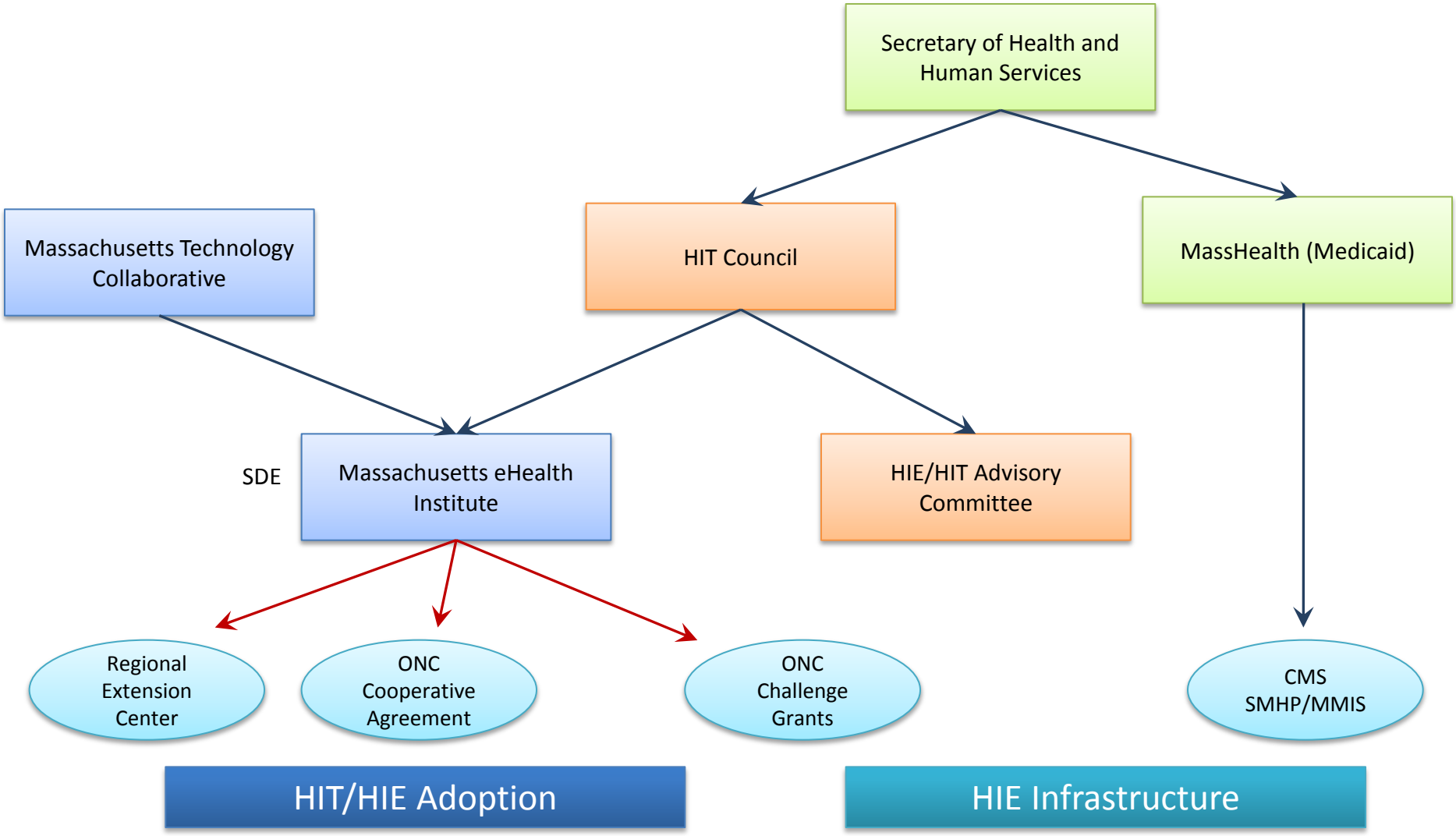
Massachusetts HIE/HIT Advisory Committee

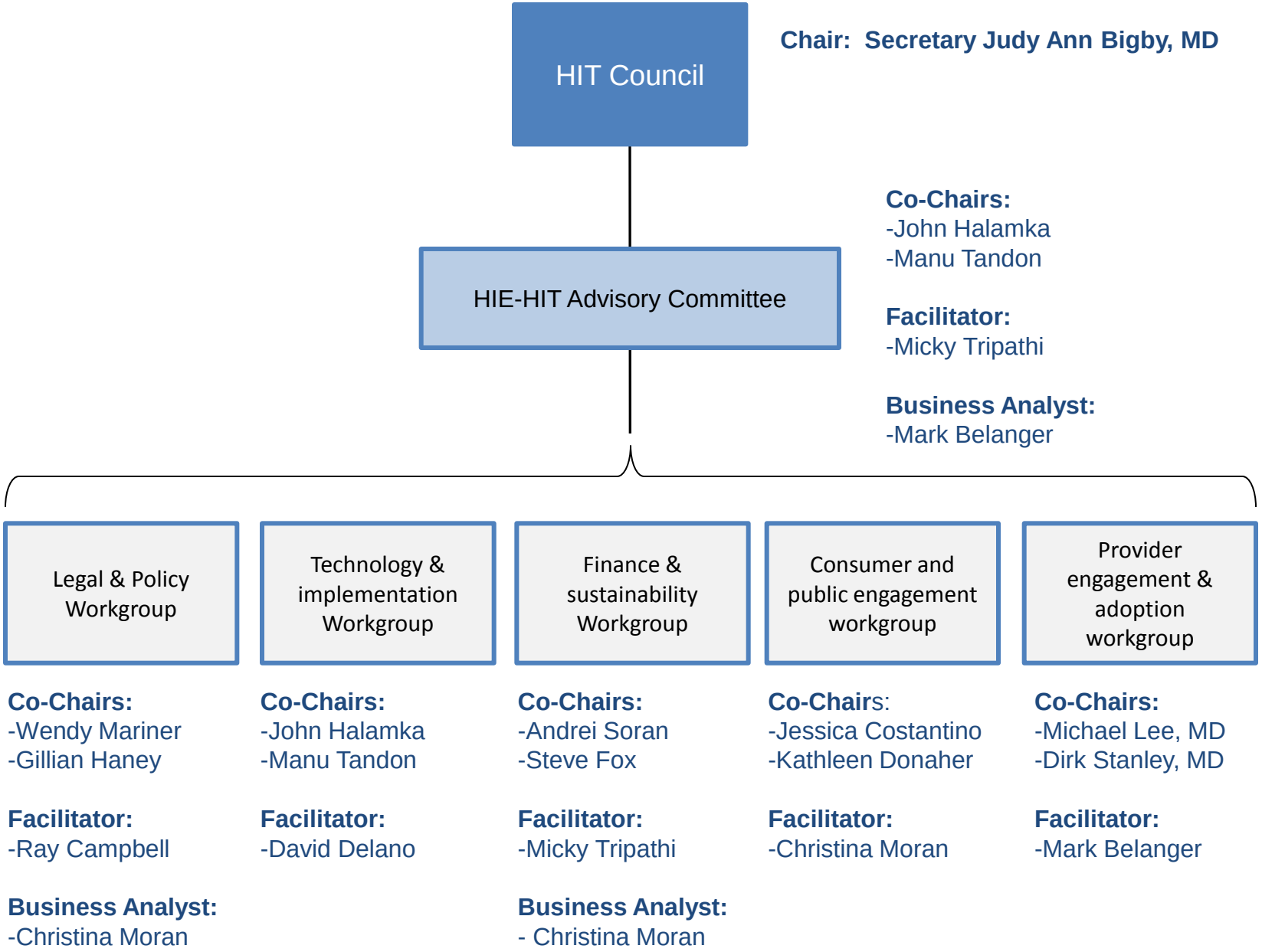
Network Users Roundtable Discussion

January 19, 2012

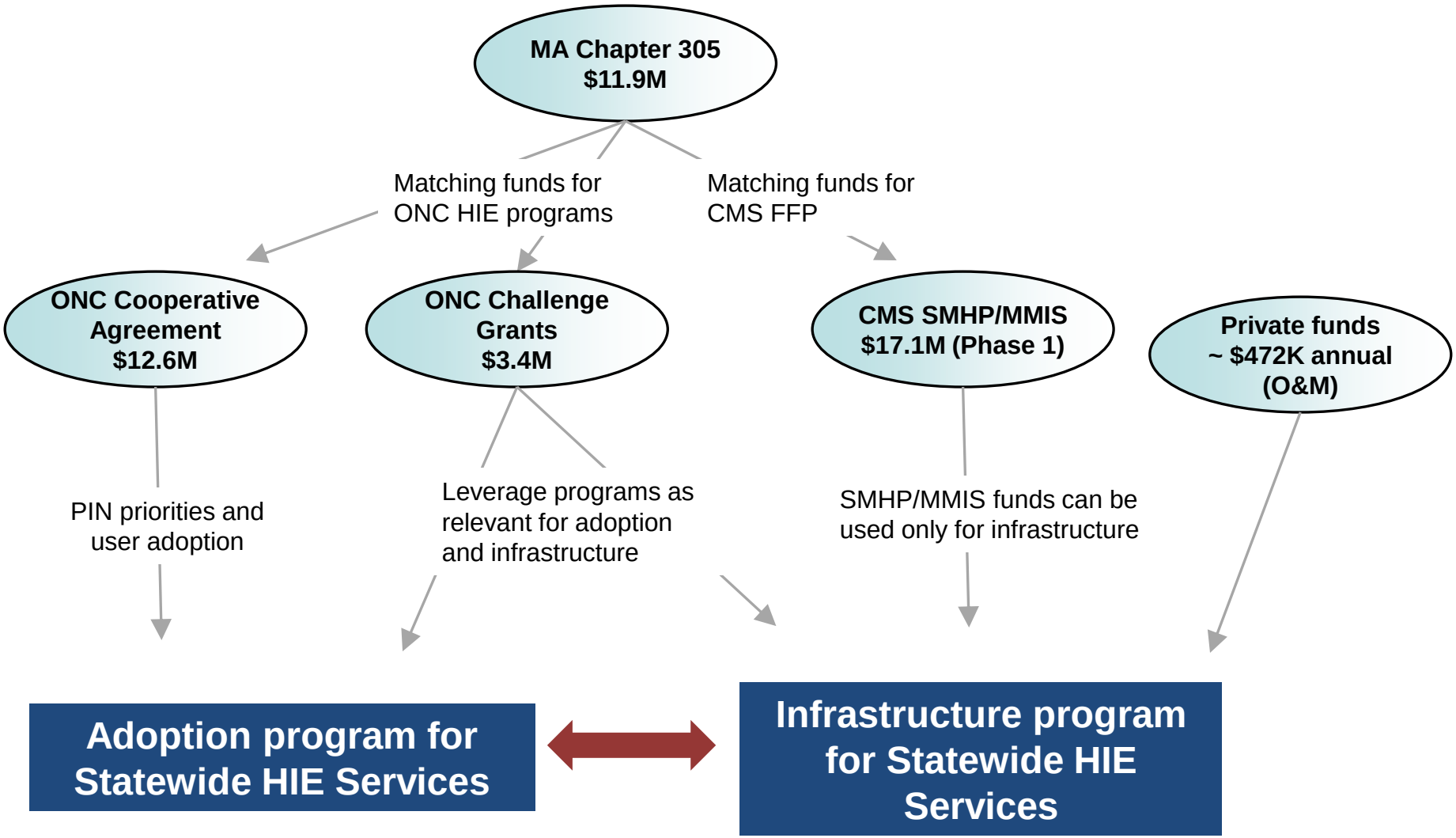
Massachusetts statewide HIE program focuses on infrastructure and adoption



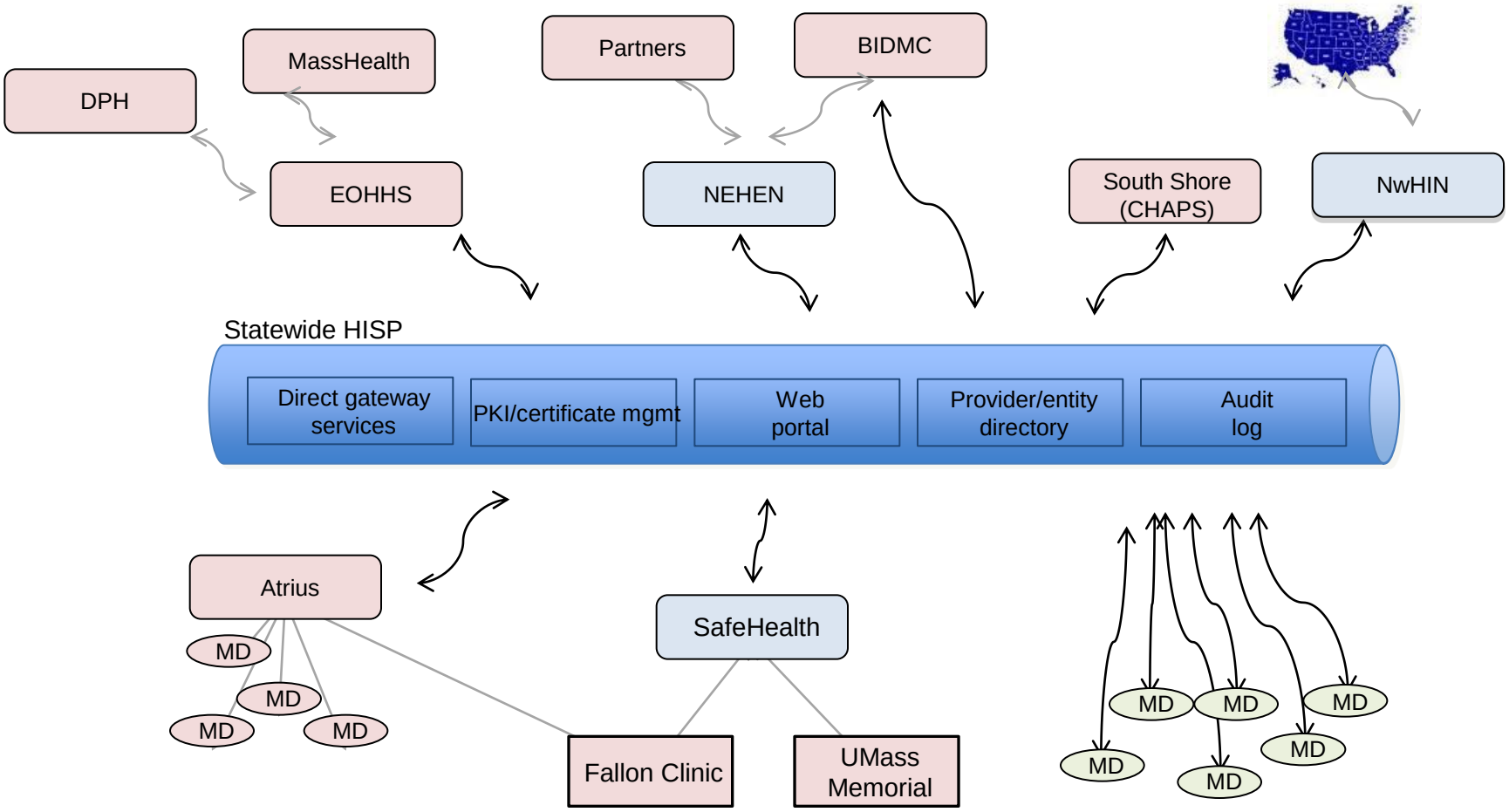
Multi-Stakeholder Governance Model



Aligning Resources for Statewide HIE Services

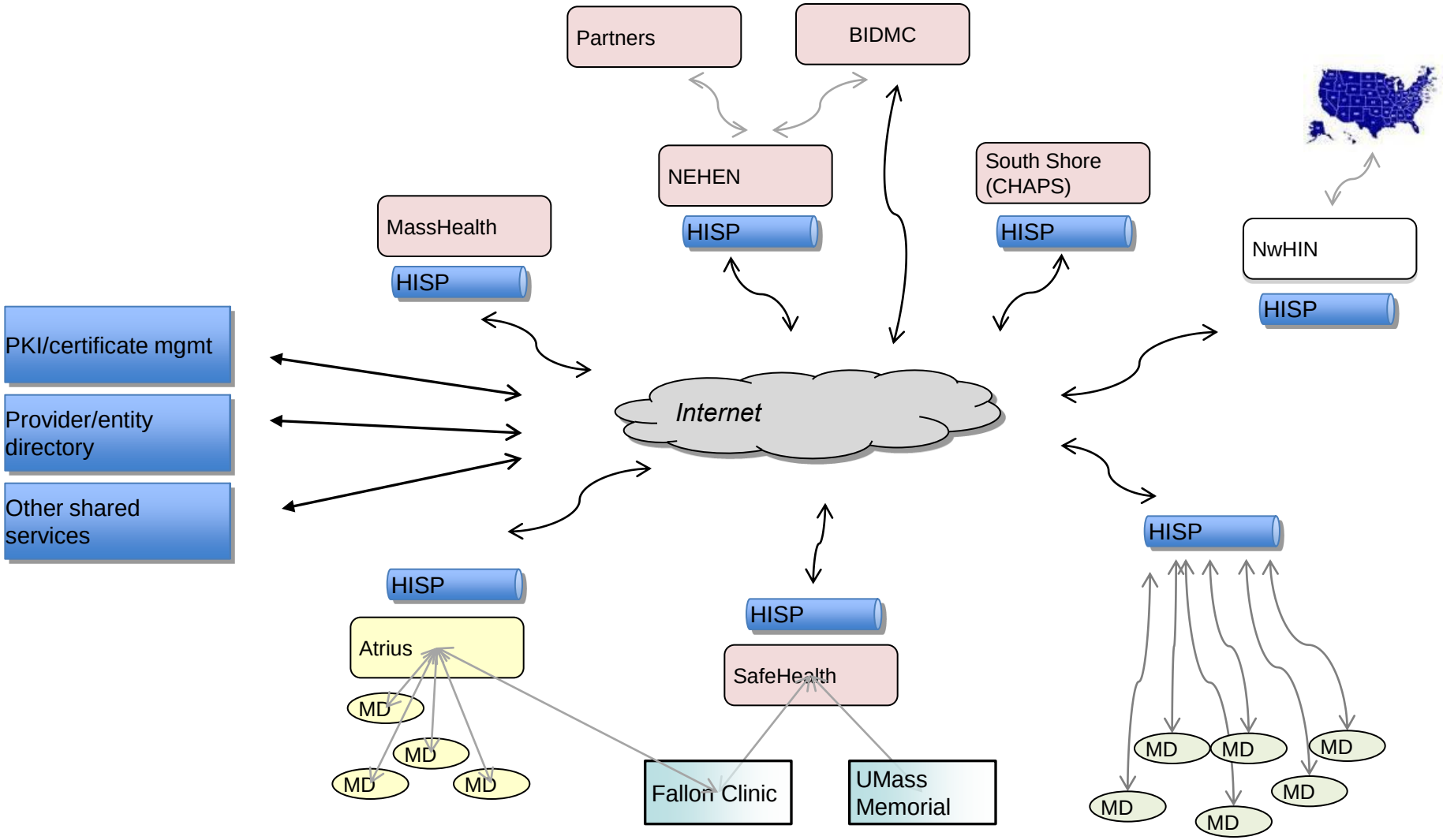


The Massachusetts Statewide Health Information Exchange
(Illustrative)



Eventually expect to transition to heterogeneous model with multiple, varied HISPs and decentralized shared services

Illustrative example



Phasing defines Roadmap for Statewide HIE Program

Phase 1

Information Highway

- Create infrastructure to enable secure transmission ("directed exchange") of clinical information
- Will support exchange among clinicians, public health, and stand-alone registries
- Focus on breadth over depth

Facilitate normalization and aggregation

Phase 2

Analytics and Population Health

- Create infrastructure to facilitate data aggregation/analysis
- Will support Medicaid CDR and quality measure infrastructure
- Will support vocabulary translation services (lab, RX)

Enable queries for records

Phase 3

Search and Retrieve

- Create infrastructure for cross-institutional queries for and retrieval of patient records

Increasing cost and complexity

Statewide HIE Services Overview

	Network participants	Network functions
Phase 1:	• Hospitals (inc. labs and imaging) • PCP or Specialist • Health plans • Long-term care facilities • Other care setting • Patients* • Quality Reporting Service * • Public health*	Send/receive: • Referral/Consult • Admission notification • Post-encounter summary • Discharge Summary/Instructions • Lab Order/Results • Death Notification • Uniform Transfer Form • Public health (SS, Imm., ELR) • Provider address search

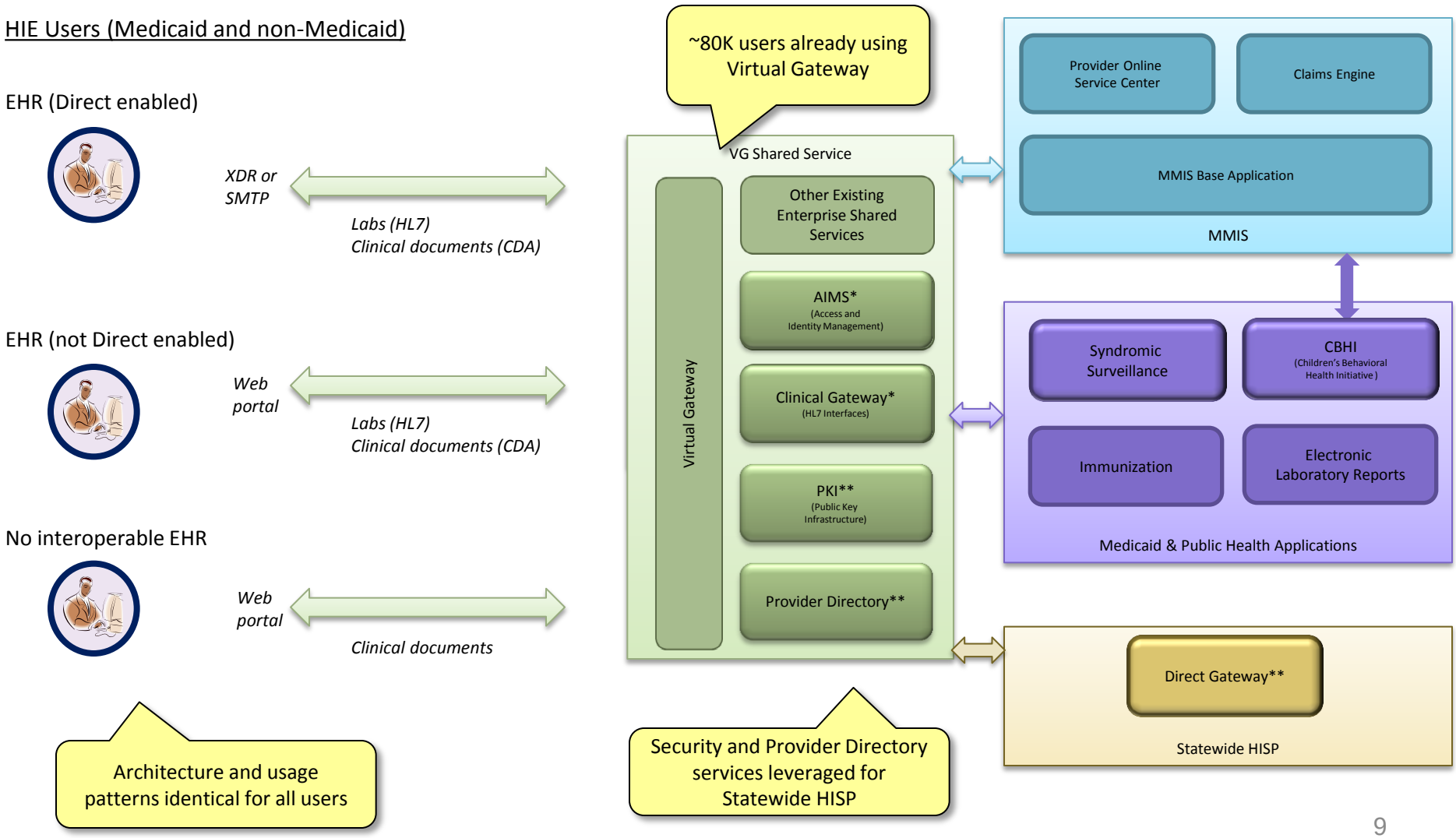
	Additional network participants	Additional network functions

Phase 2:	• More providers and payers and quality reporting services
	• Commercial diagnostic facilities
	  • Imaging centers
	  • Labs
		Send/receive:
		• Public Health Alerts
		• Quality Measure Reports
		• Patient-matching service
		• Vocabulary normalization service

	Additional network participants	Additional network functions
Phase 3:	• More providers and payers	Search and retrieve: • Patient record • Patient consent/authorization

*single-direction exchange

Leveraging existing and new MassHealth infrastructure



ACA driven MA IT Initiatives

ACA heavily promotes the use of information technology as a differentiator to achieve quality improvements and cost containment in the healthcare system.

In Massachusetts three major ACA driven IT related initiatives are being executed in parallel.

- Statewide Health Information Exchange (HIT) phased in from 2012-2015
- ACA compliant Health Insurance Exchange (HIX) by 2014
- Integrated Eligibility System (IES) at EOHHS by 2015

Summary of Features

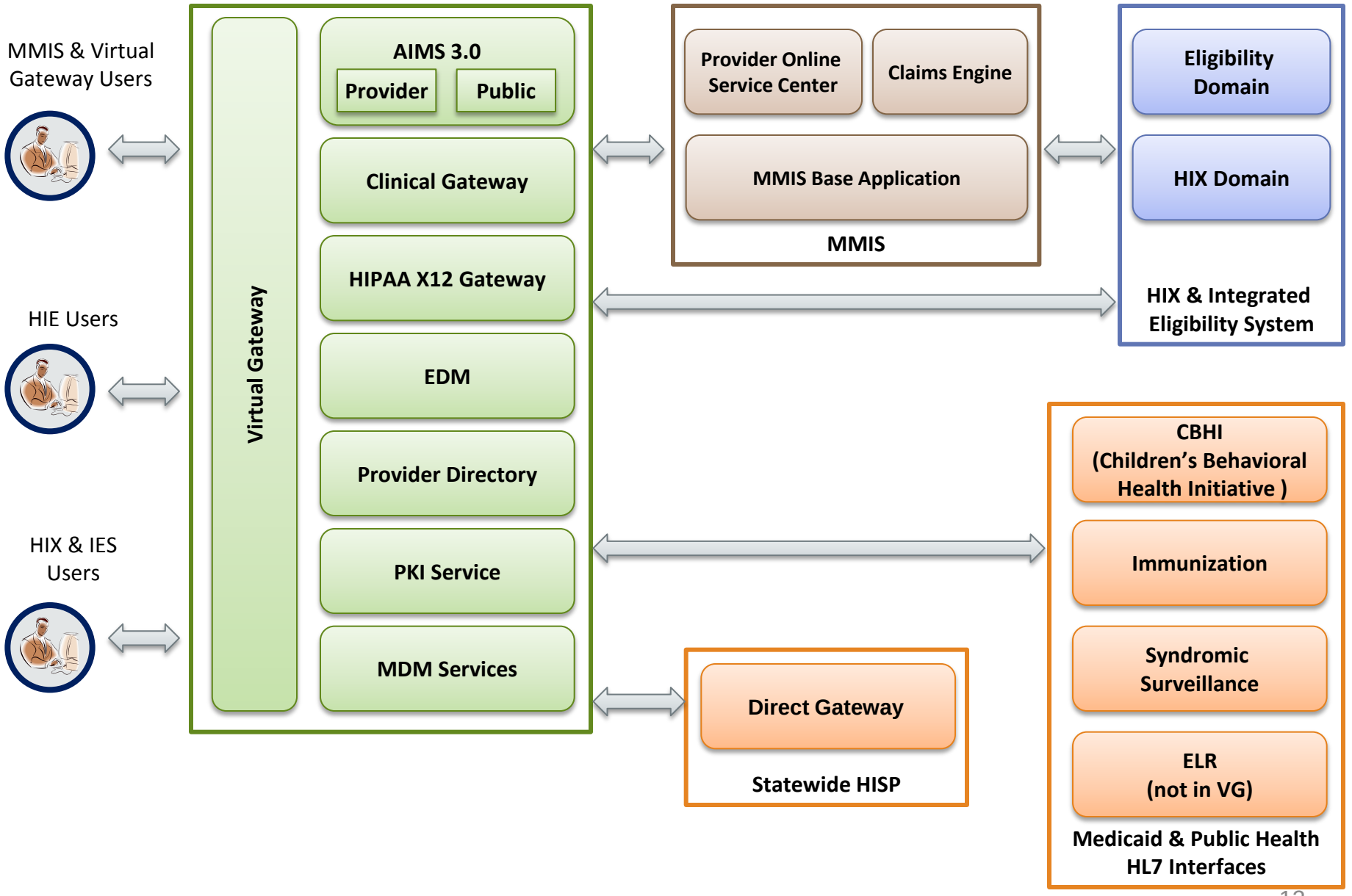
HIX	• is about getting residents access to healthcare
IES	• is about getting residents access to comprehensive health and human services with effective data sharing amongst programs
HIT	• is about giving residents, care providers, and public agencies timely access to consented information needed to enhance quality and contain costs in the healthcare system.

While each has its own mission, the three initiatives provide considerable cross leverage opportunities.

- Maximizing FFP, each project enhances coordination with federal agencies.
- They all leverage the Virtual Gateway providing a common face for these services.
- Built in cohesion, the incremental cost for each project is lower.
- They provide an opportunity to coordinate "transition of care" with "transition of coverage".
- Ability to share consented data across entities allows for coordinated care and an effective programmatic case management
- A linked provider directory and patient record locator services allows for effective handoff between clinical and administrative exchanges.

Jointly they take us on a journey from episodic care to coordinated care to patient directed care. We're moving from fee for service to bundled payments/capitation. Our IT systems are evolving from segmented to integrated to community based.

Anticipate HIX, HIT & IES Integration



Complement infrastructure with a multi-pronged Last Mile Adoption Program

ONC Cooperative Agreement (last-mile services)

CMS SMHP/MMIS (infrastructure)

Statewide outreach, recruitment, and training

Managed procurements, grants, and PM/technical support

Synergies with MeHI REC

MeHI Massachusetts eHealth Institute — A Division of the Massachusetts Technology Collaborative

Managed procurement of interfaces

Hospital/ambulatory EHR vendor

LTC/BH/other vendors

Grants/technical assistance to under-resourced providers

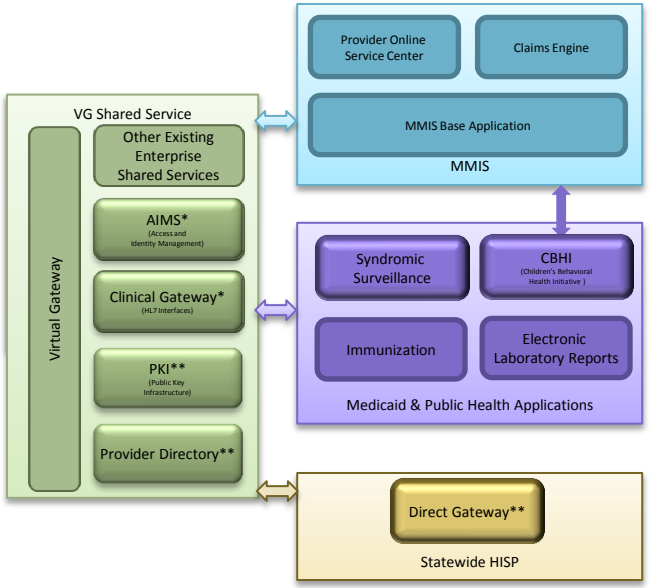
Small practices

LTC/BH/CAH

Web portal recruitment and training

Small practices

LTC/BH/other



Timeline

Initiative	Completion date
Submit IAPD and SMHP to CMS	**Complete**
Submit draft SOP to ONC	**Complete**
EHR/HIE Vendor Roundtable	Dec 16, 2011
Network Users Roundtable	Early Jan 2012
CMS approval of APD-U/SMHP (all signs indicate)	By end-Jan, 2012
ONC approval of SOP and SOP budget (expected)	By early Feb 2012
RFR for Phase 1 services released to Infrastructure Vendors	Week of Feb 6, 2012
Infrastructure Vendor selected	Mar 30, 2012
Infrastructure Vendor under contract	Apr 26, 2012
Go-live for phase 1 “Information Highway” (Direct Gateway)	Oct 15, 2012
Go-live for Last Mile program	Oct 15, 2012
Go-live for Impact program	Oct 15, 2012
Go-live for phase 1 Public Health Gateway (CBHI, SS)	Dec 14, 2012

Vendor Roundtable Review

- **EHR vendor roundtable held on December 16, 2011 at MMS**
  - Over 20 vendors participated in 4-hour session
  - Mix of ambulatory, hospital, and HIE vendors

- **Goal was to understand vendors current and near-future interoperability capabilities and get feedback on MA approach**

- **Findings**
  - There is wide variation in vendor interoperability capabilities
  - Few if any vendors have production Direct-enabled systems in place today
  - There are no standardized approaches to integration with centralized provider directories or PKI infrastructure
  - All of the vendors supported a centrally coordinated approach to interface development and deployment

Q and A

- **What do you think of the overall approach?**
  - Service offerings
  - Infrastructure phasing and priorities
  - Last Mile Adoption Program

- **Will this meet some of your expected interoperability needs? How can it be modified to better meet your needs?**

- **What do you think are the key success factors for the statewide HIE service? What do you think are the key failure factors?**

- **What are your biggest concerns with the statewide HIE approach?**

Thank you!

Appendix

Vendor Questions

1. What native capability exists in your EHR (or HIE) application suite that enables it to connect via the internet to an external system?

2. Does this native capability come with “out of box” connectivity employing any of the following HIE standards:
   - Direct
   - IHE Standards as documented in the NwHIN Exchange Implementation Guide
   - IHE Standards implemented differently than the NwHIN Exchange Implementation Guide
   - CAQH Implementation Guides

3. Specifically with regard to Direct:
   - Can you send and receive clinical content within the EHR using SMTP/SMIME?
   - Can you send and receive clinical content within the EHR using XDR?
   - Can you send and receive clinical content within the EHR using some other standard or approach?

Vendor Questions (continued)

4. What configuration activities are required in order to establish connectivity to a single node (point to point)?
   - What configuration activities are required in order to establish connectivity to an exchange gateway and/or hub router?

5. How does your connectivity capability handle the following:
   - Certificate installation
   - Certificate maintenance- renewal, revocation, etc.
   - Certificate distribution and receipt
   - To what degree are any of the above automated?

6. Do your connectivity capabilities have the ability to engage in federated logging and auditing of exchange activity?

7. If standards-based connectivity doesn't exist in your product, is it part of your near-term development plan?

Vendor Questions (continued)

8. How do you manage client/individual authentication in your system?

9. How do you orchestrate the process of message receipt at the system level and subsequent routing of messages to the individually targeted addressee?

10. Do you natively offer internal message routing integrated with configurable payload workflow in your product? If not, do you offer integrated payload workflow using a third party vendor?

11. Do you have specific capabilities incorporated into your product to support HIE integration; in particular participating in a "network of networks"?
    a. If you have multiple instances of your software implemented independently at various customer sites within Massachusetts, can/will you provide a single integration node (or gateway) through which multiple customers can connect to the statewide HIE?