Maternal Overdose Deaths: Data & Intervention

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Texas Collaborative for Healthy Mothers and Babies Summit

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Overview

- Study of Overdose Maternal Deaths
- *TexasAIM* for Opioid Use Disorder
Study of Overdose Maternal Deaths
Definition of Maternal Death

- World Health Organization (ICD-10)
  - 42 day timeframe
  - Deaths in pregnancy (all causes)
  - Maternal Deaths (pregnancy-related), direct or indirect
  - Used to calculate Maternal Mortality Rate (MMR)

- Centers for Disease Control & Prevention
  - 365 day timeframe
  - Pregnancy-related
  - Pregnancy-associated
  - Used to identify cases for MMM Taskforce review
Method

• Maternal deaths occurring within 365 days following end of pregnancy examined for years 2012 through 2015

• Maternal deaths identified by matching each woman’s death certificate with birth or fetal death within 365 days
### Maternal Deaths by Timing and Cause of Death, Texas, 2012-2015

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>While Pregnant</th>
<th>0-7 Days Post-partum</th>
<th>8-42 Days Post-partum</th>
<th>43-60 Days Post-partum</th>
<th>61+ Days Post-partum</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amniotic Embolism</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Cardiac Event</td>
<td>2</td>
<td>12</td>
<td>9</td>
<td>5</td>
<td>27</td>
<td>55</td>
</tr>
<tr>
<td>Cerebrovascular Event</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Overdose</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>49</td>
<td>64</td>
</tr>
<tr>
<td>Hemorrhage</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Homicide</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>32</td>
<td>42</td>
</tr>
<tr>
<td>Hypertension/Eclampsia</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Infection/Sepsis</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td>3</td>
<td>11</td>
<td>32</td>
</tr>
<tr>
<td>Pulmonary Embolism</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Substance Use Sequelae (e.g., liver cirrhosis)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Suicide</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>44</td>
<td>63</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>64</strong></td>
<td><strong>64</strong></td>
<td><strong>23</strong></td>
<td><strong>215</strong></td>
<td><strong>382</strong></td>
</tr>
</tbody>
</table>
Study of Overdose Maternal Deaths

Identify where greatest opportunities exist for prevention by determining:

- Specific substances involved
- Demographics of those more at risk
- Timing of death
- Geographic region
Study of Overdose Maternal Deaths

Significant Findings, 2012-2015

- 382 Maternal Deaths

- 64 Overdose Maternal Deaths
  - 42 (66%) involved a combination of substances
  - 37 (58%) involved opioids, either alone or in combination with other substances such as benzodiazepines (13/37, 35%)
  - 49 (76%) were > 60 days postpartum
# Study of Overdose Maternal Deaths

## Specific Substances Identified from Death Certificate Narratives for Overdose Maternal Deaths, 2012-2015

<table>
<thead>
<tr>
<th>Specific Substances</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPIOIDS</strong></td>
<td></td>
</tr>
<tr>
<td>Opioid</td>
<td>23</td>
</tr>
<tr>
<td>Heroin</td>
<td>18</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>1</td>
</tr>
<tr>
<td><strong>NON-OPIOIDS</strong></td>
<td></td>
</tr>
<tr>
<td>Sedative</td>
<td>22</td>
</tr>
<tr>
<td>Cocaine</td>
<td>12</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>9</td>
</tr>
<tr>
<td>Alcohol</td>
<td>3</td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>2</td>
</tr>
<tr>
<td>Antidepressant</td>
<td>1</td>
</tr>
<tr>
<td>Anticonvulsant</td>
<td>1</td>
</tr>
<tr>
<td>Inhalant</td>
<td>1</td>
</tr>
<tr>
<td>Caffeine</td>
<td>1</td>
</tr>
<tr>
<td><strong>UNKNOWN</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

*Note:* Numbers should not be summed, as multiple substances often appear on a single death certificate.
Study of Overdose Maternal Deaths

Demographic Risk Profiles

**Overdose Maternal Deaths**

- White women
- Aged 40+
- Living in urban counties and/or:
  - Public Health Region 2/3 (Dallas/Ft. Worth)
  - Public Health Region 1 (Panhandle)
- Medicaid at delivery

**All Maternal Deaths**

- Black women
- Aged 40+
- Living in urban counties and/or:
  - Public Health Region 1 (Panhandle)
  - Public Health Region 8 (San Antonio)
- Medicaid at delivery
Study of Overdose Maternal Deaths

Rate (per 100,000 live births) and Number (N) of Overdose Maternal Deaths by Public Health Region (PHR) of Residence, Texas, 2012-2015

[Map showing rates and numbers of overdose maternal deaths by PHR.]
Sec. 34.0156. MATERNAL HEALTH AND SAFETY INITIATIVE.

(a) Using existing resources, the department, in collaboration with the task force, shall promote and facilitate the use among health care providers in this state of maternal health and safety informational materials, including tools and procedures related to best practices in maternal health and safety.
TexasAIM Initiative

• Goal:
  ➢ Reduce severe maternal morbidity using evidence-based systems to enhance maternal care

• Implementing AIM bundles for:
  ➢ Obstetric hemorrhage
  ➢ Severe hypertension in pregnancy
  ➢ Obstetric care for women with opioid use disorder

• For more information:
  ➢ Email TexasAIM@dshs.texas.gov
  ➢ Visit www.dshs.texas.gov/mch/TexasAIM.aspx
Opioid AIM Bundle
Obstetric Care for Women with Opioid Use Disorder
Opioid AIM Bundle

• Goals:
  ➢ Improve identification and care of women with opioid use disorder through screening and linkage to care,
  ➢ Optimize medical care of pregnant women with opioid use disorder,
  ➢ Increase access to medication-assisted treatment for pregnant and postpartum women with opioid use disorder,
  ➢ Prevent opioid use disorder by reducing the number of opioids prescribed for deliveries, and
  ➢ Optimize the care of opioid-exposed newborns by improving maternal engagement in infant management.

• Settings:
  ➢ Inpatient and outpatient facilities to improve clinical care
Opioid AIM Bundle

- **Workgroups:**
  - Provider Education
  - Clinical Pathways & Quality Improvement
  - Metrics
  - Community Outreach & Engagement

- **Status:**
  - Bundle development completed
  - Data portal access open
  - Resource development ongoing
  - Ongoing collaboration with other early adopters
  - Implementation in 4 states (TX, NY, TN, IL)

- **Partners:**
  - Texas Hospital Association
  - HHSC and DFPS
  - Many other statewide champions
TexasAIM Opioid Bundle

• Implementation strategy
  - Piloting in 10 hospital systems around the state
  - Inpatient and outpatient facilities to improve clinical care

• Implementation Timeline
  - Fall 2018 bundle development completed, data portal open
  - Tentative Implementation Schedule
    - Spring 2019 collaboration with other states on implementation strategies
    - Spring-Summer 2019 begin measure entry
    - Summer-Fall 2019 learning collaboratives, refinement
    - Calendar Year 2020 statewide rollout


**Obstetric Care for Women with Opioid Use Disorder**

**Readiness**

- Provide education to promote understanding of opioid use disorder (OUD) as a chronic disease.
- Emphasize that substance use disorders (SUDs) are chronic medical conditions, treatment is available, family and peer support is necessary and recovery is possible.
- Emphasize that opioid pharmacotherapy (e.g., methadone, buprenorphine) and behavioral therapy are effective treatments for OUD.
- Provide education regarding neonatal abstinence syndrome (NAS) and neonate care.
- Awareness of the signs and symptoms of NAS.
- Interventions to decrease NAS severity (e.g., breastfeeding, smoking cessation).
- Engage appropriate partners (i.e., social workers, case managers) to assist patients and families in the development of a "plan of safe care" for mom and baby.

Every clinical setting/health system

- Provide staff-wide (clinical and non-clinical staff) education on SUDs.
- Emphasize that SUDs are chronic medical conditions that can be treated.
- Emphasize that stigma, bias, and discrimination negatively impact pregnant women with OUD and their ability to receive high-quality care.
- Provide training regarding trauma-informed care.
- Establish specific prenatal, intrapartum, and postpartum clinical pathways for women with OUD that incorporate care coordination among multiple providers.
- Develop pain control protocols that account for increased pain sensitivity and avoidance of opioid cross-tolerance.
- Know state reporting guidelines regarding the use of opioid pharmacotherapy and identification of illicit substance use during pregnancy.

**Recognition and Prevention**

- Know federal (Child Abuse Prevention Treatment Act - CAPTA), state, and county reporting guidelines for substance-exposed infants.
- Understand "Plan of Safe Care" requirements.
- Know state, legal, and regulatory requirements for OUD care.
- Identify local SUD treatment facilities that provide women-centered care.
- Ensure that OUD treatment programs meet patient and family resource needs (e.g., create access to services such as housing, child care, transportation, and home isolation).
- Ensure that drug and alcohol counseling and/or behavioral health services are provided.
- Investigate partnerships with other providers (i.e., social work, addiction treatment, behavioral health, and state public health agencies) to assist in bundle implementation.
RESPONSE
Every provider/clinical setting/health system
- Ensure that all pregnant women with OUD are enrolled in a woman-centered OUD treatment program.
- Establish communication with OUD treatment providers and obtain consents for sharing patient information.
- Assist in linking to local resources (g. peer support, residential treatment, medication-assisted treatment) to support recovery.
- Incorporate family planning, breastfeeding, pain management and infant care counseling, education, and outreach into prenatal, intrapartum, and postpartum care pathways.
- Provide breastfeeding and lactation support for all postpartum women on pharmacotherapy.
- Provide immediate postpartum contraceptive options (e.g., long-acting reversible contraception [LARC]) prior to hospital discharge.
- Ensure coordination among providers during pregnancy, postpartum, and the 6-week postpartum period.
- Provide referrals to providers (g. social workers, psychiatrists, and infectious disease specialists) for identified co-morbid conditions.
- Identify a lead provider responsible for care coordination, specify the duration of coordination, and assure a “warm handoff” with any change in the lead provider.
- Develop a communication strategy to facilitate coordination among the obstetric provider, OUD treatment provider, health system clinical staff (i.e., inguinal lymph nodes), social services, and other relevant stakeholders.
- Engage child welfare services in developing safe care protocols tailored to the patient and family’s OUD treatment and resource needs.
- Ensure priority access to quality home visiting services for families affected by OUDs.

PATIENT SAFETY BUNDLE
Obstetric Care for Women with Opioid Use Disorder

REPORTING & SYSTEMS LEARNING
Every clinical setting/health system
- Develop mechanisms to collect data and monitor process and outcome metrics to ensure high-quality healthcare delivery for women with SUDs.
- Develop a data dashboard to monitor process and outcome measures (e.g., number of pregnant women in OUD treatment at specified intervals).
- Create multidisciplinary case review teams to evaluate patient, provider, and system-level issues.
- Develop and implement education and training opportunities for providers and staff regarding SUDs.
- Identify ways to connect non-medical local and community stakeholders with clinical providers and health systems to share outcomes and identify ways to improve systems of care.
- Engage child welfare services, public health agencies, court systems, and law enforcement to assist with data collection, identify existing problems and help drive initiatives.

For more information visit the Council’s website at www.councilonpatientsafety.org

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Thank you