

Technology Advisory Group

February Meeting

February 26, 2013



Agenda

Advisory Group description

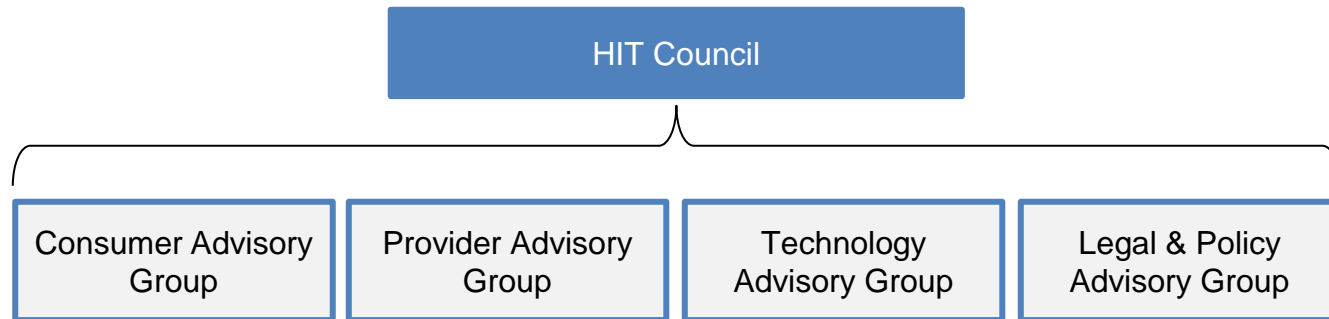
HIE Phase 2 description

Key Questions for Advisory Group Discussion

Next Steps

New HIT Council and Advisory Groups

HIT Council & Advisory Group structure going forward



Changes for 2013:

- Ad hoc HIE-HIT Advisory Committee subsumed by expanded HIT Council
- Volunteer advisors continue to be a vital part of MassHIway planning - *Working Groups* transition to *Advisory Groups*
- Advisory Groups to mirror Federal Advisory Committees
 - Purpose is to provide advice and expert opinion to the HIT Council
 - Requires focused but limited commitment in order to encourage involvement
 - Focused on targeted issue areas where advice is most needed – supported by staff who will be responsible for documenting AG recommendations
- Existing volunteers have been initially attached to an Advisory Group to get us started in Feb 26/27 meetings – There is flexibility for moving groups and recruiting others

Advisory Group membership

Technology Advisory Group – Proposed members

Member	Organization
Atia Amin	Network Health
Karen Bell	CCHIT
Peter Bristol	Network Health
Alec Cheloff	Mass Eye & Ear Infirmary
Nancy Christensen	Medicaid
Chris Diguette	Atrius Health
Larry Garber	Reliant Medical Group
Bill Gillis	BIDMC
Adrian Gropper	
John Halamka	BIDMC
Venkat Jegadeesan	EOHHS
John Kelly	EOHHS
Anurag Lal	EOHHS
Nitin Gujral	Children's Hospital Boston
Neil Meehan	Lawrence General
John Merantza	

Member	Organization
Rick Mohnk	UMass Memorial Medical Center
Matthew Moss	South Shore Hospital
Joseph Pavao	Network Health
Alin Pop	Joseph Smith CHC
Pat Rubalcaba	Partners Healthcare
Marc Silverman	MA Department of Public Health
Jason Snyder	Information Technology Division
Manu Tandon	EOHHS
Mark Taricco	UMass Memorial Medical Center
Bill Young	Berkshire Health Systems
Qiang Wang	BIDMC
David Whitman	The Dimock Center
Keith Worthley	BIDMC

Advisory Group Charges

Overall Purpose: Provide advice and expert opinion to the HIT Council

Objectives by Advisory Group:

Consumer Advisory Group	Provider Advisory Group	Technology Advisory Group	Legal & Policy Advisory Group
<ul style="list-style-type: none"> • Use cases enabled by Phase 2 services • Statewide MPI and record location approach • Consent for search & retrieve functions • Patient-directed messaging • Outreach and education approaches 	<ul style="list-style-type: none"> • Use cases enabled by Phase 2 services • Statewide MPI and record location approach • Consent for search & retrieve functions • Patient-directed messaging • Alignment with MU • Trusted exchange between participants • EHR system capabilities and integration options • Outreach and education approaches 	<ul style="list-style-type: none"> • Phase 2 functions, technical architecture, and components • Phase 2 participant integration requirements • Statewide MPI and record location approach • Search/retrieve options • EHR system capabilities and integration options • HISP-to-HISP connectivity 	<ul style="list-style-type: none"> • Statewide MPI and record location approach • Consent for search & retrieve functions • Business and legal requirements for Phase 2 participation • Trusted exchange between participants

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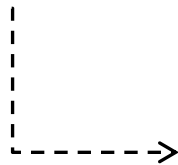
Next Steps

Mass Hlway Phasing

Phase 1

Send and receive

- 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



Phase 2

Search and retrieve

- Create infrastructure for cross-institutional queries for and retrieval of patient records
- Add additional public health services

Mass Hlway 2 phase strategy

	<i>Phase 1</i>	<i>Phase 2</i>
HIE components	<ul style="list-style-type: none"> • Provider directory • PKI infrastructure • Direct/HL7 gateway • Web portal mailbox 	<ul style="list-style-type: none"> • Master Person Index • Record locator service • Consent database • Query/retrieve infrastructure • Patient-directed messaging
HIE users	<ul style="list-style-type: none"> • Any TPO participant • Public health <ul style="list-style-type: none"> • SS, CBHI, MIIS 	<ul style="list-style-type: none"> • Any TPO participant that chooses Phase 2 services • Public health <ul style="list-style-type: none"> – ELR, PMP, Opioid, Lead • Possibly Medicaid/HIX participants (patient messaging)



Deployment and Operation
(EOHHS and MeHI Last Mile Program)



Detailed Planning
(EOHHS with Advice from HIT Council & Advisory Groups)

Phase 1 – Deployment progress to date

Golden Spike - October 16, 2012

- 9 organizations sent production transactions over the Massachusetts Hlway

Mass Hlway December release – December 28, 2012

- **Hosted Webmail (Early Adopter release v.1.0):** Webmail user can send and receive secure email with payload attachments, view and save attachments, and access provider directory.
- **LAND Device (General Availability (GA) Release v.1.0):** Supports interfaces for Golden Spike beta release plus local support of XDR, FTP, and HTTP (REST) and communication to the HIE via S/MIME XDR or the HIE proxy mode.
- **Clinical Gateway:** Supports two-way secure communication between EOHHS applications and Hlway participant systems for Syndromic Surveillance, CBHI, and Immunization reporting. Hlway address is @direct.clinicalgateway.masshiway.net
- **Security:** Web based managed services in place to issue digital certificates to support secure messaging, Symantec certificates installed in production infrastructure and all LAND devices deployed during Golden Spike release and webmail.

Last Mile Program has been launched and is setting up to connect organizations to MassHlway

Phase 2 overall timeline

Mass Hlway Phase 2 high level project schedule

Activity	Completion date
Submit IAPD to CMS	Complete
CMS approval of Phase 2 IAPD	Feb 2013
Procurement for Phase 2 services (RFP, Change Orders, Internal Development)	Feb 2013
Phase 2 infrastructure vendor selected	March 29, 2013
Phase 2 contract (or change order) executed	Apr 15, 2013
Go-live for Phase 2, Release 1 (Public Health interfaces)	Apr-Oct, 2013
Go-live for Phase 2, Release 2 (CDR, EMPI, RLS, Consent)	Oct 2013 – Mar 2014

3 ways to connect to Mass Hlway Services

User types



Physician practice



Hospital



Long-term care
Other providers
Public health
Health plans

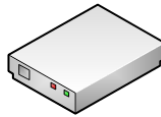


Labs and
imaging centers

3 HIE Access Methods



EHR connects directly



EHR connects through LAN



Browser access to webmail inbox

HIE Services

Phase 1



Provider directory



Certificate repository



DIRECT gateway



Web portal mailbox

Phase 2



Master person index



Consent database



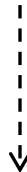
Record locator and
retrieval service

Phase 2 Component Description

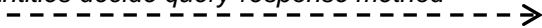
Phase 2



HL7 ADT



Entities decide query-response method



- Probabilistic patient matching using Initiate system
 - Only provide matches that are “direct hits”
 - No “fishing” or wildcard searches allowed
-
- Patient provides consent for organization to respond to queries
 - Consent captured at organization and status sent to Mass HIway in HL7 ADT message
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- Record locator shows only those organizations that patient has authorized to respond to queries
 - Preferred query and response method determined by data-holding entity

Three Query-Retrieve Methods will be available

User types



Physician practice



Hospital

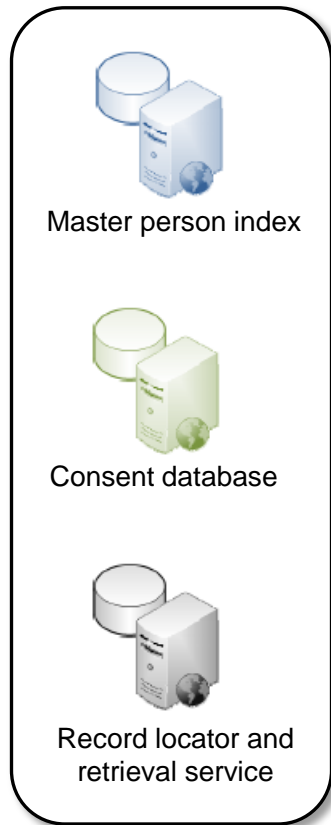


Long-term care
Other providers
Public health
Health plans



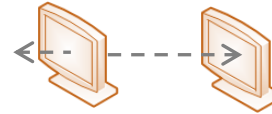
Labs and
imaging centers

Phase 2 HIE Services



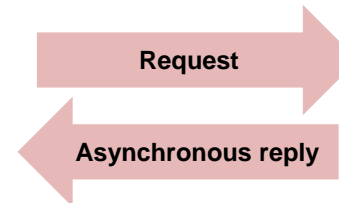
Three Query-Retrieve Methods

Cross-entity viewing



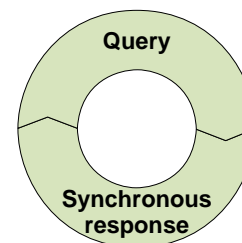
- View another EHR within own EHR
- No data or documents exchanged
- Single-sign on across systems
- Used by Atrius, BI, and others today

“Push-Push”



- Use existing Direct standards for manual request-reply
- Email-like functionality
- Does not require new standards – leverages Stage 2 MU

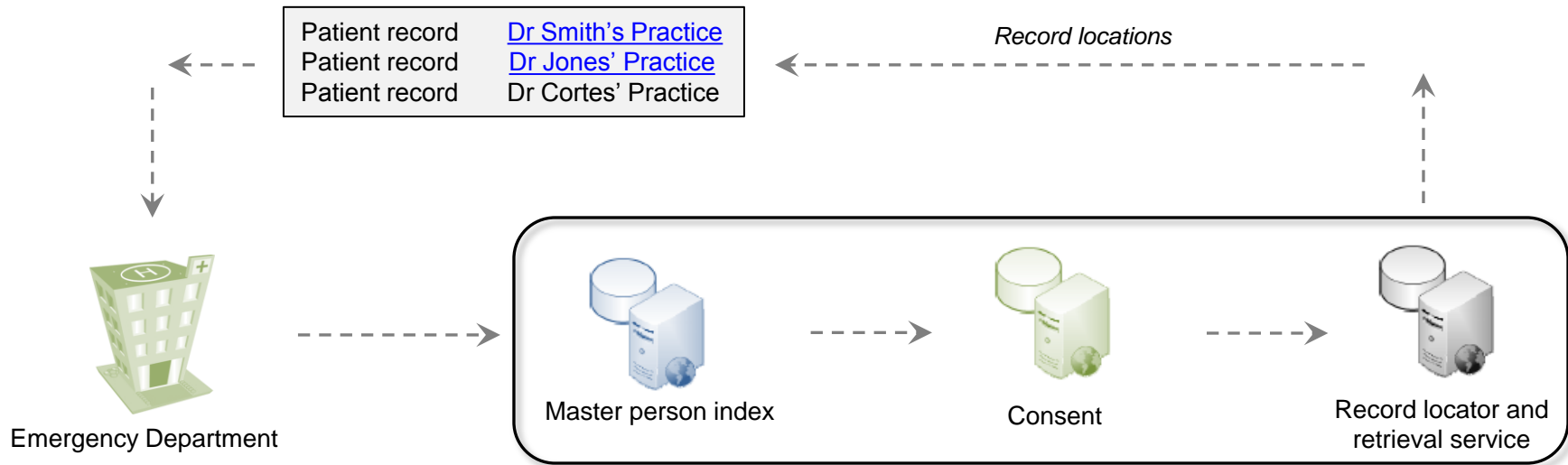
“Query-response”



- Query with automated response
- Like electronic eligibility or RX history requests
- Requires new standards beyond Stage 2 MU

Two Steps: Record Location and Record Request/Retrieval

1 Locate Record



2 Request and Retrieve Record



Phase 2 supports high-value use cases

Mass Hlway service

Use case examples

Medical record location

- An emergency room provider uses MassHlway to determine the organization(s) that holds a patient's medical records
- A case manager uses Hlway to identify the care team that may be serving a patient

Medical record retrieval

- An emergency room provider uses MassHlway to retrieve a summary record for a patient
- A provider uses Hlway to retrieve prior diagnostic test results and specialist visit records to aid in patient diagnosis

Public health reporting

- A provider uses MassHlway to report to the public health cancer registry, immunization registry, lab reporting program, opioid treatment program, syndromic surveillance program, or childhood lead poisoning prevention program

Patient-directed Messaging

- A hospital provider uses MassHlway to send discharge instructions to a patient-specified PHR/portal
- A patient uses MassHlway to send "clipboard" information to a specialist prior to an initial visit

Consent management

- A provider uses MassHlway to record a patient's consent preferences for information sharing via the MassHlway
- A patient uses MassHlway to set his/her own consent preferences

Value drivers:

- Continuity of care
- Patient safety & reduction in adverse events
- Reduction in controlled substance overuse
- Reduction in utilization of medical services
- Enhanced public health reporting adherence
- Supports MU achievement
- Administrative simplification

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Key Questions for Advisory Group Discussion

Next Steps

Questions for Advisory Group Discussion

1. Does the overall model and phasing seem reasonable and achievable?
2. Do the Phase 2 services address patient and provider needs for interoperability to enhance quality, efficiency, and affordability of care?
3. Will record location be valuable on its own if it is implemented and made available in advance of electronic query-retrieve capabilities?
4. Do the proposed query-retrieve methods provide enough flexibility and options to maximize adoption?
5. Will organizations be willing to populate the statewide MPI with patient demographic information?
6. What are the most important concerns with the approach at this point?

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- Key points and recommendations synthesized and provided back to Advisory Group for final comments
- Presentation materials and notes to be posted to EOHHS website
- Poll to go out to determine regular meeting time
- Next HIT Council – March 13, 2013, 3:30-5:00 One Ashburton Place, 11th Floor, Matta Conference Room

HIT Council meeting schedule, presentations, and minutes may be found at <http://www.mass.gov/eohhs/gov/commissions-and-initiatives/masshiway/hit-council-meetings.html>