Enabling Practical and Compelling Use Cases for Data Exchange

February 29, 2016

Laurance Stuntz, Mass eHealth Institute
Mariann Yeager, The Sequoia Project

DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.
Conflict of Interest

Laurance Stuntz
Mariann Yeager, MBA

Has no real or apparent conflicts of interest to report.
Agenda

Tackling Data Sharing in Massachusetts
• Driving HIway Implementation Grants and Communities Grants
• Collaborating at the local level and across Massachusetts
• Ensuring HIE Value

Health IT Interoperability at the National Level
• Examining the many solutions to the many challenges of interoperability
• Encouraging collaboration and innovation

Q&A
Learning Objectives

• Assess how collaborative approaches to exchange are supporting and extending interoperability

• Describe how national standards for query and Direct Messaging can be integrated into workflows across several use cases

• Evaluate how consumer-driven exchange can be facilitated through diverse health IT platforms and mobile applications
MeHI is the designated Massachusetts state agency for:

- Coordinating health care innovation, technology and competitiveness
- Accelerating the adoption of health information technologies
- Promoting Health IT to improve the safety, quality and efficiency of health care in Massachusetts
- Advancing the dissemination of electronic health records systems in all health care provider settings

MeHI is a division of the Massachusetts Technology Collaborative, a public economic development agency
Massachusetts Health Information Exchange Timeline

• 1998 - Administrative exchange NEHEN created
• 2004-2007 - BCBSMA creates MAeHC and funds EHR and local HIE pilots
• 2008 – NEHEN launches RxGateway for ePrescribing
• 2009 – MA-SHARE initiates exchange of clinical information, eventually merged into NEHEN
• 2011 – MeHI, EOHHS and CMS work together to fund the Mass HIway
• 2012 – Mass HIway launched, with Direct-based services
• 2013-2014 – HIway Implementation Grants
• 2015 – HIway Phase 2 (RLS) enters pilot
• 2016 – Community Collaboration Grants launched
HIway Implementation Grants

- **GREEN** 32 grantees
- **BLUE** ~50 collaborators
How grantees used the HIway

### Send
- Send Care Summary: 17
- Send Referral Request: 9
- Send Hospital Discharge Notification: 6
- Send Lab Results: 2
- Send Hospital Discharge Summary: 2
- Medication Reconciliation: 2
- Send Lab and Radiology Orders: 1
- Send Imaging Notifications: 1
- Send Hospital Admission Notification: 1
- Send enrollment/admission: 1
- Send ED Admission Notification: 1
- Send CANS Data to MDPH: 1

### Receive
- Receive Care Summary: 13
- Receive Referral Request: 5
- Receive Discharge Summary: 5
- Receive Lab Results: 1
- Receive Lab Orders: 1
- Receive Imaging Notifications: 1
- Receive Hospital Discharge Notification: 1
- Receive ED Visit Summary: 1
Connected Communities Implementation Grant

- Designed to support organizations in demonstrating community collaboration using HIT to address a real-world, practical, measurable healthcare need.

- Projects were required to include **behavioral health** and/or **long term and post-acute care organizations**.
  - Addresses some of the key cost drivers identified by the Massachusetts Health Policy Commission

- **Aimed at the priorities identified in the community needs assessments** with a focus on improving two aspects of care coordination; **care transitions** and **cross-setting care management**
Connected Communities: Grantees and Collaborators

GRANTEES

Collaborators

MAP SHOWING THE LOCATION OF GRANTEES AND COLLABORATORS IN MASSACHUSETTS.

MEHI
Massachusetts eHealth Institute

HIMSS 16

©HIMSS 2016
## Connected Communities Implementation Grants

<table>
<thead>
<tr>
<th>Grantee</th>
<th># of Collaborators</th>
<th>Use Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Health Network</td>
<td>13</td>
<td>eReferral – inpatient psychiatric with substance abuse treatment facilities</td>
</tr>
<tr>
<td>Berkshire Medical Center</td>
<td>7</td>
<td>Care Transition &amp; Coordination – medical center with community services</td>
</tr>
<tr>
<td>Brockton Neighborhood Health Center</td>
<td>5</td>
<td>Opioid Treatment Care Coordination – eReferrals, ADT, care coordination, meds/treatment</td>
</tr>
<tr>
<td>Cape Cod Healthcare</td>
<td>33</td>
<td>Care Transition, ADT, Discharge Summary, CCDA – post acute care, behavioral health</td>
</tr>
<tr>
<td>Lowell General PHO</td>
<td>9</td>
<td>Cross-provider Care Planning/Management – across a broad range of provider types, post acute care</td>
</tr>
<tr>
<td>Reliant Medical Group</td>
<td>14</td>
<td>Care Transition, eConsents, ADT, CCDA – automated processes</td>
</tr>
<tr>
<td>Upham's Corner Health Center</td>
<td>1</td>
<td>Closed Loop Referral, Care Coordination with Boston Children’s</td>
</tr>
<tr>
<td>Whittier Independent Practice Association</td>
<td>8</td>
<td>Medication Reconciliation with hospital, post-acute, behavioral health organizations via Wellport HIE</td>
</tr>
</tbody>
</table>
CARE COORDINATION FOR SUBSTANCE USE DISORDER PATIENTS IN RESPONSE TO THE OPIOID CRISIS

Connected Community Grant Project

GOALS

- Developing workflows at each provider
- Consistent referral and privacy protocols between providers
- Content, data set and formatting standards
- Developing technical infrastructure to support
- Some facilities will be building connections to the MA Hiway

Substance Abuse Treatment Centers

- Referrals Ordering & sharing referral status
- Medication & Treatment Status
- Discharge Summaries
- Shared Care Plans

Hospitals

Mental Health Facilities

Integrated Healthcare Centers
Specific Use Cases Drive Adoption

Health Information Exchange Toolkit

This toolkit contains guides, templates, and forms to help develop effective connections to a Health Information Exchange (HIE), like the Mass HIway.

Use Case Resources

The Use Case resources listed below describe how to develop new use cases. Use the Use Case Tools to visualize and describe the actual use cases of the planned Health Information Exchange.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Case Development Guide</td>
<td>This guide describes the benefits of developing a detailed Use Case, and the elements that should be included in every Use Case.</td>
</tr>
<tr>
<td>Use Case Development Form</td>
<td>This form provides a template for documenting your organization’s Use Cases.</td>
</tr>
<tr>
<td>Developing a Use Case</td>
<td>This meeting presentation explains the Use Case concepts and provides Use Case examples.</td>
</tr>
<tr>
<td>Workshop Presentation</td>
<td>This alternate workshop presentation similarly explains the Use Case concepts and provides Use Case examples.</td>
</tr>
<tr>
<td>Use Case Examples</td>
<td>This document provides a list of the types of healthcare information that can be exchanged via an HIE. This serves as examples to develop potential Use Cases.</td>
</tr>
</tbody>
</table>

http://mehi.masstech.org/education/resources-tools/hie-toolkit/
The Sequoia Project’s Role

The Sequoia Project is a trusted, independent convener of industry and government.

We work to address the challenges of secure, interoperable nationwide health information exchange (HIE).
Current Sequoia Project Initiatives

**eHealth Exchange**

The **eHealth Exchange** is the largest and fastest growing health data sharing network in the US.

---

**Carequality**

**Carequality** is a public-private collaborative process that built a national-level interoperability framework to inter-connect networks.

---

**RSNA Image Share Validation Program**

**RSNA Image Share Validation Program** is a conformity assessment program that tests the compliance of vendors’ systems using quality standards determined most effective for accurate and efficient exchange of medical images including those used in the RSNA Image Share Network.
2016 Sequoia Priorities

- Patient Matching
- Provider Directory
- Improved specificity and testing of clinical documents
Different Approaches to Connect

- Centralized
- Federated
- Federated with Shared Services (Hybrid)

Regional and statewide HIOs

The Internet

commonwell Health Alliance

surescripts
Introduction to Carequality

Carequality creates a standardized, national-level interoperability framework to link all data sharing networks

Carequality is a coalition of data sharing networks who wish to interconnect using this interoperability framework
How do you get nationwide connectivity? Clinic by clinic, hospital by hospital?

Data sharing networks have already connected many participants. The connections grow exponentially by connecting these networks.

- If you connect six clinics, you might reach a few dozen physicians.
- If you connect six networks, you can reach thousands of physicians.
A Multi-Faceted Approach

Carequality’s strength lies in its diverse stakeholder base. We approach the interoperability challenge from all sides.

Carequality is Supported by

The Sequoia Project is a nonprofit acting in the public interest. It convenes industry and government to address common interoperability challenges.
Common rules of the road: In order for the varied participants to trust each other with health information, everyone needs to have a legal obligation to abide by the same rules.

Well-defined technical specs: Shared rules are not enough; clear standards must be laid out in an implementation guide that all implementers can follow.

A participant directory: To connect using the common standards, systems must know the addresses and roles of each participant.
Join Us in Solving Interoperability Together

The carequality

• Physicians
• Consumers
• Government Agencies
• Data Sharing Networks
• Payers
• Behavioral Health
• Acute Care
• Long Term/Post-Acute Care

Community:

• Hospice and Home Care
• Research
• Public Health
• Vendors
• Standards Development Orgs.
• Pharmacies
• EMS Services
Iterative Use Case Process

Initial Use Case: Query-Based Document Exchange

- Treatment
- Payment
- Operations
- Public Health
- Patient Authorization (PHR)
Carequality Framework Implementers

2016 Framework Initial Adopters

- athenahealth
- COORDINATED CARE OKLAHOMA
- eClinicalWorks
- Epic
- GE Healthcare
- Kno2
- Netsmart
- NEXTGEN HEALTHCARE
- OneRecord
- surescripts

Ever-Expanding Coverage

- Over 300,000 Physicians
- Over 1,800 Hospitals
- Over 40,000 Clinics
- More than 15 million patient records shared per month
Current Priorities

**Carequality Directory:** Overcoming the industry-wide challenge of maintaining an accurate provider directory

**Patient Authorization:** Patients are consumers that deserve to be in control of their healthcare information

**Imaging Content:** Supporting medical image sharing to patients and providers
Interoperability is a journey not a destination
Questions

Laurance Stuntz
Mass eHealth Institute
mehi.masstech.org
stuntz@masstech.org

Marianne Yeager, MBA
The Sequoia Project
sequoiaproject.org
myeager@sequoiaproject.org

Visit HIMSS Booth #454