Collection and Use of Race and Ethnicity Data for Discharge Data Reporting Systems: The New Mexico Race/Ethnicity Data Project

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July 12, 2012
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Funder: Agency for Healthcare Research and Quality (AHRQ)

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  - Nicole Katz, MPH
Purpose

• To improve the collection of Race/Ethnicity/Tribal Identification data collected by hospitals
New Mexico Population

- 2,059,179 people resided in New Mexico during 2010
  - 41% of the population lives in the metropolitan areas of Albuquerque, Santa Fe, Farmington and Las Cruces
  - 22 American Indian Tribes have land within borders of New Mexico

New Mexico Race Demographics from 2010 Census

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>68%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>15%</td>
</tr>
<tr>
<td>Black</td>
<td>2%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>Multiple Race</td>
<td>4%</td>
</tr>
</tbody>
</table>

New Mexico Ethnicity Demographics from 2010 Census

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>54%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>46%</td>
</tr>
</tbody>
</table>
Hospital Inpatient Discharge Database (HIDD)

- Pursuant of the Health Information Systems Act (HIS) created by the Health Policy Commission (HPC)

- Goal: Collect, disseminate and analyze health data for public and private use to influence planning and policy development.

- Information including utilization, reasons for hospitalization, surgical procedures, diagnoses, patient demographics including race, ethnicity and tribal affiliation and payer.
Outline

• What are the guidelines for data collection?

• How can we improve the collection of race/ethnicity/tribal affiliation data?

• What are the common issues found in collecting, analyzing and reporting this data?
What are the guidelines for data collection?
Gold Standard for Data Collection by OMB 1997 Guidelines

- Self-identification/Self-Report
- Allowing for multiple race/tribe
- Asking for this information orally
NMAC – Data reporting requirements for health care facilities

- Statutory requirement for state to collect data (NMSA 1978 24-14a Health Information System Act (HIS Act))
- Based on OMB Standards of 1997

### Q1: Ethnicity
- E1 - Hispanic/Latino
- E2 - Not Hispanic/Latino
- E6 - Declined*
- E7 - Unknown*

### Q2: Race
- R1 - American Indian/Alaska Native
- R2 - Asian
- R3 - Black or African American
- R4 - Native Hawaiian/Pacific Islander
- R5 - White
- R7 - Unknown*
- R9 - Other Race*

### Q3: Tribal Affiliation
- T1 - Acoma Pueblo
- T2 - Cochiti Pueblo
- T3 - Isleta Pueblo
- T4 - Jemez Pueblo
- T5 - Jicarilla Apache Nation
- T6 - Kewa/Santo Domingo Pueblo
- T7 - Laguna Pueblo
- T8 - Mescalero Apache Nation
- T9 - Nambe Pueblo
- T10 - Navajo Nation
- T11 - Ohkay Owingeh Pueblo
- T12 - Picuris Pueblo
- T13 - Pojoaque Pueblo
- T14 - San Felipe Pueblo
- T15 - San Ildefonso Pueblo
- T16 - Sandia Pueblo
- T17 - Santa Ana Pueblo
- T18 - Santa Clara Pueblo
- T19 - Taos Pueblo
- T20 - Tesuque Pueblo
- T21 - Zia Pueblo
- T22 - Zuni Pueblo
- T100 - Other Tribal Affiliation
- T200 - Declined
- T300 - Unknown
How can we improve the collection of race/ethnicity/tribal affiliation data?
Levels of Influence in Hospitals

**LEGISLATION**
- Federal
- State

**OPERATIONAL**
- Data Managers
- IT System
- Registration Personnel
- Patients

**INSTITUTION**
- Policy
- Administration

**Health Information Systems Act Change**

**Regulation Change (NMAC 7.1.4)**

**Hospital Training**

**Key Informant Interviews**

**Focus Groups**

**Site Visits to Hospitals**

**Patient Telephone Survey**
Path of Patient Data

PATIENT → REGISTRATION → ELECTRONIC HEALTH RECORD

IT/DATA MANAGER

BILLING

DOH
Policy Change

• New Mexico Administrative Code (NMAC 7.1.4) changed as of January 2011
  – Submit HIDD quarterly instead of annually
  – Race and Ethnicity as separate variables
  – Tribal Affiliation collected
  – Allow for multiple race and tribe

• As of 2012, HIDD now resides at NMDOH
Hospital Training

• Health Insight NM- contracted to educate and train registration staff to better collect race/ethnicity/tribal affiliation data

• Nine pilot hospitals have already received education and training in Summer 2011

• Next round of training occurring now through early Fall 2012
  – 8 hospital trainings complete; 35 hospitals still need training

• Goal: Reduce barriers of race/ethnicity/tribal affiliation data collection to increase completeness and quality of this data
Training Evaluation

- Key Informant Survey

- Pre and Post Tests
  - Day of the training and three months after training
How do we evaluate hospitals?

- Feedback to hospitals:
  - Hospital Specific Progress Reports describing:
    - Patient demographics compared county population
    - Status of submitted data
    - Possible issues with data collection
New Mexico Race and Ethnicity Data Quarter One Report

DATES: January 1, 2011 – March 31, 2011

FACILITY NAME: SAMPLE

FILES RECEIVED: Yes

NUMBER OF RECORDS: 3119

QUARTER 1 RACE AND ETHNICITY VARIABLE EVALUATION:

<table>
<thead>
<tr>
<th>PERCENT OF:</th>
<th>(%)</th>
<th>NUMBER OF:</th>
<th>(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with Ethnicity Coding</td>
<td>100.0</td>
<td>Patients with Ethnicity Coding</td>
<td>3119</td>
</tr>
<tr>
<td>Patients with Missing Ethnicity</td>
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<td>Patients with Missing Ethnicity</td>
<td>312</td>
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<tr>
<td>Patients with Unknown Ethnicity</td>
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<td>Patients with Unknown Ethnicity</td>
<td>0</td>
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<tr>
<td>Invalid Ethnicity Entries</td>
<td>0.0</td>
<td>Invalid Ethnicity Entries</td>
<td>0</td>
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<td>Patients with Missing Race</td>
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<tr>
<td>Patients with Unknown Race</td>
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<td>Patients with Unknown Race</td>
<td>0</td>
</tr>
<tr>
<td>Invalid Race Entries</td>
<td>0.0</td>
<td>Invalid Race Entries</td>
<td>0</td>
</tr>
<tr>
<td>R1 (Native American) Patients with Tribal Affiliation</td>
<td>INVALID</td>
<td>R1 (Native American) Patients with Tribal Affiliation</td>
<td>INVALID</td>
</tr>
</tbody>
</table>

COMMENTS:

- Patients were categorized as American Indian, however there are no tribal identifiers. Those that are American Indian should have a tribal affiliation. All other races should not have a tribal affiliation.

QUESTIONS:

- Were race/ethnicity/tribal affiliation fields based on self-report?
COMPARISON OF INPATIENT HOSPITAL RACE AND ETHNICITY DEMOGRAPHICS TO COUNTY LEVEL

Sample Hospital Inpatient Race Demographics for Q1
- American Indian or Alaska Native: 5%
- Asian: 20%
- African American/Black: 10%
- Native Hawaiians or Pacific Islander: 2%
- White: 30%
- Other: 5%
- Two or more races: 10%

xxx County Race Demographics from 2010 Census
- American Indian or Alaska Native: 0%
- Asian: 2%
- African American/Black: 0%
- Native Hawaiians or Pacific Islander: 0%
- White: 84%
- Other: 3%
- Two or more races: 11%

Sample Hospital Inpatient Ethnicity Demographics for Q1
- Hispanic: 40%
- Non-Hispanic: 50%
- Missing: 10%

xxx County Ethnicity Demographics from 2010 Census
- Hispanic: 26%
- Non-Hispanic: 74%

*Disclaimer: Hospital demographics may not align with county demographics*
Patient Follow-Up Survey

• Telephone Survey to a random sample of patients admitted to the hospital in the last year

• Questions on their race/ethnicity/tribal identification which will be compared to the hospital data
Focus Groups

• Native American populations served in non-Indian Health Service (IHS) facilities

• Discuss issues and barriers of the collection of tribal identification data
  – How should we collect this data?
  – How do the communities think this question should be asked?
Proposed Data Linkages

• Indian Health Service (IHS) to affirm tribal affiliations and determine misclassification

• Vital Records – Birth and Death Certificate Data

• Emergency Department (E.D.)

• Emergency Management Services (EMS)
What are the common issues found in collecting, analyzing and reporting this data?
COLLECTION
Electronic Health Records

• Unable to collect this information in the hospital’s EHR
  • Unavailable fields/Not enough fields especially for multiple races
  • Incorrect categories for race/ethnicity/tribal affiliation
  • Can result in many missing, other or unknown race/ethnicity/tribal affiliation

• Hospitals have to negotiate with the vendors to change their system to be able to collect these new fields
Hospital Personnel

- Staff can be uncomfortable asking this information from patients
- Staff lack expertise for data extraction
- Turnover in registration staff and upper level management
- Departments of hospital are not communicating with one another
- R/E/T data collection not a priority
ANALYZING
Small Numbers Rule

- NMDOH Policy:
  - Cannot report a rate or percent with a denominator of less than 20 **AND** a numerator of 1, 2 or 3
Denominator Issue

• Bureau of Business and Economic Research of the University of New Mexico (BBER)
  – Calculate population estimates at the state and county level annually and provides population projections every third year
  – Widely used calculations by policy, legislatures, traffic planners, school boards and health professionals
REPORTING
NM DOH Presentation of R/E Data

• Five Categories:
  – American Indian or Alaska Native
  – Asian or Pacific Islander (Can be split up as long as the small numbers rule is followed)
  – Black or African American
  – Hispanic
  – White

• Multiple race should be reported when available and bridging method explained if applicable
**Hierarchical Assignment**

- When multiple races are checked, the single race reported is based on this hierarchy

<table>
<thead>
<tr>
<th>Checked race</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Hawaiian</td>
<td>06</td>
</tr>
<tr>
<td>American Indian or Native</td>
<td>03</td>
</tr>
<tr>
<td>Black or African American</td>
<td>02</td>
</tr>
<tr>
<td>Filipino</td>
<td>08</td>
</tr>
<tr>
<td>Chinese</td>
<td>04</td>
</tr>
<tr>
<td>Japanese</td>
<td>05</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>12</td>
</tr>
<tr>
<td>Korean</td>
<td>13</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>14</td>
</tr>
<tr>
<td>Guamanian or Chamorro</td>
<td>15</td>
</tr>
<tr>
<td>Samoan</td>
<td>16</td>
</tr>
<tr>
<td>Other Asian</td>
<td>17</td>
</tr>
<tr>
<td>Other Pacific Islander</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>07</td>
</tr>
<tr>
<td>White</td>
<td>01</td>
</tr>
</tbody>
</table>
Useful References

- Agency for Healthcare Research: http://www.ahrq.gov/
- Aligning Forces For Quality: http://www.rwjf.org/qualityequality/af4q/about.jsp
- NMAC 7.4.1 – Data Reporting Requirements for Health Care Facilities: http://nmhealth.org/HPC/documents/Rules/7_1_4_NMAC_12-1-2010_Final.pdf
Comments or Questions?

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