Ensuring the Best Start for Very Low Birth Weight (VLBW) Infants: Status of Title V’s National Performance Measure (NPM) #17

Victoria A. Freeman, RN, DrPH
Cecil G. Sheps Center for Health Services Research
University of North Carolina at Chapel Hill

Perinatal Regionalization Meeting • Washington DC • October 28, 2009
National Performance Measure #17

The percent of very low birth weight babies delivered at facilities for high-risk neonates.

Numerator: Number of infants with a birth weight less than 1,500 grams born at sub-specialty facilities (Level III facility).

Denominator: Total number of infants born with a birth weight of less than 1,500 grams.
Purpose of this Project

- Is the rate of VLBW births in appropriate facilities getting worse?

Examine trends in this measure for the 50 States, the District of Columbia, Puerto Rico, and all States combined.

- Why?

Review Annual Reports from selected states for “clues” why progress is not being made in improving this measure.
Data

- State-reported numerator, denominator and rate for 2000 - 2006 or 2007 (7 or 8 years)

- Most data were final data. Provisional data were used if they were different from previous year, i.e., not a placeholder.

- Calculate the absolute percent change from 2000 to the most recent year.
United States Rate
(2000 - 2006)

74.2% to 74.7%
.5% change
## Change in Rate for the States

<table>
<thead>
<tr>
<th></th>
<th>Rate improved (≥2% change)</th>
<th>Minimal change ≤2% + or -</th>
<th>Rate decreased (≥2% change)</th>
</tr>
</thead>
<tbody>
<tr>
<td># of States</td>
<td>25</td>
<td>10 + US</td>
<td>17</td>
</tr>
<tr>
<td>Average change</td>
<td>+ 8.6%</td>
<td></td>
<td>-8.1%</td>
</tr>
<tr>
<td></td>
<td>(7.7% w/o IA)</td>
<td></td>
<td>(6.1% w/o PR)</td>
</tr>
<tr>
<td>Range of change</td>
<td>2.1% to 30.2%</td>
<td></td>
<td>-2.2% to -40.5%</td>
</tr>
</tbody>
</table>
The rate for individual States for the most recent year ranged from 31.1% to 99.2%

Five States meet the Healthy People goal of 90% - RI, IA, WV, NV, OR
Why is there a change?

- Is this measurement error?

- Does a change in rate result from a change in programs, policies, and/or health care infrastructure?
Measurement Issues

- Classification of hospitals
  - Who does it?
  - What are the criteria?
  - How often does it change?

- Out-of-state births - no Level III facilities in WY

- The smaller the number of events, the more unstable the rates
Ensuring the Best Care for VLBW Infants

- Access to prenatal care with screening to determine risk
- Screening tools
- Education for pregnant women
- Availability of appropriate facilities for high-risk deliveries and neonates
- Availability of transport services
- Agreements and relationships among primary obstetric providers and tertiary care centers
- Coordination - Regionalized Perinatal Care
Change in Programs, Policies and/or Health Care Infrastructure

- State fund limitations
- Increase in # of VLBW births
- Hospital self-designation
- Hospital competition
- Lack of NICU beds
- Consumer choice
- Lack of funds/staff for in-depth data analysis
- Regionalized perinatal care systems - present/absent?
On the positive side…

- Care services for pregnant women
- Data improvement
- Guideline development
- Education and information dissemination
Thanks for inviting me! I’m looking forward to a great discussion of the issues.

Questions?

victoria_freeman@unc.edu

919.966.6168