New England States
Collaborative Insurance Exchange Systems

Project Baseline Review

Presentation to
Interstate Collaborative Steering Committee

May 18, 2011

Massachusetts Early Innovator Cooperative Agreement
PROJECT BASELINE REVIEW (PBR)

The overall goal of the *New England States Collaborative Insurance Exchange Systems NESCIES)* project is to create Health Insurance Exchange (HIX) Information Technology components **in Massachusetts** that are consumer-focused, cost-effective, reusable, and sustainable and **that can be leveraged** by New England and other states to operate Health Insurance Exchanges.

The **NESCIES** project will create a learning collaborative, led by a multi-state steering committee, where participating states can share and develop cutting edge and cost-effective technology components, intellectual property, and best practices for implementing an insurance exchange.
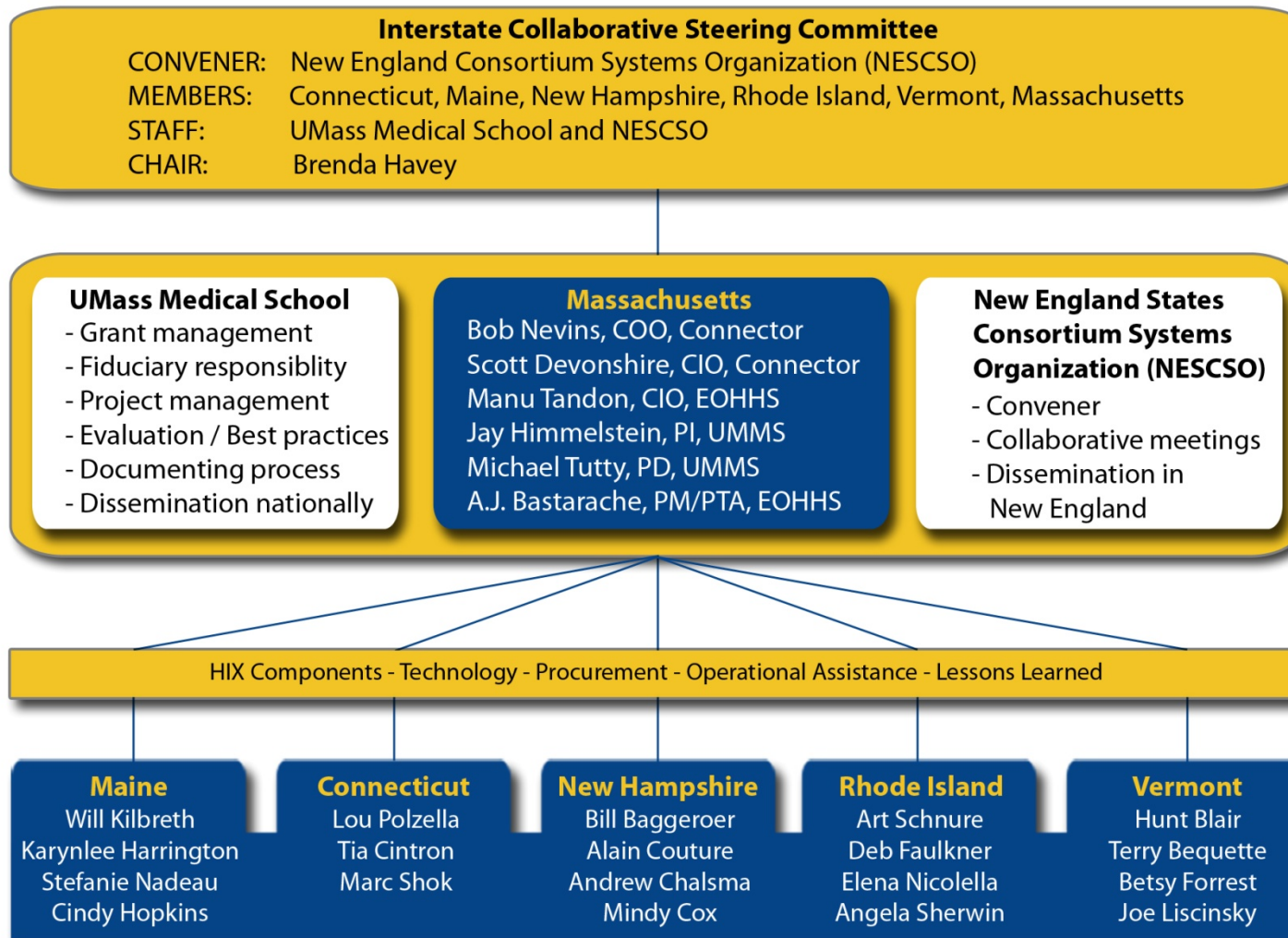
Business Need

Increase the number of insured by reducing barriers to affordable health insurance

- Help individuals and small businesses identify and purchase affordable coverage
- Insure individuals with means based needs by providing Medicaid coverage or tax credits to support the purchase of private insurance through Insurance Exchanges
- Allow individuals and small businesses comparison shop, thus facilitating competition among plans on price and quality
- Integrate enrollment with other state health subsidy programs

NESCIES Collaboration Goals

1. Coordinate efforts and learn from the Massachusetts HIX implementation, gaining efficiencies, and accelerating HIX development for each of the states.
2. Create standards-based HIX technology components that can be leveraged by New England and other states.
3. Leverage Massachusetts Exchange (Health Connector) experiences to deliver a scalable, flexible and robust exchange components.

Interstate Collaborative Steering Committee

CONVENER: New England Consortium Systems Organization (NESCSO)
MEMBERS: Connecticut, Maine, New Hampshire, Rhode Island, Vermont, Massachusetts
STAFF: UMass Medical School and NESCSO
CHAIR: Brenda Havey

UMass Medical School
- Grant management
- Fiduciary responsiblity
- Project management
- Evaluation / Best practices
- Documenting process
- Dissemination nationally

Massachusetts
Bob Nevins, COO, Connector
Scott Devonshire, CIO, Connector
Manu Tandon, CIO, EOHHS
Jay Himmelstein, PI, UMMS
Michael Tutty, PD, UMMS
A.J. Bastarache, PM/PTA, EOHHS

New England States Consortium Systems Organization (NESCSO)
- Convener
- Collaborative meetings
- Dissemination in New England

HIX Components - Technology - Procurement - Operational Assistance - Lessons Learned

Maine	**Connecticut**	**New Hampshire**	**Rhode Island**	**Vermont**
Will Kilbreth	Lou Polzella	Bill Baggeroer	Art Schnure	Hunt Blair
Karynlee Harrington	Tia Cintron	Alain Couture	Deb Faulkner	Terry Bequette
Stefanie Nadeau	Marc Shok	Andrew Chalsma	Elena Nicolella	Betsy Forrest
Cindy Hopkins		Mindy Cox	Angela Sherwin	Joe Liscinsky

Collaboration	Reusability	Self-assessment
Interstate Collaborative Steering Committee/Technical Workgroups	**NESCIES Reusability approach is categorized into 3 tiers**	**Self-assessment performed by the New England states with likeliness for sharing**
1. The NESCIES Interstate Collaborative Steering Committee will provide guidance and feedback to the Massachusetts team to assure that HIX components developed for Massachusetts will be consumer-friendly, cost-effective IT systems that can be used and adopted by other New England states (and nationally). 2. Made up of an Exchange Tech Lead, Exchange Planning Policy Lead, and Medicaid Health Reform Technical Lead from each New England state. 3. The committee, with the input from technical work groups, will be responsible for informing and assessing the MA development team on the ability for HIX components to be adaptable and reusable.	**Tier 1: Share artifacts with other states** •Business Rules •Business Processes •Common Information Models •Service Interface Models •Reference Architecture •Project Management Methodology •Risk Management Methodology •Procurement Processes and Documentation **Tier 2: Jointly procure hardware and software and manage deployments** •Hardware and Software Licensing •Cloud based Data Centers **Tier 3: Share the component or host them for use by other states (SaaS)** •Ref. Architecture Implementation •HIPAA Translator, HL7 Translator •Portal, Rules Engine, Mobile Engine	**Extremely likely (All states agree)** •HIPAA Gateway and Translation Service •Federal Systems/Interfaces **Highly likely (Five out of six states agree)** •Consumer Mediated Workflow Support Services •Development Methodology Standardization and Web Services Architecture •Loosely Coupled Interface Architecture Service •Directory and Routing Services •Data Repository and Dictionary Services **Likely (Four out of six states agree)** •Oversight Function •Premium Billing System •Reporting and Analytics Services •HL7 Gateway and Translation Service •Record Locator Service ** The BPR will reevaluate with scorecards

Based on input from the Business Process Redesign vendor and recommendations from the Interstate Steering Committee, will identify and prioritize an initial set of HIX components to share

Design Goals

1. Consumer-Friendly user interface with consumer-mediated workflow and authorization
2. Based on Exchange Reference Architecture
3. Reusable and Interoperable components based on Service Oriented Architecture (SOA)
4. Follows Federal and Industry standards for Accessibility, Business Rules, Messaging and Security
5. Reuse of existing MA EOHHS Virtual Gateway Enterprise Shared Services
6. Open Architecture – based on Open Source Frameworks
7. Scalable Infrastructure based on Cloud computing
8. Accountable and robust systems
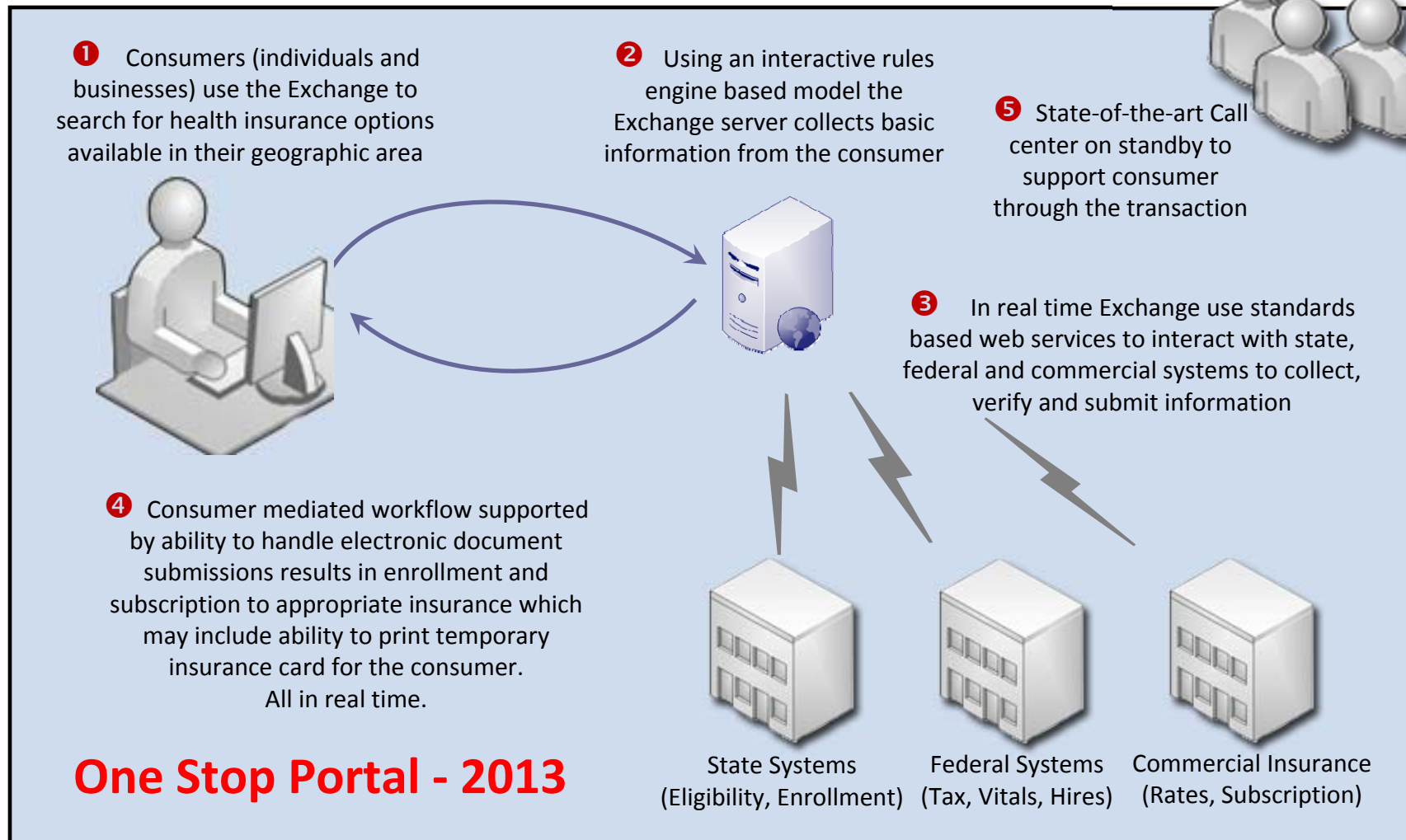9. State-of-the-art portal solution

Design Considerations

1. Heavily driven by usability and customer centric considerations
2. How far in the workflow can we take the users? (temporary card, etc.)
3. How can it ease operations? (reduce calls, change management, self-service, etc.)
4. Support for PHR
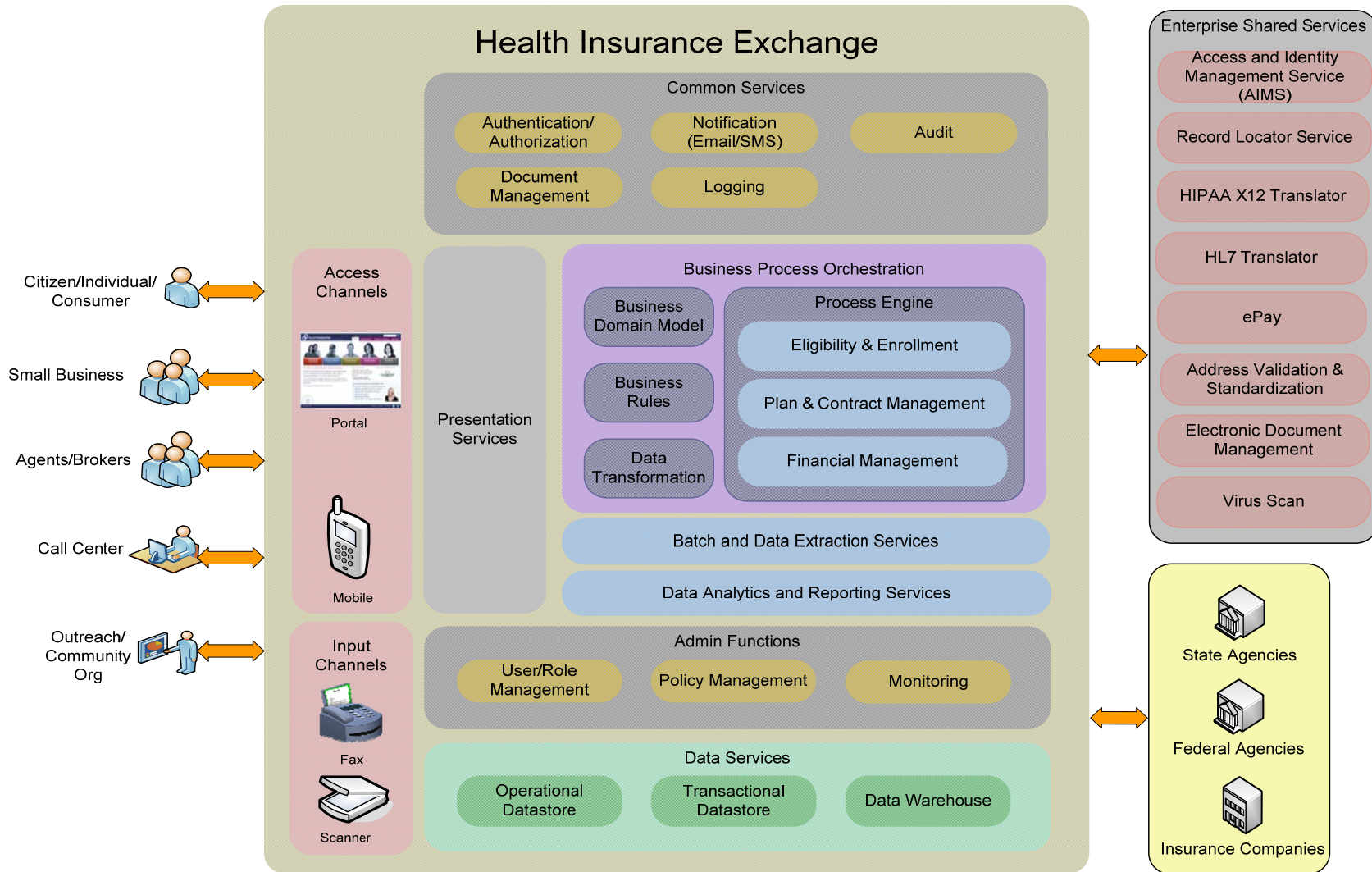5. Authentication to follow industry best practices

Guidelines

1. All HIX system components will be developed in accordance with federal guidelines
2. Will adhere to recognized SDLC frameworks
3. Creating both reusable Web Services Architecture and Service Oriented Architecture components and ensuring Office of the National Coordinator (ONC) and National Institute of Standards and Technology (NIST) compliance
4. Interstate Collaborative Steering Committee will provide guidance and recommendations to the Massachusetts development team on specific business needs of participating states and how best to promote reusability and adaptability

❶ Consumers (individuals and businesses) use the Exchange to search for health insurance options available in their geographic area

❷ Using an interactive rules engine based model the Exchange server collects basic information from the consumer

❺ State-of-the-art Call center on standby to support consumer through the transaction

❸ In real time Exchange use standards based web services to interact with state, federal and commercial systems to collect, verify and submit information

❹ Consumer mediated workflow supported by ability to handle electronic document submissions results in enrollment and subscription to appropriate insurance which may include ability to print temporary insurance card for the consumer. All in real time.

One Stop Portal - 2013

State Systems (Eligibility, Enrollment)

Federal Systems (Tax, Vitals, Hires)

Commercial Insurance (Rates, Subscription)

Health Insurance Exchange

Common Services
- Authentication/ Authorization
- Notification (Email/SMS)
- Audit
- Document Management
- Logging

Access Channels
- Portal
- Mobile

Input Channels
- Fax
- Scanner

Presentation Services

Business Process Orchestration
- Business Domain Model
- Business Rules
- Data Transformation

Process Engine
- Eligibility & Enrollment
- Plan & Contract Management
- Financial Management

Batch and Data Extraction Services

Data Analytics and Reporting Services

Admin Functions
- User/Role Management
- Policy Management
- Monitoring

Data Services
- Operational Datastore
- Transactional Datastore
- Data Warehouse

Access channels:
- Citizen/Individual/ Consumer
- Small Business
- Agents/Brokers
- Call Center
- Outreach/ Community Org

Enterprise Shared Services
- Access and Identity Management Service (AIMS)
- Record Locator Service
- HIPAA X12 Translator
- HL7 Translator
- ePay
- Address Validation & Standardization
- Electronic Document Management
- Virus Scan

- State Agencies
- Federal Agencies
- Insurance Companies

1. Eligibility and Enrollment	• Employer enrollment in an Insurance SHOP Exchange • Individual enrollment in a qualified health plan offered through the Insurance Exchange • Integration with Medicaid and CHIP
2. Plan Management	• Plan certification, recertification and decertification • Issuer contracting • Plan rating
3. Financial Management	• Premium determination including premium tax credits, vouchers, and cost sharing • Plan assessment, reinsurance, risk adjustment, and risk corridors functions • Individual and issuer reconciliation
4. Customer Service	• Manage responses to information requests and requests for service • Efficient distribution/management of requests across phone, web, paper and face-to-face
5. Communications	• Communications and outreach strategies; content and messaging • Measurement/reporting of communication effectiveness
6. Oversight	• Federal oversight of Exchange operations • Insurance Exchange management and operations

Application Life Cycle Management (ALM) - Tools

Areas	Tools
Project Management Tool	Microsoft Project
Collaboration Tool	MassForge – Implemented using CollabNet
Software Configuration Management/Version Control	SubVersion (OpenSource)
Defect Tracking	IBM Rational Clearquest
Continuous Integration	Hudson (Open Source)
Regression Testing	Open Source Tools – Selenium, JUnit, DbUnit, SOAPUI
Functional Testing	IBM Rational TestManager
ADA Compliance	IBM Policy Tester
Application Vulnerability	IBM Rational AppScan
Performance Testing	HP Load Runner
Application Performance Management	CA WILY
Coding Standards / QA	Findbugs & Checkstyle

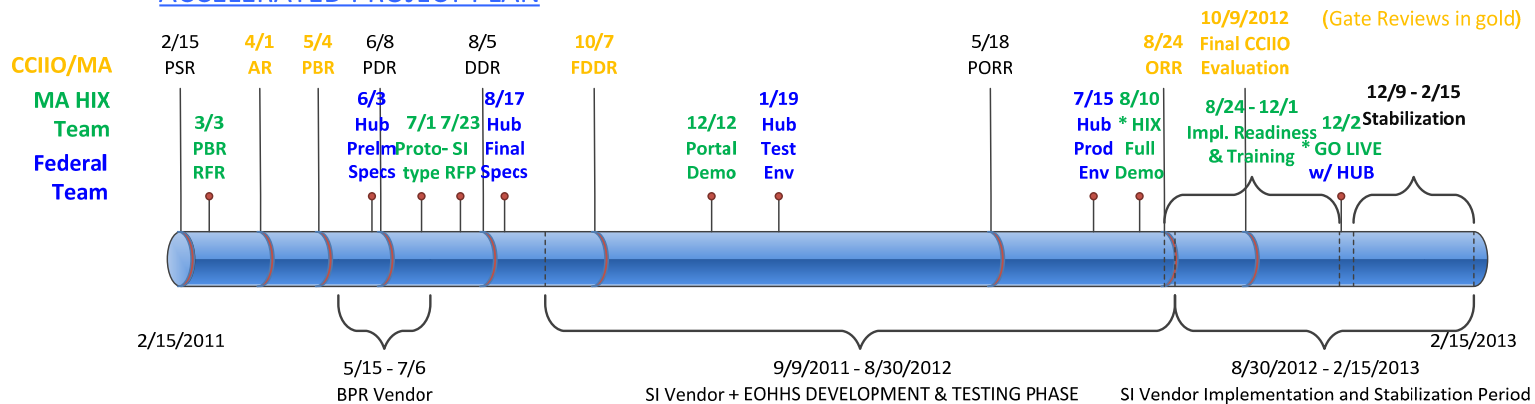| Measurement Area	Measurement Category	Measurement Indicator
Exchange Technical Development	SLDC Gate Reviews	All SLDC Gate Review timelines met and passed
	Vendor and Staff Procurement	Appropriate vendors and staff augmentation procured according to timeline
	System Development	Development of Exchange meets timelines and deliverables
	IT Infrastructure	All hardware and software is procured to meet deadlines and system specifications
	Information Security	Agreed upon security protocols are met
Reusability	Information shared with other states	Number of states participating in NESCIES and breadth of information shared more broadly
	Joint procurement	Number of joint procurements
	Sharing of Components	Number of components and number of states sharing in Massachusetts developed components.
Exchange Implementation	System Functionality	Updated Exchange has better and faster functionality than current Massachusetts Exchange
	System Usage	The number of individual and small business users increases upon completion of updated Exchange
	Operational Cost Sustainability	Post development Exchange system annual operating costs can be supported by annual revenues

HIX PROJECT PLANS – STD vs. ACCELERATED

ORIGINAL PROJECT PLAN

| 2/15 PSR | 4/1 AR | 5/4 PBR | 6/8 PDR | 9/14 DDR | 12/7 FDDR | 6/13 PORR | 10/10 ORR | 2/14 Final CCIIO Evaluation |

3/3 PBR RFR

8/22 SI RFP

2/16 GO LIVE

2/15/2011

5/17 - 8/27
BPR Vendor

10/16/2011 - 11/16/2012
SI Vendor – DEVELOPMENT & TESTING PHASE

11/17/2012 - 2/15/2013
SI Vendor Stabilization Period

2/15/2013
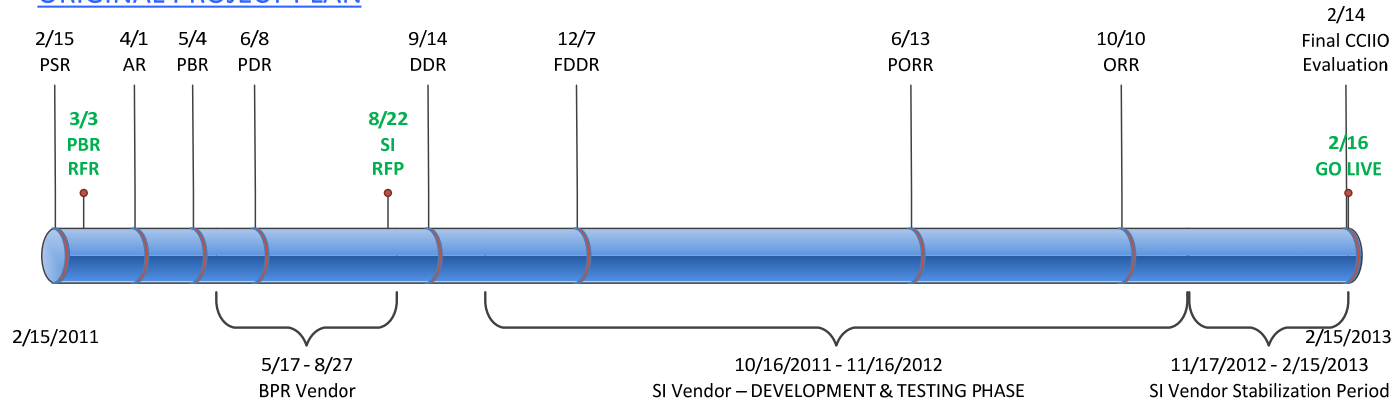
ACCELERATED PROJECT PLAN

CCIIO/MA
MA HIX Team
Federal Team

(Gate Reviews in gold)

| 2/15 PSR | 4/1 AR | 5/4 PBR | 6/8 PDR | 8/5 DDR | 10/7 FDDR | 5/18 PORR | 8/24 ORR | 10/9/2012 Final CCIIO Evaluation | 12/9 - 2/15 Stabilization |

3/3 PBR RFR

6/3 Hub Prelm Specs

7/1 Proto-type

7/23 SI RFP

8/17 Hub Final Specs

12/12 Portal Demo

1/19 Hub Test Env

7/15 Hub Prod Env

8/10 * HIX Full Demo

8/24 - 12/1 Impl. Readiness & Training

12/2 * GO LIVE w/ HUB

2/15/2011

5/15 - 7/6
BPR Vendor

9/9/2011 - 8/30/2012
SI Vendor + EOHHS DEVELOPMENT & TESTING PHASE

8/30/2012 - 2/15/2013
SI Vendor Implementation and Stabilization Period

2/15/2013

* May utilize few mock web services
** Dependent on Fed Hub and MA-21 web services

University of Massachusetts Medical School

Massachusetts Early Innovator Cooperative Agreement
PROJECT BASELINE REVIEW (PBR)

MassHealth

Changes to the Critical Path

The initial project schedule has been accelerated to provide a 3.5 month stabilization period post go-live. This new schedule proposes to deliver a prototype 7/11, a working demo 12/11, a fully functional demo by early August 2012 with a Go Live date of Dec 2012.

This new schedule also offers a contingency buffer to absorb delays in web service availability and other unforeseen problems.

Completed Late or Significantly Behind Schedule Tasks

Retaining the Business Process Redesign vendor required an extended period to complete. However, the vendor will start near the planned start date and the delay will not impact the project schedule.

Schedule leading to next major event

1. Information Security Risk Assessment   5/31/11
2. System Security Plan   5/31/11
3. Test Plans and Traceability Matrix   5/31/11
4. Logical Data Model   5/31/11
5. **Preliminary Design Review**   **6/08/11**
6. Use Cases   7/08/11
7. Detailed Design   7/12/11
8. **Detailed Design Review**   **8/05/11**

The Massachusetts Development Lifecycle is consistent with proposed Exchange Lifecycle (ELC).

The Massachusetts plan is to have a coordinated development team made up of state's in-house resources (for shared service architecture and interfaces) and a contracted vendor (for exchange specific functions like user portal, plan management and financial management) with the state providing oversight to the overall project development.

We understand that the project needs to support the following CCIIO deliverables:

Deliverables	Status
Project Startup Review (PSR)	*February 15, 2011 - Complete*
Architecture Review (AR)	*April 1, 2011 - Complete*
Project Baseline Review (PBR)	May 4, 2011
Preliminary Design Review (PDR)	June 8, 2011
Detailed Design Review (DDR)	August 5, 2011
Final Detailed Design Review (FDDR)	October 7, 2011
Pre-Operational Readiness Review (PORR)	May 18, 2012
Operational Readiness Review (ORR)	August 24, 2012
GO-LIVE	**December 2, 2012 (proposed)**

CMS	Li	Task Name	Duration	Start	Finish	ce	%	Resource Names
		☐ PROJECT MANAGEMENT	578 days	Tue 2/15/11	Tue 4/30/13		12%	
		⊟ ARTIFACTS TRACKING	429 days	Tue 2/15/11	Wed 10/3/12		24%	A.J.
	Link	**Artifacts Tracking Worksheet**	0 days	Tue 2/15/11	Tue 2/15/11		100%	A.J.
		⊟ **Acquisition Strategy**	0 days	Thu 6/2/11	Thu 6/2/11		0%	
PDR		Acquisition Strategy FINAL	0 days	Thu 6/2/11	Thu 6/2/11	434	0%	HIX Team
		⊟ **Alternatives Analysis**	0 days	Fri 6/3/11	Fri 6/3/11		0%	
PDR		Alternatives Analysis FINAL	0 days	Fri 6/3/11	Fri 6/3/11	435	0%	HIX Team
		⊟ **Architectural Diagrams**	134 days	Thu 3/31/11	Tue 10/4/11		0%	
AR	Link	Architectural Diagrams Preliminary	0 days	Thu 3/31/11	Thu 3/31/11	382	100%	HIX Team
FDDR		Architectural Diagrams FINAL	0 days	Tue 10/4/11	Tue 10/4/11	479	0%	HIX Team
		⊟ **Architecture Review**	54 days	Tue 2/15/11	Fri 4/29/11		100%	
	Link	Architecture Review Template from CMS	0 days	Tue 2/15/11	Tue 2/15/11		100%	CCIIO
AR	Link	Architecture Review PowerPoint	0 days	Thu 2/17/11	Thu 2/17/11		100%	Sr Mgmt Team
	Link	Architecture Review Worksheet	0 days	Thu 4/7/11	Thu 4/7/11	384	100%	A.J.
	Link	Architecture Review Findings from CMS	0 days	Wed 4/20/11	Wed 4/20/11	385	100%	CCIIO
	Link	Architecture Review Findings WORKSHEET	0 days	Wed 4/20/11	Wed 4/20/11	385	100%	A. J.
AR		Architecture Review Findings Response	0 days	Fri 4/29/11	Fri 4/29/11	386	100%	A.J.,Venkat,Rac
	Link	Acronyms & Terminology	0 days	Tue 2/15/11	Tue 2/15/11		100%	A.J.
		⊟ **Authority to Operate**	0 days	Mon 8/20/12	Mon 8/20/12		0%	
ORR		Authority to Operate FINAL	0 days	Mon 8/20/12	Mon 8/20/12	518	0%	HIX Team
		⊟ **Automated Code Review Results**	0 days	Wed 7/27/11	Wed 7/27/11		0%	
PORR		Automated Code Review Results FINAL	0 days	Wed 7/27/11	Wed 7/27/11	449	0%	HIX Team
		⊟ **Business Process Models**	0 days	Thu 7/28/11	Thu 7/28/11		0%	
DDR		Business Process Models FINAL	0 days	Thu 7/28/11	Thu 7/28/11	450	0%	HIX Team
		⊟ **Business Product**	76 days	Fri 5/4/12	Mon 8/20/12		0%	
PORR		Business Product PRELIMINARY	0 days	Fri 5/4/12	Fri 5/4/12	508	0%	HIX Team

HIX project staffing plan as integrated into the HIX Master Project Plan.

CMS	Li	Task Name	Duration	Start	Finish	ce	%	Resource Names
		⊟ **Project Management, Admin & Oversight**	**119 days**	**Tue 2/15/11**	**Fri 7/29/11**		**67%**	
		Technical Project Manager	26 days	Mon 4/4/11	Mon 5/9/11		100%	A.J.
		EDM WebServie - MAP/JJEMS/VIP	26 days	Mon 4/4/11	Mon 5/9/11		100%	Done
		IT Delivery Director	26 days	Tue 3/15/11	Tue 4/19/11		100%	Aydan
		HIX Eligibility Interface Manager	26 days	Sun 4/24/11	Fri 5/27/11		0%	New
		HIX Project Admin	26 days	Fri 6/24/11	Fri 7/29/11		0%	New
		EOHHS Lead Enterprise Architect	26 days	Tue 2/15/11	Tue 3/22/11		100%	Venkat
		⊟ **Requirements Analysis**	**70 days**	**Mon 4/25/11**	**Fri 7/29/11**		**0%**	
		HIX Sr. Business Analyst	26 days	Mon 4/25/11	Mon 5/30/11		0%	New
		Business Analyst	26 days	Fri 6/24/11	Fri 7/29/11		0%	Rama
		⊟ **Design Support**	**51 days**	**Tue 4/26/11**	**Tue 7/5/11**		**26%**	
		Enterprise Architect	1 day	Tue 7/5/11	Tue 7/5/11		0%	Phani
		SOA Architect	20 days	Fri 4/29/11	Thu 5/26/11		100%	Pradeep
		Security Architect	26 days	Tue 4/26/11	Tue 5/31/11		0%	New
		Sr. Developer - Security	1 day	Tue 7/5/11	Tue 7/5/11		0%	Narendra
		Sr. Developer - WebService	1 day	Tue 7/5/11	Tue 7/5/11		0%	New
		Developer - Security	1 day	Tue 7/5/11	Tue 7/5/11		0%	Michael W
		Developer	1 day	Tue 7/5/11	Tue 7/5/11		0%	Sailaja
		Developer	1 day	Tue 7/5/11	Tue 7/5/11		0%	Chaithanya
		Integration Developer	26 days	Tue 4/26/11	Tue 5/31/11		0%	New
		⊟ **Functional Test Planning**	**214 days**	**Tue 4/26/11**	**Wed 2/15/12**		**0%**	
		QA Manager	26 days	Tue 4/26/11	Tue 5/31/11		0%	Kevin
		QA Lead	26 days	Tue 4/26/11	Tue 5/31/11		0%	Sunil

Dependencies

- Timely completion of a Federal Hub
- Alignment of state and federal policy on payment reform

Assumptions

- State finalizes policy and business decisions related to HIX development in a timely way
- Federal government finalizes policy and business decisions related to HIX development in a timely way
- Full cooperation from key stakeholders including insurance providers
- Business Process Review vendor completes on-time for required deliverables
- Systems Integrator completes on-time for required deliverables

Constraints

- Real-time eligibility check with MA-21 is possible only if the personal verification and income determination are done through the Federal Government

Massachusetts

- Weekly Senior Management Meetings
- Quarterly Executive Sponsors meeting with Senior Management
- Linkages between EOHHS-Led Inter-Agency Health Care Reform Implementation Work Group and Connector Exchange Transition Planning workgroups

New England States

- Regular Interstate Steering Committee and Technical Workgroup Meetings
- www.nescies.org

CCIIO/CMS

- Participation in all Innovator grants calls and meetings
- Presentation of appropriate SDLC Gate Reviews

Change Management

•Project management will monitor objectives and timelines during each SDLC phase

•Monitor vendor compliance of established technical requirements and timelines.

- If it is determined that the project schedule is not being met or identifies high-risk problems (e.g. delay in HIX component development or a HIX component lacks reusability in other states), the project team will use corrective action plans to address the problems.

Corrective Action Plan

The corrective action plan will include the following:

- a description of the problem
- a description of the root cause of the problem
- a description of the risks to problem if not resolved
- the person(s) or vendor(s) responsible for correcting the problem
- the corrective action planned to resolve the problem
- the schedule for the corrective actions
- the steps that will be taken to monitor the performance of the corrective actions
- the criteria for determining problem resolution, and
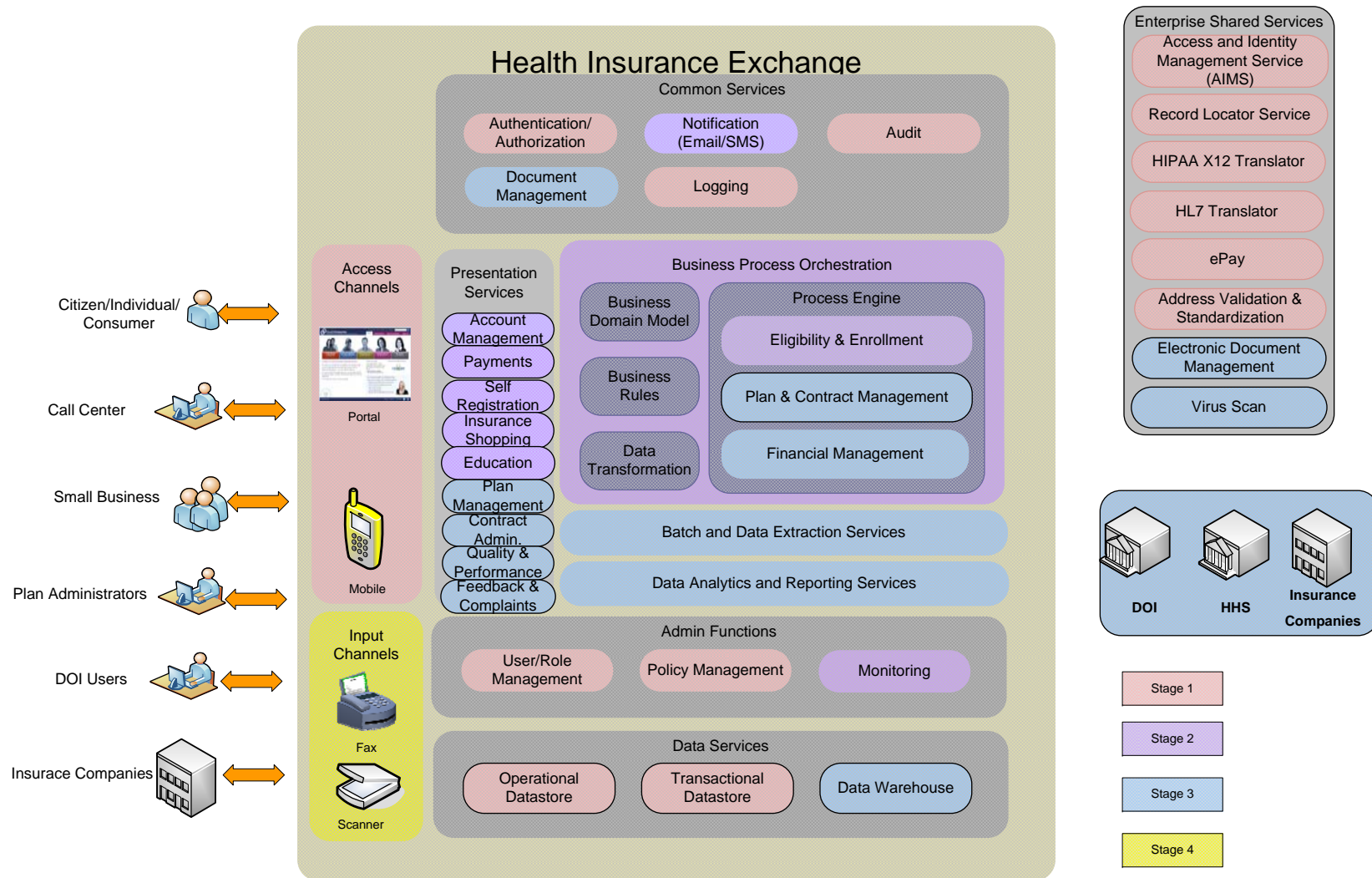- contingency options to mitigate the risks

Component development and testing will be done in staggered, overlapping stages. Each stage will generate building blocks to be leveraged and built upon by the next stage.
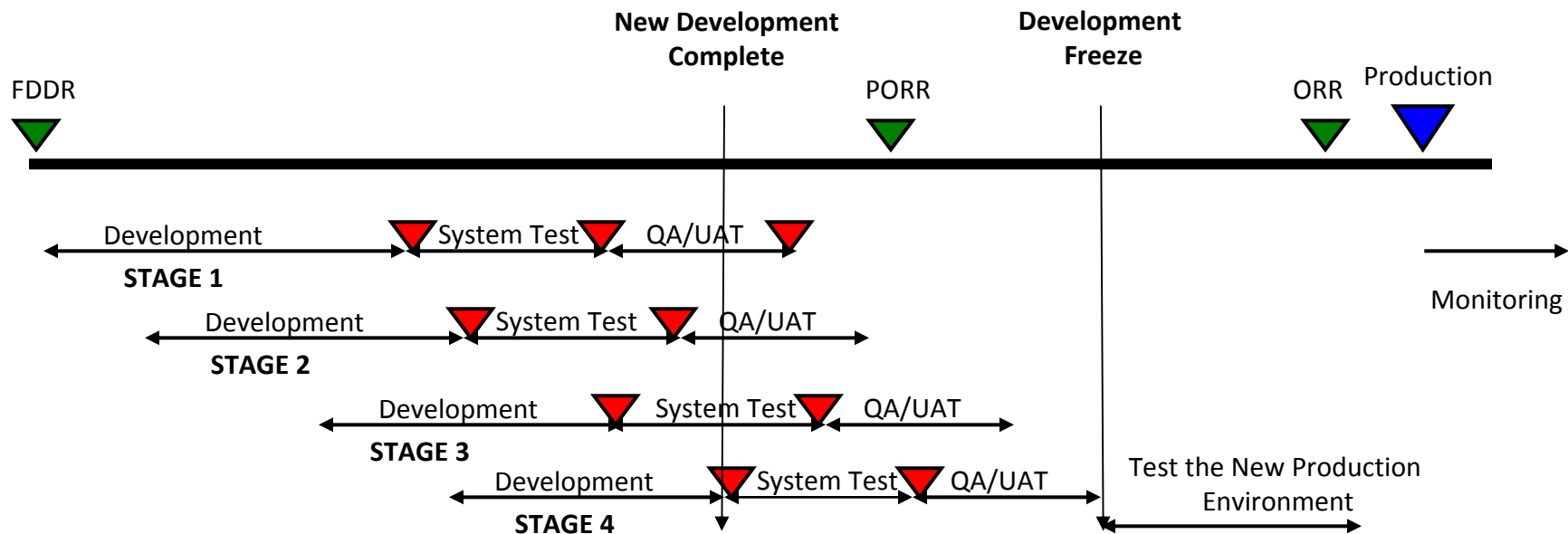
Stage 1 - AIMS, Record Locator Service, HIPAA X12 Translator & Gateway, HL7 Translator, ePay, Address Validation & Standardization, MA-2, HIX Framework for Stage 2

Stage 2 - Portal, Eligibility & Enrollment, and HIX Framework for Stage 3

Stage 3 - Plan & Contract Management, Financial Management, Batch & Data Extraction Services, Data Analytics & Reporting Services, EDM, Virus Scan, and HIX Framework for Stage 4

Stage 4 - Mobile, Input channels Fax and Scanner

#	Risk / Issues	Impact	Potential Impact	Probability	Risk Factor	Actions / Risk Mitigation	Resources
1	Delays in cooperation from key stakeholders including insurance providers	Ability to finalize development of exchange	5	3	15	Senior Management Team will work closely with state health reform planning team. Develop a contingency plan.	State
2	Completion of a Federal Hub	This component needs to be built to satisfy one of the key objectives of the project	5	2	10	Work with federal team to complete this task. Develop a contingency plan for Massachusetts to build their own hub.	Federal
3	Real-time eligibility check is possible only if the personal verification and income determination are performed through the Fed hub.	This component needs to be built to satisfy one of the key objectives of the project	5	2	10	Work with federal team to complete this task. Develop a contingency plan for Massachusetts to build their own tools.	Federal
4	State does not complete policy and business decisions related to HIX development in a timely way	Ability to finalize development components and structure	5	2	10	Senior Management Team will work closely with state health reform planning team. Develop a contingency plan.	State
5	Federal government does not complete policy and business decisions related to HIX development in a timely way	Ability to finalize development components and structure	5	2	10	Senior Management Team will work closely with CCIIO. Develop a contingency plan.	Federal
6	Determine Medicaid and Financial Eligibility Guidelines as a prerequisite for using the Insurance Exchange	Required to complete proposed architecture design.	5	2	10	Senior Management Team will work closely with state and federal health reform planning teams.	State
7	Alignment of State and federal policy on Payment reform	Ability to finalize development of components	5	2	10	Senior Management Team will work closely with state and federal health reform planning teams.	State & Federal
8	Systems Integrator does not complete project on time or complete required deliverables	Development of the application is critical to the completion of this exercise	5	2	10	Technical leads will work closely with procured Systems Integrator on timelines and deliverables.	Sr. Team
9	BPR Vendor does not complete project on time or complete required deliverables	Development of the application is critical to the completion of this exercise	5	1	5	Technical leads will work closely with procured BPR vendor on timelines and deliverables.	Sr. Team

Impact scale: (1-5) **1**-minor delay, **2**-moderate delay , **3**-major delay impacting plan/budget, **4**-major delay impacting feasibility, **5**–major delay could stop project
Probability scale: (1-3) **1**-low chance, **2**-medium chance, **3**-high chance
Risk Factor = Potential Impact X Probability

SUMMARY, DISCUSSION AND NEXT STEPS

1. What does CMS/CCIIO need from Massachusetts?

2. What does Massachusetts need from CMS/CCIIO?
   - Operations and Finance
     1. Timely release of funds for meeting the next Exchange lifecycle requirements
     2. Prompt review and approval for IAPD for the eligibility system to be submitted in August, 2011
   - Technology
     1. Sharing of artifacts and other documentation underdevelopment for the American Health Benefit Exchange
        - Sample use cases
        - Health plan engagement model
        - Others?
     2. Federal Data Hub Related
        - Federal Data Hub Ambassador
        - Preliminary specifications by 6/3/11
        - Final specifications by 8/17/11
        - Test environment operational by 1/19/12
        - Production environment operational by 7/15/12
        - Go live with MA HIX 12/2/12