Evaluating Progress Among Hospitals: Collecting Improved Race, Ethnicity and Tribal Data in New Mexico

NM Race and Ethnicity Data Project
Epidemiology and Response Division

Noell Stone, MPH, Nicole Katz, MPH,
Terry Reusser, MBA, Michael Landen, MD, MPH
Funding and Partners

• Agency of Healthcare Research and Quality (AHRQ) R01 HS20033-01
  – State Data Enhancement Grant

• Partners:
  – Health Insight NM
  – New Mexico Hospital Association (NMHA)
  – University of New Mexico (UNM) Health Science Library Information Center
  – Advisory Committee (Quarterly Meetings)
Goals

• Improve patient race and ethnicity data in New Mexico Hospital Inpatient Discharge Data (NMHIDD)

• Align with OMB standards

• Collect tribal identifier data

• Evaluate race and ethnicity data quality

• Share methods, tools and procedures with other states
Project Approach

- Legislative and policy change
- Hospital training and evaluation
- Targeted visits to non-compliant hospitals
- Patient follow-up survey
- Focus groups
- Data linkages
- Systematic reviews
Pursuant of the Health Information Systems Act (HIS)

All non-federal NM hospitals (n=52) required to report quarterly:

utilization, reasons for hospitalization, surgical procedures, diagnoses, payer, patient demographics including sex, race, ethnicity and tribal affiliation
Reporting Requirements

**Ethnicity**
- Hispanic / Latino
- Not Hispanic / Latino
- Declined*
- Unknown*

**Race**
- American Indian / Alaska Native
- Asian
- Black or African American
- Native Hawaiian / Pacific Islander
- White
- Declined*
- Unknown*
- Other Race*

**Tribal Affiliation**
- Acoma Pueblo
- Cochiti Pueblo
- Isleta Pueblo
- Jemez Pueblo
- Jicarilla Apache Nation
- Kewa / Santo Domingo Pueblo
- Laguna Pueblo
- Mescalero Apache Nation
- Nambe Pueblo
- Navajo Nation
- Ohkay Owingeh Pueblo
- Picuris Pueblo
- Pojoaque Pueblo
- San Felipe Pueblo
- San Ildefonso Pueblo
- Sandia Pueblo
- Santa Ana Pueblo
- Santa Clara Pueblo
- Taos Pueblo
- Tesuque Pueblo
- Zia Pueblo
- Zuni Pueblo
- Other Tribal Affiliation
- Declined
- Unknown
Purpose

• Evaluate the impact of administrative code and reporting frequency changes on:
  
  – Timeliness
  
  – Quality
  
  – Completeness
Methods

• Q1 and Q2 2011 data
  – 50 non-federal hospitals, 102,424 admissions

• Compared
  – acute vs. specialty
  – rural vs. urban
  – beds (<100 vs. >=100)

• Timeliness: Difference in date submitted and date due
Results: Timeliness

- 44 (88%) hospitals submitted within the “acceptable window” for Q1 and Q2
  - 36 (97%) acute hospitals
  - 13 (16%) specialty hospitals
- Submission time decreased
  - Q1 -144 to 70 days, average 10 days late
  - Q2 -53 to 81 days, average 6 days late
- Problem across hospital types
Quality

- 12 ordinal categories
- “fully compliant” to “no data submitted”
- Grades indicating:
  - “multiple race not reported”
  - “ethnicity missing for all fields”
  - “American Indian race indicated but no tribal affiliation noted”
- Assessed change in quality category using Fisher’s exact test
Results: Quality

• Improved:
  – 14 (30%)
  – Improvement range 1-3 “grades”
  – Larger hospitals (>100 beds), urban

• Worsened:
  – 3 (7%)
  – Decreased 1 grade
  – Rural

• No changes statistically significant at .05
Completeness

• Q1-Q3 2011 General Hospitals
• 95% non-missing fields by facility
  – Ethnicity
  – Race
• If indicated in race field, tribal identifier
• % of facilities reporting 1 or more encounter with multiple race or tribe
## Results: Completeness

**General Hospitals**

<table>
<thead>
<tr>
<th></th>
<th>Q1 2011</th>
<th>Q2 2011</th>
<th>Q3 2011</th>
<th>Change in Q1-Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>95% applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race Values</td>
<td>62.2% (23)</td>
<td>81.1% (30)</td>
<td>88.9% (32)</td>
<td>39%</td>
</tr>
<tr>
<td>Ethnicity Values</td>
<td>40.5% (15)</td>
<td>64.9% (24)</td>
<td>75% (27)</td>
<td>80%</td>
</tr>
<tr>
<td>Tribal Identifiers*</td>
<td>4.2% (1)</td>
<td>8.3% (2)</td>
<td>10% (2)</td>
<td>100%</td>
</tr>
<tr>
<td>% reporting multiple</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>5.4% (2)</td>
<td>8.1% (3)</td>
<td>8.3% (3)</td>
<td>50%</td>
</tr>
<tr>
<td>Tribe*</td>
<td>4.2% (1)</td>
<td>12.5% (3)</td>
<td>15% (3)</td>
<td>200%</td>
</tr>
</tbody>
</table>

*If no American Indians identified, hospital was excluded from denominator. If an American Indian is identified under race, a tribal identifier should be indicated (Q1 & Q2 each had 24 hospitals with at least one Native American, while Q3 had 20 hospitals with at least 1 Native American identified under race)*
Specific Anticipated Outcomes

• Collection of race and ethnicity data consistent with 1997 OMB standard
• Collection of multiple race data
• Collection of tribal identifier data
• Evidence that quality and completeness of data have improved
• Methods disseminated and used in other states
• Provide updated standardized data to AHRQ - HCUP
Milestones

• Increase in data quality for all fields
• Changed regulations to align with 1997 OMB
• Developing systematic method to identify and target institutional factors influencing data collection
• Increased awareness of need to improve data quality at hospital level through presentations and webinars
Challenges

• Training timeline
• Communication with key stakeholders
• Turnover in hospital staff at all levels
• Concepts of race and ethnicity as separate fields difficult for NM consumers
• Inflexibility of EHR’s to collect and store new R/E/T codes
Comments or Questions?

Nicole. Katz@state.nm.us

Noell.stone@state.nm.us
Extreme Intervention Team