments in the Exchange platform across multiple states.

7.5.8 LexisNexis

No response provided.

7.5.9 MAXIMUS/Connecture

See section 7.1.9.

7.5.10 Oracle

Please see response to section 6a. Based on our experience, it generally requires 4-6 FTEs to

support operation and maintenance of the solution. Selected activities include:

- Provide as needed Oracle database administration support such as creating/maintaining database instances to support Oracle modules, analyzing database performance bottlenecks, executing scheduled jobs, managing backup/restore, etc.,
- Support Configuration and Environment management tasks:
    - Migrate configuration changes across environments
    - Stop/start server tasks and processes across all environments
    - Design/Implement configuration management such as release management, version control} etc.,
- Configure parameters and provide monitoring of application server processes and components to analyze bottlenecks and root cause of issues such as server crashes, long running queries, etc.
- Provide as needed application administration support such as updating users, positions, organizations, responsibilities, pick lists, enabling workflows, run-time events, data-validation managers, creating iHelp, assessment and activity plan templates, etc.,
- Provision new users to access the application
- Administer updates to policy changes, business rules such as premium subsidy and tax credit calculation, etc.,
- Maintain health plans, rates, etc.,

In addition to the daily, operational maintenance of the application, the below illustrates as an example of a help desk approach, that Oracle Consulting can provide as one of many help desk offerings that the State may consider to adopt:

1. Helpdesk provides Live support between 7 a.m. to 7 p.m. (M-F); 8 a.m. to 5 p.m. (Sa-Su) Eastern U.S. Time (ET) through inbound call support.
2. Estimated Help Desk call/ticket volume is calculated based on "average case".
3. Helpdesk volume is distributed between three channels assumed as 75 percent voice and 25 percent combined for e-mail and Web self service.
4. Model assumes that 100 percent of the user community resides in the State of WV (U.S. Eastern Time). Solution factors distribution of incidents accordingly for normal support hours of 7 a.m.-7 p.m. M-F (Weekday) and 8 a.m.-5 p.m. (Weekends).
5. Call distribution during weekdays is assumed to be 85 percent of the weekly total calls with the balance of 15 percent occurring during weekend support days.
6. Model assumes that 100 percent of call/ticket volume will be handled during normal support hours including resolving issues left by voice mail the following day or during non-support hours.
7. Model assumes that "on-call" emergency support will be provided by Oracle during nonsupport hours and the callers will be directed to call a separate direct support number by the AVR system.
8. Model assumes the following service levels to arrive at the staffing level estimates:
    - Average Handle Time for Voice Calls is 180 seconds (three minutes)
    - All calls will be answered within two (2) rings by a human or electronic device (AVRS)
    - Target average speed of answer (ASA) is 99 percent of calls will be answered by live human within 150 seconds
    - All holds will be given the option to stay on hold or leave a message after 1 minute
    - All holds will be answered within 3 minutes

- All e-mails and Web requests will be answered with 15 minutes of receipt by the system

9. The model assumes that the helpdesk will require overlapping shifts Monday - Friday to cover the required 12 hours support window. A single 9 hour shift is required during weekends. Any shift overlap will be used to manage peak midday periods, clearing of voice mail backlog, open ticket transitions between agents and any follow-up work required to successfully hand-off agent duties.
10. Total number of calls received and hourly call arrival pattern is considered as constant.
11. Model assumes that all the outbound calls will be made at the time when the agent is sitting in idle or when the customer is put on hold.

7.5.11 Software AG

No response provided.

7.5.12 Speridian

No response provided.

7.6 ESTIMATED ANNUAL OPERATIONAL COSTS

Using the table provided below, please estimate annual operational costs (best, expected, and worst case), i.e., all costs associated after go-live that are not considered annual software maintenance fees, for a State similar in size and population to West Virginia. Please describe the assumptions you have used (e.g., the level of customization required, leveraging existing State systems versus implementing new state systems, etc.) for all three estimates.

Annual Operational Costs		
	Dollars	**Rationale**
Best Case		
Worst Case		
Expected Case		

7.6.1 ACS

We cannot provide an estimate on the annual operational cost without determining West Virginia's choices on components of the Exchange and the volume of participation within the Exchange. While we typically price our solution based on a PMPM or PCPM structure, as discussed above, we look forward to talking further with West Virginia about other pricing models that may work for the State.

Table 7-3. Annual Operational Costs		
	Dollars	Rationale
Best Case	NA	Dependent on the decisions made by West Virginia on the Exchange structure and the population volume within the Exchange.
Expected Case	NA	Dependent on the decisions made by West Virginia on the Exchange structure and the population volume within the Exchange.
Worst Case	NA	Dependent on the decisions made by West Virginia on the Exchange structure and the population volume within the Exchange.

7.6.2 CGI

Proprietary response provided.

7.6.3 Cognosante

No response provided.

7.6.4 Cúram Software

It is not possible for Cúram Software to provide detailed pricing information for implementation and operational costs at this time. Further information on the State's existing systems, functional and technical requirements, and project approach would be needed to develop detailed pricing information. We would welcome the opportunity to discuss this aspect and the options available in more detail with West Virginia OIC at a later stage.

7.6.5 Deloitte

Proprietary response provided.

7.6.6 Exeter

No response provided.

7.6.7 Getinsured.com

As noted earlier, there are still many "yet to be determines" at the federal and state level for the exchange. Based on Getinsured experience in operating a commercial exchange, we offer these few observations: (1) As the months go by, timing becomes more critical to development of an exchange to meet the federal assessment of readiness. Less than a year is available before applications are to be submitted to HHS for conditional approvals. The more state programs and state agencies that become involved with the development increases the likelihood of complications and delay. Getinsured would offer a solution that could meet federal requirements but be adaptable in future iterations to interface with other state data systems, such as CompareCare and RAPIDS.

Decisions concerning compensation for navigators and sustainability for the exchange will be critical to implementation and maintaining the exchange after federal support is gone.

Getinsured offers an approach to collect and remit a per member/per month assessment that can be scaled to meet the needs of the state if the Exchange Board chooses this route.

The functionality of the call center must not be overlooked. The entire life of the exchange will be dependent on the ability of operators in the call center to provide accurate and timely information in a friendly way to complete enrollment transactions. If residents experience long wait times, busy signals, or inaccurate information, the likelihood of a successful exchange that can enroll the adequate population of members for operations is diminished.

Finally, the state should carefully consider open enrollment decisions. Massachusetts has learned that having a three month open enrollment season annually results in the necessity to have huge shifts in resources and personnel during the collapsed enrollment time frame. States should consider methods of rotating enrollments to spread them throughout the plan year. Perhaps having employer enrollments occur during the month that is matched numerically to the EIN and individuals enrollment occur based on the beginning letter of the enrollees last name could help distribute the work load beyond just a three month period for processing, thus eliminating the need to "staff up" for a short time period and then layoff a large number of trained workers.

7.6.8 LexisNexis

No response provided.

7.6.9 MAXIMUS/Connecture

See section 7.1.9.

7.6.10 Oracle

Annual Operational Costs	Dollars	Rational
Best Case	4M	Based on Oracle financial model to sustain and operate the Exchange performed for other States similar to WV
Worst Case	10M	Same as above
Expected Case	6M-7M	Same as above

7.6.11 Software AG

No response provided.

7.6.12 Speridian

No response provided.

7.7 HOW SOLUTION CAN UNIQUELY LOWER COSTS DURING DDI

Describe how your solution can uniquely lower costs during design, development and implementation, as well as operationally.

7.7.1 ACS

As described above, because we have existing solutions in operation today, we are not proposing a ground-up build, nor are we requiring the State to invest in infrastructure or resources to implement the Exchange. We are simply configuring existing tools to work for the West Virginia Exchange, using easy to read, English-language business rules to quickly and easily change the look/feel of our Solution, customize questions and values within our solution, and implement business rules specific to West Virginia. This allows us to implement our solution and maintain the system through future policy and legislative changes, for multiple clients, quickly and easily.

7.7.2 CGI

Proprietary response provided.

7.7.3 Cognosante

No response provided.

7.7.4 Cúram Software

Cúram HCR is the only commercial off-the-shelf (COTS) solution built from the ground up by health and human services domain experts to specifically and exclusively support the needs of such organizations and the programs/services they administer. In designing Cúram, we were also mindful of the need to develop our product suite so that it promotes lower total cost of ownership, reduced project risks and accelerated implementation timelines. Some of the key features of our solution which significantly contribute to this philosophy are outlined as follows:

- Provides pre-built modules, processes, services, industry content and workflows out-of-the-box;
- Incorporates a single enterprise data model that has been designed from the ground up to support all necessary ACA data elements as well as the data requirements of health and human services systems;
- Is built on open software standards and conform to the Java Enterprise Edition architecture using specifications such as EJB, JDBC, JMS, XML, JSPs and Web Services;
- Is SOA compliant and supports several mechanisms, including pre-built adaptors/connectors, for integration with legacy or external systems;
- Is highly configurable and incorporates an Administration Suite for non-technical users to configure a wide range of application attributes including rules, workflow, evidence and various other attributes and properties;
- Includes application source code and an Application Development Environment thereby facilitating ready customization and extension to meet customer-specific requirements;
- Is flexible, adaptable and modular, supporting an incremental implementation approach;

- Allows for incremental, "quick-win" implementations;
- Is "systems integrator independent" thereby enabling agencies to determine which systems integrator(s), if any, they would like to work with for implementation and ongoing support;
- Supports a wide range of industry-leading operating systems, databases and application servers;
- The underlying technology is always kept current, ensuring the technology is not outdated when the project is complete and on into the future;
- Regular release of new versions reflect legislative changes, advancing technologies, and the incorporation of best practices from our customers across the US and around the world;
- Is fully supported by a team of dedicated software support personnel who are experts in all aspects of the product;
- Includes comprehensive documentation, covering technical and business aspects of the product, including manuals, guides, reference models, and business process flows.

7.7.5 Deloitte

Proprietary response provided.

7.7.6 Exeter

Lowering Costs

Exeter OneGate substantially reduces cost and, very importantly, risk, relative to alternative means of providing Exchange functionality:

- By leveraging decades of person-years investment in software functionality specifically designed for the Exchange environment, states avoid the significant costs and substantial risks inherent in a "build it from scratch" approach.

    - There is less risk of specification failure when using a COTS solution;
    - There is less risk of design and development failures using a COTS solution;
    - There is a more rapid time-to-usability, and the ability to quickly demonstrate public-facing results; and
    - Quicker time to implementation helps reduce costs and expensive implementation consulting fees are minimized.

- OneGate is delivered with starter rules sets, allowing states to focus on their unique Exchange requirements, and gives them a model on which to build.
- OneGate is built upon industry-leading components from Oracle, and is extensible over time to address the needs of additional programs, allowing states to leverage architectural investments, and avoid multiple investments for similar benefit program entry points.
- OneGate is specifically designed to be modular, and easily interfaced in an SOA environment, avoiding the "all-or-nothing" lock-in commitments required by other sizable product solutions.

- With OneGate, a state can start with more modest investments to meet immediate need, but be assured that it has purchased a solution designed to go the distance required for program growth and change over time.

7.7.7 Getinsured.com

No response provided.

7.7.8 LexisNexis

No response provided.

7.7.9 MAXIMUS/Connecture

Much of the design and development of StateAdvantage has already been completed through rigorous, multi-disciplinary business process mapping, policy analysis, technical systems planning, and joint application design sessions. New releases of our prototype are regularly deployed and tested, incorporating modifications and edits from HHS IT guidance, usability testing, and feedback from state officials, consultants, and stakeholders.

Given that the majority of the design and development process is almost complete, any Exchange with which we contract will enjoy the financial savings and economies of scale of this broad-based design and development strategy with incremental costs only related to its specific requirements and policies. Further cost savings will accrue from the absence of general testing and mitigation because, by the time we contract with an Exchange, we will deliver a stable and fully vetted system whose only testing will be in relation to that entity's unique needs and its program partners.

We have already assessed the potential requirements and needed capabilities to integrate with RAPIDS, inRoads, SERFF, and other systems unique to West Virginia. In fact, our expertise in working with state health and human service programs around the country has already given us needed insights into how to integrate with legacy systems and ensure that systems talk to one another effectively. This knowledge further drives down costs compared to other vendors with a steep learning curve about how to integrate with Medicaid legacy systems, if such integration is needed.

Our solution is also cost –effective because of its integration of offline customer service processes and online self-service. For example, if a consumer is on the StateAdvantage web portal and chooses to call the call center for assistance or to provide missing information, we use our technology to automatically identify the caller based on the originating phone number. We also provide our call center staff with possible reasons for the call based on the prior history on the portal or options they chose on the IVR. This fully integrated approach drives down operational costs, reduces human error, and saves time.

We do not offshore outsource any implementation, installation, hosting, maintenance, or operations of StateAdvantage nor do we subcontract for any of the associated operations such as call center operations, document processing, application tracking and eligibility determination. In other words, we offer a highly efficient and cost-effective turnkey solution that is unique to the Alliance.

7.7.10 Oracle

Oracle's integrated solution is a highly flexible, scalable, secure, commercial-off-the-shelf (COTS) package that is easily integrated with internal and external systems. Oracle recognizes that Health and Human Services agencies must modernize the manner in which services are being delivered to their clients. The following are some key examples of how our solution lowers costs:

- Reduce costs and improve maintainability and self-sufficiency through flexible application configuration.
- Strong upgrade track record that has a positive impact on the total cost of ownership and longevity of your solution.
- Reduced costs through Oracle's Exa-platform that provides lost cost through the consolidation of all system components such as servers, storage and network into a single platform and ongoing operation costs through reduce administration, floor space and power consumption.
- Leveraging assets from the Early Innovator states presents numerous advantages such as reduced cost and accelerating project delivery.
- Re-use of Exchange components from Early Innovator states is a central theme defined by CMS in an effort to reduce the overall cost of the program nationwide. Oracle provides several advantages customers in the area of asset re-use.
- Oracle's Health Insurance Exchange COTS solution provides a powerful, cost-effective modular solution.
- This configuration-based approach will reduce cost and implementation time, and substantially reduce risk for the Customer/provider portal project.

Moreover, the fact that we have invested 100's of millions of dollars in pre-integrating our product-lines gives the states a tremendous cost-savings due to lower implementation costs, lower ongoing maintenance costs, and higher system agility over time. For this reason, we believe that Oracle is uniquely positioned to provide the lowest-cost, highest-value solution for insurance exchanges.

7.7.11 Software AG

No response provided.

7.7.12 Speridian

Proprietary response provided.

7.8 MAJOR DECISIONS THAT IMPACT COSTS

The Federal Government has given states a degree of flexibility when designing and implementing the Exchange. Please describe the major technology, infrastructure, and policy decisions that West Virginia will need to make and their expected/potential impact on cost.

7.8.1 ACS

Because many components of our HIX Solution Suite are already operational today, implementation of our total solution is less than would be expected from vendors who are new to the marketplace. However, there are several factors which must be discussed with the Office of the Insurance Commissioner (OIC) in order for the ACS Team to provide an accurate cost estimate, work plan and timeline for implementation, including:

- Availability of West Virginia resources and carrier resources to support the Exchange implementation
- Number of other vendors the ACS Team will need to work with in order to implement
- Enrollment paths and processes required for Individual and Family Plan (IFP) and Group enrollees (universal applications, redirects or carrier/product specific applications)
- Number of carriers and plans to be implemented for a given instance of the Solution.
- Requirements for passing user demographic, health and online tracking information (User ill, etc.) among the various entities and modules involved in the Exchange
- Requirements for data consistency/uniformity among the various member plans and modules

These variables require West Virginia resources, third party vendors and participating plans to work collaboratively with the ACS Team in the implementation of the specific instance of the HIX Solution Suite prototype to determine the resources, effort and timelines required for completion of the implementation.

7.8.2 CGI

The State will have a number of decisions to make, and is in a position to exert a high degree of control around the design and implementation of the Exchange. Some of the major decision points include:

- Technology model: COTs or customized build
- Infrastructure: host or outsourced
- Policy: Exchange as a market maker or facilitator

In each instance we recommended taking a long view of the state's priorities: Healthcare Reform and the implementation of an Exchange should provide an opportunity to support other programs and priorities within impacted agencies. We have also found that the most important, and often most difficult decisions, are around governance. A strong leadership model that is committed to transparency and open communications will have a high likelihood of success.

7.8.3 Cognosante

No response provided.

7.8.4 Cúram Software

From a technology perspective, using a COTS product will help the State control overall project costs. As a COTS product, Cúram will significantly contribute to reducing the overall implementation timeline and work effort as many requirements will be met out of the box or

through configuration, and not via custom development or significant modifications as would be the case with a transfer system.

From a policy perspective, the closer the State stays to the federal guidelines, the lower the project's risk and cost. The Cúram HCR solution will support the federal guidelines out of the box. As such, State-specific exceptions or deviations will drive project work effort.

7.8.5 Deloitte

Proprietary response provided.

7.8.6 Exeter

No response provided.

7.8.7 Getinsured.com

No response provided.

7.8.8 LexisNexis

No response provided.

7.8.9 MAXIMUS/Connecture

While we can readily identify a range of consequential decision points, their expected potential impact on cost cannot be accurately assessed in a vacuum or in isolation from one another. For instance, the decision whether to operate the SHOP Exchange separate from the American Health Benefit Exchange would have a series of ripple effects on technology and infrastructure. Conversely, a decision on infrastructure could push a state toward combined or separate Exchanges.

Rather than make estimates that would be little more than a guess, we have chosen to rate each decision's impact on cost as being "significant" "medium" or "nominal."

Technology Decisions

- Whether to acquire modular functionality from multiple vendors or procure a turnkey and fully integrated solution: significant
- Whether to procure a fully integrated eligibility system encompassing all programs or continue to rely on legacy systems for eligibility in relation to Medicaid and/or CHIP: significant
- What types of real-time transactions will be available through the portal: medium
- Which electronic linkages will be created to government databases: nominal
- Whether and how to establish electronic linkages to small employer HR and payroll systems: medium
- Where to host the solution: medium
- What self-service technologies to offer besides the web (such as, mobile, text messaging, IVR, kiosks): medium

Infrastructure Decisions

- Whether to procure a turnkey operational solution that fully integrates technology and customer service or bifurcate these functions and assign them to separate vendors: significant
- How to recruit, train, and oversee the Navigators: medium
- Whether to require certain physical operations (e.g., call center, mail processing, premium processing) to be fully or partially located within West Virginia: medium

Policy Decisions

- How to integrate state workers into the Medicaid eligibility determination process: medium
- Whether to assemble an insurance market or limit its scope through a procurement: medium
- Whether to combine or separate the individual and small business Exchanges: significant
- How to position the Exchange relative to Medicaid and CHIP for outreach and marketing purposes: nominal
- What role brokers and agents will play in marketing, outreach, and in relation to the Navigators: nominal
- Whether to develop a stand-by solution if the Federal Hub is not ready or "go all in" on the Federal Hub: medium

7.8.10 Oracle

Oracle highly recommends West Virginia deploy an enterprise-class COTS solution designed for the specific needs of the State's Exchange and social services initiatives. With a COTS solution, West Virginia is able to implement a componentized solution based on the Federal and State's HIX requirements and implementation timeframes, enabling functionality with more rapid and staged return on investment (ROI) realized at critical points in the project, as well as upgrades based on productized functionality.

West Virginia's best-of-breed solution approach will allow for the maximum leverage of the existing infrastructure investments, while providing the ability to move forward on the path to a state-of-the-art architecture and a truly scalable solution. Our approach encompasses the following solution principles, based on a framework of solution components from a *single solution vendor to leverage pre-integrated and delivered functionality:*

- Incremental - A COTS approach allows incremental improvements to mitigate risk and allow initial phase benefits and scale to future initiatives while addressing a broad range of requirements across Social Services and Health Insurance Exchange
- Upgradeable - Systems will be regularly updated to keep current with new technologies
- Evolving - New functionality is continuously being developed and incorporated into future releases
- Configurable - COTS systems are designed to be configurable for the vast majority of needs, limiting the need for customization
- Unified - Single policy repository links determinations across agencies and ensures consistent outcomes

- Re-Usability - COTS componentized solution can be incorporated into the current technology environment without customization of the core features and functionality on a phased basis, avoiding rip and replace
- Compliance - Supports key CCIIO and ONC Guidance including modular system integration, open Service Oriented Architecture (SOA), and *isolation of Business Rules*

With this approach, West Virginia can implement a highly scalable and flexible technology to accelerate the HIX growth and expansion of health and human services service offerings to the State's constituents, without disruption to the current operations. West Virginia expects to benefit from the proven best-in-class functionality with better business operations, lower administrative costs, high scalability, and the backing of a viable, industry leader as the software vendor.

West Virginia can also implement a HIX solution that is designed to leverage its existing infrastructure wherever possible. We have proposed an infrastructure and integration approach that is premised upon the concept of re-usability, open, industry-standard, and agility. Moreover, the targeted solution can be leveraged as an enterprise platform for achieving broader agency goals in case management, eligibility, benefits management, centralized call center, etc. to avoid the creation of a single-purposed system silo. West Virginia further benefits from an integration solution that is both flexible and low cost, and leverages best-in-class applications, integration server technology, and business process model expertise.

7.8.11 Software AG

No response provided.

7.8.12 Speridian

Proprietary response provided.

7.9 PREVIOUS EXPERIENCE WITH SUSTAINABLE FUNDING MODELS

Please indicate previous experience, if any, with sustainable funding models associated with your solution.

7.9.1 ACS

The ACS Team has met with and continues to discuss Exchange implementation possibilities with nearly every state in the country. None have contracted to implement a full Exchange environment yet. However, we would be happy to assist West Virginia in building relationships with our other state clients to explore joint opportunities, sustainable funding models, and lessons learned from pre-ACA exchanges.

7.9.2 CGI

The key to achieving a sustainable model is enrollment of low-risk residents. As noted in our response to the state's queries on risk selection, drawing healthy, low-risk individuals into the Exchange will be critical for success. The greater the population in the Exchange the more

leverage the state will have when negotiating with carriers, and ideally, will be able to achieve instances of lower costs for members.

By creating an environment that carriers will feel comfortable participating in (knowing that they will not be covering only the very sickest of residents) will then, in turn, provide more shopping options for people, increasing the overall customer base for the Exchange. Should West Virginia choose to generate revenue through an administrative fee on premiums, this combination of carrier and consumer participation will be critical.

7.9.3 Cognosante

No response provided.

7.9.4 Cúram Software

Cúram HCR is a COTS solution and as such, our standard business model is to sell our solution in a licensing model unassociated with the sustainable funding model required to support the ongoing operations and administration of a health insurance exchange. That being said, Cúram Software has committed to building our Health Care Reform solution by bringing in resources with the necessary expertise to advise on this topic.

In the currently operating health insurance exchanges in the United States, two sustainable funding models have evolved;

1. Establish a flat-fee or percentage administrative fee to be added to the premium cost of a health plan; and
2. Establish a participation or "slotting" fee to insurance carriers who wish to load their products into the health insurance exchange.

In either case, the additive cost of the fees must take into account the administrative overhead of the operational aspects of the health exchange and potentially the payment of commissions and/or compensation to navigators and/or brokers, if applicable. Whether you compare, Florida, Massachusetts or Utah, the fees tend to fall into the area of2.5 - 3.5% of the premium cost and can be collected and distributed by the financial administrator of the exchange as part of their functions to the health exchange.

7.9.5 Deloitte

Proprietary response provided.

7.9.6 Exeter

No response provided.

7.9.7 Getinsured.com

Getinsured's services are highly conducive to efficiently meeting all ACA requirements-for Exchange implementers, carriers, consumers and administrators. The ease of use, quick adaptability and ready-to-deploy nature of Getinsured Exchange components enable any state-

appointed entity to quickly and effectively govern one within months, which is important given the ACA's tight January 1, 2014 deadline.

The comprehensive nature of Getinsured Exchanges out-of-the box is a testament to our efficiency, both in implementation and operation. Efficiency translates to sustainability for an exchange. In order to become self- sufficient by January 2015, the exchange must had enrolled a sufficient number of consumers to support the exchange (if the state decides to maintain the exchange on a per member/ per month assessment). Most states are predicting that a minimum enrollment of 100,000 will be necessary to maintain an exchange. In a state where a large number of participants may qualify for the Medicaid program, it will be even more critical to attract and keep individuals in the exchange to subsidize the lower income enrollment processes.

Getinsured Efficiency for Exchange Implementers
Getinsured operates an ASP-based extensible technology platform that can be scaled quickly and easily. The technology is SOAP-based and therefore business rules, data elements, workflows can be configured without manipulation of core machine-based code. If West Virginia considers participation in regional exchanges, this will be important. Getinsured has a track record of collaborating with multiple third party partners in the development of Exchanges. The company can integrate with web portals as well as legacy back-end systems such as Medicaid through XML or batch files shared by SFTP or other channels.

Getinsured Export Capabilities
In addition to capabilities that would allow an administrator "push-button" capabilities to create rate review export capabilities, all of the rate review data in this system will be stored in an Oracle database. As a result, it will be easy and natural for administrators at any point in the future to export any data required by HHS through simple SQL queries. The technical and administrative screen will also include the capability to export all or a selected subset of the rate filing data into XML or to a format that can be imported into Excel with ease.

Based on our commercial health insurance experience and that of other functioning health insurance Exchanges, we believe that it is possible to run a functioning Exchange at scale where a full service BPO such as us is paid about $5 to $8 per-member-per-month.

7.9.8 LexisNexis

No response provided.

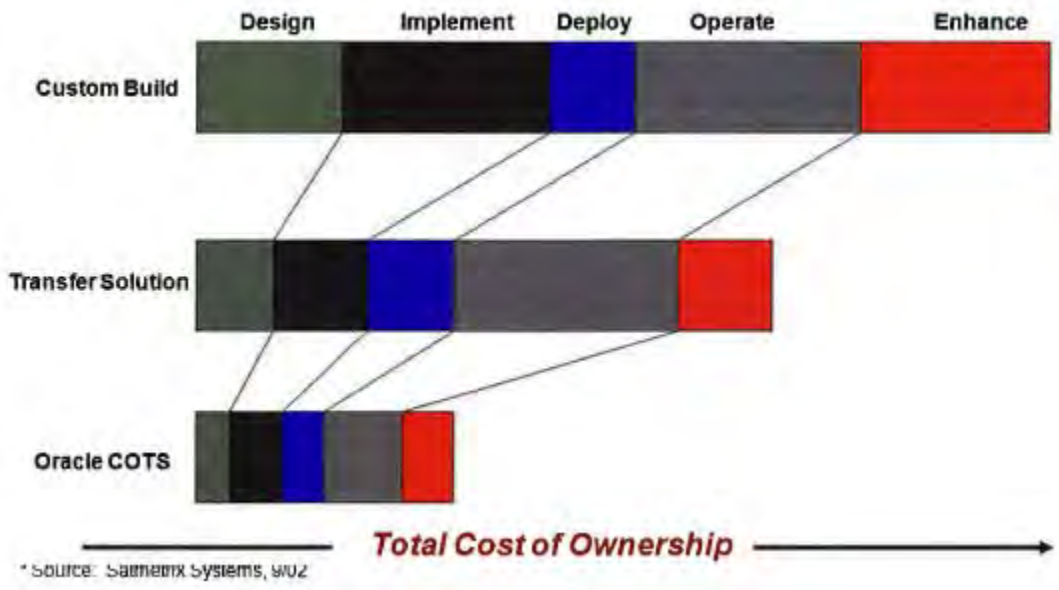
7.9.9 MAXIMUS/Connecture

In the commercial market, the Alliance currently offers a sister solution to StateAdvantage, BrokerAdvantage, to the broker community nationally for the individual and the small group markets. The solution is sustainable and continues to grow in subscriptions. The BrokerAdvantage solution is funded by both brokers and health plans through their participation in the program. BrokerAdvantage benefits to the broker community is a dramatic reduction in their administration costs since they are able to quote health plans side-by-side and produce professional co-branded proposals that brokers can send to their customers for review. Health plans benefit by having centralized access to the broker community.

7.9.10 Oracle

The Oracle HIX solution for the State is a true enterprise COTS application that leverages "out-of-the-box" functionality and allows the State to accommodate their various application requirements by configuring the solution components (using our comprehensive development tools) while minimizing the need for custom coding. This configuration-based approach will drive down the cost and time to market, and substantially reduce risk for the Exchange project. Based on the track record of numerous clients, the opportunity to potentially cut the deployment timeframe to the anticipated fifteen months with the Federal and State's approach and the accelerated realization of business value, combined with the reduced risk of project failure by leveraging a COTS solution that already exists provides the opportunity for savings of several million dollars immediately. Longer term, leveraging a COTS solution provides the opportunity to stay current with periodic updates to the core technology, making aging-out a non-issue. The underlying Oracle technology that powers the HIX solution, if maintained properly, will never become an outdated legacy system that needs to be replaced if the State continues to incrementally upgrade the solution during the life of the enterprise, including potential expansion to support the entire spectrum of Health and Social Services programs such as TANF, SNAP, Child Care, and MMIS. The potential savings associated with this approach could be estimated in the tens of millions of dollars over the next ten or more years.

The diagram below illustrates the cost savings of a COTS solution versus other options.



7.9.11 Software AG

No reponse provided.

7.9.12 Speridian

Proprietary response provided.

8.0 Performance, Reliability, and Availability

8.1 System Performance

Describe the system performance for the proposed solutions. In addition to the items below, list any requirements and other factors that could influence performance of the system. This includes:

- *Capacity (e.g., the number of concurrent customers or transactions the system can accommodate); and*
- *System safeguards that prevent users from severely degrading system performance or "hanging" the system (e.g., searches that return a large number of records).*

8.1.1 ACS

The Web-based components of the HIX Solution Suite are mature and scalable with more than 14.5 million consumers, 300,000 employers, and 60,000 agents utilizing it today to shop, enroll, and manage their benefits. The front-end Web portal is growing at more than 100,000 consumers per week and is expected to reach 15 million consumers by year-end. Using the SaaS model and a high-tech design philosophy, it is easy to add capacity to the system to accommodate growth. Each layer of the application architecture can be scaled horizontally across multiple servers, using server virtualization to optimize capacity. Additional scalability is achieved through server "horsepower" and "job farming." Scalability performance is typically benchmarked against the number of concurrent users of the application and the volume of members stored in the database. Capacity can be expanded by adding hardware to the production and backup data center well in advance of anticipated upswings in usage.

The Web-based components of the HIX Solution Suite continue to support the more than 7.2 million consumers brought on board in the last three years alone. Throughout this same time period we have maintained a 99.98 percent uptime performance level. Significant investment in servers and storage capacity has already been made with the expectation we will continue to see exponential acceleration over the next decade.

Software and hardware resource management within the data center consists of acquisition planning, installation, and maintenance of installed hardware and software assets. We continuously improve procedures as technology advances are implemented to ensure cost effective and world-class capacity management solutions.

We monitor historical growth rates for all critical resources, namely central processing unit (CPU) and storage mechanisms (e.g., tape and optical storage). Review of all planned projects and projected volumes ensures that we always have a "big picture" capacity view across the enterprise. By correlating historical growth rates with technological infrastructure advances, accurate resource requirements can be projected far in advance of the date on which the resources will actually be needed. Additionally, the capacity planning staff tracks capacity requirements for several other components in the data center, including channels, memory, storage, logical partition (LPAR) size, paging rate, and queue growth. The staff also works with the application developers to identify potential capacity issues in the areas of application

deadlocks, memory leaks, runaway processes, program thrashing, time spent in network, application, database layers, and application configuration issues.

8.1.2 CGI

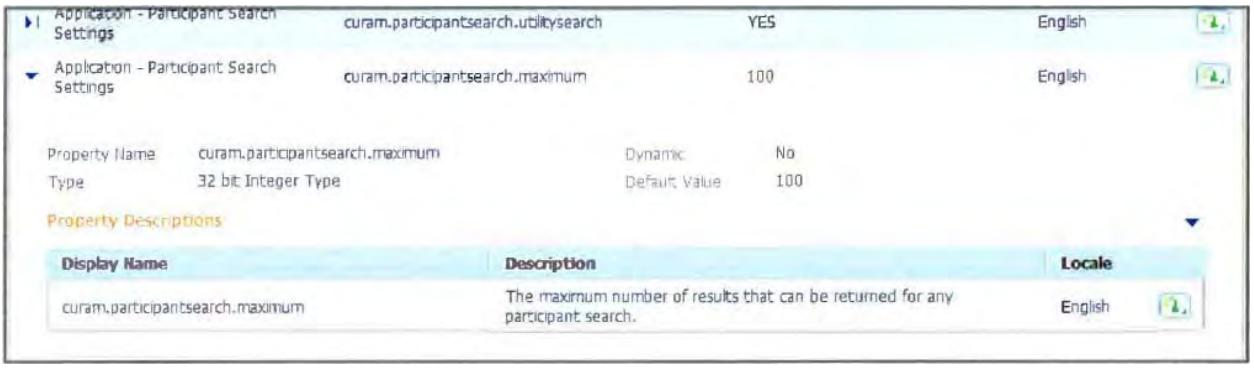
Architecturally, CGI Exchange360 follows an open standards approach with a multi-tiered architecture designed on the Java Enterprise Edition (Java EE) platform. Java EE continues to be the premier modern architectural platform that is widely adopted by COTS vendors and heavily supported with Open Source options. The multi-tiered approach provides for isolation of presentation, application (business logic) processing and data layers to promote performance fine-tuning and scaling where it is needed (e.g., higher data inquiry requests may necessitate only the scaling up of the data tier with minimal impact to the other tiers) and to establish security zones for increased protection.

8.1.3 Cognosante

See Section 6 (Operations and Maintenance) above. As the SI, Cognosante would be responsible for creation of SLAs and ensuring that contracted vendors are meeting these requirements.

8.1.4 Cúram Software

Cúram is typically used as the basis for large-scale online and web-based transaction processing applications and incorporates a wide range of utilizes several mechanisms and techniques to help ensure optimum performance, reliability and availability. The Cúram data model is well-designed to third normal form and only in exceptional circumstances is controlled redundancy allowed. Data entry is performed in a controlled environment supported by a wide range of data validation checks, the ability for fields to be automatically populated based on previous field inputs and/or business rules and the use of code tables presented in "dropdown" menus which help ensure consistency of data. In addition, a wide range of application "properties" can be configured to optimize the performance of the solution. On such property is the ability to specify the maximum number of results returned from a search as shown in the following screenshot.



Example Application Properties Configuration

The ability of the Cúram product suite to perform to a high-level in small, medium and large organizations is continuously verified through various performance and scalability benchmarks.

We have a dedicated Performance and Scalability team within our Product Development division which is committed to ensuring that Cúram solutions perform to levels that meet or exceed our customer's expectations.

Furthermore, Cúram has been independently tested and benchmarked to exceed the volume and performance requirements of the most demanding environments. Independent tests have been performed at both HP and IDM dedicated benchmark centers. These tests confirm the ability of Cúram to scale to meet extremely high numbers of concurrent user populations, while continuing to provide fast end-user response performance. The most recent benchmarking tests were performed at a HP facility and involved running Cúram in a large-scale environment that simulated 15,000 concurrent users carrying out a number of business processes typical of health and human services organizations. The tests were designed to represent "real world" usage of Cúram as effectively as possible and were based on a complex mix of business transactions based our experiences working on customer projects.

The detailed results for all benchmarking exercises, which include details of the hardware and software configurations used, transaction mixes, database cardinalities and other relevant information, can be made available on request.

The ability to achieve high-level performance is not, of course, limited to the capabilities of the Cúram product alone. Various other factors such as the hardware and operating systems deployed, the capabilities of the network and communications infrastructures, and various other operational aspects can have a significant impact of system performance.

Cúram has been architected with performance, scalability and reliability in mind. Its n-tier architecture ensures that it can scale across each of the three main application tiers - i.e. the presentation, application and persistence tiers. For the web server and application server, it is possible to scale horizontally by adding additional servers, and vertically by adding more processors, memory, and by increasing the I/O and networking capacity. For the database server, scalability is provided by using platforms with higher performance characteristics – for example, progressing from Intel servers to UNIX servers. For such platforms, multiprocessors provide scaling within the platform.

8.1.5 Deloitte

The HIX Solution has been designed to be modular and scalable. The SOA enables the use of "cloud computing" and capacity-on-demand to handle peak utilization times, such as open enrollment periods. Factors that impact resource requirements and system load include

- Number of simultaneous users,
- Number of expected QHPs, brokers, navigators, administrative users, employers, employees
- Number and type of external interfaces
- Need for legacy process support, such as paper document management.
- Current enterprise data repositories and their data-level integration needs, such as Clinical Data Repositories
- Batch processing requirements and real-time needs of business partners

- The desired mix of web-services, ESB transactions, direct calls to well-defined services, java-level methods and object data exchange, and use of "low-impact" data exchange technologies such as JSON.
- Logging and Audit requirements
- Use of server-side validation or processes and limited use of Ajax or JavaScript (client-side) validations.
- Choice of platforms and database systems. Commercial systems (IBM, Oracle, etc.) tend to be more resource efficient at a higher cost than open-source (Jboss, Linus) solutions.

Monitoring of system resources can be done to confirm that services and applications are as efficient as reasonably possible. Individual use can be monitored through session parameters limiting the amount of RAM or CPU session are entitled. Session limits and database-level restrictions would prevent large searches from slowing down the overall system. Potentially malicious traffic can be inspected at a proxy level and through XML appliances.

Centralized monitoring of services and data transaction through the ESB will provide a unified view of transactions and simplify the administrative burden of managing internal and external services, confirming that external SLA's are met and service parameters can be tuned in response to reported performance.

8.1.6 Exeter

OneGate is designed to scale to meet staff and customer needs alike and to support high-volume transactions. Proper load balancing and caching measures are taken to distribute load evenly and improve performance. The system has design features to safeguard against user actions from consuming excessive system resources, and degrading system performance. OneGate is designed to run on enterprise-grade servers separated into logical layers that can be independently scaled up (vertical scaling) or out (horizontal scaling). Each layer consists of multiple nodes, properly clustered, to ensure that processing load is distributed. This architecture allows additional hardware to be added to scale to support an increase in user base and transaction count volumes.

Exeter understands that states may have communities that have limited broadband penetration. OneGate supports users from multiple channels, including phone via call center integration. Exeter also acknowledges that there will be public centers where customers can go to get help with Medicaid and health insurance applications through community "navigators." It will be expected that these centers will have internet access. OneGate is designed to allow navigators to guide users through the eligibility and enrollment process. Exeter can also provide West Virginia with an extra light-weight, primarily text based user interface that would render faster for users with slower internet connections (e.g., dial-up modem).

8.1.7 Getinsured.com

Getinsured prides itself on providing a superior user experience for our customers and incorporates several system redundancies to safeguard against "hanging." The current average web page response time to user inputs is less than four seconds (most are under one second). To assure quality and maintenance of quick response time, we have developed tools that

automatically test the performance of web pages on a regular basis through the day, and send out alerts if response time is above the acceptable limit.

a. Performance Monitoring

No system will ever function to perfection. However, we utilize several monitoring tools that track CPU, memory and bandwidth usage. The system automatically triggers an alert to system administrators immediately when usage increases approach defined thresholds. The thresholds are defined significantly higher than what is expected based on user traffic patterns. We do this so that even when alerts are triggered, any disruption in user performance is prevented. To avoid impact on end-user performance, administrative and data exchange batch jobs are scheduled to run at off peak hours (when there is less traffic from end users). In addition to running high volumes of data during off hours, we also run batch jobs and administrative functions on dedicated machines. Getinsured is committed to making the required investment in hardware to exceed the anticipated needs of the emerging health care insurance Exchange market.

The following is the approximate average volume currently handled by the Getinsured production environment:

- Individual Consumers: 104M per year
- Carriers: 49 carriers and 6000 plans nationwide
- Brokers: 4000 nationwide enrolled at Getinsured.com
- Over 100 GetInsured internal employees (agents, administrators, policy and financial management staff)
- Current capacity for 400 concurrent users behind the firewall

8.1.8 LexisNexis

System uptime is virtually 24/7. Through our dual redundant and active datacenters, located in Alpharetta, GA and Boca Raton, FL, we are able to consistently maintain 99.9% availability. To maintain high availability and high performance, LexisNexis maintains twice as much system capacity than currently utilized. LexisNexis reserves a weekly maintenance window on Sundays (12 AM to 6 AM), although services are typically preserved by failing over to our disaster recovery hot site.

8.1.9 MAXIMUS/Connecture

A successful Exchange must have an infrastructure that is scalable to the number of anticipated consumers at initial implementation and over time. Linear scalability allows clients to exponentially grow their services without worry or concern that they will outpace their platforms. An appropriately planned and scalable infrastructure provides West Virginia more accurate cost containment options for future planning and provides sufficient capacity to support fluctuations in the target populations. The Alliance recognizes and appreciates the anticipated volumes as shown in *Exhibit* 8-1: *Anticipated Volumes.* Our infrastructure is linearly scalable around these volumes.

Anticipated Volumes	
Individual Consumers	1.37 million in year one I 10,000/month ongoing

Anticipated Volumes	
Employers	4,000 in year one I 1,000/ year ongoing
Carriers	5 with 3 plans each I constant ongoing
Brokers	200 in year one I constant ongoing
Navigators	50 in year one I constant ongoing

Exhibit 8-1: Anticipated Volumes. *The StateAdvantage solution is designed to scale and accommodate use by several different stakeholders at very high use and transactional levels.*

StateAdvantage is designed to be deployed in a three-tier architecture with each tier configured to be load balanced. StateAdvantage operates in a stateless mode which allows servers to be added or removed without an impact to online users. The architecture is designed to address scalability through additions and upgrades to the hardware configuration. Specific performance metrics are monitored and evaluated monthly to forecast minor upgrades to server hardware (memory, additional processors, and so forth). Major additions to the system such as adding additional departmental modules are typically addressed by adding servers to the web or application hardware arrays. To date, this architecture has supported as many as 1,000 concurrent users while processing millions of transactions (for example, quotes, renewals, enrollment applications). There are no practical limitations for inbound transactions, number of end users, business rules, reports, or interfaces.

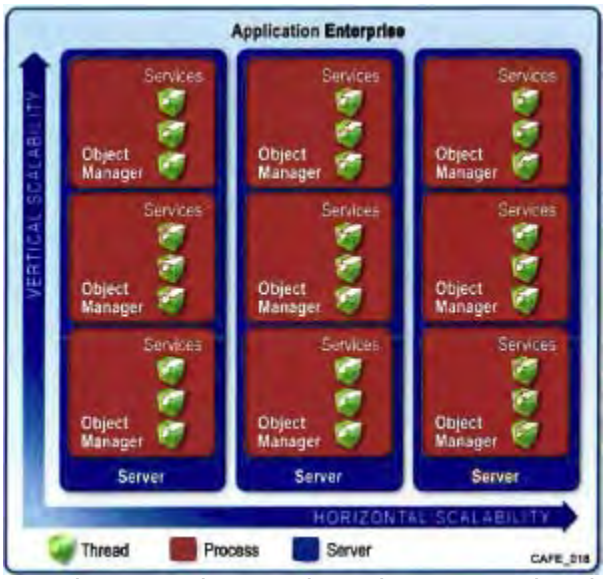
8.1.10 Oracle

The Siebel Public Sector solution is segmented into three major components: the Siebel Web Engine, the Siebel Object Manager, and the Siebel Data Manager. The Siebel n-tiered architecture clearly separates presentation, business logic; and data management with clear stable APIs in between each layer. This provides for multiple deployment options and ensures the highest level of scalability. The Siebel Public Sector application has a highly adaptable architecture which is focused on supporting customer interactions in a scalable and high performance manner. The following architecture features are specifically designed to ensure high performance and scalability:

- Efficient Clients
- Stateless Web Servers & Load Balancing
- Multiple machines per Enterprise
- Multi-threaded services and servers
- Load balanced services and servers
- Fail-over and clustering
- Database connection pooling & multiplexing

Our proposed solution supports pools of web servers and application layer servers. We propose an architecture model in which multiple Object Manager instances are configured across the enterprise. This supports availability and scalability through maintenance, growth, and realignment of resources. This deployment further brings the advantages of that the deployment model that supports scalability also supports high availability.

This is an economical methodology that promotes simple scalability, as well as recovery from server outages with minimal impact* to *application availability. The application is a resilient service to its end users, who in turn can have the best chance to provide service to their clients.



The application level load balancer distributes the load to multiple Object Managers, whether they are on the same or different machines. To add capacity to handle increasing number of users, more server processes can be added to under-utilized servers, or to expanded servers, or to new servers which are added to the processing pool. This can be done without interrupting availability of the applications services. The load balancer also provides some fail over capabilities by distributing work to other running servers should a Siebel Server become unavailable for whatever reason.

Best practices should be defined to ensure users are not able to severely degrade system performance. An example of this would include utilizing a data warehouse for reporting as opposed to running against the transactional database. Oracle applications allow for safeguards such as setting predefined and default queries for users so data is already filtered for many of the common functions. Additionally, long running queries can be cancelled and the system administrator can preset the number of rows that are allowed to be returned for any given query. Oracle also provides system administration and monitoring tools to validate system performance in real-time.

8.1.11 Software AG

Software AG will not be responding to this section.

8.1.12 Speridian

Proprietary response provided.

8.2 EXPERIENCE WITH RURAL CONNECTIVITY ISSUES

Reliable and accessible Internet connectivity is a challenge for West Virginia's citizens living in rural areas; currently, many of the State's households and businesses have limited or no access to broadband. Describe any experience your organization has dealing with rural connectivity issues and any capabilities your solution has to overcome this challenge. How is the quality of the user experience and/or timeliness of transactions impacted by the type of connection the user has?

8.2.1 ACS

In our experience, the key to communicating to residents in rural areas is three elements:

- Research the communication preferences of rural residents
- Segment these preferences into categories
- Create an actionable implementation plan

For example, some rural residents may be best reached through church and religious organization outreach. These organizations often have the experience and resources to efficiently reach and enroll rural residents. Sports and community events are also highly effective ways to reach uninsured populations in rural areas.

Another venue for outreach is trade or service organizations that have established affinity organizations. Examples include mining organizations, labor or trade groups, and ranchers and farmers. In Massachusetts, this form of segmentation and outreach was highly successful in reaching non-urban and rural populations.

For users in rural areas who do not have reliable connection to the Web or mobile services, we can empower applicants, Navigators, brokers, and community advocates with paper and non-connection based mobile applications to assist in the application process. Additionally, our HIX Solution Suite includes call center services that enable applicants and enrolls to receive assistance from trained customer service specialists.

In our experience, the quality of the user experience is less dependent on whether the user has Web connection or enrolls via paper, than if they have a clear understanding of the their choice of benefits and the associated cost and coverage. The key to a satisfactory user experience for both urban and rural populations is to make enrollment choices readily accessible and easy and simple to understand.

8.2.2 CGI

Ensuring that individuals in rural and geographically disparate areas have full access to the benefits of the Exchange is imperative. Through its work throughout the United States CGI has had the opportunity to develop an understanding of the challenges presented by a lack of rural connectivity. As we have developed our Exchange solutions, we have designed mobile applications simultaneously. The exponential expansion of mobile device adoption provides an important opportunity to reach populations in ways that have been, in the past, very difficult.

8.2.3 Cognosante

See Section 6 (Operations and Maintenance) above. As the SI, Cognosante would be responsible for creation of SLAs and ensuring that contracted vendors are meeting these requirements.

Our approach would involve stakeholders such as the Chambers of commerce, consumer advocacy groups, GOHELP, and the Small Business Administration in the roll-out of the Exchange. These groups would provide valuable input, feedback, and outreach opportunities that will help make the Exchange a success.

8.2.4 Cúram Software

In general, independent benchmarking tests indicate that in a typical deployment configuration, 95% of all Cúram transactions will complete in less than one second. However, low bandwidth and/or high latency environments will impact on browser responsiveness as the network transfer will delay the rendering of application pages. Cúram has been designed to minimize the number of network requests required to render a page by promoting caching where possible and consolidating small files into a single download. This, along with the use of HTTP compression, is used to manage the performance of the browser to web server interaction in low bandwidth environments.

HTTP compression can be enabled so that all content is compressed prior to transmission from the web server. Browsers supported by Cúram support this and decompress the content on the client. While this does introduce some CPU overhead on both the server and the client, the cumulative effect is a significant reduction in the transmission time for the page. A compression rate of about 70% or higher can be expected which will typically provide a response time reduction of 50% or higher.

Based on our experience with implementations around the world, Cúram Software is aware that in some remote locations, the connection back to a central data server may have to operate over a 56Kbps shared satellite link, with a latency of nearly one second. The average user interaction for Cúram requires 14KB of content, most of which is HTML content. Static content is received from the browser cache, once initially cached. This breaks down as 3 KB inbound traffic to the web server and 11 KB outbound traffic to the browser. Combining this information, and assuming a typical Curam deployment:

- 56 Kbps is about 7 KB per second assuming there are no latency problems and full use of the network link. Therefore it would take two seconds to transmit the 14 KB required for the page.
- Latency of nearly one second (or 1000 ms) would mean each TCP/IP packet would take one second to transmit. The MTU (maximum transmission unit) for Ethernet is typically 1500 bytes, so a single request is ten packets for the 14 KB, if each one has a latency of one second.

A variety of alternative deployment options are available that can be used to improve the potential performance in low bandwidth/high latency situations but some detailed discussions will be required to identify the most appropriate option(s) for any given scenario.

8.2.5 Deloitte

In addition to being used at customer homes and at community partner locations, a self-service solution can also improve service at local agency offices. Many of our clients have found it beneficial to set up kiosks at their locations. This enables customers to use these features in the lobby and potentially avoid the need to have a face to face meeting with a worker, or reducing the face time significantly.

8.2.6 Exeter

To address rural connectivity issues, and to provide service to the maximum number of customers, OneGate supports access via various channels. In addition, OneGate is optimized for broadband web access, but will still provide functionality at slower internet speeds. In order to meet the needs of customers who have no online access, OneGate can support customers through mobile web access. Finally, there is support for connecting to call center functionality.

8.2.7 Getinsured.com

Once operational, Exchanges cannot have long waiting lines and seemingly endless bureaucracy. This challenge is all the more crucial for eligibility determination processes because they are much more complex than most electronic government systems, which traditionally do not require as many verification sources. The federal design envisions a world class on-line shopping experience for consumers. With limited broad-band coverage and low literacy rates, West Virginia faces some difficult barriers to a successful exchange operation. Rural residents will have unique needs that differ from those of their urban counterparts. Providing support of exchange services through USPS will be costly and time-consuming. The Exchange Board will need to consider such costs when designing the financial model for the Exchange. Getinsured is exploring the need to develop mobile applications for cell phone based interfaces for some rural users. Admittedly, this will still leave some lacking access except through "other means." The studies commissioned in West Virginia concerning access will help inform strategies such as kiosks at places where people can be found to congregate or the note pads outsourced to enrollment specialists can help in the area. Getinsured will work closely with the state to explore how other rural states are addressing this challenge and will incorporate those best practices as identified.

8.2.8 LexisNexis

System uptime is virtually 24/7. Through our dual redundant and active datacenters, located in Alpharetta, GA and Boca Raton, FL, we are able to consistently maintain 99.9% availability. To maintain high availability and high performance, LexisNexis maintains twice as much system capacity than currently utilized. LexisNexis reserves a weekly maintenance window on Sundays (12 AM to 6 AM), although services are typically preserved by failing over to our disaster recovery hot site.

8.2.9 MAXIMUS/Connecture

The Alliance has monitored the recent stakeholder conversations that have been held in connection with your strategic IT planning. From these experiences, we are familiar with the broadband and satellite challenges facing many West Virginia communities. We also know that there are other challenges, including literacy and other access issues. To address these, we offer offline support through our call center, highly efficient processing and handling of paper-based forms and applications through imaging and electronic work queues, and support for community-based Navigators, brokers, trade unions, community groups, and other local, trusted entities.

For those consumers with online access, StateAdvantage is structured to maximize compatibility with modern web devices and adapt to a growing array of web access points. As

the web evolves, Smartphone or tablet devices become a primary means to access information for many individuals. Their rise in importance demands an interface well-suited for their capabilities. Through responsive web development techniques, the Exchange workflows are translated to a wide variety of screen sizes and input methods. User interfaces and data entry screens need to be adapted for touch-based input and a wide variety of environmental factors - not merely text-based variations. Adoption and success rates increase when an interface is tailored to the device, and this is especially important given the increasing reliance of many Americans on mobile devices, including West Virginians.

Navigators and brokers can also use mobile and tablet interfaces to educate and assist individuals, employers, and employees. With touch screen interfaces, a signature can be captured in any setting. A well-designed mobile solution can provide an effective outreach platform and a convenient way for Navigators and brokers to work anywhere without having to carry a laptop. The easier it is for them to access and use the StateAdvantage solution, the more likely the overall success of the Exchange. The same quick check tools available online are also available on mobile devices so that Navigators and brokers can inquire about eligibility, view application statuses, and make updates to accounts.

The Alliance currently has three Government contracts in the neighboring state of Pennsylvania, where the rural population faces some of the same challenges as those of West Virginia. There we have actively addressed health literacy issues through community partners successfully reaching individuals in various demographics and with widely varying literacy level.

8.2.10 Oracle

Oracle recommends the use of a modem with a bandwidth of 56 kilobits per second or better for citizen applications through the web portals. If lower bandwidth modems are used, the application will be functional, but performance degradation can be expected. This lower performance will be the case with any Web site that user's access.

Oracle worker facing applications should use a LAN/WAN connection supporting HTTP. If a worker will need to be in a rural area where proper bandwidth is not available, a Siebel Mobile client or Siebel Remote can be used. The Siebel Remote Web Client enables mobile employees to use Siebel Public Sector applications with the same browser-based user interface as the connected Web client on a disconnected laptop PC or Tablet PC with customer information stored locally on the computer. The Remote Web Client works with Siebel Remote on the server side to utilize intelligent transaction routing, data synchronization, and Siebel Store-and-Forward Messaging capabilities. Using Siebel Remote Web Client, mobile users can access the full power of Oracle's Siebel Public Sector Applications while disconnected and then can synchronize to upload local changes to the server.

8.2.11 Software AG

Software AG will not be responding to this section.

8.2.12 Speridian

Proprietary response provided.

9.0 Project Management

9.1 ABILITY TO MEET FEDERAL CERTIFICATION DEADLINES

Please describe your level of preparedness to meet Federal deadlines for certification by January 2013 and for a fully compliant, operable Exchange by October 1, 2013.

9.1.1 ACS

Because our HIX Solution Suite components are already being used in production environments today, we are prepared to meet the federal deadlines of certification by January 2013 and an operable Exchange by October 1, 2013, based on the award date of the contract with West Virginia. This date assumes that key operational and IT interface deliverables from CMS are completed on schedule. Please see Response Section 5.a, Time to Implement, for dependencies for additional dependencies for timely implementation.

9.1.2 CGI

CGI will be fully prepared to meet Federal deadlines for certification January 2013 through June, 2013 and for a fully, compliant, operable Exchange by October 1, 2013. We are confident in our ability to execute and meet the tight Federal deadlines and our track record confirms our ability to do so. CGI was the only vendor able to stand-up a full end-to-end program on behalf of a large Group 1 state for the Medicaid EHR Incentive Program and went live on January 3, 2011.

9.1.3 Cognosante

Each state, including West Virginia, is faced with the challenge of creating a full set of functions required to establish the Exchange in time for the January, 2013 certification period. The implementation of the Exchange involves integrating existing components and new components from multiple sources. This is a major system implementation and the time window is very short. Being fully compliant before the January, 2013 deadline will be a major challenge.

Cognosante fully understands the importance of system certification. CMS contracted with Cognosante to develop the new MMIS certification process for state Medicaid systems called the Medicaid Enterprise Certification Toolkit (MECT).

Cognosante recommends utilizing a Systems Integrator to implement a solution from a vendor that is building a system designed for use in multiple states. This allows West Virginia to be on the same development schedule as other states. The system could be either a COTS product or a shared system utilizing SaaS. The use of a COTS or shared system would expedite the certification since all of the users would benefit from the certification of the single system.

9.1.4 Cúram Software

Cúram Software is prepared to meet the federal guidelines for certification by January 2013 and provide a fully compliant system by October 1, 2013 with our Cúram for Health Care Reform COTS solution. Cúram Software's co-founder and Chief Technology Officer, Ronan Rooney, has been a member of the HIT Working Group for Eligibility and Enrollment which has enabled

Cúram Software to stay abreast of federal guidelines and help ensure that we can deliver an innovative solution to assist all states to meet the timeframe prescribed by ACA.

9.1.5 Deloitte

Deloitte is prepared to assist the State of West Virginia in developing a fully compliant, operable Health Insurance Exchange prior to the federal deadlines. While the timeline is aggressive, we believe that there are several strengths that allow us to meet the timeline, assuming that the project is able to begin soon. Deloitte has an Exchange Solution already developed that can be quickly adapted to suit the State's needs. We have an existing relationship with several State entities that will significantly reduce project "ramp up" time and risk. We also follow a Software Development Life cycle (SDLC), the Playbook Methodology, which has been proven successful on the RAPIDS project.

Exchange Solution
By January 1, 2013, the Health Insurance Exchange must demonstrate that it will be compliant with all applicable guidelines including but not limited to, streamlined enrollment, eligibility determination, SHOP, and reporting. As described in *Section* 2 *General Functional/Technical Specifications,* Deloitte has built a fully functional, flexible Health Insurance Exchange Solution that will provide these features. We also will team with industry vendors where necessary to meet the specific needs of the State.

Relationship with the State
Implementing a Health Insurance Exchange Solution will require engaging several departments and bureaus. Our existing relationships with the State give us the understanding of these key stakeholders. Deloitte is currently contracted with the DHHR for the RAPIDS project, the integrated eligibility suite of applications. Through these services, we also have a relationship with WV office of Technology (OT) and the bureaus of the DHHR, such as the Bureau of Children & Families (BCF) and Bureau of Medical Services (BMS). BCF workers are the primary users of RAPIDS and BMS receives medical data on a daily basis from RAPIDS via the Medicaid Management Information System (MMIS). Deloitte's experience in working with these State organizations and users provides us with the ability to begin work on an Exchange Solution quickly.

Familiarity with Existing Assets
In order to best meet the federal requirement that the system provide streamlined and coordinated eligibility, we believe the best approach should be to use existing State technology resources. RAPIDS provides existing eligibility determination and interfaces to the MMIS; it can be leveraged for the requirement that the Health Insurance Exchange Solution evaluate individuals for Medicaid. Additionally, the inROADS system can be expanded to accommodate screening and application intake for the Exchange; this would provide a streamlined interface for individuals whether they are applying for a health plan on the Exchange or Medicaid. The RAFT data warehouse would be used to satisfy federal reporting requirements. Deloitte's familiarity with these applications will simplify integration between these systems, and will also provide a single source of accountability for the project.

Playbook Methodology
In working with the State on the existing RAPIDS project, we have used our Playbook SDLC methodology that has been proven to work well on projects of this scope and complexity. We

would be able to reuse this SDLC and corresponding tools (i.e. defect tracking, configuration management, deployment, etc.) in developing the Exchange Solution, which will lead to reduced risk to the State.

9.1.6 Exeter

Exeter has the financial and staff resources to meet the federal deadlines for certification by January 2013, and provide the State with a fully compliant and operable Exchange by October 1, 2013.

Since its inception in 1984, Exeter has maintained a core focus on delivering high-quality management and technology solutions to numerous large and complex state and local government agencies. Exeter has built a strong reputation for enabling its clients to realize new efficiencies, create economies of scale, contain costs, leverage resources and improve customer services through cutting-edge IT strategies.

9.1.7 Getinsured.com

See 5.4.7 Implementation and 8.1.7 Capacity above.

9.1.8 LexisNexis

We understand that providing identity management within the Exchange is a critical, but overall small component of the project as a whole. We would work to integrate smoothly into the project itself, and not introduce any timeline strain. Our project teams are accomplished in doing just that - again, helped by the fact that the technological "links" between systems are commonplace using XML technology.

9.1.9 MAXIMUS/Connecture

The Alliance is prepared now to customize State Advantage to meet federal and West Virginia requirements. Once requirements are further defined through the RFP process, we will provide a detailed time line with specific tasks and milestones. We are currently finalizing the primary StateAdvantage modules that will be customized to meet Exchange requirements once they are defined. Our efforts to research, understand, and assimilate ACA statutory requirements and HHS rules put us on solid footing for the upcoming federal deadline of October 1, 2013.

While we have done as much as can realistically be accomplished in this uncertain and ambiguous environment through our technology investments and portfolio of relevant best practices, it is important to acknowledge how much remains unsettled and unknown that will affect the preparedness of any honest and experienced vendor. The principal federal rules governing the design and operation of an Exchange, and its integration with Medicaid and CHIP, remain fluid. Most states, including West Virginia, are primarily in an information gathering rather than procurement phase right now. Major state-level funding and policy decisions remain pending, some of them foundational.

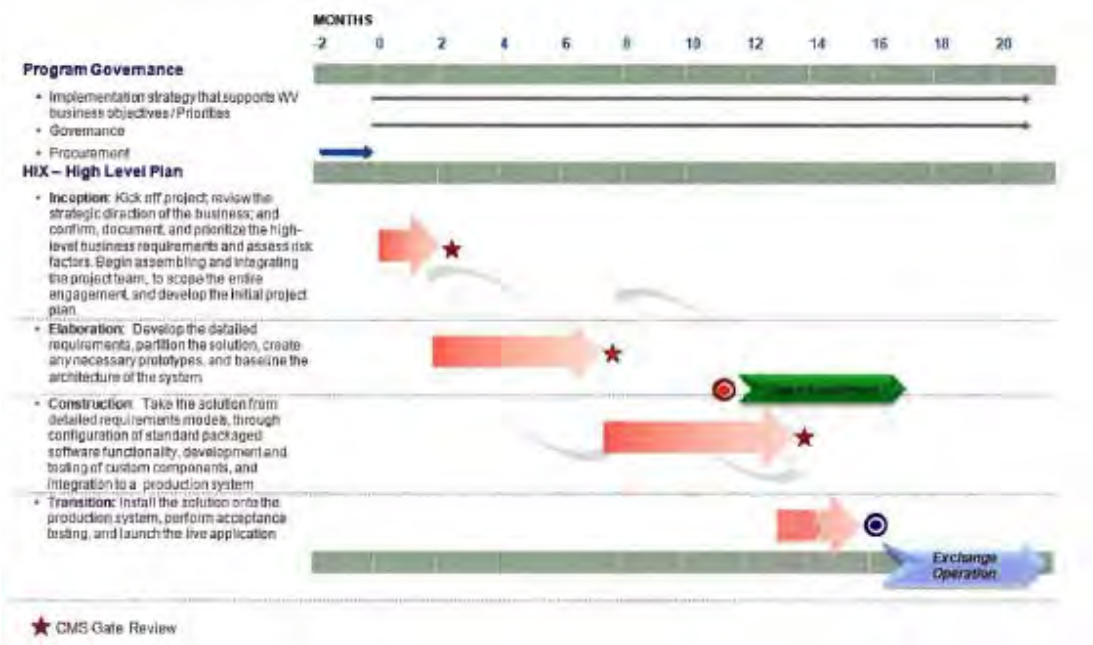
It is difficult to definitively or even confidently assert a particular level of preparedness in this kind of challenging and foggy environment. Our ability to meet the federal deadlines, as well as any related state ones, depend on decisions and actions by other parties over which we have

no control. To maximize our ability to be ready, we anticipate the following activities between the Alliance and our future clients, including potentially the West Virginia OIC:

- Fully respond to procurements
- Negotiate contracts and mutually agree upon scope of work, timetable, and milestones or deliverables
- Establish expectations, communication protocols, standing meetings, and methods for documenting and resolving policy and operational questions
- Perform iterative joint application design *(JAD)* sessions to confirm, reaffirm, and accept progress
- Continuously monitor and evaluate quality of the project and the process
- Testing and readiness reviews

9.1.10 Oracle

A 15-month implementation timeline is anticipated to implement WV Health Insurance Exchange. The diagram below illustrates the project execution notional timeline. Due to the modular and interoperable nature of our solution components, enhanced by an implementation methodology that is agile, iterative, and incremental, WV can deploy our Exchange solution to initially enable Open Enrollment capability in 10-12 months



9.1.11 Software AG

Software AG has the ability to work with Systems Integrators (SIs) in order to provide subject matter expertise surrounding our technology and solutions. However we are not looking to "prime" the implementation of West Virginia's Health Insurance Exchange thus we will not be responding to this section.

9.1.12 Speridian

Proprietary response provided.

9.2 KEY DEPENDENCIES

List any key dependencies for meeting those deadlines, including what you believe is needed from the State to ensure a successful outcome.

9.2.1 ACS

Decisions detailed in Response Section 7.h, Technical Decisions Needed, are major decisions the State needs to make in order to move forward with implementing an Exchange solution in West Virginia. Other key dependencies that the ACS Team will have are:

- Establishment of the Center for Consumer Information and Insurance Oversight (CCIIO) hub
- Issuance by CMS of Notice of Proposed Rulemaking (NPRM) or final rules
- Carrier readiness to supply rate, benefit and plan design information
- State preparedness and resources to make policy decisions
- Definition and technical rules for Modified Adjusted Gross Income (MAGI) calculation and determination

9.2.2 CGI

Dependency	Needed from the State for a Successful Outcome
Complexity of integration with existing eligibility systems	▪ Early and continued access to key eligibility system experts
Effective, time-sensitive decision making	▪ Clear directives to key program State staff and empowerment to make decisions throughout the course of the program
Federal rules on governing and oversight	▪ Continued dialogue and relationship brokering with key Federal contacts

9.2.3 Cognosante

Dependencies
Some certification dependencies include:

- Timely state purchasing and procurement processes
- Proper state and contractor resources available for joint requirements gathering
- Establishing the SOA ESB and proper SOA governance structure
- Updating eligibility systems
- Integrating with carrier, eligibility, financial, and other systems

Managing Risk
As with any large system implementation, proper planning and risk management strategies can ensure timely certification of the system. Any dependency that could affect the timely implementation and certification of the system should be tracked as a risk item. All Cognosante

projects utilize Project Management Institute risk management methodologies and track known risks using a Risk Management tracking tool that is part of our standard Project Portals powered by Microsoft's SharePoint product. The Risk Management function is part of our default project template.

Project risks are identified at the start of the project. Each risk has a mitigation strategy developed and responsible person identified to be responsible for monitoring the risk item.

9.2.4 Cúram Software

Cúram Software is prepared to meet the deadlines for certification and a fully compliant system. We believe that the State is taking the necessary steps required to allow a vendor to be successful in the areas which we would be required to deliver, but we would ask that the following be considered in moving forward.

As part of the project, timely communication of additional guidance and legislation by the Federal government anticipated to affect design of the health insurance exchange must be received when the State has been advised of such changes and updates. As an example, Cúram Software will want access to any available information regarding the design and availability of the Federal Data Hub as details emerge to the states.

Additionally, State and local configuration decisions - for example, those around the offering of a State Basic Health Plan - are decisions which will affect design and delivery. Cúram Software will need to understand the eligibility and availability of such an offering at the earliest date possible. Also, the availability of certain qualified health plans may be affected by eligibility decisions and data available within the Cúram HCR solution. Again, for the purposes of configuration, we will need to be notified as soon as any decisions are made within the State that effect eligibility for medical assistance programs and qualified health plans.

9.2.5 Deloitte

There are several dependencies that are critical to the State in being able to meet the federal deadlines:

- **Procurement Timeframe** - The State has until January 1, 2013 to demonstrate that the Exchange will be compliant with all applicable federal guidelines. Due to this compressed schedule, the State must expedite the standard purchasing process to procure the necessary components for its Exchange to provide time to fully design and implement the Exchange before the deadline.
- **Prioritized Requirements** - Based on the relatively short timeframe available to design and implement the Exchange, the State should prioritize the requirements for the Exchange. Some requirements may be viewed to the State as critical for day one while others may be delayed to a subsequent release. We will work with the OIC to create the prioritized list of requirements in line with an incremental development strategy, which will allow the project to deliver an initial release early with following releases with enhancement features and functionality.
- **Federal Rules** - There are several areas of federal rulemaking that have not yet been addressed. Some examples include: standards related to ongoing federal oversight of exchanges and actions necessary to confirm their financial integrity (e.g. program integrity requirements); benefit design standards for qualified health plans ("QHPs"),

including essential health benefits and calculations of actuarial value; quality data reporting requirements; and standards outlining the Exchange process for issuing individual certificates of exemption from the individual responsibility requirement. Since these aspects will have a material impact on the Exchange, it is necessary for the State to incorporate these rules into its Exchange design as soon as they are available.

- **Key Business Decisions** - The State's choice of what specific functions the Exchange will perform can impact the ability to meet federal deadlines. For example, the State has the ability to submit alternative plans for the Risk Adjustment and Reinsurance programs for federal approval. If the State chooses to submit alternatives, it may cause delays to the project due to the time required for approval. Additional decisions are discussed in *Section 7h Major State Decisions and Ramifications.*
- **Reuse of Existing Systems** - Given the limited timeframe available to implement an Exchange, reusing existing systems as much as possible would provide the lowest risk option to the State. As discussed in *Section* 9a *Preparedness to meet Federal Deadlines,* the State already maintains several systems, such as RAPIDS, eRAPIDS, inROADS, and RAFT which can be enhanced to accommodate portions of the Exchange solution functionality.

9.2.6 Exeter

Because the time to compliance is short, states can promote a successful outcome by:

- Clarifying requirements early, with a focus on those requirements essential for a state to meet its imminent certification and legislative mandate deadlines;
- Establishing an effective executive sponsorship structure that is able to drive business, financial and technical decisions relating to Exchange implementation, on a timely basis;
- Using an iterative release cycle that introduces the Exchange to customers in multiple phases, allowing the public to become familiar with Exchange elements as early in the implementation cycle as possible;
- Securing adequate funding;
- Effectively coordinating with insurers expected to offer plans through the Exchange; and
- Anticipating ongoing customer support requirements.

9.2.7 Getinsured.com

Most states engaged in standing up their exchanges are feeling a great deal of pressure with the looming benchmarks from the federal authorities. The analogy of building a house of cards might not be too extreme. The state exchange is dependent of the completion of several huge and important interfaces. For example, the availability of the federal DSH will be critical. For many states, the project has been undertaken by employees in the Insurance Department or other state agency under the job description of "other duties as assigned." Most already have full-time job duties and thus are being spread thin to assist in the effort. This often results in delayed decision-making and uncertainty on project completion. Thus, working in such an environment of uncertainty for an outside commercial entity can be particularly frustrating. Getinsured is committed to work arm-and-arm with the state however, to provide a timely implementation of the West Virginia exchange.

Lastly, the design of the exchange is much like the proverbial "Field of Dreams." States are trying to build it without any knowledge of if "they will come." The rating structure and

certification requirements for QHPs will determine the willingness of carriers to participate. Again, rating, certification, recertification, and decertification activities add additional duties for state employees to incorporate into their current workflow. Getinsured has experience working with major insurers through-out the country and can assist the state in developing product designs that will attract carriers to the exchange while meeting the federal requirements.

9.2.8 LexisNexis

We understand that providing identity management within the Exchange is a critical, but overall small component of the project as a whole. We would work to integrate smoothly into the project itself, and not introduce any timeline strain. Our project teams are accomplished in doing just that - again, helped by the fact that the technological "links" between systems are commonplace using XML technology.

9.2.9 MAXIMUS/Connecture

Since the Exchange concept is new, and requirements continue to evolve, we first need a firm definition of the OIC's requirements. Without those, it is difficult to explicitly and accurately identify dependencies. To meet the applicable deadlines, we also need state and federal guidance or standards.

Integration with Federal and State Agencies
ACA envisions an automated process flow, using data available real-time from the Social Security Administration, Internal Revenue Service, and Department of Homeland Security to validate citizenship/naturalization status and income. Although our business process model defines this operational exchange of data to incorporate electronic data verification sources into our business work flow, it remains to be seen how the Federal Hub will operate. State Advantage provides a variety of tools to integrate real-time with the Federal Hub and available state data sources, but the final decision as to which tools and business processes must be used cannot be determined until there is more information available about how the Federal Hub will work.

Some states have expressed concern about the readiness of the Federal Hub to be integrated with Exchange solutions in time for the 2014 deadline. Should the Federal Hub not be ready, our solution offers several alternatives, including integration with existing state databases such as Vital Statistics and the Department of Labor for Quarterly Wage and Tax Reporting data, reflecting our current experience with comparable data-matching for CHIP and Medicaid. Alternatively, we can use an exception process that tracks and follows-up on missing paper documentation to verify income and citizenship. This exception process can be used for those whose income has changed since their last tax return submission or temporarily deployed for all applicants while implementation of the Federal Hub remains pending.

Integration with Agencies Determining Medicaid/CHIP Eligibility
At this point, it is uncertain whether the West Virginia Exchange will take on processing of eligibility and enrollment for public programs as well as subsidies, or refer the applications to the Medicaid/CHIP programs for this determination. Currently, Medicaid eligibility services are performed by the Department of Economic Security (DES) through an intergovernmental agreement between the AHCCCS (Medicaid) Administration and the DES Family Assistance Administration. Under this agreement, DES performs initial eligibility determinations for

applicants of Medicaid only, and conducts the Medicaid portion of joint applications, which may include Cash Assistance, SNAP, and General Assistance.

West Virginia must determine whether the State wants to continue its current eligibility process. Under the ACA legislation, the American Health Benefit Exchange (AHBE) is required to screen all individuals who submit a single application for eligibility for Medicaid, CHIP, subsidized, or non-subsidized insurance. The StateAdvantage eligibility module performs this function, handling mail, fax, email, or web-based applications. For those deemed likely eligible for Medicaid or CHIP (through the MAGI screening), the Alliance can hand-off the applications to AHCCCS/DES for final determination for Medicaid, CHIP, and if desired, other human service benefit programs. This hand-off involves an electronic transfer of application data, requiring DES/ AHCCCS to finalize the determination using a revised legacy system that can accommodate MAGI-based eligibility rules.

Privacy and Security Requirements
StateAdvantage is completely compliant with HIP AA and other regulations guarding the privacy of individuals. We are dependent on the State to provide clear privacy and security requirements.

9.2.10 Oracle

Software and services implementation Options:

1. Preferred. Mandate software vendor prime and use software vendor's license/services agreement as a baseline with ability to share IP per CMS requirements. It's best if the state can negotiate a direct software and services agreement with the software vendor. Software vendor could be defined as either the COTS vendor or the manufacturer of the transfer software. This is the approach that KS SRS took with Oracle Consulting prime and partner sub.
2. Second best. Mandate either software vendor prime or a minimum of 40% of implementation hours of the software vendor's consulting services. Evaluation criteria provide more points for increased involvement from software vendor's consulting services over 40%. This would allow the software vendor's consulting to do the bulk of the implementation even if we had to use a reseller due to state terms issues. In the case of the reseller, the software vendor's consulting could be doing the whole project with project success accountability.

9.2.11 Software AG

Software AG has the ability to work with Systems Integrators (Sis) in order to provide subject matter expertise surrounding our technology and solutions. However we are not looking to "prime" the implementation of West Virginia's Health Insurance Exchange thus we will not be responding to this section.

9.2.12 Speridian

Proprietary response provided.

9.3 PREVIOUS OR CURRENT RELATIONSHIPS WITH OTHER STATES

Do you have previous or current relationships with other states? Can those relationships be leveraged, and if so, how?

9.3.1 ACS

The ACS Team has met with State Exchange decision makers in nearly every state in the country. As of the time of response to this RFI, none of these states have procured services for ACA-compliant exchanges. However, our team does have significant relationships and history with Massachusetts Connector and Utah Exchange personnel that could help the state of West Virginia in evaluating their decisions. Additionally, ACS State Healthcare has existing contract/client relationships with state insurance and health agencies across the country and would be happy to broker conversations with other states that could assist West Virginia in finding the most appropriate Exchange solution.

9.3.2 CGI

The ACA and implementation of Exchanges presents an unusual challenge not only for states, but the vendors that support them. This is a brand-new field of work, and one the draws on solutions, technologies and best-practices from a range of disciplines, including Medicaid, commercial insurance, SOA architecture, and member-centric processes. As noted below, CGI occupies an unusual position in this evolving world, partnering with states and the Federal government in the design and implementation of ACA and HIX strategies and solutions. We intend to bring that expertise and knowledge to all of our State implementation partners.
Below we provide a high-level view of some of our collaborations at the ground level of planning and implementation.

- NESCIES Early Innovator Planning Project - In May, 2011 the New England States Collaborative Insurance Exchange Systems (NESCIES) selected CGI to help craft their Exchange design and technology roadmap. For the engagement, CGI assessed the current components of the Massachusetts Health Connector and related technologies, analyzed the gaps, and created detailed design deliverables. Analysis was done to review how components of the Exchange may be reusable for other New England states and helped the collaborative complete necessary CMS gate review documentation.
- **Utah Health Exchange (UHE) Planning Project** - As part of their Health Insurance Exchange planning efforts, Utah selected CGI to analyze the current health insurance shopping marketplace and the consumer's Web experience. CGI is tasked with reviewing existing state and external portal environments to determine what features and requirements emerge that are suitable to incorporate into the next generation Exchange. CGI reviewed information sets and make recommendations for the state of Utah to consider helping consumers make more informed decisions.
- **Rate and Benefits Information System (RBIS)** - The Center of Consumer Information and Insurance Oversight (CCIIO) recently selected CGI to enhance the data collection and data management of Healthcare.gov. This program, the Rate and Benefits Information System (RBIS), supports legislation that requires the presentation of plan benefits data and the collection pricing from health insurance issuers. The CGI project will include the design, development, test, and implementation of new functionality and required enhancements to the existing system.

- **CMS Websites** - For over a decade, CGI has partnered with the Centers for Medicare and Medicaid Services (CMS) to develop, maintain, and enhance the IT systems and infrastructure needed to support their mission. A key component of this effort is CGI's support for the CMS External Websites including www.Medicare.gov, www.MyMedicare.gov, and www.cms.gov. This set of complementary web portals is critical to CMS's goals of outreach, education and consumer empowerment and combined receives hundreds of millions of web hits annually.
- **Medicaid Incentive360™** - Our state-of-the-art EHR Provider Incentive Program solution can be leveraged as a flexible and scalable platform to meet state and Federal requirements. This system is supporting the administration and incentive payments for the state of Texas and state of Ohio and meets the rules and guidance issued to date from CMS for the program. Using Medicaid Incentive360 as a platform reduces the time to implement, the project's risk and the project cost.

9.3.3 Cognosante

Cognosante is uniquely positioned in the HIX market. We are actively working with our partners on the Federal Exchange, as well as assisting several states with their Exchange needs. Cognosante is actively engaged with several states in the planning of the Health Insurance Exchanges, which gives us further insight into the issues and challenges states face in developing their Exchanges. We understand and have exposure to the range of technology and policy questions that influence architectural decisions, need for system scalability, and cross systems interoperability needs. The experience we have gained working with other states benefits all our HIX clients.

9.3.4 Cúram Software

The Cúram Business Application Suite is deployed in health and human services agencies at local, state, provincial, and national level throughout the world including the United States, Canada, Europe, Australia and New Zealand.

The list below outlines the US states in which Cúram is implemented:

- California
- Indiana
- Louisiana
- New Jersey
- New York (New York City)
- Nevada (Clark County)
- North Carolina
- Utah

Cúram clients in the US participate in the North America Regional User Group (RUG) which facilitates knowledge sharing and collaboration between states that are faced with similar challenges.

9.3.5 Deloitte

Deloitte has existing relationships with many states in the areas of Integrated Eligibility and State Healthcare. Below is a summary of our relationships and the benefits they provide.

Additionally, we have described our specific Health Reform relationships and experience in *Section* 2; *Current Solution Implementations.*

Relevant Relationship	Number of Projects	Benefits to West Virginia
Integrated Eligibility	16 States	• States will share a common experience in mapping eligibility to the new MAGI standard, which is discussed in *Section 2f Eligibility System Integration*. We will be able to leverage other states' experiences in developing these requirements when integrating them into the West Virginia solution. • Deloitte will host client sharing sessions which will provide States with a venue for discussing insights in how they are incorporating an Exchange into their existing Integrated Eligibility systems. • Deloitte will also host client briefing webinars in which we will discuss our analysis of applicable issues related to Integrated Eligibility and Health Insurance Exchanges. For example, Deloitte recently a series of webinars on topics such as Medicaid Eligibility, Premium Stability, etc.
HHS Portals	16 Portals	• Deloitte has executed several successful integrations of portal or front-end systems, such as with WV inROADS. • We have experience in implementing portals that include functionality required for HIX such as: performing application and enrollment requirements, integrated with state Medicaid eligibility systems for program real-time eligibility validation, performing mandated interfaces to federal and state trading partners, supporting new ACA interfaces, supporting life event changes, supporting MAGI standard changes, and supporting program specific rule sets for each program using a rules engine.
HIX Implementations	2 States	• We have already designed and piloted detailed requirements, business processes, functional designs, and solution architecture. • We will be able to use these connections to facilitate knowledge sharing of best practices in the design and implementation of an HIX Solution.

Figure 19. Deloitte Relationships and Benefits to WV

9.3.6 Exeter

Exeter has had significant experience working with public sector agencies to help implement systems, reduce inefficiencies and leverage existing resources. Examples of past work include:

- Working with the Massachusetts Registry of Motor Vehicles (RMV) to design and implement easy-to-use, rules-based self-serve web applications that automate the RMV's complex license and identification policies. Our solution has helped the RMV improve customer service by dramatically reducing high turn-away rates, inconsistent service and long wait times;
- Providing consulting assistance to the Virginia Secretary of Technology regarding statewide eHealth strategies, including administrative data exchange, Medicaid transformation grant funding, ePrescribing and medical records system standardization. This work included helping with the formation of the newly chartered Virginia Health Exchange Network (VHEN);
- Assisting the Massachusetts Executive Office of Health and Human Services (~ OHHS) with the development of user requirements for the Massachusetts Pharmacy Online Processing System (POPS) providing Exeter with an in-depth understanding of pharmacy needs requirements and claims processing infrastructure within the context of Massachusetts health agencies; and
- Working with Commonwealth Medicine, a Massachusetts -based organization, to conduct a current state IT assessment and to explore replacement options for upgrading the New England Newborn laboratory management system.

9.3.7 Getinsured.com

Getinsured is currently actively engaged in bidding on several other state exchanges and, as a fully functional exchange on the commercial market, has the ability to leverage that experience

to the advantage of any states seeking a low cost, low maintenance, low risk solution to the exchange challenge.

9.3.8 LexisNexis

We understand that providing identity management within the Exchange is a critical, but overall small component of the project as a whole. We would work to integrate smoothly into the project itself, and not introduce any timeline strain. Our project teams are accomplished in doing just that - again, helped by the fact that the technological "links" between systems are commonplace using XML technology.

9.3.9 MAXIMUS/Connecture

The Alliance has relationships with almost every state in the country plus Puerto Rico. We are involved in discussions on Exchange solutions of Early Innovator States including, Maryland, Wisconsin and New York. Specifically, MAXIMIS is on an Exchange Advisory Committee in Maryland and we have a 10-year contract providing Medicaid customer service and enrollment in New York.

- Through our state-focused eligibility and enrollment modernization program, we have helped states enroll more than 53 million individuals in managed care plans in California, Colorado, Georgia, Iowa, Indiana, Massachusetts, Michigan, New York, Pennsylvania, South Carolina, Texas, Vermont, Virginia, and soon to be Louisiana
- We've made 7.4 million CHIP eligibility determinations in California, Colorado, Iowa, Michigan and Texas
- Our 28 call centers have handled 98 million consumer inquiries and transactions
- Through our Medicaid enrollment services, we expanded Medicaid managed care to more than 16 million individuals

We leverage our successes in other states to develop best practices and best technology solutions that affect our StateAdvantage solution for West Virginia. Our regional and national healthcare business development and operations teams to discuss new innovations and lessons learned among our health services contracts. We apply lessons learned to improve our services to our customers in every state.

9.3.10 Oracle

The State of Oregon selected Oracle to build and implement their HIX solution. While their intent is to expand the selected tools to replace their current eligibility systems across all HHS program, West Virginia stands to benefit directly on many fronts from the ongoing work that Oracle Consulting is performing for completion of their HIX solution. Major benefits include:

- The Oregon HIX Oracle solution is almost identical to the one we are proposing for West Virginia. This means that another state with very similar requirements for a HIX system will be using the solution we are proposing to West Virginia, which solidifies to the credibility of our architecture and technologies.

- West Virginia will be able to use the HIX eligibility rules that Oracle Consulting will begin developing for Oregon. This means that West Virginia will leverage a set of HIX eligibility

rules that an Early Innovator state will be using rather starting from scratch. These rules include:

  - Modified Adjusted Gross Income (MAGI), Eligibility & Benefit Calculator, Insurance Plan Comparator, Tax Credit and Premium Subsidy Calculation
  - Pre-screening rules for HIX, Medicaid, CHIP, and TANF, SNAP, Child Care
  - Benefit application forms for Medicaid, CHIP, and TANF, SNAP, and Child Care
  - Full eligibility determination rules for Medicaid, CHIP, and TANF, SNAP and Child Care
- West Virginia will also leverage the Enterprise Architecture work currently underway at Oregon for the same solution footprint. Oracle Consulting is currently designing the Business, Application, Data, Integration, Platform and Security Architecture for Oregon HIX, which will be leveraged to satisfy the requirements for the Federal Government Detailed Design Review. This will enable West Virginia to be one step ahead in terms defining it's HIX Enterprise Architecture design and preparing for the Detailed Design Review with Centers for Medicare & Medicaid Services (CMS), including:
  - Definition of the overall capability mapping at each domain of the Enterprise Architecture
  - Definition of the mapping of business processes to the corresponding application, information and the technology support models
  - Definition of the component view of the architecture

9.3.11 Software AG

Software AG has the ability to work with Systems Integrators (SIs) in order to provide subject matter expertise surrounding our technology and solutions. However we are not looking to "prime" the implementation of West Virginia's Health Insurance Exchange thus we will not be responding to this section.

9.3.12 Speridian

Proprietary response provided.

Appendix: Request for Information for Exchange IT Components

WV Offices of the Insurance Commissioner

REQUEST FOR INFORMATION

NO. INS12009

Strategic Planning for the Future Health Insurance Exchange

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I. RFI DESCRIPTION AND SCOPE OF REQUESTED INFORMATION

The West Virginia Offices of the Insurance Commissioner (OIC) is issuing this Request for Information, RFI INS12009, for the purpose of gathering information to identify viable third-party Information Technology platforms and/or turn-key solutions, components, and services, as well as estimated pricing, requirements, and ideas that best fit the State of West Virginia's (State) needs for a Health Insurance Exchange (Exchange). Information provided will assist the West Virginia OIC in strategic planning for the future Exchange environment and applying for a Level Two Establishment Grant from the US Department of Health and Human Services.

A. RFI ENVIRONMENT

In March 2010, the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010 were signed into law. The two laws are collectively referred to as the Affordable Care Act (ACA) (http://www.healthcare.gov/law/about/index.html).

The ACA requires the creation of a Health Insurance Exchange in each state, either by the state or by the Federal government, which must perform a variety of functions including offering residents of each state the means to compare information on available health benefit plans, enroll in plans, and receive subsidies if eligible. In addition, the Exchange (or an entity on behalf of the Exchange) will certify qualified health plans (QHPs) to be offered on the Exchange, rate those plans based on quality, maintain a website and toll-free number, provide a calculator for consumers to determine the amount of their premium after subsidies have been calculated, coordinate with the state's Medicaid and Children's Health Insurance Program (CHIP) regarding eligibility and enrollment, identify individuals exempt from the Federal insurance mandate, require participating plans to justify rate increases, and contract for Navigators to provide public education and facilitate enrollment. Either as part of the Exchange for individuals or as a separate Exchange, states must also create a Small Business Health Options Program (SHOP) to enable small businesses to enroll their employees in health plans offered on the Exchange. The ACA and related Federally-proposed rules provide States flexibility in the design of the Exchange, which may take the form of a standalone State or a regional Exchange and which may leverage components developed by Early Innovator states and the Federal government. West Virginia's goal is to create an efficient, cost-effective solution that best fits the needs of the State of West Virginia's Exchange.

For more information about the status of West Virginia's Exchange planning process, please refer to www.bewv.com.

B. PURPOSE

On behalf of the West Virginia Offices of the Insurance Commissioner and as part of the State Exchange planning process, responses are sought regarding available third-party Information Technology (IT) platforms, components and services with the necessary degree of interoperability between IT components in Federal, State, and commercial entities to support the provision of individual and small group health insurance coverage through public programs such as Medicaid and Children's Health Insurance Program (CHIP) and commercial QHPs in accordance with Federal and State laws, regulations, and standards.

This Request for Information (RFI) addresses the goals of the Exchange in acquiring functional and compliant IT systems that achieve the Federally-mandated requirements as stated in the ACA and subsequent regulations, as well as West Virginia's goal of leveraging existing State and other IT assets to the degree possible to create a financially efficient Exchange. The purpose of this RFI is to identify viable Exchange solutions and provide WV OIC with estimated pricing, capabilities, and ideas that best fit the State of West Virginia.

Development of the Exchange's overall IT strategic plan, including a current environment assessment and a gap analysis between the current environment and the Federally-mandated Exchange environment, is presently underway. The findings of the IT strategic plan, combined with information received in this RFI, will help inform West Virginia's approach to conceptualizing a vision for the Exchange. Consequently, vendors should be prepared to describe their solution's ability to accommodate different IT models, such as a standalone model that fulfills complete Exchange functionality and models that leverage existing and/or other vendor systems, future planned Early Innovator State or Federal components, or components that may be shared as part of a Regional Exchange.

Requirements and standards are presented below in this RFI to inform vendors of the type of capabilities a proposed framework should be able to achieve.

C. SCOPE OF REQUESTED INFORMATION

Responses should address the following as they relate to the proposed development of a Health Insurance Exchange solution. West Virginia understands vendors may want to keep certain proprietary elements of their responses confidential, so per section II. H. below, vendors should feel free to provide responses to any questions below in a separate sealed envelope marked PROPRIETARY.

1. Executive Summary

a. Provide an executive summary that includes an overview of your solution, its advantages, and what makes your solution unique. Include any previous experience with Exchange or similar technology. Your response should confirm that your solution is intended to be compliant with the ACA and all subsequent State and Federal rules and proposed regulations.

2. General Functional/Technical Specifications

a. The future Exchange business environment, as it is known at this point in time based on the federal laws, regulations and guidance available, is described by the following six core business areas and their key business functions:

- eligibility and enrollment
- plan management
- financial management
- customer service
- communications
- oversight

Using these six business areas and the additional functional details provided in Attachment A, describe which Exchange functionality your solution provides. What are its components/modules? Are any optional? If your solution does not cover all functionality required by the six areas, do you have a recommendation for how the State could develop a fully compliant Exchange that delivers complete functionality while still incorporating your solution's IT components (e.g., does your company serve as a systems integrator or do you have other relationships that may be leveraged)? Please clarify what components/work would be provided by your company versus being contracted out to other vendors.

b. How do you envision your solution working as part of a regional Exchange as well as a standalone State Exchange?

c. Describe and/or provide a visual representation of your proposed solution workflow and how each component is utilized throughout the workflow.

d. How does your solution meet the Federal vision of a "modern consumer experience" comparable with those offered by leading retailers? Please provide a visual (e.g., diagram, screenshots) illustrating how a consumer completes eligibility determination and enrollment. Links to demonstration sites are encouraged.

e. How does your solution provide the SHOP functionality including, but not limited to, determining employer and employee eligibility for the SHOP and premium aggregation and remittance to carriers?

f. To determine eligibility for the newly eligible Medicaid population (aka the “MAGI group”), States can choose to have a fully integrated eligibility system that handles all Exchange eligibility functions or a system shared with other existing Medicaid eligibility systems. Which alternative do you recommend for your solution and why?

g. Please describe your approach to managing the “churn” between benefit programs, e.g. Medicaid, eligibility for advanced payment of premium tax credits and cost-sharing?

h. Is your solution a COTS product? If yes, please describe the level of customization and areas where that is available. If no, please describe the status of your solution’s design and development and its readiness to be used by the State of West Virginia.

i. Is your solution currently being used and/or are you under contract to implement in any other states; if so, are you able to share which states?

j. What are some of the common challenges you expect Exchanges to encounter when interfacing and integrating data with Exchange users and data providers such as small businesses, health insurance carriers, and the Federal government. Describe how your technical solution addresses those challenges.

k. Include how information can be captured as well as disseminated from your solution.

l. Describe your solution’s hardware requirements and technical architecture.

m. Please describe how your solution uses standard-based business rules and a technology-neutral rule repository. Are the business rules expressed outside of the transactional systems?

3. Privacy/Security

a. Indicate how your solution would assist in creating/obtaining the necessary inter-entity agreements needed to share data of this nature (e.g. IRS, Department of Labor).

b. Describe the level of information available in the solution’s audit trail and the process for Health Insurance Exchange utilization and reporting of audit trail data.

c. Describe how your solution ensures the privacy, confidentiality, and security of patient information from technical and functional perspectives. Include in your response details regarding compliance with Health Insurance Portability and Accountability Act of 1996 (HIPAA), transaction standards, standards and protocols adopted by the Secretary pursuant to Sections 1104 and 1561 of Affordable Care Act.

d. Describe the fundamental privacy and security features of your system.

4. Interoperability and Extensibility

a. Describe how your system will have the capability to leverage future planned IT components that may be provided by the Federal government or leveraged from Early Innovator States.
b. Discuss the pros and cons associated with leveraging existing State call centers (including functionality, time to implement, and cost).
c. Discuss the pros and cons associated with leveraging existing State Internet portals (including functionality, time to implement, and cost).
d. Describe how the solution may integrate information and process flows with such business partners as health plans, small businesses, producers, the Federal government, Navigators and others.
e. Describe how the solution will work to avoid duplication of costs, processes, data and effort between State agencies.
f. Please describe the lessons you have learned with regard to adverse selection (the disproportionate purchase of health insurance by the least healthy individuals) that you feel would be beneficial for the State to consider.
g. Describe how your solution and/or implementation will help to protect against the challenges associated with adverse selection.
h. Describe the Application Programming Interfaces (APIs), Software Development Kits (SDKs) or other tools available for third-parties to extend the functionality offered by your solution as well as the ability for State technical support or administrators to create and modify forms, menus, rules and reports.

5. Implementation

a. How long do you anticipate from the time the contract is signed before the system would be made operational? Using the table provided below, please provide a best, expected, and worst case estimate. Describe the assumptions you have used (e.g., the level of customization required, leveraging existing State systems versus implementing new State systems for all three estimates).

Implementation Time		
	Number of Months	**Rationale**
Best Case		
Expected Case		
Worst Case		

b. Indicate implementation services that are typically included in the standard pricing and those that can be purchased on a fee basis.
c. Describe the recommended technical and end user training/education including documentation, approaches, modules offered, and services that would be offered.
d. Describe your implementation approach, including the nature of the relationship with the client.
e. What is your approach to testing?
f. Discuss the nature of your proposed solution from an intellectual property perspective. Do you retain all rights to all source code and enhancements? Please discuss how your source code is maintained and secured/escrowed.

6. Operations and Maintenance

a. Describe the level of support and maintenance required for your proposed solution. Include your description of the types of services required to keep the solution operational, staff resource requirements by technical and non-technical personnel as well as by module, hours of operation for support, support contact methods, whether support is outsourced, and any other information that may be valuable to the State.
b. Please describe your approach to establishing a call center for ongoing customer service in support of the Exchange. Is your solution outsourced? Do multiple call centers exist, and where are they located?

7. Financial/Total Cost of Ownership

a. Please describe your overall cost model to purchase, implement, and operate your described solution.

b. When thinking about the total expenditure for the future Exchange as it relates to hardware, software, and implementation services, would a fair estimate for your product be: 10% hardware, 35% software, and 55% implementation services? Would you allocate these percentages differently and if so, how would you allocate them and why?

c. Using the table provided below, please estimate (best, expected, worst case) total costs for hardware, software, and implementation for a State similar in size and population to West Virginia. Please describe the assumptions you have used (e.g. the level of customization required, leveraging of existing State hardware such as servers, computers and of existing State systems versus implementing new state systems, etc.) for all three estimates.

Total Hardware, Software, and Implementation Costs		
	Dollars	**Rationale**
Best Case		
Worst Case		
Expected Case		

d. Using the table provided below, please estimate annual software license maintenance costs (best, expected, and worst case) for a State similar in size and population to West Virginia. Please describe the assumptions you have used (e.g., the level of customization required, leveraging existing State systems versus implementing new state systems, etc.) for all three estimates.

Annual Software License Maintenance Costs		
	Dollars	**Rationale**
Best Case		

Worst Case		
Expected Case		

e. Please elaborate on your cost model and approach to ongoing operational support (services provided after go-live, that are not covered by annual software maintenance fees)? What are the options West Virginia will have to choose from and how will these options impact costs?

f. Using the table provided below, please estimate annual operational costs (best, expected, and worst case), i.e., all costs associated after go-live that are not considered annual software maintenance fees, for a State similar in size and population to West Virginia. Please describe the assumptions you have used (e.g., the level of customization required, leveraging existing State systems versus implementing new state systems, etc.) for all three estimates.

Annual Operational Costs		
	Dollars	**Rationale**
Best Case		
Worst Case		
Expected Case		

g. Describe how your solution can uniquely lower costs during design, development and implementation, as well as operationally.

h. The Federal Government has given states a degree of flexibility when designing and implementing the Exchange. Please describe the major technology, infrastructure, and policy decisions that West Virginia will need to make and their expected/potential impact on cost.

i. Please indicate previous experience, if any, with sustainable funding models associated with your solution.

8. Performance, Reliability and Availability

a. Describe the system performance for the proposed solutions. In addition to the items below, list any requirements and other factors that could influence performance of the system. This includes:

- Capacity (e.g., the number of concurrent customers or transactions the system can accommodate); and
- System safeguards that prevent users from severely degrading system performance or "hanging" the system (e.g., searches that return a large number of records).

b. Reliable and accessible Internet connectivity is a challenge for West Virginia's citizens living in rural areas; currently, many of the State's households and businesses have limited or no access to broadband. Describe any experience your organization has dealing with rural connectivity issues and any capabilities your solution has to overcome this challenge. How is the quality of the user experience and/or timeliness of transactions impacted by the type of connection the user has?

9. Project Management

a. Please describe your level of preparedness to meet Federal deadlines for certification by January 2013 and for a fully compliant, operable Exchange by October 1, 2013.
b. List any key dependencies for meeting those deadlines, including what you believe is needed from the State to ensure a successful outcome.
c. Do you have previous or current relationships with other states? Can those relationships be leveraged, and if so, how?

II. RFI RESPONSE PROCEDURES

A. OFFICE AND CONTACT PERSON

Responsibilities related to this Request for Information reside with the West Virginia Offices of the Insurance Commissioner. The point of contact for the RFI is as follows:

Name: Vickie Marcum
Agency: WV Offices of the Insurance Commissioner
Address: 1124 Smith Street

Charleston, WV 25301

Telephone: 304-558-6279 ext. 1191
E-Mail: Vickie.Marcum@wvinsurance.gov

B. GENERAL INFORMATION

A subsequent Request for Proposal (RFP) may not be issued as a result of this RFI. There will not be a contract as a result of this RFI and the State is not liable for any cost incurred by vendors in replying to this RFI. If an RFP is issued, the information provided by vendors in response to this RFI will assist the State of West Virginia in developing the Request for Proposal. This RFI does not obligate the State to reply to the RFI responses, to issue an RFP, or to include any RFI provisions or responses provided by vendors in any RFP.

C. RFI RESPONSE DUE DATE

Responses to the RFI are due by close of business (5:00 PM EST) Wednesday, November 30, 2011.

D. COMMUNICATION WITH STATE STAFF

From the date the Request for Information is issued and until the RFI due date, contact regarding this RFI between potential vendors and individuals employed by the State is restricted to written communication with the staff designated above as the point of contact for this Request for Information.

The following exceptions to these restrictions are permitted:

1. Written communication with the person(s) designated as the point(s) of contact for the RFI;
2. Contacts made pursuant to any pre-existing contracts or obligations; and
3. State-requested presentations, key personnel interviews, clarification sessions or discussions.

No individual employee of or individual representing the State is empowered to make binding statements regarding this RFI.

E. SUBMISSION OF RESPONSE

The following describes the requirements related to the RFI submission, handling and review by the State.

To facilitate the response review process, one (1) hard copy original, clearly identified as such, and two (2) additional hard copies of the entire RFI response should be submitted to the address in Section II A. The copy marked “original” shall take precedence over any other copies, should there be a discrepancy. RFI responses must be received by the RFI due date and time.

The RFI response must be no more than 50 typed pages using 11 point font or larger, with borders no less than ½ inch. RFI responses must reference the Request for Information number and be sent to the specified address in Section II A (Office and Contact Person). Please note that the address label should appear as specified on the face of each container used to send the RFI response.

The Request for Information number must be included in all correspondence.

F. PROPRIETARY INFORMATION

Data contained in the response and all documentation provided therein become the property of the State of West Virginia and the data become public information upon opening the response. If the vendor wishes to have any information withheld from the public, such information must be submitted in a sealed package, which is separate from the remainder of the response. The separate package must be clearly marked PROPRIETARY on the outside of the package. Vendor may not mark their entire Request for Information as proprietary. Failure of the vendor to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other vendors and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State’s definition of proprietary information, the State is under no obligation to maintain the confidentiality of proprietary information and accepts no liability for the release of such information.

III. ATTACHMENTS

A. EXCHANGE CORE BUSINESS AREAS/FUNCTIONS

The future Exchange environment, as it is known at this point in time based on federal laws, regulations and guidance, is described by the six core business areas and their key business functions outlined in the CMS Exchange Reference Architecture (ERA): Foundation Guidance v0.99 March 16, 2011, plus the Exchange requirements and functions set forth in the Affordable Care Act (ACA) and the Notice of Proposed Rule Making (NPRM) 45 CFR Parts 155 and 156, Establishment of Exchanges and Qualified Health Plans.

The table below presents the six core business areas and key business processes; vendors should incorporate if/how their solution addresses each area into their RFI responses.

Business Area	Reference (All are Proposed Rules)	Future Exchange Business Environment
Eligibility & Enrollment	45 CFR 155 Subpart H	Exchange Functions: Small Business Health Options Program (SHOP)
	45 CFR 155.200 (b)	Certificates of exemption
	45 CFR 155.200 (c)	Eligibility determinations
	45 CFR 155.200 (d)	Appeals of individual eligibility
	45 CFR 155.400	Enrollment of qualified individuals into QHPs
	45 CFR 155.405 (a)	Single streamlined application for QHPs, advance payments of the premium tax credit, cost-sharing reductions, and Medicaid, CHIP or the BHP where applicable.
	45 CFR 155.405 (c)(2)	Provide the tools to allow for applicant to file an application via an Internet portal; by telephone through a call center; by mail; and in person
Plan Management	45 CFR 155 Subpart K	Plan certification, recertification, and decertification
	TBD	Plan monitoring and review
	TBD	Plan quality rating
Financial Management	45 CFR Part 153	Plan assessment, reinsurance, risk adjustment, and risk corridors
	TBD	Reconciliation of reductions in enrollee out-of-pocket costs

Business Area	Reference (All are Proposed Rules)	Future Exchange Business Environment
	TBD	Determination of issuer credits
	TBD	Premium tax credit and cost-sharing reduction administration
Customer Service	45 CFR 155.205 (a)	Call center
	45 CFR 155.205 (b)	Internet Web site
	(1)	Provides standardized comparative information on each available QHP
	(2)	Is accessible to people with disabilities
	(3)	Publishes [certain] financial information
	(4)	Provides information about Navigators, etc
	(5)	Allows for an eligibility determination
	(6)	Allows for enrollment in coverage
	45 CFR 155.205 (c)	Exchange calculator
	45 CFR 155.205 (d)	Consumer Assistance including the Navigator program
Communications	45 CFR 155.205 (e)	Outreach and education
		Applications and notices
		Measurement/reporting of communication effectiveness
Oversight	45 CFR 155.200 (e) 45 CFR 155.200 (f)	Oversight and financial integrity
		Quality activities.

B. VENDOR CONTACT SHEET

Attachment B should be completed and submitted with each response to this solicitation document. This is intended to provide the State with information on the vendor's name and address, and the specific persons who are responsible for preparation of the vendor's response.

Preparation of Response Contact Information	
Vendor Name:	
Vendor Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

Each vendor shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the vendor's response should become necessary.

Communication with the State Contact Information	
Vendor Name:	
Vendor Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	