Using a Disaster Event as a Use Case for Health Information Exchange

APHA Presentation

November 3, 2015
Disclosure

- The views expressed in this presentation are the presenters and do not necessarily reflect the position or policy of the US Department of Health and Human Services

- No Relationships to Disclose
Agenda

• HIE Overall Landscape
• Emergency Medical Services
• Connecting EMS and HIE
Foster exchange networks
- Build capacity of local and affinity models
- Reduce cost and complexity, including through shared services
- Policies that encourage exchange

Ensure exchange across networks + EMS
- Every provider has at least one option for exchange
- Governance and trust
- Common standards to connect the nodes
- Expand connectivity for EMS providers to connect to hospital electronic health records systems, local and regional health information exchange networks.
EHR Adoption 2008 - 2014

Certified EHR
Basic EHR System

Percent of Hospitals

<table>
<thead>
<tr>
<th>Year</th>
<th>Certified EHR</th>
<th>Basic EHR System</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>9.4</td>
<td></td>
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<tr>
<td>2009</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>15.6</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>27.6*</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>44.4*</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>59.4*</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>75.5*</td>
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</tbody>
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Rapid facilitation of directed exchange capabilities to support Stage 1 meaningful use

Preconditions:
✓ Little to no exchange activity
✓ Many providers and data trading partners that have limited HIT capabilities
✓ If HIE activity exists, no cross entity exchange

Bolstering of sub-state exchanges through financial and technical support, tied to performance goals

Preconditions:
✓ Sub-state nodes exist, but capacity needs to be built to meet Stage 1 MU
✓ Nodes are not connected
✓ No existing statewide exchange entity

Thin-layer state-level network to connect existing sub-state exchanges. (2015 - Supports statewide EMS connectivity, query function, patient location.)

Preconditions:
✓ Operational sub-state nodes
✓ Nodes are not connected
✓ No existing statewide exchange entity
✓ Diverse local HIE approaches

Statewide HIE activities providing a wide spectrum of HIE services directly to end-users and to sub-state exchanges where they exist

Preconditions:
✓ Operational state-level entity
✓ Strong stakeholder buy-in
✓ State government authority/financial support
✓ Existing staff capacity
HIE and the Patient Seek Care

Find patient information to support unplanned care

QUERY-BASED EXCHANGE

Send and receive patient information to support care coordination

DIRECTED

Patients aggregate use and share their own information

CONSUMER-MEDIATED EXCHANGE

From Health Affairs, March 5, 2012
The successful delivery of daily emergency care is key to our nation’s healthcare system emergency preparedness efforts.
“All Disasters are Local”

Disaster Occurs

Local First Responders

Alert

County Executive

Requests Aid From

Governor

Requests Mutual Aid

Other States

President

Requests Declaration

Declares Disaster

Federal Coordinating Officer

Appoints

Establishes

A Joint Field Office with 15 Emergency Support Functions (ESFs) & Federal Response Resources

Federal Emergency Management Agency (FEMA) Engaged
Connect HIEs (40+) so that providers and emergency responders have a way to access health information across systems.

- Improve patient health;
- Respond to disasters;
- Measure outcomes; and
- Save lives.

**Interoperability and national scalability**
PULSE Use Case-Earthquake

- 7+ magnitude earthquake in California
  - San Francisco Bay Area
    - Estimated 6 million people affected
    - 1.6 million displaced
  - Southern California
    - Estimated 5 million affected
    - 1.5 million displaced
    - The closer to Los Angeles up to 17.5 million could be affected
Outcomes

• A final report on the Patient Unified Lookup System for Emergencies (PULSE) technical requirements, use case, policy considerations, and next steps

• Letters of Intent to participate from more than 30 EMS and HIOs organizations in California

• Federal, state and local partners committed to driving PULSE forward
Where We Are Now

• California EMS Authority has secured an Advanced HIE and Interoperability grant from ONC (through 2017)
  – Implement PULSE (connecting four HIOs)
  – +EMS to enable EMS providers on scene to exchange patient health information with local hospitals

• ONC, ASPR and NHTSA continue to provide technical assistance
Resources

- IDEA Lab Project
- Healthit.gov
  - Blog: Disaster Preparedness and HIE
  - Blog: HIE Supports Disaster Preparedness and EMS
  - Blog: Expecting the Unexpected
- EMS Use Case Document
- California Project
  - Website
  - Blog
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