Preparing New York's Information Technology Infrastructure for Health Reform: A Gap Analysis

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Prepared By

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Executive Summary

Overview

The Affordable Care Act (ACA) is a game changer both in terms of the culture of enrollment in public and subsidized health insurance and in terms of the infrastructure needed to support the enrollment process. Information Technology (IT) readiness will play a critical role in establishing a streamlined and integrated "no wrong door" process for accessing both public and private benefits under ACA.

NYSHealth, in partnership with New York State stakeholders, initiated a project to help New York State hone the New York vision for implementing health care reform in the most prudent and efficient way. Two national organizations, Social Interest Solutions (SIS) and The Lewin Group, were selected to do the following:

- Interview a wide range of stakeholders to gather insights and input
- Provide a detailed understanding of federal reform requirements and identify areas needing further federal clarification
- Catalog relevant New York systems for public and private programs
- Review relevant New York systems to determine functionality and potential for use in the Exchange
- Create a technology gap analysis to inform future decisions

A variety of activities took place to accomplish these tasks and work to assess the State's readiness kept pace with new federal guidance and other environment developments.

Methodology:

A first step in the project was to review existing guidance and documentation and to meet with State leaders to understand the current New York "vision" for implementing the Exchange. One important component of this visioning session was discussing the state's response to a U.S. Department of Health and Human Services (HHS) competitive "Early Innovators" Request for Proposals. The funding opportunity (subsequently awarded to New York) was to reward states demonstrating leadership in developing cutting-edge and cost-effective consumer-based technologies and models for insurance eligibility and enrollment in Exchanges.

State stakeholders confirmed their commitment to the elements of the Early Innovator proposal and the Project Team then conducted a series of interviews with a broad range of stakeholders to get additional perspectives and input on the evolving vision.

Through these interviews and meetings with New York leadership and key stakeholders, the Project Team identified a list of IT systems that could be relevant to the work ahead in New York. The Project Team also identified key subsystems that may have ongoing value and could potentially be leveraged for meeting federal requirements. A variety of phone, Webinar and in-

person sessions were held to narrow the list of potential candidate systems and to conduct systems demos and transactional walkthroughs.

The systems reviewed included:

New York State Department of Health
- eMedNY
- Healthcare Eligibility Assessment and Renewal Tool (HEART)

New York State Office of Temporary Disability Assistance
- Welfare Management System (WMS) and five sub-systems
- myBenefits
- myWorkspace

Hudson Center for Health Equity and Quality
- EnrollNY
- Facilitated Electronic Enrollment Application (FEEA)

New York State Health Department Child Health Plus
- Knowledge Information System (KIDS)

New York City Systems
- Access NYC
- New York City EDITS
- EDITS Review
- New York City Paperless Office System (POS)

Other Insurance Systems
- Liazon Bright Choices
- HealthPass NY
- HealthCare NY Web Site

The purpose of the systems reviews was to determine the current functionality and to identify assets that may be leveraged for accomplishing New York's Exchange vision. Systems on the list above were assessed for both functional (what the user needs to do via the IT system) and technical attributes (system architecture and integration capabilities) to support all or part of New York's Health Insurance Exchange system. Systems were assessed against current Federal requirements for Exchanges.

Identifying Foundational Assets

Based on analysis of New York's Early Innovator proposal, the two most valuable assets identified in the course of this assessment are:

- **The technical architecture** developed to ultimately support eMedNY and proposed as a central part of New York's Federal Early Innovator grant award. The value of this asset is its compliance with the Medicaid Information Technology Architecture (MITA) standards and its use of flexible and extendible Service Oriented Architecture (SOA) and Enterprise Service Bus (ESB) technology, all of which are required of Exchange IT systems.

- **The Medicaid Data Warehouse,** also proposed in the Early Innovator grant, which will provide robust toolsets and features that can be leveraged for the business intelligence (reporting and data analysis) requirements of the Exchange.

While enhancements and new components will be needed to make these assets comply with federal requirements, they offer a strong foundation for the proposed State Exchange. These assets are the foundational assets against which other systems (and sub systems) were assessed.

Identifying the Gaps

Having confirmed the two foundational assets above, the Project Team assessed those assets against the federal requirements as of March 1, 2011 to identify the remaining gaps that need to be filled in New York. At a high level, these gaps include:

- A robust consumer and eligibility worker application (or portal) that provides a "first class customer experience" that enables real-time transactions and the exchange of information seamlessly across a number of programs.

- The limitations in terms of scalability and interoperability and the absence of an automated rules engine of the current human service eligibility and enrollment system known as Welfare Management System, or WMS. From a capacity perspective, this system will not be able to support the inclusion of additional lives anticipated in 2013 and beyond and the State will need to determine how to handle the information currently in the WMS system, which will ultimately be valuable to the Exchange.

- Needed functionality on the commercial insurance side of the house: rating and managing the offerings on the Exchange, and the small employer exchange and associated administration (i.e., Small Business Health Option Programs (SHOP) Exchange).

Drilling down on these gaps, Federal guidance specifically calls for:

- Full featured front-end web-based portal that will allow or provide for:
  - Consumers to explore the health insurance and other options available to them and to apply online for a range of benefits using a single online application
  - Community Assistors, Navigators and Brokers to help consumers apply online

- Small businesses, self proprietors and employees to explore the options available to them, to apply for the plans they select and to manage their plans and benefits
- Health Plans and Insurance Companies to set up their options in the Exchange based on required criteria set by the State
- Integration with federal and state verification and eligibility systems (such as Internal Revenue Service, Social Security Administration, Department of Homeland Security, State Eligibility systems) to verify and access information about consumers in real-time
- Eligibility determination for Medicaid (using the Modified Adjusted Gross Income rules), Subsidized Medicaid and other coverage available to consumers
- Consumers able to provide electronic point in time verification by faxing, scanning or emailing their supporting documents
- Notifications to consumers via e-mail, text messaging or paper notices about their coverage, renewals and more
- Consumers to view and manage their eligibility and enrollment information
- Electronic Recertification, Change in Circumstance and other subsequent application events

- Appeals
- Standards-based rules engine
- Document management
- Integration with other systems and services
- Accessibility and other usability standards
- Customer support
- Seamless eligibility and enrollment process with Medicaid and other State health subsidy programs and other human service programs. e.g., Supplemental Nutrition Assistance Program (SNAP – also known as Food Stamps) and Temporary Assistance to Needy Families (TANF – also known as cash assistance). Although this is not federally required by 2014, it is an objective of the ACA legislation.
- Support for consumer mediation
- SHOP Insurance Exchange offerings, employer reporting and third-party administration
- Commercial insurance offerings
  - Certification, recertification, and decertification of qualified health plans
  - Premium tax credit and cost-sharing reduction calculator
  - Quality rating system
  - Risk adjustment and transitional reinsurance
- Navigator program
- Notices
- Administration of premium tax credits and cost-sharing reductions
- Adjudication of appeals of eligibility determinations
- Information reporting to IRS and enrollees
- Outreach and education

- Free choice vouchers
- SHOP Exchange-specific functions

Given the extent of what needs to be in place by January 2013, it is likely inevitable the state will need to build elements of the Exchange from scratch to meet these and future requirements. With this in mind, the next step in this analysis was to look at existing assets that might start to close the gap.

Assessing Potential Assets

We looked at assets in addition to eMedNY and the Data Warehouse to see if they could help to fill the gaps. While we identified a number of possibilities, we did not find any asset or combination of assets that would completely fill the gaps identified above. Instead we found a variety of disconnected assets that we categorized into groups for further consideration by the state. We note that cobbling these varied assets together will be complicated and time-consuming and has some level of risk. The state will therefore need to assess the value of each asset against the potential considerations of using the asset.

The assets identified as part of the analysis were placed into several different categories for the purposes of calling out their potential contribution to the future. Asset categories include:

- Functional Asset - expertise or thought leadership
- Transitional Asset - potential temporary technical assets that could serve a bridge to more permanent solutions
- Technical Asset - code or IT services that could be consumed or repurposed by the Exchange
- Assistive Asset – support analysis and insight but might not be integrated into the Exchange

Managers and "owners" of all of the systems assessed could provide valuable insights and learnings (known as *functional* assets) to contribute to the future and implementing the Exchange. However, it is important to reiterate that the ease of accessing and using an IT or *systems* asset will be more challenging and will depend upon a variety of factors, including who (what agency, organization, company) owns or has purview of a particular asset. The state is up against an almost impossible deadline to stand up the Exchange by January 2013. State leaders will need to assess each potential asset against the considerations of time and practicality. For this reason, it is likely the State may not be able to take advantage of some of the potential assets identified in this analysis.

Options and Recommendations

In light of IT assessment findings, the report calls out five options for New York to consider in moving towards the 2013 deadline.

Option #1 - Utilize the New York assets identified in this assessment to cobble together a solution that would work for New York (note that many assets identified were functional assets.)

Option #2 - Look at what other states or organizations might have developed that could be leveraged for re-use in New York (note this option still must address the data structure and associated issues that arise because of WMS.)

Option #3 – Participate in the recently announced User Experience Project. This is a project funded by national philanthropies and conducted in partnership with the Centers for Medicaid and Medicare Services (CMS) and the Center for Consumer Information and Insurance Oversight (CCIIO) to help states design state of the art, consumer-mediated, Web-based front-end interfaces to Exchanges. The project involves conducting human factors research on the consumer "psychology" in accessing health coverage and will draw on the ability of an established design firm, IDEO, in creating the blueprint for the consumer-mediated front-end system envisioned through ACA. (note: this option would still need to address considerations for supporting commercial insurance and the SHOP Exchange and dealing with the significant database issues associated with the eligibility and enrollment management.)

Option #4 - Build everything from scratch and not leverage assets or projects supported by others.

Option #5 - Leverage the most capable components of options #1 - #3, with the knowledge that many of these assets are functional.

The report ultimately recommends Option #5, in which New York would leverage valuable functional assets (Option #1) and build its own Exchange front-end leveraging the User Experience work (Option #3). While much of the needed functionality for the Exchange will come through this effort, it will still require New York to build robust templating capabilities to be able to consume what is set forth by the User Experience effort. It will be critical for New York to be active participants in the project.

The contribution from Option #1 in this scenario is more about the rich functional assets in New York rather than the technical assets, though certain technical assets should not be ruled out, as described in Section H. The value of the functional assets is found in the significant experience and knowledge of those who have been thinking about and working for years to develop MyBenefits, MyWorkSpace, WMS, FEEA, ACCESS NYC and learnings from the work done on the Functional Road Map. The functional expertise of these groups should be tapped as subject matter experts in the work that lies ahead while the State makes the best and most informed decisions about leveraging, building and sharing assets to meet the 2013 timeline.

Finally, the State must still address two remaining gaps: (1) New York State's need to handle the gap created by the fact WMS is not a re-usable or leveragable asset (yet it contains data for millions of individuals known to Medicaid, SNAP, TANF and more); and (2) the need for the SHOP Exchange functionalities in the Exchange. Options for filling these two gaps were not assessed as part of this project.

A. Introduction and Project Background

Information Technology (IT) readiness will play a critical role in establishing a streamlined and integrated "no wrong door" process for accessing both public and private benefits under the Affordable Care Act (ACA).   The ACA sets forth a vision that includes:

- IT systems designed to support a first-class customer experience
- Seamless coordination between Medicaid and CHIP programs and private coverage via State Exchanges
- Seamless coordination between the Exchanges and plans, employers, and navigators
- One door for consumers to access all options

To guide states in implementing this vision, the federal government has provided formal communication on IT systems development. While the ACA provides states with significant latitude in how reform is ultimately implemented, this guidance starts to set forth expectations around consumer-mediated enrollment processes, systems architecture and security, sharing of IT assets among states, and more.

NYSHealth, in partnership with State stakeholders, initiated a project to help New York State understand the breadth of federal guidance, to assess New York's IT system readiness and to hone the New York vision for implementing health care reform in the most prudent and efficient way. Two national organizations, Social Interest Solutions (SIS) and The Lewin Group, were selected to create the Eligibility and Enrollment Systems Inventory and Plan for New York State. The project kicked off in January 2011 and concluded in April 2011. SIS conducted an eligibility and enrollment system inventory, examined the State's existing IT assets and deficiencies, and conducted multiple interviews to garner feedback from State agencies, the Governor's Office, New York City agencies, The Mayor's Office, counties, health plans, consumer organizations, and many other stakeholders.

The purpose of this report is to:

- Provide a detailed assessment of federal reform requirements and identify areas needing further federal clarification
- Catalog relevant New York systems for public and private programs
- Review relevant New York systems to determine functionality and potential for use in the Exchange (mapping systems against current federal IT systems guidance)
- Create a technology gap analysis to inform future decisions

Drawing from the perspectives of various stakeholders and constituents and mapping the State's existing IT assets to the functional requirements mandated by ACA, this report identifies the strengths, weaknesses, and disconnects with the systems currently in use or under development in New York State. This assessment of the IT system must also be reconciled with federal mandates, requirements and guidance, as well as with the vision of New York State

leadership's and key stakeholder feedback. Ultimately, this analysis should help New York to develop the best and most realistic design for adapting and extending existing systems, where practical, to meet Federal IT eligibility and enrollment mandates.

B.   Methodology

Overall Approach

The ACA and subsequent federal guidance related to Exchanges, eligibility and enrollment systems and program integration provide an opportunity to modernize systems that will support efficient processing of public benefit and private insurance applications and management. However, in order to be successful, a state must contextualize all of this guidance in terms of the state's programs, organization structure, dynamics and consumer needs and expectations and capacity to change and adopt change. All of these local nuances provide the foundation for layering the federally required system reform prescribed in ACA.

In recognition of these critical considerations, we have developed an approach that encompasses three major components as shown in the diagram below:

Each component of our approach is critical to assessing the current capabilities as compared to requirements as well as identifying assets that may fill the "gaps" and the associated risks.

Because there is latitude in how states can assimilate the federal requirements, we met with New York leaders via group meetings and interviews to identify the areas where choices exist in an effort to establish an integrated vision with a New York twist. This vision (summarized in the Stakeholder Report), served as the basis for our methodology and associated analysis described in this gap assessment.

Methodology

As noted earlier, the key steps of the project plan used to develop the findings and conclusions presented in this report were to:

1. Interview a wide range of stakeholders with both policy and technical expertise
2. Provide a detailed understanding of federal reform requirements to identify areas needing further federal clarification
3. Catalog relevant New York systems for public and private programs
4. Review relevant New York systems to determine functionality and potential for use in the Exchange (mapping systems against current federal IT systems guidance)
5. Create a technology gap analysis to inform future decisions

The methodology for each of these project components is described below.

1. Stakeholder Interview Activities

The first step in preparing to conduct stakeholder interviews was confirming the State's current vision for the Exchange with project leadership and other state stakeholders. The Early Innovator proposal formed a base for this vision, with state leadership agreeing that even if the proposal wasn't funded, the proposed approach would still be the direction the state would pursue.

Lewin and SIS (in partnership with the Core Project Team) then identified a broad list of stakeholders to interview. Groups included consumer representatives, policy experts, State and New York City officials, CMS staff, Medicaid and commercial health plans, and small business representatives. To provide stakeholders an understanding of the project and the key state and federal issues, SIS and Lewin conducted three webinars, offering an overview of relevant components of ACA and the evolving New York State vision for health care reform. The webinars offered a current New York vision as expressed through the New York Early Innovator Proposal.

Each Webinar included active discussion and questions and answers. Following the webinars, the project team conducted 11 interviews, representing 25 organizations and agencies and including almost 70 individuals. Interviews focused on the usability of the Exchange, required functionality and integration features, systems to leverage, and other recommendations for success. In each interview, individuals were asked to consider IT systems assets this initiative

should assess and business and process change considerations.   Please see Appendix B for the Stakeholder Summary Report.

2. Provide a detailed understanding of federal reform requirements to identify areas needing further federal clarification

The Project Team has reviewed ACA and the associated guidance, which includes:

- 1561 Standards and Protocols, Ver. 1.0, September 17, 2010
  [http://healthit.hhs.gov/portal/server.pt?open=512&mode=2&objID=3161]
- Planning Grants, September 30, 2010
  [http://www.healthcare.gov/news/factsheets/esthealthinsurexch.html]
- Cooperative Agreement to Support Innovative Exchange Information Technology Systems, October 29, 2010 [www.hhs.gov/ociio/initiative/index.html]
- Guidance for Exchange and Medicaid Information Technology Systems, Ver. 1.0, November 3, 2010
  [http://www.hhs.gov/ociio/regulations/joint_cms_ociio_guidance.pdf]
- Notice of Proposed Rule Making, "90/10", November 3, 2010
  [http://www.federalregister.gov/articles/2010/11/08/2010-27971/medicaid-federal-funding-for-medicaid-eligibility-determination-and-enrollment-activities]
- Cooperative Agreement to Support Establishment of State-Operated Health Insurance Exchanges, January 20, 2011
  [http://cciio.cms.gov/resources/fundingopportunities/foa_exchange_establishment.pdf

This guidance was reviewed and discussed with federal officials at HHS and in a number of federal workgroup forums. The requirements established by these documents as well as the imbedded references therein were assimilated into a Gap Analysis Checklist. This detailed checklist was used to compare and contrast the range of capabilities of the systems that were inventoried and analyzed in New York.

The requirements set forth in the GAP Analysis Checklist served as our guide in interviewing the system "owners" for the systems reviewed in New York as well as to identify "gaps" that need to be addressed to have a fully functioning Exchange.

As with many ACA related developments, the IT guidance and information is evolving daily. A clear advantage for New York is that by being part of the Early Innovator grant project, the New York team is on frequent calls with The Center for Consumer Information and Insurance Oversight (CCIIO) as it is formulating and disseminating new guidance. Where guidance is lacking, New York has the opportunity to raise with CCIIO the need for additional guidance. New York's participation in the Early Innovator grant will therefore not only influence other states, but likely significantly influence the federal process as well.

3. Catalog relevant New York systems for public and private programs

Through interviews and meetings with New York leadership and key stakeholders the Project Team identified a list of systems that could be relevant to the work ahead in New York. The Project Team also identified key subsystems that may have ongoing value and could potentially be leveraged for meeting federal requirements**.** Re-use of these types of technology assets is possible because the Enterprise Service Bus architecture, proposed to meet the Early Innovator grant, provides significant capacity to re-use code, to repurpose code (by wrapping it in a "service"), to interface with multiple systems and to leverage existing data structures (such as database modules or storage).

4. Review relevant New York systems to determine functionality and potential for use in the Exchange (mapping systems against current federal IT systems guidance)

We conducted a review of current state eligibility and enrollment systems identified in Section G as compared to the integrated system vision with a New York twist. The purpose of these systems reviews was to determine the current functionality of State eligibility and enrollment systems and to identify assets that may be leveraged for accomplishing New York's vision. The reviews included identification of the technical architecture, consumer access and usability, accessibility, vertical and horizontal integration, data structure, privacy and security and rules management. The reviews also included discussion of the system with the key parties that operate and manage the system and transaction walkthroughs where we saw the system in action. Where possible and appropriate, the transaction walkthroughs allowed the Project Team to observe current users using the system in their daily activities. Throughout this process, we also identified gaps in the existing systems where they will need to be augmented to support the vision.

We reviewed the systems currently used by private insurers and/or brokers for the purpose of determining the extent to which these systems could integrate into an Exchange or require modification for that purpose. These were less intensive reviews and focused primarily on integration (i.e., interface or service level integration).

We then developed a current New York IT Map, including vertical and horizontal integration. The summary findings from this assessment are summarized in Section E.

5. Create a technology gap analysis to inform future decisions

Our final step was to assess both functional and technical attributes of the potential systems for use or modification to support all or part of New York's Health Insurance Exchange system or as part of the horizontal (system integration) solution to meet the requirements of Section 1561 of ACA. In the functional assessment, we looked at what the user needs to do via the system and described this process in non-technical language (e.g. the application needs to support address verification once an address is entered.) In the technical assessment, on the other hand, we

examined the system architecture (e.g., Cobol versus .Net, or consumer-server vs. Web-based; or transactional architecture versus Systems Oriented Architecture, etc.) and integration capabilities to meet federal and state requirements. We also reviewed potential assets from a licensing and cost standpoint.

This analysis led us to develop an overall assessment of the assets into four categories as presented below.

Functional
- Can provide expertise, guidance, consultation or thought leadership in an area that can help fill gaps
- Supports involvement of a multi-functional team

Transitional or Temporary
- Technical assets that may fill gaps until such time as the state can replace the temporary or transitional asset
- Often times referred to as legacy (or existing) systems

Technical
- Assets where code and/or services can be used or consumed by the Exchange to meet one or more of the Federal requirement

Assistive
- Assets that may support analysis of Exchange offerings
- These assets are used to help provide insight about a part of the system and would likely not persist once the system is implemented.

We also reviewed options that appear to be available from other states or activities supported by the federal government in supporting the implementation of the ACA.

The following section sets forth the findings associated with identification of the New York Systems that had relevance and could potentially help to meet the requirements of ACA.

C: Stakeholder Interviews: Key Findings

The stakeholders interviewed varied in their familiarity with ACA and their proposed strategies and ideas for implementing an Exchange. In spite of variances, there were areas of important agreement among the stakeholders. Overall, stakeholders agreed that the Exchange should establish a simple and accessible online channel for consumers to access public and private

health insurance. Beyond the online system, stakeholders recommend that consumers have access to "navigators," both by telephone and in-person. For both the online component and the navigation assistance, stakeholders stress that existing systems and programs (e.g., eMedNY, Health Insurance Links NYC, Facilitated Enrollers), should be leveraged as the State designs and implements the Exchange.

Stakeholders offered the following insights, comments and vision:

- The Exchange needs to be user-friendly and appealing to consumers at all income, demographic and computer-literacy levels. Stakeholders are concerned that a complicated system or a front end that resembles a welfare application will discourage consumer use of the Exchange.
- A successful Exchange will be able to interface with existing and forthcoming State, local, and Federal systems to share information effectively and securely.
- Consistency of data, such as out-of-date income information in some, but not all, databases or inconsistent listings for the same person (e.g., John Smith and John W. Smith), was cited as significant concern. Stakeholders acknowledge existing systems and databases are fraught with unclean data and finding a data "match" is challenging. They worry about this in particular when thinking about one state system.
- Stakeholders agree that public and private health care insurance options need to be offered through the Exchange (vertical integration); they disagreed as to the extent of inclusion of social services and other public assistance programs (horizontal integration). They were not all aware of inclusion of these programs in the ACA and current Federal guidance.
- Stakeholders are concerned that consumers may be uncomfortable with the personal information accessible through the Exchange and associated security and privacy concerns. An effective marketing and education campaign is recommended to alleviate these concerns.
- The "human touch" will be critical to the success of the Exchange and should include both navigational and decision-making guidance (e.g. face to face assistance, online or telephonic assistance). Several existing navigator and consumer assistance programs are in place throughout New York that should be leveraged for the Exchange.
- To assure usability of the Exchange, beta testing among users, including consumers, navigators, small businesses, and health plans is critical.
- Stakeholders believe their ongoing engagement is important to standing up a successful Exchange. Stakeholders felt a "train had left the station" with regard to the State's Early Innovator proposal and want to be engaged moving forward.
- There is value in viewing Exchange enrollment system prototypes to better understand what 2013-14 "looks like" and to stimulate thinking and ideas.

In addition to the messages outlined above, there was skepticism that the State can successfully design and implement an Exchange that meets evolving federal requirements and participant expectations within the required timeframe. Stakeholders cite specific concern with design and

usability for consumers and other users, flexibility to truly integrate and make systems changes, and how real-time transactions, such as eligibility determinations, are handled. Despite this, all stakeholders look forward to working with the State towards the development of an effective system in a quick timeframe and see this as an incredible opportunity to improve systems.

D.   Summary of New York's Early Innovator Solution

An IT infrastructure that supports a consumer-mediated application will be critical to the success of any state Exchange. Recognizing this, the U.S. Department of Health and Human Services (HHS) issued a competitive "Early Innovators" Request for Proposals to reward States that demonstrate leadership in developing cutting-edge and cost-effective consumer-based technologies and models for insurance eligibility and enrollment for Exchanges.

New York State reached an important readiness milestone in being awarded a Federal Early Innovator grant. With this award, the State has provided a starting point from which to understand and examine additional IT assets and deficiencies in order to make sound decisions about how to meet the 2013 implementation timeline required of Early Innovator states.

As a grant recipient, New York has committed to support the minimum functions of the Exchange noted above with commensurate technology that must handle eligibility and enrollment in the Exchange as well as premium tax credits and cost-sharing reductions for eligible consumers. The Exchange IT systems must also be interoperable and integrated with state Medicaid programs to allow consumers to easily switch from private insurance to Medicaid and CHIP as their circumstances change. In addition, the IT systems must be able to provide data to HHS or other Federal agencies as needed.

The Principal Agency in the New York Early Innovator grant is the New York State Department of Health (DOH). The agency was awarded $27,431,432 in federal monies and an additional amount that is allocated in a 90/10 federal/state ratio through Medicaid. New York proposed to build off of its eMedNY Medicaid Management Information System (MMIS) system to create products for the Exchange.

Today, the eMedNY MMIS system processes claims payments for approximately one of every three health care dollars paid in the state. It is also the primary source of Medicaid data used for financial reporting, program analysis, auditing, and quality measurement. This system currently processes more than 56 million transactions per month, which is an average of 470 cumulative transactions per second. This is significant processing throughput.

It is important to reiterate that it is the *technical architecture* developed to ultimately support eMedNY which was proposed as part of New York's Federal Early Innovator grant award. The value of this asset is its compliance with the Medicaid Information Technology Architecture (MITA) standards and utilizes flexible and extendible Service Oriented Architecture (SOA) and Enterprise Service Bus (ESB) technology, all of which are required of Exchange IT systems. DOH

has indicated it plans to replicate this new architecture for the purposes of establishing the Exchange.

Service Oriented Architecture is a flexible set of design principles used during the phases of systems development and integration in computing. A system based on a SOA will package functionality as a suite of interoperable services that can be used within multiple, separate systems from several business domains. So instead of building a single comprehensive system, the software is instead made up of smaller stand-alone services that can be accessed (used, shared) separately as needed. SOA is therefore more agile and efficient than traditional systems development.   This flexible technology platform provides a solid foundation upon which to build or leverage the components needed to meet the Exchange requirements. Core to the IT infrastructure supporting SOA is the Enterprise Service Bus (ESB), which connects and mediates all communications and interactions between services.

In addition to the eMedNY technical architecture, the NY Early Innovator proposal includes leveraging:

- The Medicaid, MMIS and Data Center (hosting environment) to meet the standards set forth in the Health Insurance Portability Accountability Act (HIPAA), National Institute of Standards and Technology (NIST) and the Federal Information Processing Standards (FIPS) which are required by ACA and associated guidance.
- The data center hosting environment for the eMedNY (Medicaid Management Information System). This data center meets Uptime Institute's Tier III requirements; only a very small fraction of the data centers in the country meet this requirement. This data center is also ISO 9000:2000 certified.
- The Medicaid Data Warehousing system for the required business intelligence (reporting and data analysis).
- The Medicaid and Public Coverage Enrollment Center, currently under development, to provide the required customer support and call center requirements. DOH has demonstrated capacity in this area. For example, the CHIP Call Center, which was the first call center to be implemented by the Enrollment Center, handles roughly 350 calls per day and it averages 35 seconds to respond to a call. Further, the current eMedNY call center responds to more than 3,000 provider calls per day and 93% of these calls are answered in less than two minutes.

The Project Team assessed the Innovator Proposal and found that the proposed technical architecture meets the requirements under MITA and will provide a strong base for the Exchange solution.   The architecture also meets the required security requirements (such as HIPAA, NIST, and FIPS). The Medicaid Data Warehouse system will serve as a strong base for the business intelligence, though it will need to be extended to support more ad hoc real-time reporting. Finally, while the Project Team did not assess the eMedNY IT architecture in the live environment, we have been advised that it is now operational.

As part of the Early Innovator's grant, New York acknowledged its commitment to the development of Exchange IT components so they are fully extensible and scalable to be "re-used" by any other jurisdictions. Additionally, New York has committed to not only meet ACA standards and requirements set forth in the Early Innovator's grant agreement and other federal guidance, but also to meet these requirements by January 1, 2013.

We reviewed the high-level aspects of New York's Early Innovator proposal with the State officials in a visioning session and all participants agreed the proposed solution would serve as the foundation of the New York Exchange solution – even if the grant were not awarded. With this review conducted and state commitment to this approach confirmed, eMedNY and the Data Warehouse became "core IT assets" of in this system assessment. All other "potential" assets were assessed against the proposed foundation set forth in New York's Early Innovator proposal.

The following section describes our methodology for assessing New York's technology assets in relation to the New York proposed Early Innovator solution to determine if they can be "re-used" to meet the other requirements for New York's Exchange.

E.   Current New York IT Map

This section provides a "map" of the current IT system layout for New York. As noted in the methodology, we identified these systems based on our team's knowledge of the IT system in New York, through information provided by project leadership and through interviews with stakeholders. In this section of the report, we have provided a graphical representation of the system using arrows to indicate how they "connect" or interface with other systems in the state. In certain instances, they do not interface to other systems in the state so there are no arrows. The first diagram provided represents the IT Map for Upstate New York.

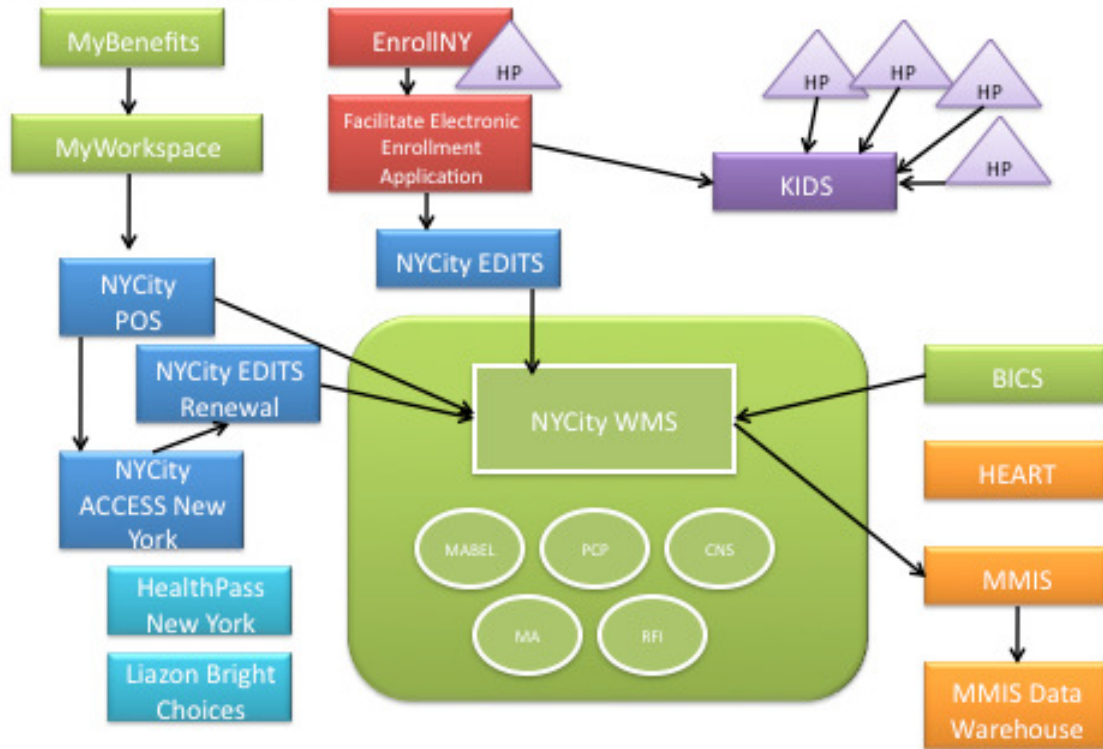**Current Upstate New York IT Map**
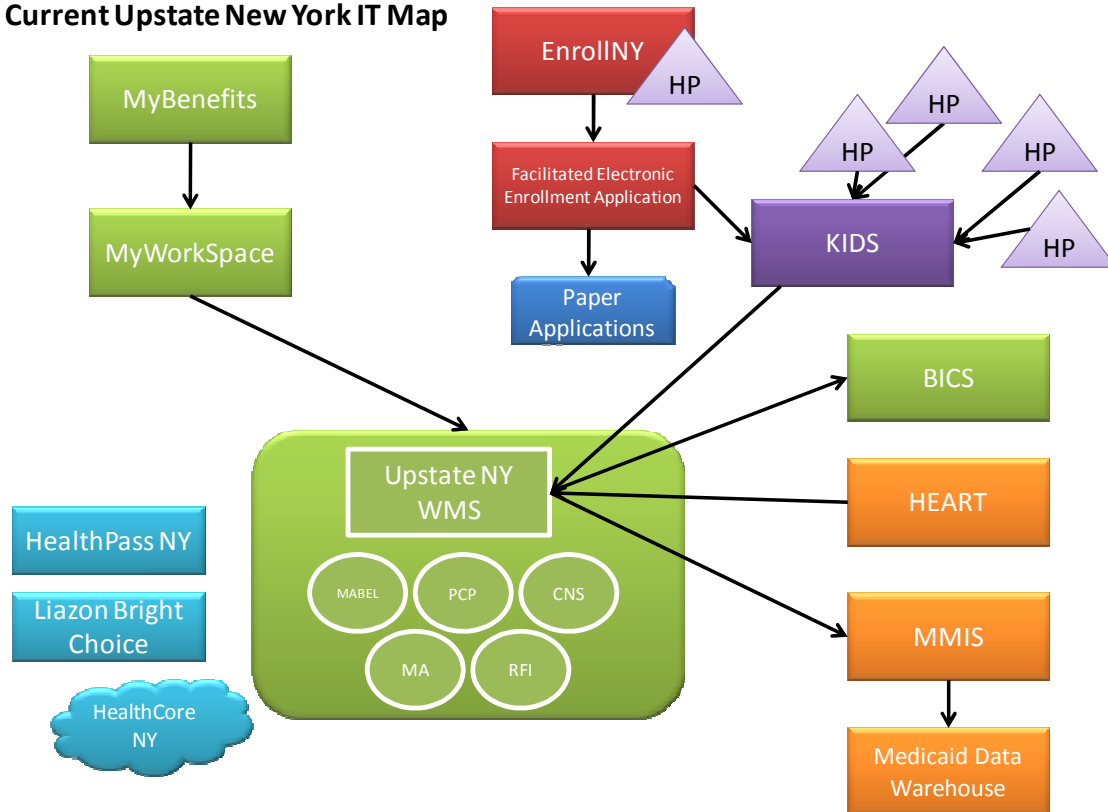
The diagram above is color coded to illustrate systems operated by agency or group. The key for this diagram is below:

OTDA	New York State Office of Temporary and Disability Assistance
Hcheq	Hudson Center for Health Equity and Quality
NYS Health - CHP	New York State Department of Health Child Health Plus KIDS
NYS Health - Medicaid	New York State Department of Health Medicaid
Insurance	Various Insurance Systems
HP	Health Plans

It should also be noted that the there are more than 30 health plans throughout the state. The Health Plans use the same secure upload process to submit Child Health Plus data to the KIDS systems, so we did not represent every Health Plan in the diagram.

The WMS system that is operated by the Office of Temporary and Disability Assistance (OTDA) has a number of subsystems. A *subsystem* is a set of elements, which is a system itself, and a component of a larger system. The WMS subsystems are highlighted as "circles" inside the box that represents WMS. These subsystems were highlighted as each was reviewed to assess its potential to provide assets or capability to meet the needs of the Exchange.

The next diagram illustrates the IT system map for New York City. New York City has developed additional capabilities in order to meet administrative needs as well as the citizens of New York City.

Current New York City IT Map

The major difference between this diagram and the Upstate New York IT Map is that New York City has developed additional systems and interfaces than what are available in Upstate New York. Further, the WMS system in New York City is different than (and does not "talk to") the WMS system used by the rest of the state. The key for this chart is presented below:

OTDA	New York State Office of Temporary and Disability Assistance
Hcheq	Hudson Center for Health Equity and Quality
NYS Health - CHP	New York State Department of Health – Child Health Plus
NYS Health - Medicaid	New York State Department of Health – Medicaid
New York City	New York City Systems
Insurance	Various Insurance Systems

The following section identifies the high-level requirements that are set forth by ACA and the subsequent guidance from the federal government. The requirements presented were used as the basis for determining whether any of the current New York IT systems provided in the maps above could meet, or help meet, these new ACA requirements.

## F.   Federal Exchange Requirements

Federal IT Requirements

Federal guidance is both cumulative and ongoing and sets forth expectations and specific requirements around consumer-mediated enrollment processes, systems architecture and security, the sharing of IT assets among states, and more. See below for more detail on the requirements.

Consumer Experience

The federal government requires states to develop a transparent, easy to use, online process for consumers to make choices, apply, recertify, modify and manage benefits in the Exchange. Guidance articulates a consumer *mediated* approach in which consumers own their data and make decisions about how, when and with whom it is shared. Consumer *usability* is also called out in the guidance and Exchange systems must support a range of languages and user capabilities, including usability standards under Section 508 of the Rehabilitation Act,

compliance with federal civil rights laws and standards and protocols adopted under sections 1104 of ACA.

According to guidance, consumers can expect real-time transactions, electronic verification of eligibility from federal and state databases and third party assistance in enrolling and maintaining coverage. Consumers will enter a minimal amount of personal information, and Exchange systems must provide real-time notification of eligibility and enrollment and seamless integration among all health insurance options. Systems also need to facilitate timely resolution of discrepancies for persons who cannot be handled in real-time. The Use Case provided in the graphical representation below was developed to help the ONC HIT Enrollment Workgroup consider requirements for the expected consumer experience.

High-Level Exchange Use Case for New, Changed or Renewal Applications
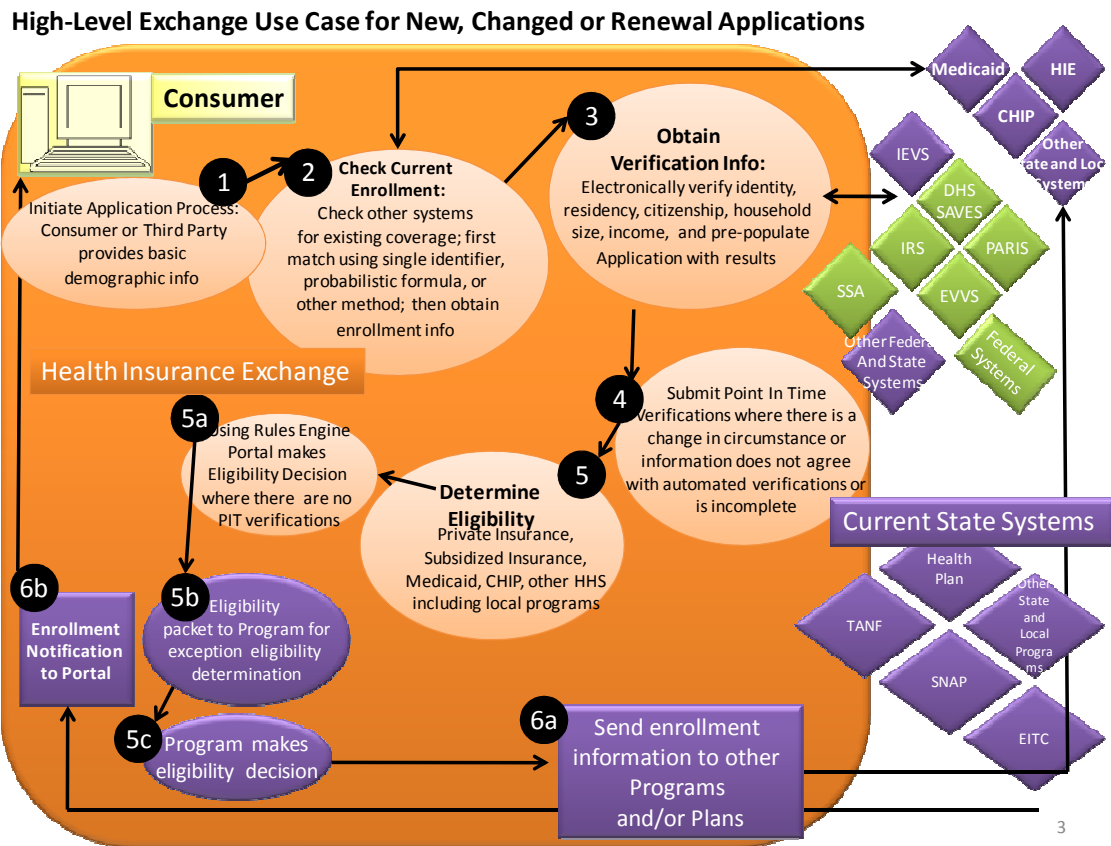
In 2013 and 2014, the consumer can expect the same enrollment experience whether they enter through the Exchange, Medicaid or CHIP, SHOPS or brokers. Guidance calls for a highly responsive level of customer service, modeled on retail, banking, airlines and other industries.

Systems Integration and Data Exchange

Seamless integration between private insurance and public health coverage options is echoed throughout all of the published guidance. Systems need to ensure seamless coordination and integration with the Exchange, and allow interoperability with health information exchanges, public health agencies, human services programs and community organizations providing outreach and enrollment. Systems are expected to connect consumers not only with health programs (vertical integration), but also with Supplemental Nutrition Assistance Program (SNAP), Temporary Aid to Needy Families (TANF) and other human services (horizontal integration). This vision, while not mandatory by 2014, suggests a high level of integration with little or no duplication.

To enable the interoperability and integration envisioned in the guidance, states are expected to use NIEM data guidelines to permit consistent, efficient and transparent data exchange between programs and states (Medicaid, CHIP, SNAP, TANF). NIEM is the National Information Exchange Model, a partnership of the U.S. Department of Justice, the U.S. Department of Homeland Security, and the U.S. Department of Health and Human Services. NIEM enables information sharing by promoting a common semantic understanding among participating organizations and data formatted in a semantically consistent manner; essentially promoting the level of standardization needed to achieve the interoperability called for in ACA guidance to date. NIEM standardizes content (actual data exchange standards), provides tools, and manages processes (see http://www.niem.gov for more information).

Finally, standard HIPAA transactions are required to enroll consumers into public and private health coverage programs. Guidance promotes leveraging existing HIPAA transaction standards (e.g., HIPAA 834, 270, 271) to send and respond to eligibility queries, as well as transmit enrollment data between public and private insurance programs.

Verification Processes

Federal guidance requires states to utilize real-time verifications with federal and other agencies for the purposes of eligibility determination for Medicaid, CHIP and subsidies and for re-certification and change in circumstances for health insurance coverage options. Guidance recommends the development of a Federal "reference software model" to obtain verification of a consumer's initial eligibility, renewal and change in circumstances. The Federal Government is contemplating the creation of such a "verification hub" for states to use to verify a consumer's information against the following databases:
- Internal Revenue Service
- Homeland Security
- Social Security Administration
- National Directory of New Hires
- Electronic Verification of Vital Events Record System (EVVE)
- State Income and Eligibility Verification (IEVS) systems
- Public Assistance Reporting Information System (PARIS)
- U.S. Postal Service Address Standardization

In addition, enrollment systems should facilitate automated queries across programs to determine if a consumer is known to other eligibility and enrollment systems. If the consumer is known to another system, the Exchange system should permit for the retrieval and re-use of relevant eligibility data. Guidance also points to the use of a Web Services approach to support eligibility determinations in other health and human services programs, including Medicaid, CHIP, SNAP and TANF. States may want to use translation tools that reliably and consistently translate or transform data from various sources and formats in their implementation plans.

Business Rules

Section 1561 and other federal guidance recommends that states clearly and unambiguously express their business rules outside of the transactional systems. The primary reason for this is to develop a consistent, reusable set of business logic that can be written once and applied broadly. In contrast, business rules that exist only as computer code are harder to understand, enforce, extract and modify.

A key component of the federal guidance is that Federal agencies and States express their business rules in a consistent, technology-neutral standard. The clear and unambiguous expression of business rules, as well as the output of these business rules – the eligibility finding and justification – has enormous value for both developers and consumers. Clear and consistent expression will ease development of technology solutions and facilitate seamless interoperability between programs, as developers will be able to identify and understand the rules that should be coded into new and existing systems. In addition, use of consistent rules standards would also provide maximum transparency to the consumer by providing a foundation for clear, understandable eligibility determinations.

Privacy and Security

Given the unprecedented role of the consumer in enrolling in and keeping his/her public or privately financed health benefits, Federal requirements provide guidance on the need for sound privacy and security elements, with more information anticipated on this front. Current Federal guidance offers that State systems should be designed to collect and use the minimum data necessary for an eligibility and enrollment determination. This should be balanced with the desire to reuse information for multiple eligibility decisions (beyond just health coverage). Guidance calls out the need for states to have clear, transparent policies and processes for consumers about authorizing access to data. Authorization to access and data use intentions should be provided to the consumer in a Privacy Notice, presented to all consumers accessing the Exchange.

It is expected that this Privacy Notice will govern the consumer's rights to confidentiality and privacy. The Privacy Notice should be provided to the consumer *prior to or at the time of* collection of personally identified information in a method the consumer can understand. The

Privacy Notice should also clearly indicate all entities that will be permitted to use a consumer's eligibility data, as well as the permissible uses of such data.

Federal guidance outlines a scenario in which consumers have:

- Electronic access to their eligibility and enrollment data in a format they can use and reuse;
- Knowledge of how their eligibility and enrollment information will be used, including sharing across programs to facilitate additional enrollments, and to the extent practicable, control over such uses; and
- The ability to request a correction and/or update to such data;
- A consumer's ability to designate proxy (e.g., third party) access should be as specific as feasible regarding authorization

In addition, the following privacy and security safeguards are provided as a starting point for state compliance:

- FIPS (Federal Information Processing Standards)
- FIPs (Fair Information Practices)
- NIST (National Institute of Standards and Technology)
- HIPAA (Health Insurance Portability and Accountability Act)
- HITECH (Health Information Technology for Economic and Clinical Health)

Privacy guidance to date builds upon these existing practices and standards, most of which were designed to protect clinical health information but which provide a valuable starting point and framework for protecting enrollment health information. Privacy guidance was also informed by the ONC's *Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health Information.*

Systems Architecture

In implementing ACA enrollment provisions, States must develop modular, flexible systems including open interfaces and exposed application programming interfaces. The vision is that systems are built to permit sharing (in whole or in part), and to allow for ongoing and iterative updates and enhancements. To accomplish this, systems need to be in alignment with the Medicaid Information Technology Architecture (MITA) framework and must follow the Standard Industry Lifecycle Framework (SDLC) framework. It is expected that states will take advantage of Web Services Architecture (utilizing protocols and formats such as SOAP and XML) and Service Oriented Architecture (SOA) to leverage opportunities to share and to pool configurable resources.

Systems and system components financed with federal financial participation are required to be non-proprietary, utilizing open architecture standards, to permit re-use by other states and jurisdictions. In particular, Early Innovator states must be able to produce requirement

specifications, analysis, design, code, and testing that can be easily shared with other interested and authorized parties and stakeholders, including other states.

Guidance is intended to enable states to promote, share, leverage and re-use technologies within and among states.

Exchange Operations

New State responsibilities associated with the ACA include establishing Health Insurance Exchange (Exchange) operational components (e.g., authorities, organization, administration, and more), determining an approach for providing the minimum benefit package, providing an easy to use web-site for individual and small employers to evaluate and select coverage options that work for them, and providing more robust technology that supports the underpinnings or all of the Exchange responsibilities.

As ACA defines it, an Exchange is an organized marketplace to help consumers and small businesses buy health insurance in a way that permits easy comparison of available health plan options based on price, benefits, and quality. By pooling people together, reducing transaction costs, and increasing price and quality transparency, ACA envisions that an Exchange will create more efficient and competitive health insurance markets for individuals and small employers.

As required by ACA and associated federal guidance, the New York Exchange must carry out a minimum set of functions including:

- Certification, recertification, and decertification of qualified health plans
- Call center
- Exchange website
- Premium tax credit and cost-sharing reduction calculator
- Quality rating system
- Navigator program
- Eligibility determinations for Exchange participation, advance payment of premium tax credits, cost-sharing reductions, Medicaid and CHIP
- Seamless eligibility and enrollment process with Medicaid, other State health subsidy programs, and other human service programs (e.g., Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance to Needy Families (TANF). While this is not a Federal requirement for 2014, it is a goal of the ACA legislation.
- Enrollment process
- Applications and notices
- Individual responsibility determinations
- Administration of premium tax credits and cost-sharing reductions
- Adjudication of appeals of eligibility determinations
- Notification and appeals of employer liability
- Information reporting to IRS and enrollees

- Outreach and education
- Free Choice Vouchers
- Risk adjustment and transitional reinsurance
- Small Business Health Options Program (SHOP) Exchange-specific functions

G. Analysis of "Potential" IT Assets

The Project Team conducted analysis of the IT systems identified in this section to assess their ability to meet the requirements outlined in Section F. This analysis included analyzing State and City systems as well as Health Plan, Private Insurance and other community based systems.

Given we had already assessed the proposed solution included in the Early Innovator grant as sound, the focus of this section of the gap analysis was to analyze and evaluate other systems in the state to identify other potential assets to fill the gaps. Evaluation and analysis were based on the following:

- Whether the system possesses any specific function or feature required in the Exchange
- Whether the system operates under an architecture that is compatible with the Exchange architecture and whether the system will be able to integrate with the Exchange
- Whether the administrative and operational structures of the system allow a cost effective way for the State to leverage its functions or features
- Other considerations include amount of retrofit required to meet the requirements, risks associated with software integration or adoption, and others
- Evaluation of possible alternatives to adoption of existing assets versus consideration of adopting new software that can assimilate functional, workflow and other capabilities learned from current software (New York assets) capabilities

Each of the assets below was thoroughly assessed and documented in terms of its specific processes, types of transactions, users, programs supported, technology architecture and integration capabilities. Findings for each system are detailed in **Appendix A**.

OTHER ASSETS:

New York State Department of Health
- eMedNY
- Healthcare Eligibility Authorization and Renewal Tool (HEART)

New York State Office of Temporary Disability Assistance
- Welfare Management System (WMS) and five sub-systems
- myBenefits
- myWorkspace

Hudson Center for Health Equity and Quality
- EnrollNY
- Facilitated Electronic Enrollment Application (FEEA)

New York State Health Department Child Health Plus
- Knowledge Information System (KIDS)

New York City Systems
- Access NYC
- New York City EDITS
- EDITS Review
- New York City Paperless Office System (POS)

Other Insurance Systems
- Liazon Bright Choices
- HealthPass NY
- HealthCare NY Web Site

This component of the analysis was conducted via introductory phone interviews followed by Web Ex demo sessions conducted for each system. If after this initial assessment, it was determined there may be potential asset, an in-person meeting that included a transaction walkthrough was conducted. A transaction walkthrough is the act of tracing a user's path through the system to complete eligibility and enrollment processes and other associated functions--a commonsense and hands on approach to learning how a process works. Finally, system documentation and other materials related to the technical architecture, volumetrics and other aspects of the systems were also reviewed.

H.   IT Infrastructure – Gaps and Assets

The goal of examining the IT systems above was to identify assets and to identify IT gaps and options for the state in moving towards the 2013 implementation target. With the solid foundation of eMedNY and the Data Warehouse called for in the Innovator Proposal, there still exist several significant gaps in the state's systems readiness for 2013. They include:

- A robust consumer and eligibility worker application (or portal) that provides a "first class customer experience" that enables real-time transactions and the exchange of information seamlessly across a number of programs.

- The limitations in terms of scalability and interoperability and the absence of an automated rules engine of the current human service eligibility and enrollment system known as Welfare Management System, or WMS. From a capacity perspective, this system will not be able to support the inclusion of additional lives anticipated in 2013

and beyond and the State will need to determine how to handle the information currently in the WMS system, which will ultimately be valuable to the Exchange.

- Needed functionality on the commercial insurance side of the house: rating and managing the offerings on the Exchange, and the small employer exchange and associated administration (i.e., SHOP Exchange).

The drill-down to this high level characterization of the gaps is the list of features and functions, below, that will need to be added to the eMedNY and Medicaid Data Warehouse capabilities to meet federal requirements for the Exchange, including:

- Full featured front-end web-based portal that will allow or provide for:
  - Consumers to explore the health insurance and other options available to them and to apply online for a range of benefits using a single online application
  - Community Assistors, Navigators and Brokers to help consumers apply online
  - Small businesses, self proprietors and employees to explore the options available to them, to apply for the plans they select and to manage their plans and benefits
  - Health Plans and Insurance Companies to set up their options in the Exchange based on required criteria set by the State
  - Integration with federal and state verification and eligibility systems (such as IRS, SSA, Homeland Security, State Eligibility system) to verify and access information about consumers in real-time
  - Eligibility determination for Medicaid (using the Modified Adjusted Gross Income rules), Subsidized Medicaid and other coverage that is available to consumers
  - Consumers to provide electronic point in time verification by faxing, scanning or emailing their supporting documents
  - Notifications to consumers via e-mail, text messaging or paper notices about their coverage, renewals and more
  - Consumers to view and manage their eligibility and enrollment information
  - Electronic Recertification, Change in Circumstance and other subsequent application events
- Appeals
- Standards-based rules engine
- Document management
- Integration with other systems and services
- Accessibility and other usability standards
- Customer support
- Seamless eligibility and enrollment process with Medicaid and other State health subsidy programs and other human service programs (e.g., Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance to Needy Families (TANF).

Although this is not federally required by 2014, it is an objective of the ACA legislation.

- Support for consumer mediation
- SHOP Insurance Exchange offerings, employer reporting and third-party administration
- Commercial insurance offerings
    - Certification, recertification, and decertification of qualified health plans
    - Premium tax credit and cost-sharing reduction calculator
    - Quality rating system
    - Risk adjustment and transitional reinsurance
- Navigator program
- Notices
- Administration of premium tax credits and cost-sharing reductions
- Adjudication of appeals of eligibility determinations
- Information reporting to IRS and enrollees
- Outreach and education
- Free choice vouchers
- SHOP Exchange-specific functions

The diagram below illustrates where and how the components of the Innovator proposal relate to the overall required functions of the Exchange.
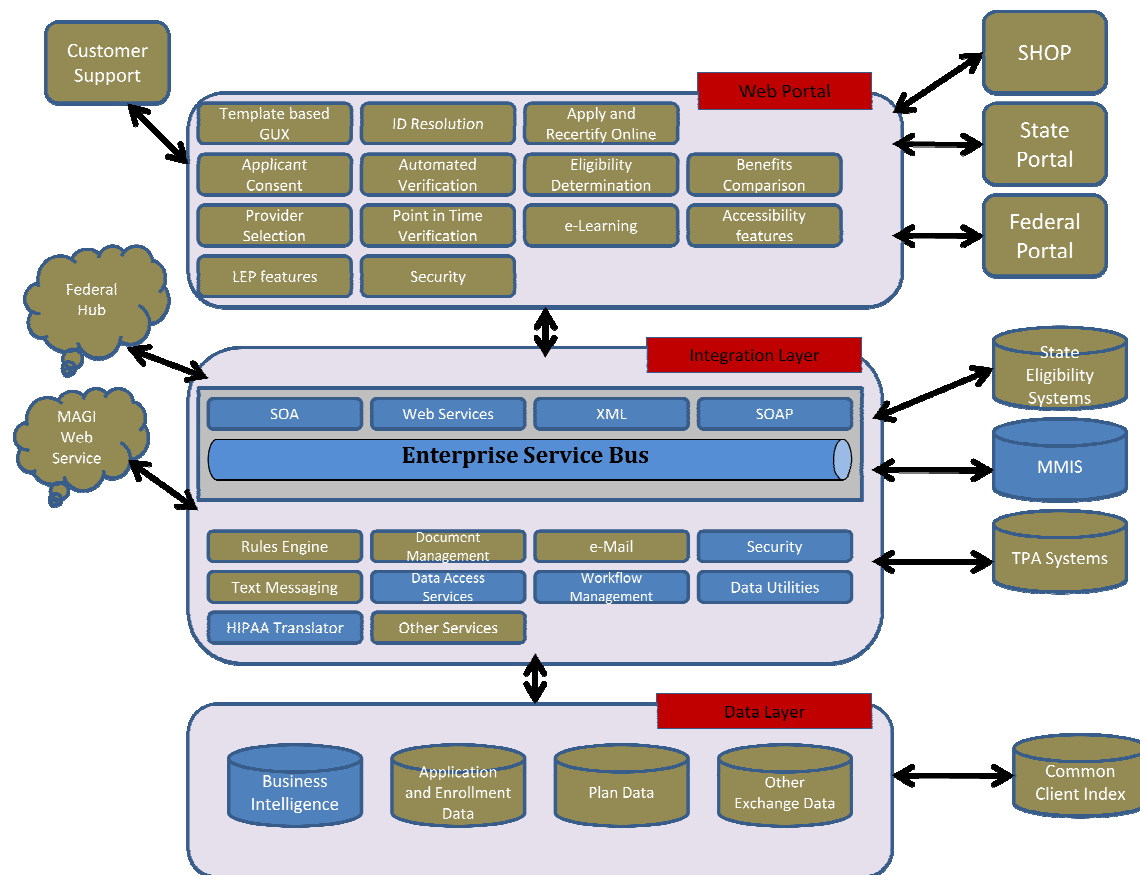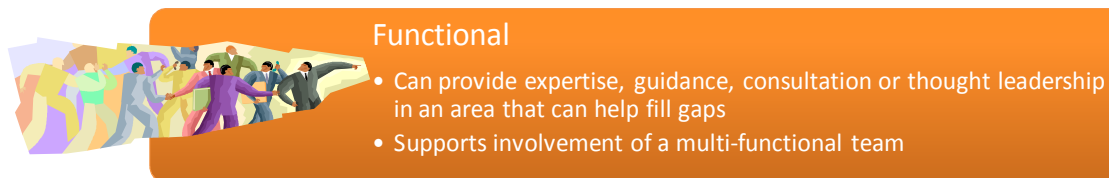
As illustrated above, there are a number of key capabilities not specifically addressed as part of New York's Early Innovator solution (items in gray are not specifically addressed in the solution) that are required to meet the 1561 Standards and the federal guidance. The State has committed to meet these requirements.

In light of the gaps, we looked at the other assets to see where they might be used to support or fill some, or all, of these identified gaps. While we identified a number of possibilities, we did not find any asset or combination of assets that would completely fill the gaps. Instead we found a variety of disconnected assets that we categorized into groups for further consideration by the state. We note that cobbling these varied assets together will be complicated and time-consuming and has some level of risk (discussed below under Options). The state will therefore need to assess the value of each asset against the potential complications of using the asset.

The assets identified as part of the analysis were placed into several different categories for the purposes of calling out their potential contribution to the future. Asset categories are described below.

Functional
- Can provide expertise, guidance, consultation or thought leadership in an area that can help fill gaps
- Supports involvement of a multi-functional team

Transitional or Temporary
- Technical assets that may fill gaps until such time as the state can replace the temporary or transitional asset
- Often times referred to as legacy (or existing) systems

Technical
- Assets where code and/or services can be used or consumed by the Exchange to meet one or more of the Federal requirement

Assistive
- Assets that may support analysis of Exchange offerings
- These assets are used to help provide insight about a part of the system and would likely not persist once the system is implemented.

The specific assets and the rationale for their respective categorization are described below. Please refer to **Appendix A** for the detailed systems findings.

Functional
- Can provide expertise, guidance, consultation or thought leadership in an area that can help fill gaps
- Supports involvement of a multi-functional team

Based on our analysis, New York has a number of groups that can offer strong subject matter expertise, provide keen insights for design and adoption, and help New York avoid problematic land mines that are inherent in developing a complex system like the Exchange. The groups that we suggest can provide this functional expertise and knowledge are:

- **Hudson Center for Health Equity and Quality (Hcheq):** Hcheq has extensive knowledge about and experience with developing the consumer portal, Enroll NY, that helps individuals and families apply for a range of benefit programs. This experience could be useful in building the robust consumer front-end for the Exchange. Hcheq also has a system called Facilitated Electronic Enrollment Application (FEEA) that helps Health Plans and Facilitated Enrollment Entities (FEEs) process applications and support families who are applying. Hcheq's experience in supporting assistors could be useful in designing features to support the Community Assistors, Navigators and Brokers who will be using the Exchange. The lessons learned from developing and managing Enroll NY

and FEEA can provide real and practical insight, and make Hcheq a good candidate for participation in the functional expert group for the Exchange solution. Hcheq is a non-profit organization and the state may need to work out an appropriate approach to support their participation in this process.

- **Office of Temporary and Disability Assistance (OTDA):** The OTDA team brings valuable insight and knowledge to the table stemming from their management of the WMS systems and subsystems, as well as systems consumer-centric solutions like myBenefits and myWorkspace. OTDA's experience developing the Functional Road Map is also important as a major agency, multi-year undertaking to map the current systems and practices. While much of OTDA's work will need to be re-cast to reflect the requirements of ACA and the Early Innovators solution, there is foundational work that can be used to derive use cases, process flows, work flows and other considerations that can accelerate the work that needs to be done for the Exchange. The value of the OTDA contribution (and of all functional assets, for that matter) from the perspective of what hasn't worked for them and the kinds of challenges faced in undertaking a mapping exercise of this magnitude, may also be instructive.

- **City of New York:** The two major agencies in the City of New York (HHS Connect and HRA) have combined technology and business processes in New York City to allow families with low or no income to access the services they need. HHS Connect has developed a single online portal (Access NYC) to allow consumers to apply for benefits. Access NYC is often known for its CURAM front-end, but more relevant to the establishing an Exchange, it offers middleware technology architecture that allows seamless integration between systems. HHS Connect, and particularly its knowledge of service oriented architecture and the use of an Enterprise Service Bus, can provide important insight and experience to the planning and development of the New York State Exchange solution. We discuss Access NYC with regards to its technical assets later in this section.

- **Insurance Functional Experts:** All of three of the insurance groups we met with have experience and capability that would be very useful in building out the insurance and SHOP capabilities of the Exchange. The state will have to work with these groups to determine how and whether they would be willing to be involved in Exchange given they are for-profit businesses and their expertise may be considered proprietary. The areas of functional expertise they can offer are highlighted below.
    - **HealthCore NY:** HealthCore NY has extensive experience in working with State and Federal agencies to reduce the cost of health insurance. HealthCore NY works with State agencies and carriers on creative solutions to reduce state costs by combining revenues generated by the carriers and federal grants. The HealthCore NY team also has experience working as a broker and a Third Party Administration (TPA) agency in New York, and is currently working with the State Department of Insurance in promoting the States Healthy New York program.
    - **HealthPass NY:** HealthPass NY has experience working with business owners and self-proprietors to help them choose suitable and cost-effective private insurance solutions. HealthPass NY also has experience in working with major

carriers, health plans and brokers in New York on various insurance plans. HealthPass NY has connections and working relationships with the TPAs that operate in the state, and has expertise in the area of premium billing and collections with both the employers and individuals.

- **Liazon:** The Liazon team has developed creative solutions for business owners and self-proprietors to provide a flexible and employee choice based insurance model to their employees. Liazon also has extensive experience working with major carriers, health plans, TPAs and brokers in New York. Liazon has developed several creative tools to make the insurance choice model for the employers and their employees more efficient and effective. Liazon's work in the area of consumer insurance education could be a valuable asset in establishing the outreach and education framework required in the Exchange.

Transitional or Temporary

• Technical assets that may fill gaps until such time as the state can replace the temporary or transitional asset
• Often times referred to as legacy (or existing) systems

Transitional or temporary assets are designed to be time limited. There is significant risk associated with adoption of this type of strategy. One risk is that the asset is designed in such a way that utilizing it would result in new systems or components not reaching their full capabilities because they had to accommodate an older, less functional system, and that the new systems would be too costly to change once the temporary asset was replaced. A second risk is that changes in funding could result in the temporary option becoming permanent, a less than ideal (and problematic) solution.

All of the assets identified below present the first risk. While the scalability and interoperability limitations could be triaged for WMS to be a temporary asset (though not without resource consumption), another major consideration is that WMS, which serves as the current central component and system of record for the eligibility and enrollment systems for Medicaid, CHP, SNAP, TANF and other programs, is a case-based system built on a hierarchical database. The Exchange absolutely needs to be person based and needs to be built on a relational database to provide the robust data management capabilities required to operate the Exchange. *Because of this risk, we would highly recommend that the state avoid consideration of using or deploying these assets on a temporary basis if at all possible.*

The reason for presenting these temporary assets is that if the state is concerned about meeting the federal deadline of January 2013 for the Exchange and needs to evaluate less optimal solutions, one alternative would be to focus on building out other aspects

of the Exchange and re-using these assets while trying to meet the Federal timelines. We want to note that when we met with New York leadership, they were clear that they did not want to compromise the Exchange solution to meet the federal timelines.

With these caveats in mind, we present the following assets that could serve as temporary gap fillers:

- o **WMS Upstate and WMS New York City Version (Current Legacy Systems):** WMS is the current system of record for Medicaid, SNAP, TANF and other social services programs. WMS therefore has a lot of information and history that will be valuable for the Exchange. While OTDA is working on the replacement of the current WMS system, it could, if absolutely needed, serve as a temporary asset.

    - ▪ **Challenges:** In order to use WMS as a database of record, the following items will need to be considered for the current WMS system.
        - **Multiple Versions:** WMS has separate versions of the system for upstate and downstate areas of New York. These two systems are separate systems and hence any change required at the WMS end will need to be done twice. A more thoughtful approach to handle the differences between these two systems will need to be addressed. In addition, the Federal government has signaled that enhanced match funds for Exchanges may not be used to support multiple state eligibility and enrollment systems. This would also need to be considered in making this decision.
        - **Database**: WMS resides on an older generation hierarchical database technology that is not ideal for the load and concurrency that is expected in the exchange solution. The OTDA team has already migrated certain features to a separate ORACLE database because of WMS' capacity issues. Appropriate capacity planning will need to happen for WMS to be a part of the exchange solution.
        - **Case vs. Person:** WMS is case based. This means that units of work are tracked by a case rather than a person. More modern systems are person based so that you can track individuals through multiple cases. This construct can be managed around to accommodate these limitations, but requires extra programming of the new systems and had inherent limitations.

    If WMS is used as a temporary asset, then other temporary assets may be used to facilitate integration and capabilities on a temporary basis. These temporary assets are systems that currently integrate with Upstate WMS (i.e., myBenefits and myWorkspace which is currently only operational for SNAP) or with the New York City version of WMS (i.e., EDITS and EDITS Renew for Medicaid and

Medicaid Renewals and POS for SNAP). These systems serve to integrate key program applications with WMS. A range of temporary solutions could be used, from extracting the WMS interface logic and putting it in a service to be deployed on the Exchange to having workers use these systems as they do today to support automated integration with WMS. Clearly, this cobbling to make WMS work in the Exchange has trade-offs that the State will need to consider.

o   **HEART's Rules:** HEART is a system that Department of Health has developed using Web services to support Medicaid Renewals. In order to calculate Medicaid for a renewal, one basically has to apply all the Medicaid rules. To make this more rational, HEART has developed a table-based rules set to determine eligibility for Medicaid. Although having the Medicaid rules codified in this table-based rule set will be useful, this approach to rules lacks certain key components and designs of the required rules engine for an ACA solution including:

- Being a centralized plug and play module
- Adhering to the federal standards such as Structured English, SVBR and RFI standards
- Service based architecture and design

The HEART Medicaid rules could be used temporarily for the Exchange solution while the transition to a more sophisticated rules engine is underway.

- **Challenges:** The following items will need to be considered.
    - **Expansion:** While the rules in HEART have been thoughtfully codified into a rational table-based format, the rules engine to support the Exchange will need to accommodate new Medicaid eligibility rules (i.e., MAGI) and other programs that will be supported in the Exchange. It may be practical to convert the traditional Medicaid rules logic codified in HEART to a new rules engine and then add the new Medicaid, insurance, premium tax calculations, subsidy calculations and other programs into a new rules engine.
    - **Externalization:** The HEART table-based rules set would need to be externalized to fit into the Exchange solution and offer reusability.
    - **Note:** HEART is person-based vs. case based and utilizes a relational database (required for data management capabilities under ACA.)
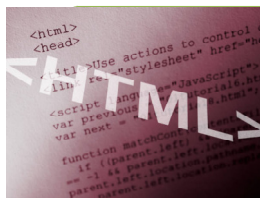
Technical
• Assets where code and/or services can be used or consumed by the Exchange to meet one or more of the Federal requirement

As stated throughout this report, we believe the eMedNY MITA compliant technical architecture, the Medicaid Data Warehouse and the Medicaid Data Center proposed in the Early Innovator Grant are strong technical assets upon which to build the Exchange. In addition to these assets, our analysis identified other technical assets that we believe should be assessed further for potential re-use by New York's Exchange. As with all assets, the ease of accessing and using these IT assets will depend upon a variety of factors, including who (what agency, organization, company) owns or has purview of a particular asset and how easily and quickly it might be adopted or used by the state. State leaders will need to assess each potential asset against the considerations of time and practicality. The potential technical assets are described below.

o *Facilitated Electronic Enrollment Application (FEEA)*

FEEA is an easy to use tool for health plans and other Facilitated Enrollment Entities (FEEs) to process applications for a range of programs. FEEA also has the technology and architectural support for integration with external systems. Some of the features that FFEA has could be beneficial for the Exchange solution, including:

- **Managing Supporting Documents:** FEEA has a simple yet sophisticated feature that allows users to separate the digitized copies of each supporting document that are received by fax and categorize them into different document types (e.g., Birth Certificate, Pay Stubs, other verification documents). This solution allows seamless integration with imaging systems, and provides a mechanism that could allow the front end users of the Exchange to work on the digitized documents in an easier way.
- **Centralized Data Validation:** FEEA has a centralized data validation feature that presents missing required information in a single view before the eligibility determination happens and allows users to navigate to the specific data elements that are missing. This feature could be a useful feature in the Exchange.
- **Common Consumer Index:** Hudson Center is working with a group of FQHCs in the state to develop a common consumer index that will be added to FEEA as a future enhancement. This common consumer index, which will store essential client data in a common repository to permit tracking and identification, could be an important and useful asset for the exchange solution in order to provide a single view of consumer information.

Challenges: In order to utilize any of the above-mentioned features from FEEA, Hcheq will need to transfer the technical assets for these features to the State. Because FEEA is licensed, proprietary software, appropriate considerations would need to be made to address this asset transfer.

o *HHS Connect Middleware*

HHS Connect's solutions (including Access NYC) operate on a sophisticated and robust technology middleware. This middleware is built using IBM MQ Series and I-Way Enterprise Service Bus and provides an enterprise backbone that operates on a Service Oriented Architecture. The architecture employs web services, SOAP, XML and other open standards and is MITA compliant. This middleware connects to a range of systems and services using web services and SOAP over HTTP, and has many services such as data transformation, single sign-on, access management, exception management, logging, configuration management and data filtering that could be used by external systems including the Exchange. This middleware connects to a common consumer index to provide a common view of the consumer information that is pulled from various sources. We believe this could be a significant asset for the Exchange. This middleware also employs the NIEM standard for the data housed and is capable of handling the volume and concurrency of transactions required in the exchange based on the load test results we have received from HHS Connect.

This middleware is similar to the middleware of eMedNY that the State proposes to utilize as the backbone of the Exchange solution. Although we don't propose the HHS Connect middleware to replace the eMedNY middleware, we believe that these two enterprise middleware systems could potentially supplement each other by sharing services and features. An example might be the common client index service that is operational in Access NYC and may have value for the Exchange. Because both eMedNY and Access NYC use loosely coupled web services on an Enterprise Service Bus, the likelihood of the Exchange being able to re-use a service from Access NYC is high. That said, the complications of jurisdictional ownership of IT assets may complicate the east of such sharing.

Challenges: In order to leverage this middleware, the following things will need to be considered for this integration:

- **Expansion:** The HHS Connect middleware is operational in New York City only and hence will need to be expanded to accommodate the rest of the state.
- **Transfer of Assets:** HHS Connect would need to transfer services to the Exchange. These services were developed by New York City and are not part of the CURAM license. While the transfer of services would likely be allowed, the State would need to engage with New York City to insure that

the transfer could take place, if assets were determined valuable to the Exchange. The complications and time needed to accommodate a transfer, and the timing considerations for the State will be important considerations in assessing this option.

o   *Liazon Bright Choices*

Liazon Bright Choices provides a number of useful technical assets that could be adopted and adapted by the Exchange in both the public and private insurance areas.

- **On-line Insurance Portfolio Management:** Bright Choices provides on-line insurance portfolio management that allows employees and employers to select insurance options, compare plans and manage their insurance enrollments and renewals. This feature, which is simple, robust, and easy to use, would clearly be valuable for the private insurance arena of the exchange but could also be utilized to bridge the public and private options and allow consumers to manage their benefits portfolio online.
- **Online Education Subsystem:** Bright Choice's education subsystem provides a creative e-learning module through an online video library. The uniqueness of this module is that it has the intelligence to personalize the videos based on the individual user and organization and based on the user's need. Bright Choices is also working on an enhancement to this module that will have an intelligent audio component where the system can even talk to the user who is logged in. This education subsystem could be a useful asset in the Exchange to educate the consumers on various aspects of the Exchange offerings, consumer options, subsidies, premium tax calculations and so much more.
- **Advance Decision System:** Bright Choice's Advance Decision system allows users to answer certain basic questions about their health and other situation and recommends appropriate insurance options for them. This could be a useful feature to guide consumers through their choices on the Exchange or to guide small employers in selecting benefit packages for their employees.
- **Health Risk Assessment Tool:** Bright Choice's Health Risk Assessment tool allows users to answer certain basic questions about their health and get an assessment of their health risk in order to choose the right health insurance plans for themselves. This could be a useful feature in supporting consumers who will have a range of choices to consider on the Exchange.

Challenges: Liazon is proprietary licensed software. We discussed with Liazon the federal requirements of the Exchange and the need to have systems assets which

are transferrable to and re-usable by other states. They signaled an interest and willingness to work with the State to determine the feasibility of this.

Assistive

- Assets that may support analysis of Exchange offerings
- These assets are used to help provide insight about a part of the system and would likely not persist once the system is implemented.

The following assets or capabilities are associated with proprietary licensed software or are service offerings that would likely also come with a charge to the State. As with other assets, the State would need to assess the value proposition for each of these before proceeding. The assistive assets that may be helpful in establishing or operating the Exchange are described below.

- *Liazon's Advance Decision System*

  Liazon's Advance Decision System allows users to provide the information about their health and other situation and recommends appropriate plan options to them. Liazon has developed an engine that supports this decision system. This engine could be used to feed certain information about the uninsured population in the State and help the State identify the specific plans and options that need to be offered in the Exchange. We understand that the State will be required to offer the minimum benefits package; this decision system could be used to establish the higher levels of coverage on the Exchange.

- *Liazon's Carrier Rating Engine*

  Bright Choice's carrier rating engine determines the rating of a carrier based on set criteria. The State could use this engine to have a rating mechanism for the carriers who would want to participate with offerings on the Exchange.

- *HealthCore's Promotional Expertise*

  The HealthCore team has extensive experience and expertise in promoting the Healthy New York program and several other products through mass media, radio, television, social networks and other mechanisms. This knowledge and expertise will be a useful asset for the State for the promotion of the Exchange.

This analysis identified a number of potential IT assets that could be leveraged to fill gaps in the Exchange. Taking the choices presented above and overlaying them on the solution proposed for the Early Innovator Grant, starts to paint the following picture of what this might look like:
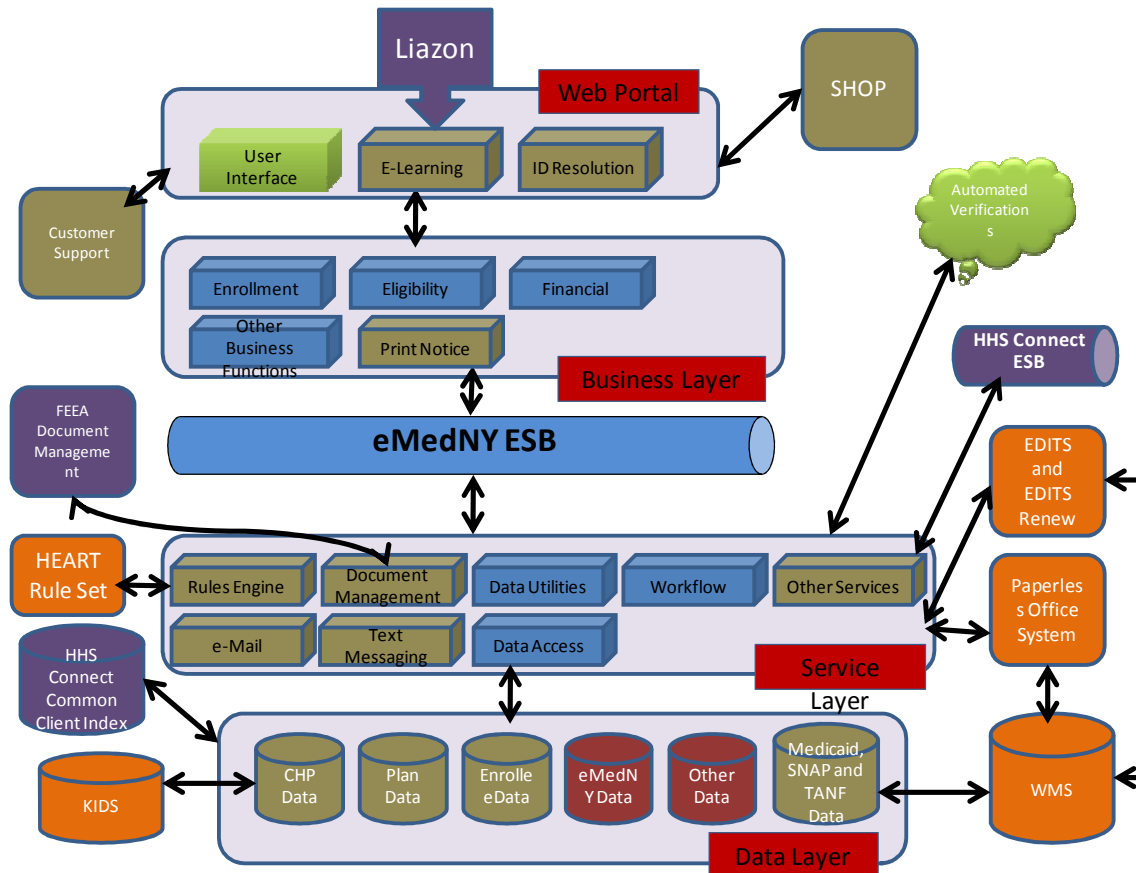
Conceptually, some of the gaps could be filled or augmented by New York assets, but there are tradeoffs and considerations the State will need to assess in making decisions about technology and other assets. See the coding legend below for more insights and cautions regarding this diagram:

- Blue – Exchange capabilities proposed in the Early Innovator solution.
- Maroon - Potential technical assets that may serve as permanent capabilities on the Exchange depending on complexity in acquiring
- Orange – Temporary assets that we strongly advise to try to avoid using
- Gray – Assets that do not yet have a solution and would have to be developed

- Green – A key component asset that no solution was identified as of yet, but that may be a likely solution forthcoming from the federal government or its partners.

Even with the proposed Early Innovator solution and the assets that may be adopted from other New York systems, there are still gaps that must be filled to meet the requirements of the Exchange and the anticipation of additional Federal guidance on eligibility and enrollment for ACA.

I.   Options for Moving Toward 2013

The good news is that, however imperfect they may be, New York does have options for filling the gaps, including:

Option #1 – As possible, utilize the New York assets (most of which are functional) identified in the previous section to cobble together a solution that would work for New York.

Option #2 - Look at what other states or organizations might have developed that could be leveraged for re-use in New York. In this option, consideration of Exchange software or prototypes from other states (i.e., Massachusetts, Utah and Wisconsin) or those that may be developed by other innovator states and/or consideration of third party administration software to support the insurance needs of the Exchange. This option still must address the data structure and associated issues that arise because of WMS. The benefit.

Option #3 – The recently announced User Experience Project presents an option for New York to participate with other states, CMS, CCIO, ONC and other philanthropies in a project to maximize the design integrity of health insurance exchanges. The project will conduct human factors research on the consumer "psychology" in accessing health coverage and will draw on state of the art design firms in creating the blueprint for the consumer-mediated front-end system envisioned through ACA. This option would need to address considerations for supporting commercial insurance and the SHOP Exchange and dealing with the significant database issues associated with the WMS eligibility and enrollment management.

Option #4 - New York could also choose to build everything from scratch and not leverage assets or projects supported by others.

Option #5 - Leverage the most capable components of options #1 - #3.

After careful consideration of these options, the strongest approach for New York would be Option #5, a combination and leveraging of components from options #1 - #3. Because the State has already agreed it will leverage the eMedNY architecture and

utilize the Data Warehouse, it has addressed the foundational requirements of systems architecture and reporting and analysis under ACA. With that as the start, the State could participate in the User Experience project to get much of what it needs to fill gaps. This option still will require work to integrate outcomes of the User Experience project in New York, but the project will produce a valuable prototype to guide the state's work on this.

As the State is participating in the User Experience Project, it should simultaneously incorporate the *functional assets found in Option #1* (here referred to as the expertise, the lessons learned and the understanding of the barriers that need to be overcome from the functional experts and organizations identified). The State should also be mindful of the several potential *technology and assistive* assets identified above. This combination option purposefully omits the *temporary* asset approach based on the considerable risks described previously. Finally, this recommendation is made with awareness that adoption of technical and assistive assets have tradeoffs and challenges, described above.

The rationale for selecting this combined option and approach is summarized as follows:

Option #1: As stand-alone solution, there are too many small and disparate assets identified to try to "re-use" them in an efficient manner. There is significant challenge (and risk) in trying to make sense of and understand all the current coding, and in modifying the various workflows, data structures and code to conform to the business requirements of the Exchange.   The other significant challenge for solely looking to re-use New York's current assets is they have all been designed to deal with the WMS system, as it is the current center piece for eligibility and enrollment software. As stated, WMS is an out-of-date system built for a different time and different business needs. As a result, many of New York's other systems assets have been limited by having to accommodate WMS. The reason Option #1 makes it to the final recommendation is more about the rich functional assets in New York. There has been a lot of valuable thinking and work to develop WMS, MyBenefits, MyWorkSpace, FEEA, ACCESS NYC, etc. The functional expertise of these groups should be tapped as subject matter experts in the work that will be required as part of Option #5.

Option #2: We have reviewed all the other known state Exchange offerings and prototypes. While we believe there are lessons that can be learned from them, as they currently stand, none of them provide a complete or robust fit for New York. At a high level, the Massachusetts Exchange, for example, has very limited integration across other systems. The user experience is not seamless. If a person starts at the Massachusetts Connector and determines they are likely eligible for Medicaid, they are directed to complete a paper application for Medicaid. The Utah Exchange is for small businesses. Like the Massachusetts Connector, it does not integrate with Medicaid. Wisconsin's Exchange prototype, we believe, may come the closest to presenting a more "integrated and seamless" user experience between Medicaid, commercial and

SHOP Exchange capabilities. For example, the Wisconsin prototype has modeled features including data collection, account establishment, and supporting a variety of channels; it has not yet tackled identity resolution, data verification, and more. However, given where it is in its evolution, it may have more difficulty adopting and seizing the lessons and capabilities of User Experience project set forth in Option #3.

We do believe there are opportunities for New York to leverage capabilities of a number of insurance third party administrators to support the requirements to meet the SHOP Exchange and the qualification, rating and management of other commercial insurance offerings on the exchange.   The SHOP Exchange and associated administration is one of the more complex areas that must be addressed as part of the ACA requirements. It was not in scope for SIS to evaluate these third party administrator options and alternatives in this project, but we would recommend that New York conduct this evaluation early in its Exchange project so it can determine what it is building around.

Option 3: This option is designed to produce a user experience vision, overall design and interactive components that would address the universal enrollment needs of state and federal Exchanges. The option and its deliverables are hoped to improve the user experience along federally required dimensions with tools that allow for state-specific situations. Further, this option is intended to introduce key efficiencies into the design process through centralization of design standards and component driven design that allows for re-use of key elements within a structure of flexibility, and broad distribution and usage at scale. The limitation of this option alone, is that it does not address some of the other major gaps such as the WMS replacement (the lives currently in WMS will ultimately need to live in a more scalable and robust database), the third party administration for SHOP and commercial insurance functionality, so it can not be a stand-alone option.

Option 4: Time becomes the biggest barrier to Option 4. While time is a critical factor in all these options, including Option 5, building the entire New York Exchange would be an enormous undertaking. Years have been devoted to developing the Functional Road Map for replacement of WMS, signaling this is not a flip of the switch change. In addition, this approach excludes use of third party systems that could be integrated into the infrastructure proposed for the Exchange to handle the health insurance offerings and SHOP Exchange capabilities. This may be the place to buy, versus make, so that the State's resources, subject matter experts and other capabilities can focus on the Medicaid, CHIP and other human service program offerings on the Exchange. Further, there are significant policy implications associated with shifting the eligibility and enrollment functions from WMS to the Exchange that will need to be worked through by all parties. Accordingly, we do not recommend this option.

Option 5: This option takes the best of breed of the other options as much as possible. New York would build its own Exchange front end leveraging the User Experience work. This will require New York to build robust templating capabilities to be able to consume

the capabilities set forth by the User Experience team. It will be critical for New York to be active participants in the User Experience project.

It is important to note that in pursuing this blended option of #1 and #3, New York will also have to build database capacity to address the shortcomings of the WMS system which has limitations in terms of interoperability, is case versus person driven and which has exceeded its capacity limitations. Part of the proposed approach to this is a common persistent data storage that tracks activity at a person or member level. In order to support the integration across a number of systems, this approach is going to be essential. It is our belief that significant database design and architecture will need to take place concomitantly with state policy and practice decisions regarding the operation and management of programs offered through the Exchange. Finally, none of these options handles the need to build out the SHOP functionality of the Exchange, which as mentioned earlier, was not in scope for this analysis.

All of these options are still going to require strong Exchange organization, strategic decisions on administrative efficiency (including program integration and management), decisions on essential benefits and insurance offerings, inclusion of SHOP Exchange operations and strong IT governance. Because the Exchange will be operational across programs and across agencies, it will require capable customer support operations including call centers, online help, navigator programs and more. There is much to do in a short time, and there are many moving parts. Given that New York is an Early Innovator Grantee, this work is supposed to be done by January 1, 2013. For each of the options presented above, we believe that meeting the January 1, 2013 deadline is a significant, and that New York, like other states will face enormous challenges in meeting the deadlines. New York and others will need to work closely with the federal government to continue to move toward an optimal technical solution, maintain the federal financing and achieve the desired outcomes for all, even if ultimately, the work is not completed by January 1, 2013.

J.   Conclusion and Next Steps

The technical architecture developed to support eMedNY and the Medicaid Data Warehouse (both components of the Early Innovator proposal), offer a strong foundation for the proposed State Exchange. The technical architecture described in the eMedNY solution has not yet been assessed in the live environment and will therefore need to be assessed on this front. Further, services developed as part of this architecture will need to be loosely coupled and tested for externalization. This will insure that they are "re-useable" by other jurisdictions, which is a requirement of the Early Innovator Grant.

There are a number of next steps that the State needs to initiate regardless of which options are selected from those presented above. These could include:

- Establish IT Governance appropriate for the Option selected.
- Conduct agency briefings to make sure that state agencies align and do not invest in technology strategies that are not consistent with the overall direction.
- Conduct agency impact assessment (there is considerable change for all agencies, DOH, OTDA, Insurance that must be planned for and addressed as part of the Exchange process)
- Establish the process for replacing WMS capabilities in a way that is complimentary to the Exchange capabilities and requirements. This will likely include taking advantage of the 90/10 financing that is available through the federal government.
- Promote community involvement and impact assessment (this includes assessment and engagement plan for New York City and other communities that are active in the eligibility and enrollment process.)
- Organize functional assets into subject matter expert groups to support requirements, design, testing and implementation of the Exchange.
- Develop a series of Use Cases by access channel (e.g., paper, on-line, in-person, call center, etc.); by application group (ranging from a single adult to applying groups that have a person who wants commercial insurance, a child eligible for CHIP and another adult eligible for insurance on the SHOP Exchange and so on); by user type (e.g., consumer, small employer, navigator, community assistor, health plan, eligibility worker, system administrator, etc.); by verification type (i.e., automated federal hub verification versus point in time verification); by communication protocol (e.g., text messaging, e-mail, letters, other) and so on.
- Develop a template driven, functional prototype that provides capability to manage each of the Use Cases.
- Use the prototype as the basis, conduct requirements sessions to identify what the Exchange needs to do.
- Update the prototype and associated documentation.
- Evaluate of third party software options for rules engine, commercial insurance offerings and third party administration of the SHOP Exchange.
- Complete additional steps on the system development life cycle (e.g., design, development, testing, training, implementation, post implementation support.)

While this report has focused on the technological requirements to stand up an Exchange, there are many administrative, operational and practical considerations that must be addressed. Further, there are a number of key areas of guidance that are still outstanding from the federal government, including Modified Adjusted Gross Income rules, automated verification assistance and essential benefit package. All of these decisions will have a significant impact on the Exchange. Thus, the technological approaches for the Exchange must be built in a way to accommodate flexibility and change (e.g., where rules are not certain, build the capacity to easily update the rules; or where organizational involvement is not clear, build in the capacity to easily make changes to support different organizations).

Building a new system is hard even when the environment is static. The current environment is far from static, with ongoing developments and iterative guidance anticipated. In the face of the health care reform environment, the state must be prepared for changing directions and capabilities. Adopting the strong SOA architecture operated by Medicaid in New York is a key step in moving in the new direction of flexible, changing and adaptable system approaches that are much more aligned with the programmatic needs of the state.

We have had the privilege of meeting with a strong group of functional and technical experts across the State of New York. They have been working for years trying to make the process more rational and workable for consumers and the persons who support them. They are excited about the opportunity to make significant change happen through the opportunities and financing accorded states through ACA. Our thanks to all of them for sharing insights and experience with us in completing this Gap Analysis and supporting the State of New York in its effort to set up a high quality Exchange.

Included as Separate Documents

Appendix A: Details of Systems Review
Appendix B: Stakeholder Interview Summary Report

APPENDIX A – SYSTEM REVIEW DETAILS

Preparing New York's Information Technology Infrastructure for Health Reform: A Gap Analysis

The following sections describe the result of our analysis for each of the agencies and groups and their systems as listed in Section G.

NYS
Health -
Medicaid

New York State Department of Health – Medicaid

The State Department of Health (DOH) is responsible for managing the Medicaid program in the State of New York and has the primary responsibility for the Exchange solution. As part of the Early Innovator proposal, DOH proposed two of their systems (eMedNY and the data warehouse) as potential assets that could be leveraged for the technical middleware and business intelligence solution for the exchange. DOH also has another system called HEART that deals with Medicaid Renewals.

eMedNY

The State plans to use the capability of the technical architecture of eMedNY (the State's Medicaid Management Information System) as a platform for the Exchange to easily and seamlessly integrate with a range of external systems regardless of their technology platform. Summarized below is an analysis of the technical architecture and how it fits into the Exchange solution:

- The technical architecture of the Medicaid Medication History Pilot, based on the information provided to us in our review, does meet the architectural requirements under MITA and, as such, this architecture will provide a strong base for New York's Exchange solution. This architecture will need to support integration and orchestration of the Exchange features and functions listed above, as well as integrate with other federal, state and local systems.
- The Medicaid hosting environment will be leveraged to support the Exchange. It provides the capacity, security and flexibility needed to support the Exchange.
- The technical environment meets the required security standards such as HIPAA, NIST and FIPS.

As noted, our analysis indicated that this is a sound foundation for the Exchange. Another system that was evaluated as part of this effort is the HEART system.

Healthcare Eligibility Assessment and Renewal Tool (HEART)

HEART is a tool being developed and managed by the Department of Health to support electronic renewals for Medicaid. This is a caseworker system and will not be available to consumers. HEART was developed to support the centralization of Medicaid renewals and is not yet in productive use, but will be by summer. The following describes the plan for HEART:

- **Process:** Applicants will receive a renewal notice and application from the Welfare Management System (WMS). When the applicant completes the renewal, it will be sent to the Department of Health. The case worker will review the application. HEART has a real-time connection to WMS that will allow the worker to check WMS to see if the applicant is known, or not. If known, the latest information is downloaded from WMS to HEART. The case worker makes the necessary updates. Once the updated information is entered, HEART runs the information through a set of rule tables to determine eligibility. HEART also has the capability to use certain WMS subsystems and processes to conduct batch verifications for employment (with IEVES) and SSN (with SADX) match. Once eligibility is determined, the case worker confirms specific transaction codes in HEART (Approved, Denied or Dis-enrolled). The transactions will then be sent to WMS through a secure batch process. HEART also sends information to the notices subsystem of WMS called CNS. This subsystem then sends an updated notice to the applicant regarding their renewal status.
- **Types of Transactions:**
    - o Approval
    - o Denial
    - o Disenrollment
- **Users:**
    - o Call Center Staff and Supervisors
- **Programs Supported:**
    - o Medicaid Renewals
    - o Initial Eligibility (available in HEART; the missing component is the service for registration in WMS)
- **Technology**:
    - o Microsoft .NET (front end and middle tier)
    - o ORACLE (back end)
    - o Three Tiered Architecture
    - o HEART is person based and is built on a relational database
    - o HEART uses Web Services

- **Integration Capabilities:** The technical architecture of HEART supports integration with other systems using web services and other open standards. HEART is integrated with New York State WMS and through the integration will take advantage of the automated verifications that happen through the RFI subsystem of WMS.

OTDA   New York State Office of Temporary and Disability Assistance

The New York State Office of Temporary and Disability Assistance (OTDA) manages several systems including the Welfare Management System (WMS) for both upstate and New York City geographic regions. OTDA also has two other systems called myBenefits (a consumer portal) and myWorkspace (a worker portal) that are operational in the state. We worked with the leadership and technical team at OTDA to analyze the following systems and their subsystems. The result of our analysis is described below:

myBenefits

myBenefits is an on-line, web-based application that allows the residents of the State of New York to apply for the Supplemental Nutrition Assistance Program (SNAP or Food Stamps). myBenefits also supports prescreening (i.e., applicants can not submit an application) for a broad range of other programs. myBenefits is a transfer system from Wisconsin and was modified in five months. Since its launch in May 2008, approximately 284,000 SNAP applications have been processed through myBenefits; more than 500,000 persons have been prescreened for other programs.

- **Application Process:** myBenefits provides an on-line application through which consumers can create user accounts and explore for the programs available. The system allows the consumers to complete a pre-screening process by providing minimal information or to complete the application process and apply on-line for SNAP. In upstate New York, the SNAP applications are then sent to myWorkSpace (description below) for processing. In New York City, the SNAP applications are then delivered electronically to WMS using the Paperless Office System (POS) a New York City developed interface to WMS.
- **Types of Transactions:**
  - New Application
- **Users:**
  - Consumers
  - Community Based Organizations
- **Programs Supported:**
  - Applications
    - Food Stamps

- o Pre-Screening; No Applications
  - Medicaid
  - Family Health Plus
  - Child Health Plus
  - WIC
  - Healthy NY
  - EPIC
  - Prescription Saver
  - ADAP (May 2011)
  - Veterans Affairs
  - HEAP
  - Temporary Assistance
  - School Meals
  - Tax Credits
  - EITC
  - Child and Dependent Care
  - Non-Custodial Parent
- **Technology**:
  - o Microsoft .NET (front end)
  - o ORACLE (back end)
  - o Web Services
  - o Three Tiered Architecture
- **Integration Capabilities:** The technical architecture of myBenefits supports integration with other systems using web services and other open standards. myBenefits is integrated with myWorkspace and through myWorkspace is integrated with WMS. As noted, in New York City, myBenefits, interfaces with POS that then interfaces to WMS.

myWorkspace

myWorkspace is an on-line system used by the OTDA case workers to work on applications that are completed in myBenefits. Since myBenefits only has SNAP applications, currently myWorspace processes SNAP only applications. This system was launched in May 2008 and provides a front end for the workers to determine the initial eligibility for SNAP. myWorkspace does not support changes, updates or renewals. It has a real-time interface to WMS and its subsystems.

- **Process:** Summarized below are the processes that happen in myWorkspace once the application is transferred from myBenefits:
  - o **Intake:** The applications received from myBenefits are registered automatically in myWokspace. The intake process also includes scheduling appointments, providing information about programs and services, collecting information about a consumer's situation and/or eligibility to qualify for a program or service and more.
  - o **Clearance Report:** During the intake process the worker can also run a file clearance in the system to identify existing consumers and allows the workers to

generate a clearance report. The file clearance happens through a secured real-time connection to WMS.

- o **Interview:** If the consumer is not present during the intake process then an in person interview gets scheduled to proceed with the rest of the application process after the intake is completed. If the consumer is present then the additional data collection process gets continued after the intake.
- o **Point-in-Time Verification:** The consumers are required to provide verification documents to support their responses on the application. The physical documents are reviewed and verified by the workers before an eligibility determination is made.
- o **Eligibility Determination:** The worker manually determines program eligibility from non-financial and financial data collected during the eligibility interview. If all eligibility information is complete and appropriately documented, the worker calculates the benefit amount.
- **Types of Transactions:**
  - o Approval
  - o Denial
- **Users:**
  - o SNAP Case Workers
- **Programs Supported:**
  - o SNAP
- **Technology**:
  - o Microsoft .NET (front end)
  - o ORACLE (back end)
  - o Web Services
  - o Three-Tiered Architecture

Integration Capabilities: The technical architecture of myWorkspace supports integration with other systems using webs services and other open standards. myWorkspace is integrated with myBenefits and WMS.

Welfare Management System (WMS)

WMS is the eligibility system and the system of record for Medicaid, SNAP (Food Stamps), Temporary Assistance to Needy Families (TANF) and other social services programs in New York. WMS is managed by OTDA. There are two versions of WMS, one for the City of New York and one for the rest of the state (upstate New York); the two systems do not talk to one another. WMS also includes a range of subsystems that perform various tasks as mentioned in this section. These systems operate on a hierarchical database that has exceeded its capacity and, therefore, is being augmented by Oracle database. Further, the WMS system is a typical mainframe system where case manager entries are generally codes, rather than picklist values, etc. As a result, it is very difficult to train new users. The overview of this system includes:

- **Process:** Consumers can apply for a program supported in WMS by phone, in person or by mail. The applications can also come to WMS from select other systems (HEART,

myWorkspace and POS). The following high-level features and processes are supported in WMS:

- o **Intake:** The intake process allows the intake workers to conduct the initial application registration for the applications. The intake process also includes scheduling appointments, providing information about programs and services, collecting information about a consumer's situation and/or eligibility to qualify for a program or service.
- o **Clearance Report:** During the intake process WMS allows the workers to run a file clearance in the system to identify existing consumers and generate a clearance report. Importantly, the clearance report does not look across upstate and NYC systems. A major flaw is that it runs a clearance only in the system being used. For example, if someone applies in NYC, the system runs a clearance in the NYC system. A person could have an active case in the state system and not be identified.
- o **Interview:** If the consumer is not present during the intake process then an in person interview gets scheduled to proceed with the rest of the application process after the intake is completed. If the consumer is present then the additional data collection process gets continued after the intake. Note there is no in-person or interview requirement for Medicaid.
- o **Point in Time Verification:** The consumers are required to provide physical verification documents as required by the programs they are applying at the time of the in person interview. The documents are verified by the workers before an eligibility determination is made.
- o **Automated Verification:** Apart from the point in time verifications mentioned above, WMS also conducts various batch automated verifications with a range of systems using the Resource File Integration (RFI) subsystem as described below.
- o **Eligibility Determination:** The worker manually determines program eligibility from non-financial and financial data collected during the eligibility interview. If all eligibility information is complete and appropriately documented, the worker makes a choice of whether and how much benefit to recommend based on their assessment. Prior to receipt of all eligibility documentation, a worker can run a 'scratchpad' eligibility determination to assess if a consumer will qualify for a program when their self-reported information is documented. Note there is no in-person or interview requirement for Medicaid.
- o **Budget Calculation:** Budget calculation for approved cases is done by WMS. Once the budget calculation is done, the information is electronically delivered to the Benefits Issue and Control System (BICS). BICS communicates with Chase Morgan to manage the issuance of benefit cards for Medicaid, Food Stamps and TANF.

- **Subsystems:** WMS has a range of subsystems that are used for various activities as listed below:

- **Consumer Notices System (CNS)**

  CNS produces letters to local district consumers advising them of case actions and Fair Hearing rights. The system provides the ability for workers to create consumer

notices based solely on a transaction or to create consumer notices by adding "limited fill" or "extensive fill" information when required by a specific notice type. Selections from the CNS sub-menu provide the ability to:

- Create notices
- Perform inquiry on notices
- Update existing notices
- Perform inquiry on pending notices
- Create a notice print for supervisory review
- Authorize/release a pending notice
- Perform batch notice entry/inquiry/update
- Perform notice history inquiry
- Provide notice history reprint
- Perform CNS control info maintenance
- Perform NYC/Upstate inquiry

CNS notices are produced nightly following a WMS batch update. CNS identifies what data elements were modified by the transaction and generates language based on those changes. CNS also uses WMS data to include consumer specific information in the notice. Each notice is also stored on an immutable electronic device for fair hearing purpose.

In addition to the 58 Local Social Services Districts (57 Upstate counties plus NYC), CNS serves three (3) additional "local districts", namely Office of Mental Health (OMH), Office of Persons with Developmental Disabilities (OPWDD) and a Breast Cancer 'district'. These are districts 97, 98 and 99, respectively. There are about twelve million mailings annually.

- **Medicaid Automated Budgeting Eligibility Logic (MABEL)**

  MABEL provides the capability to determine the financial eligibility and the level of Medical Assistance benefits that a financially eligible Medical Assistance Only case will receive. The case, suffix and individual level information used to determine financial eligibility and the calculated benefit amounts are assigned a budget number and "stored" in the mainframe database. This stored budget can then be used to initiate benefits for new cases or change the level of recurring Medical Assistance benefit amounts received by active cases via the entry of a budget number in the Eligibility or Undercare Data Entry transaction.

- **Prepaid Capitation Plan (PCP)**

  The PCP allows users to enter consumer data for individuals eligible for the managed care program, set coverage, view benefit packages, verify managed care providers and verify eligibility for enrollment. Coverage is put into the "pending area" for updating upstate WMS overnight as part of batch update and for downstate the data is stored right away.

- **Medical Assistance (MA) Restriction or Exception**

  The Restriction or Exception MA subsystem manages information about Medicaid consumers who have been flagged as having Medical Assistance exceptions. Users can enter and maintain restriction or exception data, verify eligibility and verify providers. Typically the exception will be to limit the consumer to a list of approved providers. Exception data is uploaded to eMEDNY nightly.

- **Resource File Integration (RFI)**

  The RFI retrieves consumer resource data from federal and state verification sources. In New York City, the RFI initiation for a consumer is automatic. The worker can also initiate the process manually if needed. In contrast, the RFI process for the rest of the state is initiated automatically and the worker is not able to manually initiate the RFI. A nightly batch job initiates the matching process with a number of external agencies for applicants and recipients. 'Hits' from the various matches are available for review by local district eligibility workers. The presence of a 'hit' creates a flag on the WMS case and inhibits certain types of eligibility transactions, most notably case openings, until the worker enters an acceptable resolution code.

  WMS has the following data exchanges with other systems:

  - Wage Reporting System (WRS)
  - Unemployment Insurance Benefits (UIB)
  - Beneficiary & Earnings Data Exchange (BENDEX)
  - The State Verification and Exchange System (SVES)
  - Financial Institution Resource Match (FIRM)
  - NYC Bank Match
  - State Directory of New Hires (SDNH)
  - Verified Employment Data (VED)

  Statewide applicants and selected recipients from NYC are matched daily against WRS, UIB, SVES and SDNH. Recipients are matched monthly against WRS, UIB and SDNH. Updates to the recipient population are sent monthly for BENDEX and FIRM. Results of matches from BENDEX for recipients are posted daily. Results of matches from FIRM and VED are received weekly. Results of matches from the NYC Bank Match are received monthly.

- **Types of Transactions:**
  - Approval
  - Pending
  - Denial
- **Users:**
  - Case Workers for Medicaid, Food Stamps and other Social Services programs

- **Programs Supported:**
  - Medicaid
  - SNAP or Food Stamps
  - TANF
  - Child Care
  - Domestic Violence
- **Technology**:
  - UNISYS Mainframe
  - COBOL
  - UNISYS DMS (backend)
- **Integration Capabilities:** WMS integrates with a range of external systems using batch file exchange mechanism as mentioned in the RFI subsystems section.

| Hcheq | Hudson Center for Health Equity and Quality |

The Hudson Center for Health Equity and Quality (Hcheq) is an independent and non-profit organization whose goal is to improve accessibility and quality of health care through administrative, technological, and clinical streamlining. Hcheq manages several systems that range from those allowing consumers themselves to apply on-line for multiple programs (unassisted) to those systems used by health plans and other community agencies to assist and enroll the families in several programs. We worked with the Hcheq team and had several telephonic, web and in-person meetings to analyze their systems and other offerings. The result of our analysis is presented below.

EnrollNY

EnrollNY is a web based application that allows the residents of New York to apply on-line for Medicaid (via the FEEA interface to EDITS), Family Health Plus and Child Health Plus programs. EnrollNY is a consumer facing application that allows the consumers to either get pre-screened for these programs or complete their application and apply for these programs. This system was developed and is managed by Hcheq.

- **Process:** Consumers can access EnrollNY (http://enrollny.org/) and complete a pre-screening for public programs by answering a few questions or complete an application for these public programs by answering additional questions. Once the application process and screening for programs is completed, EnrollNY allows the consumer to pick a Facilitated Enrollment Entity (FEE) where the consumer must go to complete a face-to-face interview and provide supporting documentation for verification purposes. The application information is electronically delivered to the FEE selected by the consumer. If the FEE is a user of the Facilitated Electronic Enrollment Application (FEEA) system, which is also a system developed and managed by Hcheq, then the FEE can use FEEA to process the consumer's application once the consumer presents for their interview. If not the FEE does not use FEEA, then the FEE can access an on-line inbox provided by

EnrollNY to download the application to paper, which must then be manually re-entered into the FEE's own system to complete the application process when the consumer presents for an interview. This same process supports the situation where the consumer starts an application and is not able to complete it on-line. In this case, the consumer selects a FEE and that agency starts with the consumer's partially completed application.

- **Types of Transactions:**
  - Pre-Screening
  - Initial Application
- **Users:**
  - Consumers

- **Programs Supported:**
  - Medicaid
  - Family Health Plus
  - Child Health Plus
- **Technology**:
  - Microsoft .NET (front-end and middle-tier)
  - SQL Server (back-end)
  - Three-Tiered Architecture
- **Integration Capabilities:** The technical architecture of EnrollNY supports integration with other systems using web services and other open standards. EnrollNY is currently integrated with the Facilitated Electronic Enrollment Application (FEEA) system.

Facilitated Electronic Enrollment Application (FEEA)

FEEA is a system that allows the health plans and other Facilitated Enrollment Entities (FEEs) to process applications that are received through EnrollNY, mail-in or outreach processes to enroll applicants into public programs such as Medicaid, Family Health Plus and Child Health Plus. This system was developed and is managed by Hcheq.

- **Process:** The applications for FEEA can either be electronically transferred from EnrollNY or be entered into the system by the users of FEEA through paper applications that may have been received through the mail or from the information gathered from interviews with consumers. The system provides extensive data validations for the information entered to ensure complete and quality data is collected. Once the application data is entered, the system processes it through a rules engine to determine eligibility for the programs supported in FEEA. FEEA also has a document management system that allows users to fax the supporting documents into the system and stores digital copies of the documents. The system allows users to verify the documents on-line, split them into individual documents and categorize the specific document types (e.g., citizenship and income verification). This helps the users to decide whether all required documents have been received for processing the eligibility for a person or not. The user is then able to process the applications for submittal as appropriate. In New York City, the eligibility and enrollment information is delivered electronically to the EDITS and KIDS systems. In the rest of the state (upstate New York) pre-filled paper applications are printed out of FEEA.
- **Types of Transactions:**

- o Initial Application
- o Eligibility
- o Enrollment
- o Disenrollment
- **Users:**
  - o Health Plan Users
  - o Facilitated Enrollment Entities
- **Programs Supported:**
  - o Medicaid
  - o Family Health Plus
  - o Child Health Plus
- **Technology**:
  - o Microsoft .NET (front-end and middle-tier)
  - o SQL Server (back-end)
  - o Three-Tiered Architecture
- **Integration Capabilities:** FEEA has the architecture and infrastructure required by the system to seamlessly integrate with other systems using open standards. Currently FEEA delivers information about the supported programs to the following systems:
  - o **EDITS:** Eligibility and enrollment information for Medicaid and Family Health Plus in New York City are delivered to the EDITS system through a batch process. The information then goes to WMS through EDITS.
  - o **KIDS:** Eligibility and enrollment information for the Child Health Plus program is uploaded to the portal provided by KIDS.
- **Other Features:** FEEA has the following useful assets in the system that could be important for the State's solution for ACA:
  - o **Centralized Data Validation:** FEEA has a centralized data validation feature that informs the users about missing required information before determining eligibility. This feature lists all the missing information in one single screen and allows the users to select specific missing data elements to enter. Once selected, the system takes the users back to the screen where the specific data element is located.
  - o **Document Management:** FEEA has a sophisticated document management solution that allows the users to separate each supporting document that is received by the system and categorize them into different document types (e.g., Birth Certificate or Proof of Income). This is a feature that allows an easy digitization of the documents.
  - o **Common Consumer Index:** Hudson Center is working with a group of FQHCs in the state to develop a common consumer index that will be added to FEEA as a future enhancement. This common consumer index could be an important and useful asset for the exchange solution in order to provide a single view of consumer information.

| NYS Health - CHP | New York State Department of Health – Child Health Plus |

The New York State Health Department's Child Health Plus (CHP) agency manages the Knowledge Information Data System (KIDS). KIDS serves as the database of record for the CHP program and allows FEE's (i.e., health plans and other community based organizations) to send the CHP eligibility information to a centralized database. This information is processed and the sender is provided information on whether it was accepted or rejected. We conducted several telephonic and web meetings with the New York Department of Health to understand the KIDS system. The result of our analysis is summarized below.

Knowledge Information Data System (KIDS)

Knowledge Information Data System (KIDS) is a system that serves as the system of record for the Child Health Plus program in New York. Child Health Plus is the state Child Health Insurance Program and as such will be a program that must be included in the Exchange work ahead. KIDS was developed and is managed by the State Department of Health. The CHP program in New York covers children who are under 19 years of age (both citizens and non-citizens) and are within 400% of the Federal Poverty Level. This program has served more than 400,000 children in the state of New York. Summarized below are the details of KIDS.

- **Process:** The KIDS system is a centralized data repository. The application gathering and eligibility determination is done by the FEE's (e.g., Health Plans). The participating health plans are provided software supported by KIDS that allows them to upload 59 data elements for each child they believe is eligible for CHP in a fixed file format. Applicants are required to mail- or walk-in their supporting (verifications such as birth records, proof of income, etc.) documents to the health plans. The health plans verify the supporting documents before they enroll an applicant. KIDS provides a portal that allows the health plans to upload the files manually for further processing. The uploaded files are received through a secured network at KIDS. These files are loaded, validated and cleared against WMS. The health plan receives a reconciled file back from KIDS which indicates records that are accepted and those records that are rejected. The rejected records include a reason code. The accepted records are placed on the appropriate health plan roster for the enrollment period. KIDS serves as the system of record for CHP.
- **Types of Transactions:**
    - New Application
    - Re-Certification
    - New Enrollment
    - Disenrollment
- **Users:**
    - Health Plan Workers
- **Programs Supported:**
    - Child Health Plus
- **Technology**:
    - Microsoft .NET (front-end portal for uploading of the flat file)

- o ORACLE (back-end)
- **Integration Capabilities:** KIDS allows external systems to upload information using a portal that KIDS provides.

New York City

New York City Systems

New York City has several systems that allow the consumers to apply for a range of programs and also act as communication hubs between the New York City version of WMS and other systems. The City systems are managed by two agencies, The Health and Human Services Agency (known as HHS Connect) and the Human Resources Administration (HRA). We worked with both of these agencies and had several telephonic, web and in-person meetings on the analysis of their systems. Our findings are summarized below.

Access NYC

Access NYC is an online application that allows the residents of New York City to apply for a broad range of health, nutrition, cash and other New York City Human Services programs. Access NYC is managed by the Health and Human Services of the City of New York.

- **Application Process:** Access NYC provides an on-line application for the consumers to apply for the programs supported in the system. The consumers can choose to be pre-screened by providing a minimal set of information or complete the application process. Access NYC has extensive set of data validations to make sure that the information gathered complete and accurate. After the required data elements are collected Access NYC determines preliminary eligibility by using a Rules Engine that is part of the CURAM licensed product. Once the preliminary eligibility is determined by Access NYC, the consumer can submit applications electronically for SNAP (or Food Stamps) and Medicaid Renewal. Initial Medicaid applications cannot be processed through Access NYC. For other programs supported by Access NYC, the system generates a pre-filled, or blank applications if the consumer has not completed the information on-line, which is then sent to the appropriate agency. Access NYC uses EDITS Renew and the Paperless Office System (POS) to deliver the Medicaid Renewal and SNAP applications electronically to the New York City version of WMS. These systems are described later in this document.

  Access NYC also has a worker portal that allows the workers to log in and view their workload based on the applications that are delivered to their offices. This is a read only portal and hence doesn't allow the workers to take any action on a case or receive any information back from the New York City version of WMS.

- **Types of Transactions:**
  - o Pre-Screening
  - o New Application
  - o Renewal
- **Users:**

- o Consumers
- o City Eligibility Workers
- **Programs Supported:**
  - o Food Stamps
  - o Medicaid
  - o Family Health Plus
  - o Child Health Plus
  - o Healthy NY
  - o Head Start
  - o Out of School
  - o Universal Prekindergarten
  - o In-School Youth Employment Program
  - o New York State Unemployment Insurance
  - o NYCHA Resident Employment Services
  - o Senior Employment Services
  - o Summer Youth Employment Program
  - o Workforce1
  - o WIC
  - o Commodity Supplemental Food Program
  - o Summer Meals
  - o HEAP
  - o Temporary Assistance
  - o School Meals
  - o Child and Dependent Care Tax Credits
  - o EITC
  - o Child Care
  - o Disability Rent Increase Exemption
  - o Disabled Homeowners' Exemption
  - o School Tax Relief
  - o Section 8 Housing Assistance
  - o Senior Citizen Homeowners' Exemption
  - o Senior Citizen Rent Increase Exemption
  - o Veterans' Exemption
- **Technology**:
  - o CURAM (front-end) Licensed, Proprietary Software
  - o JAVA
  - o IBM MQ Series
  - o I –Way ESB
  - o ORACLE (back-end)
- **Integration Capabilities:** Access NYC is integrated with the EDITS Renew and POS systems and through these systems is integrated with the New York version of WMS for the Medicaid renewals and SNAP programs. Access NYC also operates under a sophisticated middleware with an Enterprise Service Bus (ESB) and has a robust technical architecture to support seamless integration with a broad range of systems using web services, SOAP and other open standards.

New York City EDITS and EDITS Renew

EDITS and EDITS Renew are systems that work as a middleware and communication hubs between the providers and New York City's WMS. EDITS and EDITS Renew were developed and managed by the Human Resources Administration (HRA) of New York City. While EDITS supports the new applications for Medicaid, EDITS Renew supports Medicaid renewals. EDITS have been in production since 2005. Summarized below are the details of EDITS.

- **Process:** The applications for EDITS and EDITS Renew are completed by the following agencies and systems in the city:
  - o Providers in the community who are authorized to take applications on behalf of the consumers
  - o Consumers (through Access NYC)
  - o Other health plan systems such as Facilitated Electronic Enrollment Application (FEEA)

  The Medicaid and Medicaid renewal applications are completed by the agencies and systems mentioned above and application data and images are then placed on a secured FTP site for EDITS and EDITS Renew. Once the files are placed on the FTP site, they are downloaded into the EDITS system, the initial application registration is completed and the cases are then available for the New York City eligibility workers to work on. The workers review the data and complete the eligibility determination process in EDITS. The information is then delivered to the New York City version of WMS through a batch process. EDITS receives the information back from WMS through the reverse of the same batch process.

- **Types of Transactions:**
  - o New Application
  - o Re-Certification
  - o New Enrollment
  - o Disenrollment
- **Users:**
  - o New York City Eligibility Workers
- **Programs Supported:**
  - o Medicaid
- **Technology**:
  - o Microsoft .NET (front-end)
  - o ORACLE (back-end)
  - o Web Services
  - o Three-Tiered Architecture
- **Integration Capabilities:** EDITS and EDITS Renew are integrated with the New York City version of WMS and act as a communication hub between the New York City version of WMS and external systems for Medicaid.
- **Other Features:** Summarized below are some of the other features that are supported by EDITS and EDITS Renew:
  - o **Data Validations:** EDITS and EDITS Renew have extensive data validations to make sure that the applications received have quality and complete information.

- **Rules Table:** EDITS and EDITS Renew have a decision table based rules feature that runs certain basic rules for checking the compliance of the applications.
- **Automated Image Transfer:** The images received by EDITS and EDITS Renew are automatically transferred to the HRA image repository and are stored in FileNet.

New York City Paperless Office System (POS)

The New York City POS is an electronic case record and was initially designed for and currently used in all the Cash Assistance Job Centers in the City of New York to help applicants apply for the SNAP (or Food Stamps) program. Workers using POS are electronically guided through the interview process with prompts designed to improve the integrity of the case file and the accuracy of the benefits issued. POS provides on-line workflow monitoring tools to facilitate the timeliness of case actions and provides management tools that enhance the oversight of the work process. POS also facilitates the audit process as case actions can be tracked in the system and documentation found in designated on-line folders for each case. POS is managed by the Human Resources Administration (HRA) of New York City.

In addition to being used as a facilitated assistance system for SNAP in the City of New York, POS also serves as a communication hub for other systems to connect to New York City's version of WMS for SNAP applications. The external systems can send the SNAP application data through a secured batch process to POS. POS then sends that information to the New York City version of WMS.

- **Process:** POS supports both mail-in application as well as telephonic application processes. While the mail-in process is for both new and recertification applications, the telephonic application process if only for SNAP recertification (or renewals). POS supports an Interactive Voice Response system (IVR) for the telephonic applications. The applications received through the IVR are auto populated into the POS system. The mail-in applications are entered into POS by the workers. POS mandates that the workers who use POS should also have a valid and active user account in WMS because POS connects to WMS in real time for authenticating the worker credentials. POS also connects to WMS in real time for file clearance. Once the application is entered into the system POS goes through a decision table based rule set to determine eligibility for SNAP and also does the SNAP budget calculation. The eligibility and budget information are transmitted to the New York City version of WMS through a secured nightly batch process.

- **Types of Transactions:**
    - Initial Application
    - Recertification
- **Users:**
    - Case Workers Food Stamps
- **Programs Supported:**
    - SNAP
- **Technology**:

- o CITRIX
- o Windows
- o ORACLE (back-end)

Integration Capabilities: POS has both real time, as well as batch connectivity to the New York City version of WMS. It is also integrated with the Access NY system. POS allows other external systems to electronically transfer Food Stamps applications to WMS.

Insurance	Various Insurance Systems

The state of New York has several organizations that deal with the private insurance for individuals, business owners, self-proprietors and employees. These organizations have several functional and technical assets that range from managing creative systems to working with carriers, health plans and other third party administrators, as well as dealing with the premium and billing side of the private insurance market. We have worked with three of these organizations and have had several telephonic, web and in-person meetings to analyze the systems and other assets they have. The goal of this process was to see if we could find existing assets that could support the SHOP Exchange or commercial insurance functionality that will be required in the Exchange. The result of our analysis is described below for each of these organizations.

Liazon Bright Choices

Liazon Bright Choices is a system that deals with private insurance for employers, employees and self-proprietors. The Bright Choices system was developed and is managed by the Liazon group. It is licensed and proprietary software. Bright Choices provides innovative ways for employers to allow their employees to customize their insurance needs for themselves and to manage their insurance selections through an individual insurance portfolio. Bright Choices provides a range of insurance coverage options including health, life and many other insurance options.

- **Process:** In a regular scenario where the employers choose specific insurance plans for all their employees, some employees end up becoming "over insured" (because their health and other situations would not require them to have the level of coverage that the specific plan offers) or "under insured" (because their health and other situations would require more than what the specific plan offers). Bright Choices provides an online "shopping mall" type of experience to the employees of organizations who sign up for the Liazon Bright Choices system. The system allows the employees to pick and choose from various options that are available to them from multiple carriers based on their need. It also provides an online advance decision support system where the employees can answer a set of questions on their current situation and have the system present them coverage option choices that are suitable for their specific situations. The system also flags the options that are most suitable and highly recommended for the employees and provides an informative graphical illustration of the reasons why those options are most suitable or highly recommended by the system. The employees can

then have access to an online insurance portfolio and can manage their portfolio at any time. Bright Choices also allows the employers to view the insurance options that have been selected by their employees. In addition, Bright Choices provides the following innovative features:

- o **Carrier Rating Engine:** The rating engine has the ability to take information from the carriers and health plans and determine the appropriate ratings for them based on the selection criteria set by the system.
- o **Education Subsystem:** The education subsystem is an online video library that not only provides an extensive e-learning feature but also has the intelligence where the video libraries can be personalized to a specific user or a specific organization.
- o **Health Risk Assessment Tool:** The health risk assessment tool allows the employees to enter their health information and get an online risk assessment done before making a choice on the insurance coverage.

- **Users:**
    - o Employers
    - o Employees
    - o Self Proprietors
- **Technology**:
    - o Microsoft .NET (front-end)
    - o SQL Server (back-end)
    - o Web Services
    - o Three-Tiered Architecture

HealthPass NY

HealthPass NY is licensed, proprietary software that allows business owners and self proprietors to search for private insurance options for their employees. HealthPass NY also works with brokers and carriers on providing various options to the employers and handle the premiums and claims. HealthPass NY was established in 1999 and offers a range of insurance coverage options including health, life and disability insurance. HealthPass NY is active in 14 New York counties including the downstate area (New York City) and works with most of the major carriers and plans in New York.

- **Process:** HealthPass NY works with the employers to select appropriate insurance packages and coverage plans for their employees from multiple carriers and plan designs. The employers can also choose bundled packages for health, life and disability insurances as well as options for the individual employees and their families. HealthPass NY then provides an employee choice model where the employees can choose the type of insurance coverage, doctors, networks, pharmacy co-pay deductibles and more based on their situations and needs. HealthPass NY offers individual in-person discussions with the employees to support their decision-making. Using the HealthPass NY portal the employees can manage their insurance coverage options. Employers can manage their employee roster for insurance coverage by adding and removing employees.
- **Working with Brokers and Carriers:** HealthPass NY works with a range of brokers and carriers on the insurance side. The brokers can use the HealthPass NY portal to see rate information, the products and services offered and can also register to submit an online

proposal. HealthPass NY has extensive experience of working with most of the major carriers in both upstate and downstate counties.

- **Handling Premiums and Billings:** HealthPass NY offers the following models to handle the premiums and billings.
    - **Small Business Owners:** For small business owners HealthPass NY offers a choice where the employers can submit the premiums at the end of the month through a single aggregated bill. HealthPass NY then breaks the bill down by carrier and then sends separate bills to the individual carriers.
    - **Large Business Owners:** Large business owners directly work with the carriers on the premium.
    - **Individuals:** HealthPass NY also has the ability to work with individuals on premium and billing, especially for COBRA.
- **Working with TPAs:** HealthPass NY works with a number of Third Party Administrators (TPA) and offers real time integration with many TPA systems.
- **Future Enhancements:** The following future enhancements are planned at HealthPass NY:
    - **Pre-Screening Tool:** HealthPass NY is in the process of developing a pre-screening tool that will allow the users to enter minimal set of information and see the options that might be available for them.
    - **Advanced Search Feature:** HealthPass NY is in the process of developing a "Kayak" style search and filter feature for the users.
    - **Plan Comparison Tool:** A plan comparison tool is in development to allow the users to compare different plans available to them based on set criteria.
    - **Direct Online Payments:** HealthPass NY is working on a direct online payment module that will allow the users to pay online.
    - **Integration with Healthy New York:** HealthPass NY is working on the integration of Healthy New York product.
- **Users:**
    - Employers
    - Employees
    - Self Proprietors
    - Brokers
- **Technology**:
    - Microsoft .NET (front-end)
    - SQL Server (back-end)
    - Web Services
    - Three Tiered Architecture
- **No Integration capacity**

HealthCore NY Web Site

HealthCore NY is a web site, or portal, is an initiative of Healthy New York, a program of the New York State Insurance Department that provides more affordable health insurance coverage to working individuals, sole proprietors, and small businesses throughout New York State. HealthCore NY provides a promotional and educational portal for the residents of New York on the Healthy NY program. HealthCore NY web site was implemented in May 2009 and is currently

operational in 9 New York Counties.   This is not a web application. It is a web site, or portal, used for education and promotional purposes.

- **Process:** HealthCore NY's web site portal provides a creative approach to consumer awareness with the goal of trying to decrease the uninsured population in New York. The consumers can access the portal to get the following information:
    - Information about the Healthy NY program
    - Eligibility criteria for the program
    - Application process for the program
    - Plan and rate information
    - Physician and network information
    - Frequently asked questions
    - Other educational materials

    The portal has an easy navigational feature where it guides the consumers to the right places based on their needs. It also has an 8th grade reading level to make it easier for the consumers to understand the information presented to them. While the portal provides a lot of features for consumer awareness and education, HealthCore also uses other creative approaches such as mass media, radio and television promotions to promote the awareness of the Healthy NY program.

- **Other areas of expertise:** The HealthCore team has extensive experience and expertise in working as brokers and deal with consumers directly in helping them find the right insurance plans, understanding how to shop network, how to pick a provider and more. The team also has extensive experience of working as Third Party Administrators and has a sophisticated and sustainable distribution channel. The team has the ability, knowledge and expertise in working with state and federal agencies and the carriers in order to reduce the rates for the consumers through innovative and creative collaborations.
- **No Integration capacity**

New York State ACA IT Gap Analysis Stakeholder Report

May 2011

Prepared by

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Executive Summary

The NYSHealth Foundation (NYS Health) and its partners at the State of New York understand the critically important role of Information Technology (IT) readiness in establishing a streamlined and integrated "no wrong door" process for accessing both public and private health benefits under the Affordable Care Act (ACA).

The NYSHealth Foundation, in partnership with State stakeholders, initiated a project to help the State understand the breadth of federal guidance, to assess New York's IT system readiness and to hone the New York vision for implementing health care reform in the most prudent and efficient way. Two national organizations, Social Interest Solutions (SIS) and The Lewin Group (Lewin), were selected by NYSHealth to create the Eligibility and Enrollment Systems Inventory and Plan for New York State. The project began in early 2011 and will conclude in April 2011.

One major portion of the project is conducting stakeholder interviews. Lewin and SIS have conducted multiple stakeholder interviews to garner feedback from 25 organizations and agencies, including State and Federal agencies, the Governor's Office, New York City agencies, county representatives, The Mayor's Office, health plans, consumer organizations and policy experts.

Stakeholders interviewed vary significantly in their familiarity with ACA and their proposed strategies and ideas for implementing an Exchange. Most stakeholders interviewed considered themselves as future "users" of the Exchange, whether in providing assistance directly to individual consumers, accessing the Exchange as a small business, or exchanging data with the Exchange. Stakeholders brought numerous perspectives to these interviews, based on their current roles and responsibilities within the health insurance and social services marketplace. With a few exceptions, interviewees were not IT experts; IT systems interviews are taking place as a separate activity for the project.

In spite of variances, there were areas of important agreement among the stakeholders. Overall, stakeholders agree that the Exchange should establish a simple and accessible online channel for consumers to access public and private health insurance. Beyond the online system, stakeholders recommend that consumers have access to "navigators," both by telephone and in-person. For both the online component and the navigation assistance, stakeholders stress that there are existing systems and programs (e.g., eMedNY, Health Insurance Links NYC, Facilitated Enrollers) that should be leveraged as the State designs and implements the Exchange.

Stakeholders appreciate being engaged in the planning process for the Exchange and look forward to continued work with the State. The following stakeholder messages, examined in more detail in the report, may be used a starting point for the State's work with stakeholders.

Key Stakeholder Messages

Stakeholders offered the following insights, comments and vision:

- The Exchange needs to be user-friendly and appealing to consumers at all income, demographic and computer-literacy levels. Stakeholders are concerned that a complicated system or a front end that resembles a welfare application will discourage consumer use of the Exchange.
- A successful Exchange will be able to interface with existing and forthcoming State, local, and Federal systems to share information effectively and securely.
- Consistency of data, such as out-of-date income information in some, but not all, databases or inconsistent listings for the same person (e.g., John Smith and John W. Smith), was cited as significant concern. Stakeholders acknowledge existing systems and databases are fraught with unclean data and finding a data "match" is challenging. They worry about this in particular when thinking about one state system.
- Stakeholders agree that public and private health care insurance options need to be offered through the Exchange (vertical integration); they disagreed as to the extent of inclusion of social services and other public assistance programs (horizontal integration). They were not all aware of inclusion of these programs in the ACA and current Federal guidance.
- Stakeholders are concerned that consumers may be uncomfortable with the personal information accessible through the Exchange and associated security and privacy concerns. An effective marketing and education campaign is recommended to alleviate these concerns.
- The "human touch" will be critical to the success of the Exchange and should include both navigational and decision-making guidance (e.g. face to face assistance, online or telephonic assistance). Several existing navigator and consumer assistance programs are in place throughout New York that should be leveraged for the Exchange.
- To assure usability of the Exchange, beta testing among users, including consumers, navigators, small businesses, and health plans is critical.
- Stakeholders believe their ongoing engagement is important to standing up a successful Exchange. Stakeholders felt a "train had left the station" with regard to the State's Early Innovator proposal and want to be engaged moving forward.
- There is value in viewing Exchange enrollment system prototypes to better understand what 2013-14 "looks like" and to stimulate thinking and ideas.

In addition to the messages outlined above, there was skepticism, common among stakeholders, that the State can successfully design and implement an Exchange that meets evolving federal requirements and participant expectations, particularly within the required timeframe. Stakeholders cite specific concern with design and usability for consumers and other users, flexibility to truly integrate and make systems changes, and how real-time transactions, such as eligibility determinations, are handled. Despite this, all stakeholders look forward to working with the State towards the development of an effective system in a quick timeframe and see this as an incredible opportunity to improve systems.

Recommendations and Considerations for New York State

As described above and throughout the report, stakeholders very much appreciated the opportunity to learn more about the Exchange and to provide feedback on its development and implementation. As such, New York State should continue and as appropriate, consider expanding, its stakeholder engagement activities. The stakeholder interviews conducted for this project were focused around the expertise and issues areas of the groups themselves (e.g.,

consumers, health plans), which was valuable in helping to identify the specific issues, concerns and hopes of each group. On an ongoing basis, we recommend continuing to convene groups of similar stakeholders interested in a common topic, such as eligibility and enrollment or premium payments. We believe this approach will enable stakeholders to understand the various perspectives being brought to the table and the potential trade-offs and implications of different approaches. Convening groups by topic should facilitate State development of a balanced approach that meets as many needs and desires as possible.

During the course of our interviews, it also became clear that several stakeholders felt they could provide more constructive and focused comments if they were responding to a prototype (or "road map" as one stakeholder put it) of the State's Exchange. At this stage in the conversation, a prototype could reflect the general structure the State envisions, including how the Exchange will interact with other systems, such as those operated by plans and health insurers for enrollment and premium payment purposes. In later stages, the prototype could allow for beta testing of specific components (such as identity validation) to ensure usability and ease of use. Engaging a small group of stakeholders in the Foundation-supported work to develop a common, easily- accessible entry portal (the User Experience Project) might also be considered.

Additionally, New York State will benefit from continuing to review all opportunities for developing a simple, easy to use Exchange. Positive experiences with the Exchange among users, particularly early on, will lead to increased participation in the Exchange. In addition to being easy to use, New York State should be sure to provide educational and navigational assistance available to users, both via telephone and in person.

Introduction and Overview

The NYSHealth Foundation (NYSHealth) and its partners at the State of New York understand the critically important role of Information Technology (IT) readiness in establishing a streamlined and integrated "no wrong door" process for accessing both public and private health benefits under the Affordable Care Act (ACA).

Federal health care reform is indeed a game changer both in terms of the culture of enrollment in public, subsidized, and private health insurance and in terms of the infrastructure needed to support the enrollment process. The ACA sets forth a vision that includes:

- IT systems designed to support a first-class customer experience
- Seamless coordination between Medicaid and CHIP programs and private coverage via State Exchanges
- Seamless coordination between the Exchanges and plans, employers, and navigators
- One door for consumers to access all options

To guide states in implementing this vision, the federal government has provided formal communication on IT systems development. Federal guidance on this front is both cumulative and ongoing, and to date includes the following documents:

- HHS Enrollment HIT Standards Section 1561 - Sept. 2010
- HHS and OCIIO Cooperative Agreement to Support Innovative Exchange Information Technology Systems grant (Early Innovator Grant) - Oct 29, 2010
- CMS and OCIIO Guidance for Exchange and Medicaid Information Technology Systems, Ver 1.0 - Nov. 3, 2010
- Notice of Proposed Rule Making - Nov. 3, 2010
- HHS State Health Planning Grants – January 20, 2011

While ACA provides states with significant latitude in how reform is ultimately implemented, the guidance above starts to set forth expectations around consumer-mediated enrollment processes, systems architecture and security, sharing of IT assets among states, and more. Consumer mediated is defined in Appendix A of Section 1561 HIT enrollment standards as "adopting approaches where the consumer has the authority to make choices and direct use and reuse (i.e., for themselves, by programs or by other authorized third parties) of their enrollment information to the extent practicable."

The NYSHealth Foundation, in partnership with State stakeholders, initiated a project to help the State understand the breadth of federal guidance, to assess New York's IT system readiness and to hone the New York vision for implementing health care reform in the most prudent and efficient way.

Two national organizations, Social Interest Solutions (SIS) and The Lewin Group, were selected by NYSHealth to create the Eligibility and Enrollment Systems Inventory and Plan for New York State. The organizations are working to:

- Provide a detailed understanding of federal reform requirements to identify areas needing further federal clarification

- Catalog the universe of existing New York State systems for public and private programs (includes systems throughout the state)
- Review relevant IT systems to determine functionality and potential for use in the Exchange (mapping systems against current federal IT systems guidance)
- Create a technology gap analysis to inform future decisions
- Gather feedback from key informants on systems, policies, opportunities and concerns

The project began in early 2011 and will conclude in April 2011. Social Interest Solutions is in the process of conducting an eligibility and enrollment systems inventory and examining the State's existing IT assets and deficiencies.

By working with various stakeholders and constituents and mapping the State's existing IT assets to the functional requirements mandated by ACA, this project will identify the strengths, weaknesses, and disconnects with the systems currently in use or under development in New York State. Ultimately, it will help New York to develop the best and most realistic design for adapting and extending existing systems to meet Federal IT eligibility and enrollment mandates.

Lewin and SIS held a visioning session with a core group of state leaders and conducted multiple stakeholder interviews to garner feedback from State agencies, the Governor's Office, New York City agencies, The Mayor's Office, health plans, consumer organizations, and others. This report summarizes the findings from the visioning session and the stakeholder interviews.

New York State Visioning Session

The visioning session was conducted as part of *Activity #4: Meet with State Leaders to Confirm Vision with a New York Twist* in the NYSHealth project workplan. The process included using outputs of Activities #2 (reviewing and clarifying ACA systems requirements) and Activity #3 (identifying functional requirements mandated by Federal reform).

Social Interest Solutions and the Lewin Group held the visioning session in Albany on January 21, 2011. Participants included:

Melissa Seeley	New York State Health Foundation
Donna Frescatore	Governor's Office
Judy Arnold	NYS Department of Health
Beth Osthimer	NYS Department of Health
Trish DuBois	NYS Department of Health
Thomas Donovan	NYS Department of Health
Ann Volpel	NYS Department of Health
Troy Oechsner	NYS Department of Insurance
Eileen Hayes	NYS Department of Insurance
Patricia Swolak	NYS Department of Insurance

Stakeholders were led through an overview of the federal IT requirements contained in documents including Section 1561 HIT Enrollment Standards, the CMS Notice of Proposed Rule Making and other published guidance. With a common understand of these federal

requirements, participants were asked to share their vision for how New York will meet the requirements, including a discussion of potentially leveraging existing IT systems and processes.

Consistent with what is proscribed in ACA, stakeholders articulated an overall vision that calls for a consumer friendly, integrated, one-stop approach to enrollment in private and public coverage. Comments included:

• The New York Health Benefit Exchange (NY-HX) should work for consumers, individuals and employers.
• NY-HX should facilitate enrollment for commercial, public coverage and hybrid programs.
• The system should provide maximum automation and Integration.
• It should provide easy access, simple questions, easily understood choices and comparisons regarding price, benefits and the availability of providers.
• Employers need easy access to information and support in making purchasing decisions.
• NY-HX needs to certify plans and provide consumers information on quality and rates.

Open issues included decisions around whether the Small Business Health Options Program (SHOP) component will be separate or integrated into the consumer exchange. Another open question was whether the state will be a purchaser on behalf of NY residents accessing coverage via the NY-HX, or a market aggregator (compiling individual policies sold by private insurers.) Finally, at the time of the visioning session, there were still open questions on necessary legislation and where the NY-HX will be located and under what auspices it will be operated and governed.

The group discussed and shared its vision for the technical elements of the NY-HX. This conversation echoed the vision above, with the group calling for integration, automation and strong consumer support. Highlights included:

• Inclusion of a sophisticated rules engine to support enrollment, recertification, and other application updates.
• The system should have the potential to link to other social services programs, but the priority is vertical integration (health programs).
• There was an acknowledgement of the need for "real-time" enrollment and some skepticism about how that will be practically achieved.
• The group agreed on the need to "track" consumers moving from one situation to another (likened this vision to the Fed Ex approach to tracking and communication).
• There was discussion around Service Oriented Architecture and an Enterprise Service Bus with analogies to Amazon (in terms of back-end functionality that appears as a single, streamlined process for consumers).

An important outcome of this discussion was general consensus that, even if New York was not awarded a Federal Innovation Grant, State stakeholders supported the approach taken in the Innovation Grant to leverage the technical architecture of eMedNY. There was further agreement that there is value in the Call Center and the work begun with the HEART system to provide a rules engine.

The Visioning Session concluded with a discussion of existing state assets, including those mentioned above. Some of these were already on the radar for assessment, and some were

newly identified in the session. The Project Team used the outcomes of this discussion to update both the stakeholder interview list and the list of systems for assessment as part of the project. The stakeholder interview approach and outcomes are described below.

Stakeholder Interview Approach

The stakeholder interviews were conducted as part of *Activity 6: Key Informant Interviews (15 sets of interviews; 30-40 people/representatives),* in the NYSHealth project workplan. The process included using outputs of Activities 1 – 5, and in particular, built upon the work of *Activity 4: Meet with State Leaders to Confirm Vision with a New York Twist.*

With the NYSHealth Foundation and its New York State partners, Lewin and SIS identified a list of stakeholders to interview. Groups included consumer representatives, policy experts, State and New York City officials, CMS staff, Medicaid and commercial health plans, and small business representatives. To provide stakeholders an understanding of the project and the key state and federal issues, SIS and Lewin conducted three webinars, offering an overview of relevant components of ACA, the evolving New York State vision for health care reform, and clarification of the stakeholders' role in the interview process. Specifically, the webinars offered the following points on the New York State vision:

> *The Evolving New York State Vision*
> - NYS Early Innovator Proposal – The Opening Pitch
>   - Builds on the scalable MMIS architectural framework (currently being piloted with several initiatives) to serve as the Medicaid, CHIP, and Exchange component of the NY-HX
>   - Leverages HEART as the rules engine and possibly more…
>   - Agrees to comply with Federal guidance
> - Need to assess proposal against Federal guidance elements and how New York will meet them with this as starting point
> - Additional Potential Assets: Call Center, Service Center, My Benefits, Data Warehouse
> - Other assets to be analyzed as part of this effort?

Each Webinar included active discussion and questions and answers. Following the webinars, the project team conducted 11 interviews, representing 25 organizations and agencies and including almost 70 individuals. Interviews focused on the usability of the Exchange, required functionality and integration features, systems to leverage, and other recommendations for success. In each interview, individuals were asked to consider IT systems assets this initiative should assess and business and process change considerations. A complete list of interview participants is included in Appendix A.

Stakeholder Interview Findings

In speaking with the stakeholders, major messages focused on three areas of the Exchange: Development, functionality/integration, and usability. The findings below are organized in each of these three topics, outlining areas of agreement and dissent among stakeholders.

DEVELOPMENT OF THE EXCHANGE

The Exchange and related components are new concepts to the majority of stakeholders. Some stakeholders, particularly those that are less knowledgeable, were apprehensive to make recommendations on how the Exchange might function. Nevertheless, stakeholders were comfortable with offering recommendations and considerations, related to the usability of the Exchange.

A common recommendation among stakeholders is that existing systems be considered when developing the Exchange. Stakeholders recommend that the State engage the developers and users of existing systems, functions, and initiatives. Stakeholders note that there has been significant resource, time, and expertise invested in existing eligibility and enrollment systems. While stakeholders acknowledge that existing systems are not perfect, they recommend understanding both the strengths and weaknesses of each to inform future development. In addition to the architecture and functionality of a system, stakeholders note the importance of policy and technology alignment.

On both key points, stakeholders look forward to the opportunity to work with the State to develop a successful Exchange. More detail on stakeholder feedback related to Exchange development follows.

Continue to Engage Stakeholders

All stakeholder groups want to remain engaged with the State during the Exchange development and design phase. To date, stakeholders report not being involved in the planning process with the State, particularly New York City stakeholders. Suggested strategies for involvement include a health plan workgroup, consultation of those involved in existing systems, beta testing with consumers and other Exchange users (e.g., navigators, small businesses, health plans). They explain that ongoing stakeholder engagement will allow for prospective feedback prior to system implementation so that adjustments can be made quickly and accordingly in response to stakeholders' experiences.

Consider Several Governance and Structure Options

The two stakeholder groups that most directly voiced governance and structure preferences for the Exchange were the consumer representatives and small business stakeholders. Consumer stakeholders agreed that the Exchange should be a State-run agency, to ensure public accountability, with the expectation that the State would likely contract with multiple external vendors to develop and operate many system functions. Though several other stakeholder groups interviewed acknowledged that the State would run, or at least oversee, the Exchange, some expressed apprehension in the State's ability to do so. Stakeholders stressed that partnering with current system administrators in New York City and other localities will lend to

the success of the Exchange by allowing New York State to build off existing successes and ensure that systems will successfully integrate.

The small business stakeholders agreed that the Exchange should alleviate the existing administrative burden that small businesses face in administering health insurance for their employees. While small businesses want to be able to provide comprehensive coverage for their employees, they hope for an Exchange that demands only a very minor role for small businesses in administering and overseeing coverage selection through the Exchange. Furthermore, they envision a system which would incorporate built-in compliance reassurance so that they know when they send an employee down a particular service delivery pathway, that there is guaranteed compliance at the end of that pathway.

Another issue discussed at several sessions was the appropriateness of integration of the individual and Small Business Health Options Program (SHOP) exchanges. While there is not unanimous agreement on the issue, the general consensus is that it would be easier for consumers to assess their options in one system. Several stakeholders also suggest that there will essentially be no individual market left in New York, therefore the viability of the Exchange relies on the integration of the individual and SHOP exchanges.

Align Policy and Technology

Stakeholders introduced the idea of policy and technology alignment, which they feel is critical to the success of Exchange development and ongoing operation. Misalignment can happen in both directions. First, stakeholders note that "policy gets ahead of technology," citing experiences that systems cannot be changed quickly enough, if at all, to adjust to new policies. Stakeholders feel that a reasonable assessment of the current technology needs to occur before a policy is put in place demanding unrealistic technological innovation. Conversely, stakeholders expressed concern that the Exchange may be built on outdated policies, likening this to "building on a broken system." While stakeholders understand that existing eligibility policies for Medicaid and other public programs will change, they emphasized that the State consider future policies in designing the Exchange and support systems. Beyond considering future eligibility and enrollment policies, one stakeholder recommended that the State build the Exchange to accommodate a potential changing locus of responsibility between and among State, as well as local, agencies.

Leverage Current Systems

Underscoring the importance of the work underway, stakeholders feel strongly that a thorough assessment of past and current systems' strengths and weaknesses should be completed prior to development of the Exchange. Stakeholders expressed interest in understanding the findings of the systems analysis currently underway as part of this project. They hope that a meaningful assessment would help to identify useful tactics for interfacing systems, gaps in current system integration, and supporting capabilities. Stakeholders acknowledged the importance of building on existing efforts, noting that no current system is likely to serve as the sole foundation for Exchange development. Instead, they hope that the assessment identifies a strong platform for Exchange development.

FUNCTIONALITY/INTEGRATION OF THE EXCHANGE

All of the stakeholder groups communicated their ideal Exchange features and functions with greater ease than they were able to communicate potential strategies for Exchange development. The stakeholders identified effective system integration, real-time information verification, a one-stop shop, and "push" and "pull" capabilities as the most important features and functions for the Exchange. "Push" and "pull" capabilities may be defined as the ability for the Exchange to "pull" or accept information and process it (e.g., accessing financial information and determining appropriate eligibility) and the ability to "push" information to consumers (e.g., reminders for re-enrollment), described in more detail below. Privacy and security issues were also important to stakeholders in considering the trade-offs of certain functions and features of the Exchange.

Ensure seamless transitions for consumers

The stakeholders anticipate substantial consumer movement across the public and private health insurance market when the Exchange is launched. They want an Exchange that accounts for initial consumer enrollment, in addition to ongoing movement due to consumer changes in life circumstances, such as age or income. Furthermore, stakeholders explain that the Exchange should accommodate consumer transitions both between the systems participating in the Exchange and across systems in and out of the Exchange. Stakeholders worry that if the systems within and outside of the Exchange lack the adaptability necessary to integrate with other systems, whether local, state, or federal, they will not be able to support seamless transitions for consumers.

Stakeholders understand both the importance of and the difficulty behind achieving seamless consumer transitions within the Exchange. Particularly, they identify variance across program and system policies, eligibility rules and coverage duration periods, and current database capabilities as primary barriers to effective consumer transitions. They also identify particular consumer populations that may face more difficulties in achieving a seamless transition. For example, stakeholders from the New York City Human Resources Association and stakeholders from the Medicare Rights Organization were in agreement that the aged, blind, and disabled populations may present unique challenges related to seamless transitions. In another example, it was noted that when members transition to Medicare, due to either age or disability status, they are no longer served through the Exchange. The Exchange should be designed to alert consumers of this transition and, with consumer authorization, share relevant information with Medicare. While it was acknowledged that Medicare may not be prepared to support seamless transitions within the Exchange, one consumer stakeholder noted that the State consider a strategy (e.g., develop a parallel system that is able to interface with Medicare's current system) to maintain adequate coverage for Medicare consumers.

Beyond transition-supporting technological functions, several stakeholder groups identified a "warm handoff," defined as a live and direct transfer from one navigator to another, as perhaps the most important feature of effective consumer transitions. In fact, many of the ideas generated from discussions about seamless transitions focused on the consumer, rather than solely the supporting IT system capabilities. For example, when a consumer is transitioning from one plan option to another or across public programs, interviewees felt the Exchange should

both share data electronically to ease the transition, and also offer a skilled navigator to assist with the transition if needed.

Support flexible interface capabilities and allow for shareable assets across relevant stakeholders

Stakeholders feel strongly that systems within the Exchange should be able to "talk" to each other and suggest built-in system integration functions, such as the ability for one system to pre-populate information in another. Stakeholders appreciate the challenges behind a single system interfacing with other State, local, or federal systems, as well as with private sector systems. Stakeholders suggested that existing programs, such as those in place for Medicaid, streamline internal services and systems prior to integration with the Exchange. As noted above, one stakeholder suggested a strategy to promote continuous coverage for consumers transitioning from Medicaid, subsidized programs, or other health insurance coverage to Medicare, due to age or disability status, particularly in the early stages of the Exchange.

Stakeholders asserted that systems need to demonstrate flexible interfacing capabilities to support existing information assets. Interfacing with multiple systems allows for effective management of comprehensive consumer information profiles. For example, both Medicaid and commercial health plans want their systems to interface with the systems supporting the Exchange. They explain that if the Exchange is to make eligibility determinations it should communicate electronically with the plans. In addition to basic information transmission capabilities, health plans and other stakeholder groups want the integrated systems to have the capabilities to collect, combine, and support distribution channels for consumer data. Small businesses envision one portal to the Exchange for both employer and employee access to health insurance coverage options. Medicare consumer stakeholders also hope for some level of integration with the information systems supporting the Exchange, regardless of Medicare's level of involvement within the Exchange. Stakeholders also suggest that integrated systems maintain consumer databases to accommodate consumers that may participate in plans through the Exchange on a non-continuous basis.

Additionally, health plan stakeholders presented the idea of integrating provider offices into the Exchange. This would allow providers to access insurance information and, in the longer term, may assist providers in coordinating care for their members. Furthermore, providers often possess the most current contact information for their patients, which may assist the Exchange in identity verification.

Develop a real-time information verification and correction approach

With the large number of systems to be integrated across the Exchange in order to obtain individualized and comprehensive consumer information profiles, stakeholders stress the importance of accurate and current data, with the flexibility for consumers to enter updated information as necessary. The two critical components of information verification addressed by stakeholders are identity verification and income verification.

Stakeholders identified existing areas that they suspect will present heightened challenges for information verification, which will then impede "real time" determination of eligibility. For example, they anticipate substantial difficulty resolving identity discrepancies between Medicaid

systems and certain Federal systems. The stakeholders cite the Social Security Administration (SSA) as an agency that does not currently have a single database with which to match data, which often results in data being returned by SSA as invalid or inconsistent. The use of matching algorithms across health insurance and social service systems was identified by stakeholders as a potentially useful function to ensure information accuracy across the integrated systems supporting the Exchange. Similarly, stakeholders stressed the importance of a set of rules to serve as a "gold standard" for the information verification processes across differing integrated systems. For example, the Office of the Mayor envisions the creation of a common client index so that if an eligibility worker inputs the name "John Smith" into the system, they can be sure that they are verifying data for the correct person out of the thousands of "John Smith"s identified in the system.

> Early successes with accurate and current data and "real time" identity verification and eligibility determination will lead to positive "word of mouth" marketing and, ultimately, increased participation in the Exchange.

Related to identity and income data, stakeholders also express concern related to the consumer's ability to correct or enter updated information into the Exchange. Concerns focused on three key points. First, the Exchange will need to accept updated information (e.g., change in name, loss or decrease in income from previous IRS statement) and determine eligibility accordingly. Second, once corrected and updated information is verified, it will need to be shared across relevant systems and saved for future determinations. This challenge is related to the recommendation for a "gold standard" database as described above. The system will need to recognize conflicting data and determine which data point to use. Third, and specifically related to income verification, consumers may experience a sudden and complete loss of income, causing them to be eligible for Medicaid and other subsidized programs. Stakeholders explained the current difficulty in proving a lack of income for Medicaid and caution that this difficulty is likely to continue.

Ensure the security of consumer data

Stakeholders hope for built-in system safeguards to ensure that the correct person is entering and viewing their own personal data. One stakeholder suggests a system lock feature to prevent against identity theft or misuse of another person's personal information. Stakeholders recommend that the Exchange look to the banking industry for other strategies to enhance the security underlying information verification functions within the Exchange.

Stakeholders expressed that there are likely to be serious security concerns among consumers. To alleviate these concerns, stakeholders recommend a widespread education and marketing campaign to assure consumers that their information is secure.

The "one-stop shop" should address health insurance first and consider incorporating other services in the longer term

A popular topic across all stakeholder group discussions was the concept of a "one-stop shop" for consumer access to the vast array of insurance systems and associated products available within the Exchange. Stakeholders identified current systems, such as Health Insurance Links NYC, which has attempted construction of a "one-stop shop" for consumers within New York City, as a model for New York State to review in establishing the Exchange. Another stakeholder

recommended the Wisconsin Exchange prototype for New York State and users to review in determining how to structure the Exchange.

While stakeholders agree that the Exchange should provide a "one-stop shop" for health insurance products, there is both a lack of understanding of requirements on this front in ACA and some disagreement around other systems and products that should be accessible through the Exchange. For example, some stakeholders want health insurance enrollment and eligibility systems to integrate with social services enrollment and eligibility systems. Doing so, they say, would enhance access to items such as cash assistance, food support, and other public programs through the Exchange, known as "horizontal" integration. They recommend this to increase enrollment for Medicaid and other low-income consumers in public assistance programs and to decrease the stigma attached to public benefits. One interviewee described this as a way to "rebrand" Medicaid and other social services. They also identify the economies of scale benefits and efficiencies that may be generated through construction of a "one-stop shop" for social and health insurance services.

However, other stakeholders recommend that only health insurance products be included in the Exchange, known as "vertical" integration. These stakeholders fear that offering social services, which are primarily targeted at low-income consumers, via the Exchange may associate a stigma with general participation in the Exchange. Business stakeholders are especially concerned that social service system integration might deter both small businesses and private health plans from participating in the Exchange. Meanwhile, some Medicaid health plan stakeholders view the integration of Medicaid into the Exchange as a way to decrease Medicaid's stigma and associate it with other insurance offerings. They worry that including social service programs will continue the current Medicaid stigma.

> For consumers who access the Exchange, but are not eligible for subsidized insurance and cannot afford any of the plan options, several stakeholders encouraged the State to offer information on health care and opportunities to access free and sliding scale care. This currently is available on the Health Insurance Links website (www.nyc.gov/hilink) and stakeholders are in favor of a similar resource on the Exchange.

To operationalize screening for Medicaid and other subsidized insurance products, and social services, if included, one stakeholder offered that the Exchange could include a back-end screening mechanism so that consumers are only made aware of the health and social services for which they are being considered once they are deemed eligible. Another stakeholder envisioned a system of partial integration in which a consumer is identified to be at a certain income eligibility level for health insurance and is then merely flagged and offered a referral for any eligible social services.

Even among stakeholders who prefer horizontal integration, they appreciate that it will be a significant challenge to vertically integrate health insurance systems and that the Exchange might be initially overextending itself in attempting horizontal integration with social services systems upfront.

Finally, the "one-stop shop" should calculate premiums and allow the consumer to make real-time premium payments. While some consumers prefer real-time transactions facilitated by credit cards, others might prefer more of a Pay-Pal type system. The payment system needs to

accommodate all plan options, including subsidized and non-subsidized plans. Some health plans explained that they currently have the capacity to accept on-line premium payments. While premium payments were only discussed by one stakeholder group, this will be an integral component of the Exchange and likely is worthy of further consideration.

"Push" and "pull" system capabilities that support proactive enrollment and renewal

Stakeholders agree on the benefits of an Exchange system with built-in "push" and "pull" capabilities. "Push" and "pull" capabilities were defined as the ability for the Exchange to "pull" or accept information and process it (e.g., accessing financial information and determining appropriate eligibility) and the ability to "push" information to consumers (e.g., reminders for re-enrollment). While stakeholders anticipate that the system will "pull" data to determine eligibility and to enroll consumers in a plan, it should also "push" information to support plan re-enrollment or renewal. Potential "push" features identified by the stakeholders included automated distribution of simple and comprehensible renewal applications, online renewal reminders, and automated recertification. Stakeholders suggested aligning renewal reminders for family members. Stakeholders were uncertain on the degree of strength to be asserted behind the "push" and suggested the system be constructed in a way that allows for consumers to communicate their "push" preference based on their diverse needs and accessibilities.

USABILITY OF THE EXCHANGE

Though stakeholders acknowledge the importance of mapping out a plan for Exchange development and designing supporting functions and features, they maintained that the success of Exchange development and design rested on the Exchange's ability to ensure usability. Stakeholders defined "ensuring usability" as promoting the participation of consumers, employers, health plans, and providers and assisting businesses and consumers with meaningful-decision making. Stakeholders recommend an effective marketing strategy, education campaigns, and consumer contoured navigational assistance.

Utilize effective marketing strategies to notify consumers and small businesses of the benefits available in the Exchange while addressing security and stigma concerns

Stakeholders are concerned that development of the Exchange will generate somewhat of a "presentation challenge" when addressing the anticipated security and stigma concerns of the potential users.   Business and consumer representative stakeholders agree that a large number of people may be unnerved by and uncomfortable with the information available through the Exchange, which they fear may deter participation. This fear may be especially exacerbated by data verification across the Exchange to Federal databases, such as the Social Security Administration (SSA) or the Internal Revenue Service (IRS). Therefore, they suggest a marketing campaign to reassure users that privacy and security have been accounted for in system development and design. There was recognition that these risks are inherent in transactions such as banking, used today. But there was nonetheless a feeling that extra caution would need to be applied to this phenomenon. Stakeholders believe that involvement of "connectors" and community-based organizations, especially those that deal with particular diseases or disabilities

such as Cancer Care or the Lupus Foundation, may be essential in preparing consumers for the level of personal information accessible through the Exchange.

Additionally, in attempts to minimize any potential stigma associated with Medicaid's integration into the Exchange, stakeholders suggest educational outreach focused on informing businesses and consumers that the Exchange is to function as a channel to both public and private health insurance options. It should be noted that stakeholders envision the educational outreach to extend far beyond this basic stigma reduction initiative. They envision an educational outreach strategy focused on reminding the businesses and consumers that the Exchange is there to help them, providing them with the appropriate quantity and quality of information regarding the options available to them in the Exchange, and informing them of the location(s) and functions of supporting access portal(s).

Provide educational tools for individual consumers and small businesses to guide meaningful decision-making

Consumer stakeholders agree that very few current systems are available to educate consumers and small businesses on health insurance market terms, system functions, and benefit options, but that such education is necessary. Currently, the New York City Health Insurance Links (www.nyc.gov/hilink) system educates consumers fairly well, but is targeted only to consumers in New York City. Stakeholders note that the amount of information made available to consumers is expected to radically increase with the development of the Exchange. Therefore, they support an Exchange that provides the educational tools necessary to assist small businesses and individual consumers in effectively processing this information, allowing for meaningful decision-making when selecting benefit options. Consumer stakeholders envision supporting technology in the form of scroll-over options and pop-ups on the screen throughout the eligibility assessment and enrollment process.

Furthermore, stakeholders hope that the Exchange provides consumers with educational information regarding the availability of an appeals process concerning eligibility determinations (termed the "fair hearing" system in the Medicaid program, but also required to be available for the subsidized programs being established under ACA). They note that many consumers are currently unaware of their right to such a review. Stakeholders aim to ensure the consumers that the Exchange is a system in which their voice can be heard and they hope to provide consumers with educational materials on their more detailed rights to appeal.

Contour navigational assistance to the diverse needs of consumers

All stakeholders interviewed acknowledged the importance of contouring navigational assistance to the diverse needs of the consumers using the Exchange. They note that existing consumer assistance groups, such as the Facilitated Enrollers, already face challenges such as language barriers and variable levels of computer literacy when assisting consumers with the current health insurance systems and options available. Stakeholders anticipate that an even greater number of individuals will likely seek assistance when navigating the Exchange, as they attempt to understand the large number of benefit options available to them. Stakeholders predict that even the more affluent and previously-insured populations will require some assistance in getting acclimated to the Exchange.

Stakeholders also recommend a navigational assistance strategy that accounts for differing consumer preferences. For example, stakeholders note the importance of maintaining the "human touch" despite the advancing technologies supporting navigational assistance. Some consumers will prefer or even require more intensive consumer assistance despite new system capabilities. Stakeholders called out the Facilitated Enroller process as a valuable model and health plans acknowledged that many consumers start the health coverage journey by contacting a health plan directly. The State should consider the multiple channels and assistance points and seek input from those channels.

Standardize and simplify systems and benefit options

There was a strong focus in all stakeholder discussions on consumer-facing system simplicity based on their understanding that a simple, streamlined, and less involved eligibility and enrollment system would benefit all types of stakeholders involved in the Exchange. This desire for simplicity covered all aspects of the Exchange, from initial program eligibility determination, to plan choice, and premium payment.

The need for enrollment and eligibility system simplification remained a major theme in discussion among all stakeholder groups. Some stakeholders were comfortable with constructing the system so that the consumer inputs the minimum number of data elements possible for safe and accurate identification, which will then be used to pull data from supporting Federal databases. These

> Stakeholders suggested a built-in system capability to identify the point at which the consumer abandons the online eligibility or enrollment process. Such information would direct system developers to the points in the applications that are likely perceived to be more complex and time-consuming, offering an opportunity for additional simplification and ongoing continuous quality improvement.

stakeholders anticipate that such a system will greatly relieve consumers of excessive data input requirements while efficiently utilizing the information already available in other systems. Other stakeholders were skeptical this can be accomplished given concerns around data verification described above. In general, stakeholders believe that the Exchange should minimize the number of systems that the consumer is to navigate through and minimize or remove any accompanying paper documents in the mail in order to both save consumers' time and promote efficiency. Administrative simplicity was cited by both consumer stakeholders, to ensure maximum consumer participation, and by stakeholders responsible for conducting eligibility determinations, allowing for faster and more accurate determinations and minimized use of staff resources.

Stakeholders agreed that consumers tend to avoid onerous eligibility processes and that automated eligibility screening with minimal yet targeted questions upfront is likely to yield higher consumer participation rates in the Exchange. One stakeholder recommended a meaningfully ordered screening process. For example, this might consist of an initial screen for the MAGI pool, followed by screening for a subsidy and then for the private market. Most stakeholders preferred a screening process that is not made transparent to the consumer, so as to avoid stigma association and unnecessary consumer information input. They envision a system that asks the appropriate questions early enough in the eligibility screening process so that the consumer is only screened for the programs for which they are most likely eligible for based on their response to those few early questions. Stakeholders assert that such a system both promotes system efficiency and respects the consumers' valuable time. However, if a

consumer gets to the end of the screening process and finds private insurance to be unaffordable, stakeholders agree that the system should have a simple "kickback" feature that allows the consumer to be screened for programs that he or she did not initially consider.

In addition to simplifying eligibility, consumer selection of health plan options should be simple and easy for users to navigate. Stakeholders caution against offering too many plan options, which may intimidate individual consumers and inadvertently burden small employers to assist with or carry out health insurance decision-making for the employees, a responsibility that small business stakeholders vocalized that they do not wish to have.

An overarching concern is the time required for consumers to navigate through the Exchange. While each individual's experience will differ, stakeholders recommend providing an estimate of time required to input information at the beginning of and throughout the application. Such a feature was likened to the wait time estimates provided to passengers on a transit system.

Ensure comprehensive, individualized, and affordable benefit options

The small business community stakeholders feel that current health insurance options are not robust, despite the high-cost. There was a general consensus among the stakeholders that there needs to be great focus on the product, including scope, choice, and availability. They also fear that the four benefit level options (bronze, silver, gold, and platinum) available through the Exchange will not be adequate and that the naming convention for these benefit options will imply a hierarchy that is not always true, thus misguiding the consumer. Conversely, stakeholders hope to minimize the number of benefit options to consumers. They note that too many options will unnecessarily overcomplicate the system and overwhelm the consumer. They predict that in the case of too many options, the consumer is likely to select the least costly option, which may not always provide all of the services needed by the consumer.

Conclusion

Stakeholders genuinely appreciated the preparatory webinars and the opportunity to share perspectives on health care reform implementation. They agree with the overall vision of a consumer-friendly, streamlined, real-time, one-stop shop to promote health insurance coverage, whether public or private. They share concern that the State will be able to implement the desired Exchange within the short timeline.

Finally, while initial stakeholder feedback presents concurrence with a common set of goals for the Exchange, the level of knowledge about Exchange requirements was variable. As more guidance and new prototypes become available, the State and stakeholders will continue to assess the implications on their activities to implement an Exchange by 2013. Over time, stakeholders and the State alike may find that a significant number of details need to be vetted to gain consensus.

Appendix A: Interview Participants

Organization	Name
Affinity Health Plan	Alisa Simmons
Benefit Specialists of New York	Jeannette Jones Paul Muoio
Blue Cross Health Plan	Lynne Scalzo
CMS Regional Office	Julie Alberino John Guhl Sue Kelly Mike Melendez Fred Miller Pat Ryan
Community Service Society	Elisabeth Benjamin
Empire Justice Center	Trilby DeJung
Excellus Health Plan	John Griffith Jackie Lyttle Tim Meyers Tom Napier Jeffrey Pankow Allan Shaeffer
Fidelis Health Plan	Jim Burnosky Dave Thomas
Health Plan Association (HPA)	Paul Macielak Sean Dolan Jessica Zemko
HealthNow Health Plan	Mary Angelo Claudia Hurley Donald Ingalls Gary Kerl Jeffrey Knight Timothy Muldoon Gregory Pasieka John Walsh
Hinman Straub	Cheryl Hogan
Hudson Health	Georganne Chapin Kathy Clamsy Ted Herman Mark Santiago
Liazon	Tim Godzich
Manatt Health Solutions	Patti Boozang Melinda Dutton Kinda Serafi
Medicare Rights Center	Joe Baker
MVP Health Plan	Chris Smith

Organization	Name
Nassau-Suffolk Hospital Council (NSHC)	Stacy Villagran
New York Business Council	Maggie Morre
New York City Human Resources Administration: Medicaid and CHIP Office	Dorothy Evans Linda Evans Linda Hacker Mary Harper Karen Lane Sam Marcos
New York City Human Resources Administration: Office of Citywide Health Insurance Access (OCHIA)	JoAnne Bailey Marjorie Cadogan Audrey Diop Stana Nakhle
New York City Office of the Mayor	Andrea Cohen
New York State Governor's Office	Jim Introne
New York State Medicaid	Judy Arnold Jason Helgerson
New Yorkers for Accessible Health Coverage	Mark Scherzer
Public Health Solutions	Sandra Jean-Louis Wyn Wang
United Hospital Fund	Danielle Holahan
Wellpoint	Alison Anway Valerie Bousa Rajiv Chawla Michael Cizek Sean Doolan Amy Odom Sanket Shah Dennis Shearer Jane Sokoloff Greg Webster Tim Webster