Children’s Hospital Boston
Center of Excellence for Pediatric
Quality Measurement (CEPQM)

Massachusetts Child Health Quality
Coalition Winter 2012 Meeting

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Overview

• Brief update on CEPQM measure development assignments

• Methodological issue: Small numbers challenges in pediatric quality measurement for hospital-based care
Update: Pediatric H-CAHPS Measure

- CAHPS = Consumer Assessment of Healthcare Providers and Systems measure
- 8 focus groups completed in 3 cities nationally
- Federal Register Notice posted to solicit candidate domains
- National Stakeholder Panel
- Cognitive interviews will be conducted in 4 cities nationally spring
- Local field test in summer
- National field tests start in fall
Update: Readmissions

- Studying prevalence, timing, cost, and reasons for readmissions in children’s hospitals’ claims data
- Assessing all-cause and condition-specific hospitalizations
- Working on determining how to exclude elective admissions
- Analyzing readmission rate variation across hospitals
- Hoping to expand to MassHealth data soon
- Aiming for medical record validation starting in the fall
Small Numbers Challenges

• Low volume
  – Low prevalence conditions
  – Hospitals with low pediatric volume

• Subset analyses
  – Racial/ethnic disparities
  – Children with special health care needs
  – Socio-economic status
Example: Low Pediatric Inpatient Volume

- 3,400 hospitals in 2003 KID database admit children
- Many have insufficient volume to support robust annual measure reporting

### Annual Hospital Volume for Pediatric Hospitalizations

<table>
<thead>
<tr>
<th>Reason for Admission</th>
<th>Median</th>
<th>Interquartile Range (IQR)</th>
<th>% Hospitals ≥ 100 Admits</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td>344</td>
<td>61 - 1,018</td>
<td>74%</td>
</tr>
<tr>
<td>Non-newborns</td>
<td>116</td>
<td>34 - 434</td>
<td>53%</td>
</tr>
<tr>
<td>Asthma</td>
<td>14</td>
<td>4 - 44</td>
<td>11%</td>
</tr>
<tr>
<td>Appendectomy</td>
<td>11</td>
<td>5 - 25</td>
<td>5%</td>
</tr>
<tr>
<td>Sickle Cell</td>
<td>5</td>
<td>1 - 16</td>
<td>4%</td>
</tr>
</tbody>
</table>
Implications for Pediatric Quality Measurement

• May have fewer options for viable quality measures
• Not all hospitals will be able to use all measures
• Some measures may be limited to higher levels of aggregation
  – e.g., state vs. hospital, health plan vs. practice
• Anticipate variation in measure specification
  – e.g., 3-yr rolling averages for some measures
• Limitations in stratification by “CHIPRA-specific attributes of interest”
  – e.g., not all racial/ethnic groups included in all reporting