Massachusetts Health IT Council Meeting

HEALTH INFORMATION EXCHANGE VISION
Health Information Exchange Vision

- Our 2010 current state includes e-prescribing functionality (eligibility, formulary, history, routing, refill), administrative transactions (benefits, referral/auth, claims, claims status), and hospital summary push to pcp/referring clinicians.

- Our 2011 vision is to provide push routing among every provider in the Commonwealth, directories supporting routing, public key infrastructure, and public health repositories (immunization, syndromic surveillance, reportable lab) necessary for every provider in the Commonwealth to achieve meaningful use stage 1, improving healthcare quality, safety and efficiency.

- Our 2013 vision is to provide the master patient index, record locator, all payer database, event notification, patient controlled consent functionality, and pull data exchange tools necessary to achieve meaningful use stage 2, improving care coordination and patient engagement in the Commonwealth.

- Our 2015 vision is to provide the pharmacosurveillance, decision support, and clinical research tools necessary to achieve meaningful use stage 3, creating the foundation for accountable care organizations and supporting healthcare reform in the Commonwealth.
1. Physician / clinician uses software of his or her choice to create an electronic prescription.

2. Electronic prescription is transported to HIE service for submission and tracking (via put / push or get / pull, based on business rules).

3. HIE service submits eligibility verification to payer for pharmacy benefit eligibility and any other available data.

4. HIE service submits electronic prescription / claim to pharmacy processing aggregator / intermediary or directly to pharmacy benefit manager (PBM) for formulary compliance, etc.

5. Pharmacy processing aggregator / intermediary sends electronic prescription fill order to mail order or retail pharmacy.

6. Pharmacy processing aggregator / intermediary sends acknowledgement to HIE service.

7. HIE service sends acknowledgement and other prescription data back to E-Prescribing System or directly to prescribing physician / clinician (via e-mail, fax or standard format message).
As a result of a referral, admission, or emergency, patient registers in hospital or visits physician.

Medication history request is sent to HIE; HIE retrieves retail and mail order history from national network and any other available history from other participating sources (payers, PBMs, other hospitals, etc.).

Medication list is validated with patient, incorporating OTC, herbal supplements, etc.

Inpatient prescription orders are created based on treatment plan and home list.

If patient is discharged, new discharge prescriptions are written and submitted to HIE service for routing to external pharmacy for fulfillment.

If patient is transferred, reconciled medication list is routed to next provider of care via HIE service.

HIE service routes reconciled medication list to interested and trusted party (e.g., PCP).

Patient uses medications dispensed at retail or mail order pharmacy, or purchased over the counter (OTC).
Patient visits PCP, establishes relationship; PCP needs to refer, Consents and routing prefs sent to HIE service.

Consult report transmitted to HIE network.

HIE service checks routing prefs, routes discharge summary to PCP, specialist, others (e.g., health insurance case manager, health record proxy, etc.).
Public Health Reporting

2010

1. Patient visits PCP, specialist, hospital or other provider and establishes trusted relationship and consents (if necessary) for release of data for public health reporting.

2. Standard format visit summary or other standard message is sent to state and municipal public health agency or to a proxy aggregator via FAX or phone.

Secondary Public Health Jurisdiction (e.g., municipal, CDC, etc.)

2011

1. Patient visits PCP, specialist, hospital or other provider and establishes trusted relationship and consents (if necessary) for release of data for public health reporting.

2. Consents and routing instructions are sent to HIE service.

3. Standard format visit summary or other standard message is sent to state and municipal public health agency or to a proxy aggregator, including:
   - Demographics for health disparities analysis
   - Chief complaints for syndromic surveillance
   - Immunization detail/history
   - Lab test results for certain notifiable conditions

Directory/Consents/Log

4. Alerts and reports routed back to providers and other jurisdictions and/or made available by HIE service or agency for query.

Secondary Public Health Jurisdiction (e.g., municipal, CDC, etc.)

Primary Public Health Reporting Agency (e.g., state)

Primary Public Health Reporting Agency (e.g., state)
2010

1. Patient visits PCP.

2. Patient visits a hospital or other provider and the records are faxed upon patient request.

3. Patient is discharged from the hospital or completes a provider visit and is given a paper-based summary.

4. Patient mails or faxes paper summary to PCP.

2012

1. Patient visits PCP. Summary of visit sent to the patient's Electronic Medical Home along with educational materials.

2. Patient visits a hospital or other provider and the patient shares the records from the Electronic Medical Home.

3. Upon discharge or visit completion, summaries are sent to the Electronic Medical home. The patient can share this data with the PCP, family members, or other stakeholders as they wish.
Query Patient History

**2010**

1. Patient visits PCP, specialist, hospital or other provider and establishes trusted relationship and consents for release of data to named health information organization.

2. Standard format visit summary and other data generated by visit, diagnostic test or other healthcare encounter or event is added to local records.

3. Providers, e.g. ED, would have to know where records are and get each.

**2013**

1. Patient visits PCP, specialist, hospital or other provider and establishes trusted relationship and consents for release of data to named health information organization.

2. Consents and routing instructions are sent to HIE service.

3. Standard format visit summary and other data generated by visit, diagnostic test or other healthcare encounter or event is stored by HIE service or proxy to establish electronic health record or summary based on patient consent and business rules in HIE service.

4. Providers, e.g. ED, and authorized parties can access electronic health record through EHR or portal provided by HIE service.
HIE: Health Provider Network of Networks and Readiness to Connect

- Ready to Connect
- Minor Improvements Needed to Connect
- Has EHR, Needs HIE Interface
- No EHR, Use Push Portal
- 2nd Tier Connectivity Targets

HIE: State-wide HIE - Network of Networks

- IDN
- PCP
- Hosp
- IPA
- CHC

- Independent Labs
- Independent Pharmacies
- Payers
- HIE/EHR Vendors
- Long Term Care
- Behavioral Health
- Homeopathic
- Oral Health
- Social Services
- Physical Therapy
- Home Health

Sunday, October 17, 2010
Discussion/Questions?