Acquiring, Implementing and Using Hospital & Emergency Department Data: The Utah Experience

Utah Environmental Public Health Tracking Network

Utah Department of Health
The Context

- R428-10: Health Data Authority for Hospital Impatient Reporting
  - Establishes the Hospital Discharge Database (HDD)
  - Specifies data uses

- R426-7: Emergency Medical Services Pre-Hospital Data System Rule
  - Establishes the Emergency Department Encounter Database (EDED)
  - Specifies data uses

- R386-703: Injury Reporting Rule
  - Allows reporting via the HDD

- 13 year history of injury data sharing experience
What we get

- HD data from 1992 – completed year
- ED data from 1996 – completed year
- Data includes
  - Patient identification if available (name, hospital record number)
  - Demographics (age, sex)
  - Location information if available (address, city, ZIP code)
  - Event dates if available (admission, discharge, duration, year)
  - Diagnostic codes
  - Payer information
## Issues

<table>
<thead>
<tr>
<th>Data Element</th>
<th>HDD</th>
<th>EDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Name</td>
<td>33.62%</td>
<td>99.89%</td>
</tr>
<tr>
<td>Geocodeable Address</td>
<td>8.30%</td>
<td>6.12%</td>
</tr>
<tr>
<td>ZIP Code</td>
<td>89.91%</td>
<td>94.18%</td>
</tr>
<tr>
<td>County</td>
<td>89.90%</td>
<td>94.18%</td>
</tr>
<tr>
<td>Data of Admission or Encounter</td>
<td>79.93%</td>
<td>100%</td>
</tr>
<tr>
<td>After back calculating</td>
<td>99.86%</td>
<td></td>
</tr>
<tr>
<td>Birth Date</td>
<td>99.93%</td>
<td>99.99%</td>
</tr>
<tr>
<td>Age</td>
<td>99.97%</td>
<td>99.99%</td>
</tr>
<tr>
<td>Sex</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Only records of Chronic Obstructive Pulmonary Disease and Ischemic Heart Disease evaluated.
Acquisition

- Utah Department of Health
  - Standard public-use policy
  - Department GRAMA policy
  - Standard use liability statement
  - Department level data protection standards

- Office of Health Care Statistics
  - Public use policy
  - Data request rule

- Utah-EPHTN
  - Data sharing agreement
  - Scientific Review Board control
  - Third-party application and approval process
  - Metadata
Acquisition Tricks
(so simple …)

• Know the environment
  – Legal requirements for data stewardship
  – Operational requirements for data stewardship

• Give added value

• Facilitate (make it as easy as possible)

• Appreciate, acknowledge and promote
Examples of EPHTN Use

- Implemented into the Rapid Inquiry Facility (RIF) GIS application
  - Linkage via geometrics
  - Used for public health surveillance
  - Used to investigate community complaints

- Health Hazards Assessment Program
  - Linkage via exposure
  - Used for public health assessment reports

- Available on IBIS-PH
  - Linkage via published indicators
  - Used to inform

- Used to complete the Utah Injury Registry
  - Used for program specific injury investigations