Adding Clinical Data to Administrative Datasets: Overview of AHRQ Pilots

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Limitations of Administrative Data for Quality Measurement

- **Lacks clinically important information**
  - Limited to ICD-9-CM diagnosis codes
  - Missing physiological data (lab values and vital signs)

- **May not include present on admission (POA) indicator for diagnoses**
  - POA distinguishes conditions at admission (comorbidities) from conditions that arose during a stay (complications)
AHRQ’s Adding Clinical Data Project

- **Purpose:**
  - Establish the feasibility of linking clinical and administrative data
  - Develop a reproducible approach for joining clinical and administrative data
  - Enhance capabilities of state data organizations
  - Set the stage for future integration of clinical and administrative data streams
Two Types of Contracts

- **In-depth Pilots**
  - Add or link hospital clinical information to administrative data
  - September 2007 – September 2009

- **Planning Contract**
  - Not ready for pilot but want to investigate linkage
  - September 2007 – March 2009
Awards to Statewide Data Organizations

**Pilots**
- Florida Agency for Health Care Administration
- Minnesota Hospital Association (MHA)
- Virginia Health Information (VHI)

**Planning**
- Washington Center for Health Statistics, State Department of Health
AHRQ Adding Clinical Data Pilot & Planning Awards

Key:
- Pilot State
- Planning State

States receiving awards:
- WA
- MN
- VA
- FL
Project Requirements

- Identify and select clinical data elements
  - Add POA if not already collected
- Extract clinical data from electronic format
- Transfer data from at least 5 hospitals
- Link clinical and administrative data
  - Create a multi-hospital database
- Collaborate with stakeholders
Peer-to-Peer Learning Network

- Monthly conference calls
  - Supported by Thomson-Reuters and NASHP
  - Included California staff working on regs
- Annual in-person meeting
- Purpose:
  - Learn from and collaborate with peers
  - Understand, anticipate, and resolve implementation hurdles
  - Forge solutions for other data organizations
  - Share tools and materials
Pilot Project Activities

- Developed project informational material
- Recruited hospitals
- Identified clinical data elements to add
- Standardized lab data using **Logical Observation Identifiers Names and Codes** (LOINC)
Pilot Project Activities

- Provided education and feedback on quality of POA coding
- Developed processes for data transmission, lab coding, data collection, and linking
- Provided technical assistance to hospitals
## Project Successes

<table>
<thead>
<tr>
<th>Project</th>
<th>Number of Hospitals Expected</th>
<th>Clinically-Enhanced Data Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Requirement</td>
<td>5</td>
<td>POA (if not currently collecting) and others</td>
</tr>
<tr>
<td>Florida</td>
<td>22</td>
<td>34 lab values</td>
</tr>
<tr>
<td>Minnesota</td>
<td>13</td>
<td>POA, 26 selected numerical chemistry, blood gas, hematology lab results</td>
</tr>
<tr>
<td>Virginia</td>
<td>27</td>
<td>POA, approximately 30 lab values, several linking variables</td>
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</tbody>
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Challenges and Lessons Learned

- Project initiation
- Data standards and transmission
- Communication
  - Stakeholders
  - Hospitals
- Data analysis
Next Steps for Pilot Organizations

- Continue analyzing data
- Develop reports and materials for volunteer hospitals
- Identify staffing, time, and funding needed for continuation of collection and analysis (sustainability)
Next Steps for AHRQ

- Disseminate information about the pilots

- Develop online toolkit based on the pilots’ experiences
  - Obtain Partner input at lunch today
  - Obtain Partner input through an information-gathering conference call
  - Create materials and templates for Partners
Some Suggested Next Steps for AHRQ

- Develop materials on the business case for adding clinical data
- Estimate potential costs of adding clinical data
- Facilitate Partner education on LOINC
- Host vendor roundtable on LOINC

What suggestions do you have?