Overview of Health IT in Utah:
Data to Inform and Improve Performance

Office of Economic Analysis, Evaluation and Modeling
&
State HIE Program

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Chartpack Team

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Questions?

- Please contact your project officer with any questions.
Overview of the Data
What is in the Chartpacks?

National and state data on:

Health information exchange
- Capacity to exchange
- Active exchange
  - Exchange what types of data? (e-Rx, lab data, care summaries)
  - Exchange with who? (physicians, hospitals, pharmacies, labs, patients)

EHR adoption
- Adoption of a basic EHR
- Intent to apply for Meaningful Use
Goals of the “Chartpacks”: A Tool for States

Provide a snapshot of current levels of HIE/HIT capacity and activity underway

Assess trends over time

Help identify gaps as well as areas of strength
Why Chartpacks?

Regional extension centers

Workforce training

Medicare & Medicaid Incentives and penalties

State grants for health Information exchange

Standards & certification framework

Privacy & Security framework

Adoption of EHRs

Meaningful Use of EHRs

Exchange of health information

• Improved
  • health outcomes
  • ability to study and improve care delivery
  • Increased transparency and efficiency

Research to enhance HIT

About the Data Sources

• ONC acquired potential indicators of HIT adoption and use from 3 major sources:

• **National Ambulatory Medical Care Survey (NAMCS) EMR Supplement:**
  – The National Center for Health Statistics conducts this survey of physicians who work in ambulatory care settings annually by mail.
  – Starting in 2010, the sample size was increased so we could generate state-level estimates.

• **American Hospital Association (AHA) survey Health IT Supplement:**
  – The American Hospital Association administers this annual survey of hospitals CIOs online and by mail. We report on non-federal acute care hospitals.

• **Surescripts:**
  – A leading e-prescription network, Surescripts provides the highest quality representative sample of e-prescribing by providers and pharmacies in the United States.
## Current Data Sources

### Potential Indicators of HIT/HIE Capacity and Activity

<table>
<thead>
<tr>
<th>Data Source</th>
<th>EHR adoption</th>
<th>Labs</th>
<th>eRX</th>
<th>Care Summary</th>
<th>Consumer</th>
<th>State Level Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAMCS</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X**</td>
<td>X**</td>
<td>X</td>
</tr>
<tr>
<td>AHA (Hospital)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X*</td>
</tr>
<tr>
<td>Surescripts</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Generation of State-Level estimate depends upon sample size and response rate.

**2011 data only will be available later this year.
ONC’s Current Data Sources

Provider Surveys

**NAMCS**
- **Physicians**
  - Annually
  - Physicians who work in ambulatory care settings
  - Mail

**AHA**
- **Hospitals**
  - Annually
  - CIOs of non-federal acute care hospitals
  - Online & mail

Possible overestimate of adoption/use rates due to self-reported data & respondent bias
Surescripts, a leading e-prescription network, provides the highest quality representative sample of e-prescribing in the United States.

Data on providers and pharmacies are available **quarterly**.

Market presence may vary in certain territories/states.*

*Please report pharmacies that are on a different network to your project officer.*
### Data Strengths and Limitations

<table>
<thead>
<tr>
<th>Source</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| **NAMCS**         | • Oversampling to generate state-level estimates  
                    • Administered by NCHS  
                    • High response rate | • Self-reported  
                    • Non-responder bias |
| **AHA**           | • High response rate  
                    • Respondent is the hospital CIO | • Self-reported  
                    • Non-respondent bias  
                    • No oversampling |
| **Surescripts**   | • Geographic scope of more than 92% of all pharmacies nationwide  
                    • Large sample size  
                    • Zip code level data  
                    • Includes both nurse practitioners and physicians | • Coverage varies by state  
                    • Denominator not supplied |

> **Over-estimation of HIT adoption**

> **Due to small sample sizes, in some cases we may not be able to generate reliable state-level estimates. When the Relative Standard Error is high, it is considered an unreliable estimate and will be indicated with either an asterisk or the data will not be shown.**
NAMCS Chart Packs
National Trends: Physician EHR Adoption

'Basic' EHR Adoption by Office-Based Physicians

Source: NAMCS, 2008-2010

*Rural = Non-Metropolitan
Rural estimates not shown for 2008 because >30% relative standard error
How does your State Compare to National Estimates?

Proportion of Office-Based Physicians that have Adopted a 'Basic' EHR

<table>
<thead>
<tr>
<th>Category</th>
<th>National</th>
<th>Utah</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>25%</td>
<td>52%</td>
</tr>
<tr>
<td>Small Practices (≤10 Physicians)</td>
<td>21%</td>
<td>43%</td>
</tr>
<tr>
<td>Primary Care</td>
<td>30%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Source: NAMCS, 2010
Nationwide: Physician Meaningful Use Intent

Overall MU Intent for Office-Based Physicians in the Country

- Yes: 41%
- No: 14%
- Uncertain: 45%

MU Intent for Key Physicians

- Intend to Apply in 2011: 75%
- Primary Care: 50%
- Small Practices (≤10 Physicians): 85%

Source: NAMCS, 2010
Overall MU Intent for Office-Based Physicians in Utah

**Source:** NAMCS, 2010
National Trends: Physicians Viewing Lab Results Electronically

Proportion of Office-Based Physicians with the Capability: View Lab Results Electronically

Source: NAMCS, 2008-2010
“EHR” defined by those who report having any EHR
How does your state compare to national estimates?

Office-Based Physicians Capability: Viewing Electronic Lab Results

- With EHR
  - National: 44%
  - Utah: 68%
- Without EHR
  - National: 19%
  - Utah: 7%* (Indicates unreliable estimate, Relative Standard Error > 0.3)
- No Capability to Exchange
  - National: 37%
  - Utah: 25%

Source: NAMCS, 2010
“EHR” defined by those who report having any EHR
* Indicates unreliable estimate, Relative Standard Error > 0.3
How does your state compare to national estimates?

Office-Based Physicians Capacity: Electronic Lab Test Ordering

With EHR: 37% National, 48% Utah
Without EHR: 8% National, 4%* Utah
No Capability to Exchange: 55% National, 48% Utah

Source: NAMCS, 2010
“EHR” defined by those who report having any EHR
* Indicates unreliable estimate, Relative Standard Error > 0.3
Nationwide Comparisons
Statewide Estimates: Physician EHR Adoption

Source: NAMCS, 2010
Statewide Estimates: Physician Intent to apply for Meaningful Use

Source: NAMCS, 2010
Statewide Estimates: Physicians Viewing Lab Results Electronically

PIN Priority

Source: NAMCS, 2010
Statewide Estimates: Physician Electronic Lab Test Ordering

Source: NAMCS, 2010
Measures of ePrescribing
How does your State Compare to National Estimates?

PIN Priority

Percent of Retail Community Pharmacies Enabled to e-Prescribe and Actively e-Prescribing on the Surescripts Network in Utah

State of the Nation September 2011

Enabled nationwide: 92.4%
Active nationwide: 90.9%

Data Source: Surescripts
Surescripts Connectivity:
Urban vs. Rural Pharmacies

Percent of Retail Community Pharmacies Connected to the Surescripts Network in Urban and Rural Counties in Utah

State of the Nation
September 2011

Enabled urban: 93.1%
Enabled rural: 90.2%

Data Source: Surescripts
The medication history request variable measures adoption and demand, describing the number of medication histories sought on the Surescripts network. There are 240 million patients with medication history data in the Surescripts database. Their information comes from participating pharmacy benefit managers and pharmacies.

Data Source: Surescripts
AHA Data
How Does Your State Compare to the National Estimates?

Adoption of (Basic) EHRs by All Hospitals

<table>
<thead>
<tr>
<th>Year</th>
<th>National</th>
<th>Utah</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>2009</td>
<td>16*</td>
<td>12</td>
</tr>
<tr>
<td>2010</td>
<td>19</td>
<td>14*</td>
</tr>
</tbody>
</table>

*Estimate not reliable due to sample size and relative standard error greater than .49

Data Source: AHA Hospital Survey
How Does Your State Compare to the National Estimates?

Adoption of (Basic) EHRs by Rural Hospitals

Data Source: AHA Hospital Survey

*Estimate not reliable due to sample size and relative standard error greater than .49
How Does Your State Compare to the National Estimates?

Adoption of (Basic) EHRs by Small Hospitals

- **National**
- **Utah**

Data Source: AHA Hospital Survey

*Estimate not reliable due to sample size and relative standard error greater than .49
Meaningful Use
How Does Your State Compare to the National Estimates?

Year Hospitals Intend to Apply for Meaningful Use

National

- 2011: 45%
- 2012: 21%
- 2013+: 8%
- Do not know: 11%
- No: 15%

Utah

- 2011: 17%*
- 2012: 19%*
- 2013+: 26%*
- Do not know: 21%
- No: 17%

Data Source: AHA Hospital Survey
Data from 2010

*Estimate not reliable due to sample size and relative standard error greater than .49
Statewide Estimates: Hospitals Intending to Apply for MU in 2011/2012

Data Source: AHA Hospital Survey
Data from 2010
Measures of Lab Exchange
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Laboratory Reports

Inside Hospital System

- National
- Utah

<table>
<thead>
<tr>
<th>Year</th>
<th>National</th>
<th>Utah</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>72%</td>
<td>95%</td>
</tr>
<tr>
<td>2009</td>
<td>70%</td>
<td>85%</td>
</tr>
<tr>
<td>2010</td>
<td>64%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Outside Hospital System

- National
- Utah

<table>
<thead>
<tr>
<th>Year</th>
<th>National</th>
<th>Utah</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>17%</td>
<td>10*</td>
</tr>
<tr>
<td>2009</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>2010</td>
<td>18%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Data Source: AHA Hospital Survey
Data from 2010

*Estimate not reliable due to sample size and relative standard error greater than .49
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Laboratory Reports with Ambulatory Providers Outside Their System

Data Source: AHA Hospital Survey
Data from 2010
Other Measures of Exchange
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Radiology Reports

Inside Hospital System

Year  | National | Utah  
---    |----------|-------
2008  | 70       | 95    
2009  | 69       | 85    
2010  | 64       | 88    

Outside Hospital System

Year  | National | Utah  
---    |----------|-------
2008  | 21       | 18    
2009  | 23       | 16    
2010  | 25       | 22    

Data Source: AHA Hospital Survey
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Medication Histories with Hospitals

Data Source: AHA Hospital Survey

*Estimate not reliable due to sample size and relative standard error greater than .49
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Care Summaries with Hospitals

Inside Hospital System

2008 2009 2010
National 77 77 70
Utah 100 93 100

Outside Hospital System

2008 2009 2010
National 14 13 14
Utah 5* 13* 21

Data Source: AHA Hospital Survey

*Estimate not reliable due to sample size and relative standard error greater than .49
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Radiology Reports with Ambulatory Providers Outside Their System

Data Source: AHA Hospital Survey
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Medication Histories with Ambulatory Providers Outside Their System

- **2008**: National 45, Utah 39
- **2009**: National 39, Utah 5* (Estimate not reliable due to sample size and relative standard error greater than .49)
- **2010**: National 30, Utah 8*

*Data Source: AHA Hospital Survey*
How Does Your State Compare to the National Estimates?

% of Hospitals Electronically Exchanging Care Summaries with Ambulatory Providers Outside Their System

- National: 44% in 2008, 42% in 2009, 32% in 2010
- Utah: 26% in 2008, 13%* in 2009, 22% in 2010

Data Source: AHA Hospital Survey

*Estimate not reliable due to sample size and relative standard error greater than .49
How Does Your State Compare to the National Estimates?

Data Source: AHA Hospital Survey
Data from 2010

<table>
<thead>
<tr>
<th></th>
<th>Lab Reports</th>
<th>Rad Reports</th>
<th>Med Histories</th>
<th>Clinical Care Summaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>73</td>
<td>70</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>Utah</td>
<td>66</td>
<td>70</td>
<td>55</td>
<td>55</td>
</tr>
</tbody>
</table>

% of Hospitals Electronically Exchanging Key Data with Ambulatory Providers Inside Their System
How Does Your State Compare to the National Estimates?

% of Hospitals with Capacity to Provide Patients with an Electronic Copy of their Health Information\(^1\) within 3 Business Days

**National**
- Yes: 36%
- No: 64%

**Utah**
- Yes: 39%
- No: 61%

**Mechanism of Sharing**

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Utah</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Other</td>
<td>9*</td>
<td>16</td>
</tr>
<tr>
<td>USB</td>
<td>10*</td>
<td>45</td>
</tr>
<tr>
<td>Secure Messaging</td>
<td>27*</td>
<td>46</td>
</tr>
<tr>
<td>Patient Portal</td>
<td>19</td>
<td>39</td>
</tr>
<tr>
<td>PHR</td>
<td>9*</td>
<td>9</td>
</tr>
</tbody>
</table>

*Estimate not reliable due to sample size and relative standard error greater than .49

\(^1\)Includes all of the following: Diagnostic test results, problem lists, medication lists, allergies, and discharge summaries
How Does Your State Compare to the National Estimates?

% of Hospitals with Capacity to Send Electronic Reminders to Patients

**National**
- Yes: 29%
- No: 71%

**Utah**
- Yes: 36%
- No: 64%

*Data Source: AHA Hospital Survey*
*Data from 2010*
Statewide Estimates: Hospitals with Capacity to Send Electronic Reminders to Patients

Data Source: AHA Hospital Survey

Data from 2010
Statewide Estimates:
HIE/HIO available in region

Data Source: AHA Hospital Survey
Data from 2010
Statewide Estimates:
Exchange Capacity/Participating in an HIO

Data Source: AHA Hospital Survey
Data from 2010
How Does Your State Compare to the National Estimates?

Data Source: AHA Hospital Survey

% of Hospitals with Exchange Capacity and Participating in an HIO

- National
- Utah

Data Source: AHA Hospital Survey
Thank you!