Modeling Impact of Policy on Maternal Mortality

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Maternal Mortality Climbs in the U.S.; Declines Elsewhere
### Leading Causes of Pregnancy-Related Deaths in the United States.\(^1\)

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Total Percent of Deaths</th>
<th>Percent of Non-Hispanic White Deaths</th>
<th>Percent of Non-Hispanic Black Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular and coronary conditions</td>
<td>14.0%</td>
<td>15.5%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Hemorrhage</td>
<td>14.0%</td>
<td>14.4%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Infection</td>
<td>10.7%</td>
<td>13.4%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Cardiomyopathy</td>
<td>10.7%</td>
<td>10.3%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Preeclampsia and eclampsia</td>
<td>8.4%</td>
<td>5.2%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Embolism</td>
<td>7.4%</td>
<td>5.2%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

Maternal Mortality
3-to-1 Non-Hispanic Black Women vs. Non-Hispanic White Women
Data Quality Issues

National Statistics
- High reliance on information from death certificates
- Death certification inaccurate or incomplete
- Overreporting via pregnancy checkbox
- Voluntary reporting to NCHS
- NCHS assigns ICD-10 codes, which change periodically
- Revision of coding methodology by NCHS

State MMRCs
- Definitions of maternal mortality vary by state
- Determining pregnancy-associated vs. pregnancy-related deaths
- Determining preventability varies by state
- Many states do not have an MMRC

No standardized data collection approach for states/jurisdictions;
No standardized interplay between NCHS & State MMRCs
Data Sources

Data Sources within 3MID

Synthetic Populations and Ecosystems of the World

Synthetic Population

A synthetic population is a reproduced representation of a population (e.g., women of childbearing potential) which replicates the statistical variable distributions of the larger population.
Maternal disorders: maternal hemorrhage; maternal sepsis and other maternal infections; maternal hypertensive disorders; maternal obstructed labor and uterine rupture; maternal abortion, miscarriage, and ectopic pregnancy; indirect maternal deaths; late maternal deaths; other maternal disorders; maternal deaths aggravated by HIV/AIDS.

A maternity care desert is a county in which access to maternity health care services is limited or absent, either through lack of services or barriers to a woman’s ability to access that care. Click [here](#) for the full report.
County Level Data View

Glenn County
Rate: 0.33
Maternity Care Desert
Individual Level Demographic View

Race: Black
Age: 24
Income: $32,900
Employment: Not in labor force
Risk: 0.416