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INTRODUCTION

Maternal mortality review committees have a sober and noble charge: determine preventability of individual maternal deaths and recommend specific and feasible actions to prevent future deaths. Committees such as your own have successfully fulfilled this role and promise. By establishing and consistently following comprehensive and sound formal processes, you can maximize your committee’s effectiveness and impact.

This guide is intended to share best practices that will help maternal mortality review committees (MMRCs) establish processes for case review. The guide is structured in the general order of steps a committee might take in conducting an actual review committee meeting. Your committee may choose to do things differently depending on your resources, committee makeup, and scope. Consider this document a tool to help you establish a strong foundation for committee facilitation from which to develop and build upon your own skills and experience.

MATERNAL MORTALITY REVIEW COMMITTEE FACILITATION

1. Review the Authority and Protections Under Which Your Committee Operates

- Are there specific legislative statutes that address the maternal mortality review process? If so, are there any directives provided for data collection, committee review, and public reporting?
- If there is broader legislation under which the MMRC operates, take steps to assure the entire process has adequate protections to foster full abstraction, review, and reporting.
- All members of the MMRC should be aware of existing protections and authority.
- Case discussion by the MMRC must adhere to principles of confidentiality, anonymity, and objectivity.

1. For examples of committee successes, see Appendix I: Maternal Mortality Review Success Stories.
2. See Appendix A for a Maternal Mortality Review Committee Logic Model to guide processes and outcomes.
3. Adequate protections include authority to access data sources, protection of collected data, and immunity for committee members from subpoena. See Appendix B for an Authorities and Protections Checklist.
4. A note on confidentiality: there will be cases reviewed in your committee with which a committee member may be personally familiar. Your committee should develop a policy on how to handle such cases. You may consider having those familiar with the case share their information on the case with the abstractor before the meeting. That committee member may then recuse him/herself from discussion during the meeting.
2. Review the Scope, Mission, Vision, and Goals Established by Your Committee

When disseminating case information and at the start of each committee meeting, review the scope, mission, vision, and goals established by your committee.

It is also helpful to define terms:

- **Pregnancy-related death**: the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.
- **Pregnancy-associated but NOT related death**: the death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is *not related to pregnancy*.

The cases should be reviewed through the lens of established and prescribed authority and in conjunction with committee member input.

- Prioritize cases to be abstracted and reviewed based upon your scope, mission, vision, and goals.5
- Periodically review your committee’s priorities to make sure they are still relevant and applicable.

3. Review Your Membership

Committees should be comprised of individuals representing multiple disciplines and organizations that can promote understanding of both the medical and non-medical contributors to maternal deaths and help move recommendations to action.6

Chairs must be inclusive of all members and mindful of the multiple disciplines that can offer valuable perspective on a case. Building the trust of individual members is essential to a functional committee dynamic.7

Adding new voices is an important growth opportunity for the committee and for the chair. As facilitator the chair must be mindful of each member’s individual contribution to the whole.

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5. For a well-developed example of MMRC Scope, Mission, Vision, and Goals, see Appendix C: Sample Scope, Mission, Vision, Goals and Meeting Structure.
7. For more information refer to the Facilitating the Decision Making Process section. See also Appendix H: Notes on Facilitative Group Leadership.
4. Review Your Case Identification Process

Many committee members find it beneficial to hear a brief overview of the process for identifying and selecting cases for abstraction and review. Such an overview fosters engagement of committee members in the entire maternal mortality review process and offers a system of checks and balances to the case identification and selection process. Items to consider for this discussion may include a summary of:

- Cases identified and the process used for identification
- Causes of death (COD) listed on death certificate
- Timing of death in relation to pregnancy: death during pregnancy or number of days between birth and mother’s death
- Basic demographics of cases identified: mother’s age, race, ethnicity, marital status, place of birth, education, occupation, entry into prenatal care
- If applicable, any preliminary classification of cases (prior to abstraction), i.e. possibly pregnancy-related death, pregnancy-associated but NOT -related death, not pregnancy-related or -associated
- Cases referred to medical examiner and number that received autopsy
- Pregnancy outcomes, such as live birth, fetal demise, and the number of surviving children

You may also consider reporting the above indicators to the committee as a comparison of cases selected and not selected for abstraction and review.

5. Present a Case

Cases should be presented by a designated person such as the committee coordinator or chairperson. Your committee may also choose to have the case abstractor present or ask members to volunteer to present cases that pertain to their interests or expertise. Regardless of who is presenting the case, it is beneficial to have a standard format and process for guiding committee review and discussion. Identify what information will be shared with MMRC members prior to and during the case review meeting.

- Providing case information to committee members in advance of the meeting helps ensure that any identified gaps in information are addressed prior to the meeting and reduces time required during the meeting for members to become familiar with the cases.
- If it is not possible for case information to be presented prior to the meeting, allow members adequate time to read cases prior to beginning discussion. This avoids frustration and ensures informed decisions about the case.
- Using a standardized format for the development of case narratives promotes ease of reading and understanding (see MMRIA case narrative templates in the Abstracter Manual).
- Using the MMR Committee Decisions Form can help to efficiently and comprehensively guide committee members as they make case decisions).

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8. For an example of case identification and data flows, see Appendix J: Sample Case Identification Process.
9. MMRC may designate a subcommittee to preliminarily classify cases to be sent for abstraction.
10. Note that though the Committee Decisions Form referenced is programmed into the Maternal Mortality Review Information Application (MMRIA), the guidance here is intended for use by all committees, whether or not they use MMRIA.
11. For this form, see Appendix F: Maternal Mortality Review Committee Decisions Form.
Introduction of Case: Things to Share

- How the case was first identified
- Criteria used to select case for review by committee (Does the case fit into the committee scope OR is there a special interest in reviewing this case?)

Case Overview:

The designated person reads the case narrative that highlights the relevant information needed by the committee to make their decisions. (See MMRIA case narrative templates.)

- Prior to meeting, decide who will lead the case discussion. Some committees ask the abstractor who worked on the case to present the case narrative, as he or she is most familiar with the case. Other committees choose to appoint a coordinator, chair, or other committee facilitator to read the case narrative. If the abstractor does not present the case, he or she should still be available at the meeting to answer questions and provide additional detail as needed.
- Ensure that someone has been assigned responsibility for:
  - Keeping the meeting within time parameters,
  - Keeping discussion on track,
  - Eliciting input from the entire committee membership, and
  - Capturing and synthesizing committee decisions.

- It may be useful to have the individual who is assigned to record and synthesize committee deliberations enter notes directly into a form that is projected onto a screen during the meeting. This provides visual confirmation that committee recommendations are appropriately captured.
- Provide copies of the Committee Decision Form to members for each case and collect their notes to be sure that salient points are captured. This has the added benefit of allowing quieter members to have their voices heard. The person responsible for documenting committee decisions – usually a committee coordinator or an abstractor – should then review the collected forms and integrate written comments into notes captured at the meeting.
6. Facilitate the Decision-Making Process

Designate a Facilitator

Regardless of who presents cases, there should be an individual tasked with the role of Committee Facilitator to help guide the committee in its decision-making process. Facilitative leadership promotes efficiency, effectiveness, and engagement of the committee members. Facilitator responsibilities may include the following:

- Developing structured agendas for case review meetings
- Facilitating case discussions
- Ensuring minimal personal biases
- Ensuring data-driven recommendations
- Serving as committee representative at conferences and stakeholder meetings
- Engaging the participation of each group member

Facilitation is a unique skill. It requires effective management of committee dynamics, including a sense of how the group members interact as individuals and as a whole. The facilitator must be an effective communicator, an active listener (paraphrases, summarizes, reflects) who inquires and seeks clarification in a non-critical manner, and encourages authenticity and maintains trust in the group.

Designate a Facilitation Team

In addition to a strong facilitator, Maternal Mortality Review Committees need support positions as well. These positions should include a coordinator, abstractor(s), a database manager, and one or more epidemiologists. Their responsibilities can vary between individual reviews.

For example, coordinators might take on some of the facilitation and agenda-setting responsibilities for review committee meetings. An Abstraction and Case Review Time Cost Estimator is available to assist committees in budgeting for abstraction and planning for the number and length of committee meetings necessary. They may meet with case abstractors to prioritize cases and review the status of a case sent for abstraction. Coordinators also ensure key committee documents, such as the policies and procedures, are updated and implemented. In addition, they may be responsible for coordinating activities to implement findings from review deliberations.

Database managers can help by ensuring that the data strategy of the MMRC adheres to the jurisdiction’s data management policies. Epidemiologists may provide data analysis support for developing products from the reviews, such as fact sheets and reports. In most cases, these individuals are not exclusively dedicated to the review, but assist the review in addition to executing their other job duties.

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12. See Appendix G or a committee meeting agenda template.
13. For more tips on facilitating a committee, see Appendix H: Notes on Facilitative Group Leadership.
14. See Appendix E: Considerations for Hiring Abstractors.
Other considerations that facilitate sustainable committees include:

- **Committee member compensation/incentives**: Most jurisdictions do not pay committee members to participate in the review proceedings. However, they may reimburse travel costs to attend meetings, provide meals, or apply to be an accredited continuing medical education (CME) provider so committee members can receive CME credits through their participation.

- **Budget for printing and office supplies**: Maternal mortality review committee (MMRC) meetings use a lot of paper. As such, printing and mailing costs should be included in a MMRC budget. The documents generated may include confidentiality agreements, case narratives, case review forms, and other handouts. The MMRC is also tasked with keeping key materials confidential and may invest in lockable briefcases, file cabinets, or web-based secure file storage and file transfer services that can be tracked in a virtual environment. The costs of server space, though very minimal for data storage, should also be considered.

- **Disseminating findings and taking action**: Convening partners to present the findings of the MMRC accelerates their implementation. Committees often overlook the funding required to disseminate findings (e.g. travel to present committee process and findings at professional conferences in and out of state) or the programmatic funding necessary to implement a key finding from the review into population-based action.

**Use a Standard Process to Guide Decision-Making**

Using a standard process has many benefits. A standard process:

- Promotes consistent and complete case review
- Provides direction and promotes efficiency of case review
- Enhances committee focus and keeps case discussions on track
- Corresponds to case abstraction tools to ensure seamless conversion from abstraction to review
- Presents a reminder of priority data elements and their application
- Records committee findings and recommended actions in a standard format
- Fosters collection of data that is consistent over time and with other reviews, supporting analysis over time and across reviews

**Formalize Committee Decisions**

Before beginning, your committee will need to decide how decisions are made. For each of the decisions, will a majority vote be sufficient? Or will consensus be required? Each process has its advantages and disadvantages. Consensus decision-making requires discussion and supports each member having a voice, ensuring engagement of the full committee, but it can also be an inefficient use of committee time. A majority vote can be a more efficient approach to decision-making, but minority voices can be lost. Members who feel their voices are never heard may disengage from the committee. A committee may decide that some decisions are made by consensus, while others are by majority vote.

---

15. The Maternal Mortality Review Committee Decisions Form found in Appendix F, serves as a guide to ensure that your standard process addresses all key points needed in a review to make a decision about maternal mortality.
**Pregnancy-Relatedness**

Because the decision on pregnancy-relatedness is fundamental to the review and triggers a cascading pathway of decisions, this decision is one that most committees should identify as requiring consensus. Committee members determine whether the case was pregnancy-related or pregnancy-associated but NOT -related. If a consensus (or majority) cannot initially be reached, it can be helpful to review the case discussion for committee members.

- Committee members should know and understand the core definitions used for determining relatedness.
- If committee is unsure, pose the following question: “If this woman had not been pregnant would she have died?”
  - Answering “yes” indicates that this is a pregnancy-associated but NOT -related case.
  - Answering “no” indicates a pregnancy-related case.

**Underlying Cause of Death (COD)**

The underlying cause of death is the event that initiated a chain of events that ultimately resulted in the woman’s death. Because the underlying cause is the initiating event, it is the focus for committee decision-making and analysis of review committee data.

- Specify what the committee determines to be the underlying cause of death.
  - MMRIA has a text field to capture the descriptive causes of death determined by the committee.
  - The descriptive underlying cause of death can be documented for both pregnancy-related deaths and deaths determined to be pregnancy-associated but NOT -related.
- Document whether the committee agrees with the cause of death listed on death certificate.

**PMSS-MM Underlying Cause of Death Code**

These codes are derived from the CDC/ACOG Pregnancy Mortality Surveillance System (PMSS) underlying cause of death listing used to determine the national pregnancy-related mortality ratio. If the death was deemed pregnancy-related, assign the corresponding PMSS-MM underlying cause of death code.

- Assign the most detailed PMSS-MM code possible; for example, if you determine the cause of death is hypertrophic cardiomyopathy, select 80.2 Hypertrophic Cardiomyopathy, rather than 80 Cardiomyopathy.
  - These codes are intended for coding pregnancy-related deaths only. If the death was deemed pregnancy-associated BUT NOT pregnancy-related, the PMSS-MM codes are not applicable, and you can skip this decision.
  - Up to two PMSS-MM codes may be selected for a case within MMRIA. Remember, you are determining the underlying cause of death.
Other Contributors to the Death

The following questions document other significant contributors to and characteristics of the death that may not be an underlying cause. These six questions should be answered regardless of whether the death was deemed pregnancy-related or pregnancy-associated but NOT -related.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Probably</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did obesity contribute to the death?</td>
<td>YES</td>
<td>PROBABLY</td>
<td>NO</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>Did mental health conditions contribute to the death?</td>
<td>YES</td>
<td>PROBABLY</td>
<td>NO</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>Did substance use disorder contribute to the death?</td>
<td>YES</td>
<td>PROBABLY</td>
<td>NO</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>Was this death a suicide?</td>
<td>YES</td>
<td>PROBABLY</td>
<td>NO</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>Was this death a homicide?</td>
<td>YES</td>
<td>PROBABLY</td>
<td>NO</td>
<td>UNKNOWN</td>
</tr>
</tbody>
</table>

If homicide, suicide, or accidental death, list the means of fatal injury:
- Firearm
- Sharp instrument
- Blunt instrument
- Poisoning/overdose
- Hanging/strangulation/suffocation
- Fall
- Punching/beating
- Explosive
- Drowning
- Fire or burns
- Motor vehicle
- Intentional neglect
- Other, specify:
- Unknown
- Not applicable

If homicide, what was the relationship of the perpetrator to the decedent:
- No relationship
- Partner
- Ex-partner
- Other relative
- Other acquaintance
- Other, specify:
- Unknown
- Not applicable

Preventability and Chances to Alter Outcome

These two questions help drive the development of actionable recommendations and support prioritization among recommended actions:

<table>
<thead>
<tr>
<th>Committee Determination of Preventability</th>
<th>Was this death preventable?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chance to alter outcome</td>
<td>Good chance</td>
<td>Some chance</td>
<td>No chance</td>
</tr>
</tbody>
</table>

Some committees choose to only answer one question or the other. Each has its value. The first decision says nothing about the degree of preventability, and a “Yes” simply indicates there was at least some chance. The second decision speaks to the specific degree to which the death was potentially preventable. Either decision is useful alone but when used together can better support prioritizing areas for the committee to recommend action. The most frequent underlying causes of death may not be the most preventable, and within those that are the most preventable, there is a range of opportunity for prevention. Used together, these decisions help committees to identify the best opportunities for recommended action.

16. The committee may not be ready to label a case pregnancy-related or preventable when they reach these components on the Committee Decisions Form. It is not uncommon for committee members to want to jump ahead or request to go back into the case to gain clarity on certain data points, review the flow of events, or further explore details. To ensure that all points are captured, a facilitator should repeat back each decision that was made to ensure all thoughts have been captured before moving on to the next case.
Contributing Factors

Completion of this section should be guided by the mission and scope of the review committee.

- Your committee should decide whether to complete this section only for pregnancy-related deaths or for all pregnancy-associated deaths. This should be consistent with your committee’s mission and scope.
- Using the Contributing Factors list on the Committee Decisions Form, identify all factors that the committee determines contributed to the death.
- Align each Contributing Factor with a corresponding Factor Level. You may provide a description explaining the contributing factor and factor level to document more specifically the contributing factor, and how it reflects the specific recommendations when you develop a report and translate your findings to action.

Committee Recommendations

This question can help review committees move to case-specific recommendations:

- If there was at least some chance that the death could have been averted, were there specific and feasible actions which, if implemented or altered, might have changed the course of events?

An attempt should be made by the committee to develop a recommendation for each contributing factor identified. Recommendations are most effective when they are specific and feasible. Recommendations should address who is responsible to act, and when. The phrasing of recommendations should be in actionable terms.

**FOR EXAMPLE:**

- If the underlying cause of death was determined to be related to a mental health condition; substance use disorder contributed to this death, and an identified contributing factor was lack of provider assessment – specifically not screening for substance use disorder during prenatal care, then:
  - An ineffective recommendation would be: Better substance use disorder screening.
  - An actionable recommendation would be: Prenatal care providers should screen all patients for substance use disorder at their first prenatal visit.

Level of Prevention

For each recommendation that your committee makes, determine the level of prevention that is achieved if implemented. Like preventability decisions, this decision helps support prioritization of recommendations by the committee to then translate into action:

- **Primary**: Prevents the contributing factor before it ever occurs.
- **Secondary**: Reduces the impact of the contributing factor once it has occurred (i.e. treatment).
**Tertiary**: Reduces the impact or progression of an ongoing contributing factor once it has occurred (i.e. management). Recommendations that support primary prevention may be prioritized over those that support secondary or tertiary prevention. It should not be the goal of the committee, however, to always or only think of primary or secondary prevention opportunities, which are not common (especially primary prevention).

### Level of Impact

For each recommendation your committee makes, determine what the expected impact level would be if the recommendation were implemented. Use the following as a guide, which was adapted from CDC Director Tom Frieden’s Health Impact Pyramid:

1. **Giant**: Address Social Determinants of Health
2. **Extra Large**: Change in context
3. **Large**: Long-lasting protective intervention
4. **Medium**: Clinical intervention and coordination of care
5. **Small**: Education and Counseling

This determination helps committees to prioritize their recommendations to help determine which should be translated to action. The base of the pyramid addresses social determinants of health. Actions aimed toward the base of the pyramid have greater impact population-wide and require less individual effort. However, they require a large and sustained amount of political will and are thus often difficult to enact. Actions aimed toward the top of the pyramid help individuals instead of entire populations and depend on person-by-person individual behavioral change; yet, they require less political commitment and are often less difficult to enact. A comprehensive strategy to reduce maternal mortality would include interventions at multiple levels of the pyramid. Some examples of recommended interventions at each level:

---

17. This determination may be made by the full committee or, for the sake of time, by a smaller group (i.e. committee leadership or a subcommittee responsible for moving recommendations to action).
Small: Education/Counseling:
- Community/Provider-based health promotion and education activities

Medium: Clinical intervention and coordination of care, across continuum of well-woman visits through obstetrics, observed in:
- Protocols
- Prescriptions

Large: Long-Lasting Protective Intervention:
- Improve readiness, recognition, and response to obstetric emergencies
- Increase access to long-acting reversible contraceptives (LARC)

Extra Large: Change in Context:
- Improve public transportation
- Reduce vehicle carbon emissions
- Promote environments that support healthy living
- Ensure available and accessible services

Giant: Address Social Determinants of Health:
- Poverty
- Inequality

7. Conclude by Providing a Recap of Cases Reviewed

After you have finished reviewing cases and before you adjourn your meeting, consider recapping the accomplishments of the meeting with your committee members. You may utilize MMRIA to project some basic summary reports or to simply make a summary statement, such as the following:

Today we reviewed ___ (NUMBER) cases. We determined ___ (NUMBER) were pregnancy-related, ___ (NUMBER) were pregnancy-associated but not -related, ___ (NUMBER) were (OTHER). We determined ___ (NUMBER) to be preventable, and we made the following recommendations: ____________.
CONCLUSION

Skillful facilitation of committee case review is an essential component of a maternal mortality review committee’s success. Using this guide with consideration to your committee’s scope, composition, and jurisdiction context provides a strong foundation for your committee. Moving forward, your committee can consistently conduct effective reviews by establishing and following reliable structures and processes. Your careful work, through your recommendations, has the potential to impact everything from the care a woman receives from her providers to the environmental determinants of health in her community. Though this is challenging work, it is critical work. Your committee has the potential to save many mothers’ lives and in so doing, help keep families together, help communities to raise healthier children, and improve health and well-being across the U.S.
APPENDIX A: MATERNAL MORTALITY REVIEW COMMITTEE LOGIC MODEL

Maternal Mortality Review Committee Logic Model

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short</th>
<th>Intermediate</th>
<th>Long</th>
</tr>
</thead>
</table>
| • Legislative authority and protections  
  - Authority to access required data  
  - Confidentiality  
  - Immunity for committee members from subpoena  
  - Leadership buy-in  
  - Staff  
  - Funding  
  - Defined scope and explicit protocols  
  - Data  
    - Vital records  
    - Medical records  
    - Social Service Records  
  - Defined stakeholders and membership  
    - With status or authority to implement recommendations within their organizations  
    - Broad representation | • Secure any missing inputs (from previous column)  
  • Periodically recruit and train committee members  
  • Identify cases and select cases for abstraction  
  • Abstract cases and produce case summary  
  • Convene committee meeting, review cases, and make key committee decisions  
  • Disseminate recommendations  
  • Identify implementation resources | • Fully functional and sustainable MMRC  
  • Robust, accurate data  
  • Health surveillance and data analysis build evidence base  
  • Recommendations  
  • Reports and presentations  
  • Campaigns, trainings, and initiatives | • Awareness of the existence and recommendations of the MMRC among the public, clinicians, and policy makers  
  • Adoption of policy changes by health systems  
  • Implementation of data driven recommendations e.g. evidence based practices, screenings, and patient education by providers, etc. | • Widespread adoption of patient safety bundles and/or policies that reflect the highest standard of care  
  • Access to holistic care during pregnancy and postpartum period e.g. prenatal, diabetes, mental health, and substance use disorder care, etc.  
  • Coordination of care across providers | • Elimination of preventable maternal death  
  • Reduction in maternal morbidity  
  • Improvement in population health for women of reproductive age including reductions in hypertension, obesity, smoking, substance use, and other chronic diseases |

**Assumptions**
State has a Perinatal Quality Collaborative (PQC), a perinatal center, advocacy organizations, or other infrastructure to support the implementation of MMRC recommendations

**Contextual Factors**
- Geography  
- Political will and support

MMRC recommendations are part of a cycle of continuous quality improvement for health systems.
APPENDIX B: KEY COMPONENTS TO SUPPORT AUTHORITIES AND PROTECTIONS

Efforts to establish or strengthen a maternal mortality review committee (MMRC) should include a review of what protections and authorities are already in place. The purpose of the MMRC is not to assign blame to individual providers or hospitals but to look for opportunities to prevent maternal deaths within and across cases for population level action. It is distinct from and not a substitute for hospital peer review committees, root cause analysis, or complaint investigations. Authority and protections for MMRCs must protect the intent of the public health surveillance process.

The “Building US Capacity to Review and Prevent Maternal Deaths” initiative developed a short video <youtu.be/jtKde7hGz4I> on the steps to establish an MMRC. This video is useful in educating individuals about MMRCs.

What are some key components to consider?

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>RATIONALE AND OBJECTIVE</th>
<th>EXAMPLE</th>
</tr>
</thead>
</table>
| 1. AUTHORITY TO ACCESS DATA      | Case abstractors should be able to collect at a minimum vital records, hospitalization and prenatal care records, and autopsy reports. Other desirable data sources include interviews with family members or police reports. Pointing to clear authority in legislation can facilitate compliance with data requests.                                                                                     | WASHINGTON:                                                                                     

(5) The department of health shall review department available data to identify maternal deaths. To aid in determining whether a maternal death was related to or aggravated by the pregnancy, and whether it was preventable, the department of health has the authority to: (a) Request and receive data for specific maternal deaths including, but not limited to, all medical records, autopsy reports, medical examiner reports, coroner reports, and social service records; and (b) Request and receive data as described in (a) of this subsection from health care providers, health care facilities, clinics, laboratories, medical examiners, coroners, professions and facilities licensed by the department of health, local health jurisdictions, the health care authority and its licensees and providers, and the department of social and health services and its licensees and providers.

(6) Upon request by the department of health, health care providers, health care facilities, clinics, laboratories, medical examiners, coroners, professions and facilities licensed by the department of health, local health jurisdictions, the health care authority and its licensees and providers, and the department of social and health services and its licensees and providers must provide all medical records, autopsy reports, medical examiner reports, coroner reports, social services records, information and records related to sexually transmitted diseases, and other data requested for specific maternal
<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>RATIONALE AND OBJECTIVE</th>
<th>EXAMPLE</th>
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<tbody>
<tr>
<td>2. CONFIDENTIALITY AND PROTECTION OF COLLECTED DATA, PROCEEDINGS, AND ACTIVITIES</td>
<td>Confidentiality for MMRCs refers to the legal protection of information collected as part of the review process and the protection of the MMRC’s discussions and findings from discovery or subpoena. Strong confidentiality protections can facilitate participation in reviews and the sharing of data and information.</td>
<td>[\text{deaths as provided for in subsection (5) of this section to the department.}]</td>
</tr>
<tr>
<td>COMPONENT</td>
<td>RATIONALE AND OBJECTIVE</td>
<td>EXAMPLE</td>
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<tr>
<td><strong>3. IMMUNITY FOR COMMITTEE MEMBERS</strong></td>
<td>Immunity protects MMRC members as well as any witnesses or others providing information from personal liability based on activities during the review process. Immunity facilitates full participation in the review process.</td>
<td><strong>GEORGIA:</strong> (2) A health care provider, health care facility, or pharmacy providing access to medical records pursuant to this Code section shall not be held liable for civil damages or be subject to any criminal or disciplinary action for good faith efforts in providing such records. (2) Members of the committee shall not be questioned in any civil or criminal proceeding regarding the information presented in or opinions formed as a result of a meeting or communication of the committee; provided, however, that nothing in this Code section shall be construed to prevent a member of the committee from testifying to information obtained independently of the committee or which is public information.</td>
</tr>
<tr>
<td><strong>4. REGULAR REPORTING AND DISSEMINATION OF FINDINGS</strong></td>
<td>Specifying how often and to whom/to what entity the MMRC will report its findings and recommendations helps keep MMRC as a public health priority for the state and facilitates dissemination of best practices.</td>
<td><strong>GEORGIA:</strong> (g) Reports of aggregated non-individually identifiable data shall be compiled on a routine basis for distribution in an effort to further study the causes and problems associated with maternal deaths. Reports shall be distributed to the General Assembly, health care providers and facilities, key government agencies, and others necessary to reduce the maternal death rate.</td>
</tr>
<tr>
<td><strong>5. MULTIDISCIPLINARY COMMITTEE WITH LOCAL INPUT</strong></td>
<td>The MMRC members should represent a variety of clinical and psychosocial specializations and members working in and representing diverse communities and from differing geographic regions in the state. Specifying committee membership facilitates diversity and inclusion of key stakeholder groups.</td>
<td><strong>TEXAS:</strong> In appointing members to the task force, the commissioner shall: 1. include members: a) working in and representing communities that are diverse with regard to race, ethnicity, immigration status, and English proficiency; and b) from differing geographic regions in the state, including both rural and urban areas; 2. endeavor to include members who are working in and representing communities that are affected by pregnancy-related deaths and severe maternal morbidity and by a lack of access to relevant perinatal and intrapartum care services; and 3. ensure that the composition of the task force reflects the racial, ethnic, and linguistic diversity of this state.</td>
</tr>
<tr>
<td>COMPONENT</td>
<td>RATIONALE AND OBJECTIVE</td>
<td>EXAMPLE</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------</td>
<td>---------</td>
</tr>
</tbody>
</table>
| 6. ABILITY TO SHARE DE-IDENTIFIED DATA AND FINDINGS LOCALLY AND REGIONALLY | Flexible authority for limited access to MMRC data for research and to collaborate with other jurisdictions helps MMRCs overcome challenges presented by identification of trends from small caseloads or cases where the place of residence and place of death are in different states, and participate in activities to advance regional or national priorities in maternal mortality prevention. | **CONNECTICUT:**  
...the Department of Public Health may exchange personal data for the purpose of medical or scientific research, with any other governmental agency or private research organization; provided such state, governmental agency or private research organization shall not further disclose such personal data.  

**TENNESSEE:**  
(2) The state team:  

...  

(B) May share information with other public health authorities or their designees as the state team may determine necessary to achieve the goals of the program.  

(b) The state team may request that persons with direct knowledge of circumstances surrounding a particular fatality provide the state team with information necessary to complete the review of the particular fatality; such persons may include healthcare providers or staff involved in the care of the woman or the person who first responded to a report concerning the woman. |

Questions about MMRCs? Please contact Julie Zaharatos at CDC, Andria Cornell at AMCHP, and Kathryn Moore at ACOG. ACOG has a state toolkit with additional examples.
APPENDIX C: SAMPLE MATERNAL MORTALITY REVIEW COMMITTEE SCOPE, MISSION, GOALS, AND VISION

Scope:
The scope of cases for committee review is all pregnancy-associated deaths or any deaths of women with indication of pregnancy up to 365 days, regardless of cause (i.e. motor vehicle accidents during pregnancy, motor vehicle accidents postpartum, suicide, homicide). Deaths are identified from review of death certificates with a pregnancy checkbox selection and linkage of vital records by searching death certificates of women of reproductive age and matching them to birth or fetal death certificates in the year prior.

Mission:
The mission is to increase awareness of the issues surrounding pregnancy-related death and to promote change among individuals, healthcare systems, and communities in order to reduce the number of deaths.

The mission of the <state> Maternal Mortality Review Committee is to identify pregnancy-associated deaths, review those caused by pregnancy complications and other associated causes, and identify the factors contributing to these deaths and recommend public health and clinical interventions that may reduce these deaths and improve systems of care.

Goals:
The goals of the Maternal Mortality Review Committee are to:

- **Perform thorough record abstraction** in order to obtain details of events and issues leading up to a mother’s death.
- **Perform a multidisciplinary review of cases** to gain a holistic understanding of the issues.
- **Determine the annual number of maternal deaths related to pregnancy** (pregnancy-related mortality).
- **Identify trends and risk factors** among pregnancy-related deaths in <state>.
- **Recommend improvements to care** at the individual, provider, and system levels with the potential for reducing or preventing future events.
- **Prioritize findings and recommendations** to guide the development of effective preventive measures.
- **Recommend actionable strategies for prevention** and intervention.
- **Disseminate the findings and recommendations** to a broad array of individuals and organizations.
- **Promote the translation of findings and recommendations** into quality improvement actions at all levels.

Vision:
The Maternal Mortality review Committee’s vision is to eliminate preventable maternal deaths, reduce maternal morbidities, and improve population health for women of reproductive age in <state>.
Membership:

The <state> Maternal Mortality Review Committee is a multidisciplinary committee whose geographically diverse members represent various specialties, facilities, and systems that interact with and impact maternal health. At any one time, the committee consists of approximately <__> members who commit to serve a <renewable> <__>-year term.

Meeting structure:

Maternal Mortality Review Committees review and make decisions about each case based on the case narrative and abstracted data. The committee examines the cause of death and contributing factors, and determines:

- Was the death pregnancy-related?
- If pregnancy-related, what was the underlying cause of death? (PMSS-MM)
- Was the death preventable?
- What were the contributing factors to the death?
- What specific and feasible recommendations for action should be taken to prevent future deaths?
- What is the anticipated impact of those actions if implemented?

Process:

Information is gathered from death certificates, birth certificates, medical records, autopsy reports, and other pertinent resources. Records are abstracted by a trained nurse abstractor, who prepares de-identified case narratives for review by a committee of experts from diverse disciplines.
APPENDIX D: POTENTIAL MATERNAL MORTALITY REVIEW COMMITTEE MEMBERS

Organizations
- Academic Institutions
- Behavioral Health Agencies
- Blood Banks
- Community Advocate
- Community Birth Workers
- Federally Qualified Health Centers
- FIMR/CDR Programs
- Healthy Start Agencies
- Homeless Services
- Hospitals/Hospital Associations
- Private and Public Insurers
- Professional Assoc. State Chapters
- Rural Health Associations
- State Medical Society
- State Medicaid Agency
- State Title V Program
- State Title X Program
- Tribal Organizations
- Violence Prevention Agencies

Core Disciplines
- Anesthesiology
- Family Medicine
- Forensic Pathology
- Maternal Fetal Medicine / Perinatology
- Nurse Midwifery
- Obstetrics and Gynecology
- Patient Safety
- Perinatal Nursing
- Psychiatry
- Public Health
- Social Work

Specialty Disciplines
- Cardiology
- Clergy
- Community Leadership
- Critical Care Medicine
- Nutrition
- Emergency Response
- Epidemiology
- Genetics
- Home Nursing
- Law Enforcement
- Mental Health Provider
- Pharmacy
- Public Health Nursing
- Quality/Risk Management
- Addiction Counseling
APPENDIX E: CONSIDERATIONS FOR HIRING ABSTRACTORS

Special consideration should be placed on the selection of the medical record abstractors for a Maternal Mortality Review Committee (MMRC). The expertise and skill of the individual abstractor is closely tied to the quality of information that is presented to the review committee and ultimately to the accuracy of identified issues and recommendations for improvement.

The abstractor represents the MMRC while out in the field and holds a great deal of responsibility to ensure the protection and confidentiality of the information gathered. Therefore, it is of utmost importance for all medical record abstractors to demonstrate professionalism and have a full understanding of the authority and/or legislative parameters under which they operate. Abstractors should receive initial and ongoing training with regards to appropriate practice.

The abstractor typically reviews and abstracts information from death certificates, birth certificates, fetal death certificates, medical and hospitalization records, autopsies and social service records. Contacting hospitals and arranging access to medical records for assigned cases may be the responsibility of the abstractor alone or may be divided between an abstractor and a program coordinator. The abstractor typically receives assigned cases from a program coordinator and then abstracts them within a specified time period. The abstractor is responsible for reviewing records at each hospital, filling out appropriate abstraction forms, writing a case narrative, and providing additional information on each case based on clinical documentation in the records. While most records are found at area hospitals, the abstractor may be required to gather information from other types of facilities. The abstractor will typically attend review committee meetings and report to a program coordinator.

Ideal Abstractor Qualifications:

- Nursing experience in obstetrics, antenatal, and postpartum care - minimum of five years
- Demonstrated understanding of normal/abnormal processes of pregnancy, delivery, and postpartum and the wide spectrum of factors that can influence maternal outcomes
- Demonstrated strong professional communication skills (phone, email, fax, verbal)
- Computer skills, including data entry experience and ability to navigate a variety of electronic medical record systems
- Experience in medical record review (peer review, FIMR, etc.)
- Flexibility and ability to accomplish tasks in short time frames.
- Demonstrated appreciation of the community
- Knowledge of HIPAA and confidentiality laws
- Ability to serve as an objective, unbiased storyteller; not looking to assign blame
- Demonstrated understanding of social determinants contributing to maternal mortality
- Possessor of own automobile with valid insurance (if on-site abstraction is required).

States have differing needs for abstractor personnel and hours. Refer to Review to Action website for assistance in calculating the number of hours of abstraction required for your committee each year and the associated costs.
Abstracting is a taxing job and abstractors need support from the committee and from other staff. Before hiring an abstractor, decide who your abstractor will report to and who he or she can go to for questions, concerns, and emotional support.
APPENDIX F: MMR COMMITTEE DECISIONS FORM
## MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM V17

### COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CAUSE (DESCRIPTIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMMEDIATE</td>
<td></td>
</tr>
<tr>
<td>CONTRIBUTING</td>
<td></td>
</tr>
<tr>
<td>UNDERLYING</td>
<td></td>
</tr>
<tr>
<td>OTHER SIGNIFICANT</td>
<td></td>
</tr>
</tbody>
</table>

**PREGNANCY-RELATEDNESS: SELECT ONE**

- **PREGNANCY-RELATED**
  - The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.

- **PREGNANCY-ASSOCIATED, BUT NOT RELATED**
  - The death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy.

- **PREGNANCY-ASSOCIATED BUT UNABLE TO DETERMINE PREGNANCY-RELATEDNESS**
  - This choice should be used if there is any doubt whether pregnancy was a factor in the death or if it is not possible to determine whether it was a factor.

- **NOT PREGNANCY-RELATED OR -ASSOCIATED**
  - (i.e., false positive, woman was not pregnant within one year of her death)

**ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:**

- **COMPLETE**
  - All records necessary for adequate review of the case were available.

- **SOMewhat COMPLETE**
  - Major gaps (i.e., information that would have been crucial to the review of the case)

- **MOSTly COMPLETE**
  - Minor gaps (i.e., information that would have been beneficial but was not essential to the review of the case)

- **NOT COMPLETE**
  - Minimal records available for review (i.e., death certificate and no additional records)

- N/A

**IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH**

Refer to page 3 for PMSA-MF cause of death list. If more than 1 is selected, list in order of importance beginning with the most compelling (1-5; no more than 5 may be selected in the system).

- [ ]

**DID OBESITY CONTRIBUTE TO THE DEATH?**

- [ ] YES
- [ ] PROBABLY
- [ ] NO
- [ ] UNKNOWN

**DID MENTAL HEALTH CONDITIONS CONTRIBUTE TO THE DEATH?**

- [ ] YES
- [ ] PROBABLY
- [ ] NO
- [ ] UNKNOWN

**DID SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?**

- [ ] YES
- [ ] PROBABLY
- [ ] NO
- [ ] UNKNOWN

**WAS THIS DEATH A SUICIDE?**

- [ ] YES
- [ ] PROBABLY
- [ ] NO
- [ ] UNKNOWN

**WAS THIS DEATH A HOMICIDE?**

- [ ] YES
- [ ] PROBABLY
- [ ] NO
- [ ] UNKNOWN

**IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE MEANS OF FATAL INJURY**

- [ ] FIREARM
- [ ] SHARP INSTRUMENT
- [ ] BLUNT INSTRUMENT
- [ ] POISONING/OVERDOSE
- [ ] HANGING/STRANGULATION/SUFFOCATION
- [ ] FALL
- [ ] PUNCHING/KICKING/BEATING
- [ ] EXPLOSIVE
- [ ] DROWNING
- [ ] FIRE OR BURNS
- [ ] MOTOR VEHICLE
- [ ] INTENTIONAL NEGLECT
- [ ] OTHER, SPECIFY:

**IF HOMICIDE, WHAT WAS THE RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT?**

- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER RELATIVE
- [ ] OTHER, SPECIFY:

**DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE?**

- [ ] YES
- [ ] NO
<table>
<thead>
<tr>
<th>CONTRIBUTING FACTOR LEVEL</th>
<th>CONTRIBUTING FACTOR (SEE BELOW) AND DESCRIPTION OF ISSUE</th>
<th>RECOMMENDATIONS OF THE COMMITTEE</th>
<th>LEVEL OF PREVENTION (SEE BELOW)</th>
<th>LEVEL OF IMPACT (SEE BELOW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATIENT/FAMILY</td>
<td></td>
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<tr>
<td>PROVIDER</td>
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<tr>
<td>FACILITY</td>
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<tr>
<td>SYSTEM</td>
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<tr>
<td>COMMUNITY</td>
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</tr>
</tbody>
</table>

**CONTRIBUTING FACTOR KEY (DESCRIPTIONS ON PAGE 4)**

- Delay
- Adherence
- Knowledge
- Cultural/religious
- Environmental
- Violence
- Mental health conditions
- Substance use disorder - alcohol, illicit prescription drugs
- Tobacco use
- Chronic disease
- Childhood abuse/tamra
- Access/financial
- Unstable housing
- Social support/ isolation
- Equipment/ technology
- Policies/procedures
- Communication
- Continuity of care/ care coordination
- Clinical skill/ quality of care
- Outreach
- Law/Enforcement
- Referral
- Assessment
- Legal
- Other

**PREVENTION LEVEL**

- PRIMARY: Prevents the contributing factor before it ever occurs
- SECONDARY: Reduces the impact of the contributing factor once it has occurred (i.e., treatment)
- TERTIARY: Reduces the impact or progression of what has become an ongoing contributing factor (i.e., management of complications)

**EXPECTED IMPACT LEVEL**

- SMALL: Education/counseling (community- and/or provider-based health promotion and education activities)
- MEDIUM: Clinical intervention and coordination of care across continuum of well-woman visits (protocols, prescriptions)
- LARGE: Long-lasting, protective intervention (improve readiness, recognition and response to obstetric emergencies/LARC)
- EXTRA LARGE: Change in context (promote environments that support healthy living/ensure available and accessible services)
- GIANT: Address social determinants of health (poverty, inequality, etc.)
IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH* PMSS-MM

If more than one is selected, please list them in order of importance beginning with the most compelling (1-2; no more than 2 may be selected in the system).

*PREGNANCY-RELATED DEATH: THE DEATH OF A WOMAN DURING PREGNANCY OR WITHIN ONE YEAR OF THE END OF PREGNANCY FROM A PREGNANCY COMPLICATION, A CHAIN OF EVENTS INITIATED BY PREGNANCY, OR THE AGgravATION OF AN UNRELATED CONDITION BY THE PHYSIOLOGIC EFFECTS OF PREGNANCY.

10 Hemorrhage (excludes aneurysms or CVA)
10.1 Hemorrhage – rupture/laceration/intra-abdominal bleeding
10.2 Placental abruption
10.3 Placenta previa
10.4 Ruptured ectopic pregnancy
10.5 Hemorrhage – uterine atony/postpartum hemorrhage
10.6 Placenta accreta/increta/percreta
10.7 Hemorrhage due to retained placenta
10.8 Hemorrhage due to primary DIC
10.9 Other hemorrhage/NOS
20 Infection
20.1 Postpartum genital tract (e.g., of the uterus/pelvis/perineum/rectal/vaginal area)
20.2 Septic/septic shock
20.3 Chorioamnionitis/antepartum infection
20.4 Non-pelvic infections (e.g., pneumonia, TB, meningitis, HIV)
20.6 Urinary tract infection
20.9 Other infections/NOS
30 Embolism - thrombotic (non-cerebral)
30.9 Other embolism/NOS
31 Embolism – amniotic fluid
40 Preeclampsia
50 Pemphigus
60 Chronic hypertension with superimposed preeclampsia
70 Anesthesia complications
80 Cardiomyopathy
80.1 Postpartum/peripartum cardiomyopathy
80.2 Hypertrophic cardiomyopathy
80.9 Other cardiomyopathy/NOS
82 Hematologic
82.1 Sickle cell anemia
82.9 Other hematologic conditions including thrombophilies/TTP/HUS/NOS
83 Collagen vascular/autoimmune diseases
83.1 Systemic lupus erythematosus (SLE)
83.9 Other collagen vascular diseases/NOS
85 Conditions unique to pregnancy (e.g., gestational diabetes, hypertensive, liver disease of pregnancy)
86 Injury
88.1 Intentional (homicide)
88.2 Unintentional
88.9 Unknown/NOS
89 Cancer
89.1 Gestational trophoblastic disease (GTD)
89.8 Other malignancies/NOS
89.9 Other malignancies/NOS
90 Cardiovascular conditions
90.1 Coronary artery disease/myocardial infarction (MI)/atherosclerotic cardiovascular disease
90.2 Pulmonary hypertension
90.3 Valvular heart disease congenital and acquired
90.4 Vascular aneurysm/dissection (non-cerebral)
90.5 Hypertensive cardiovascular disease
90.6 Marfan Syndrome
90.7 Conduction defects/arrhythmias
90.8 Vasculopathic malformations outside head and coronary arteries
90.9 Other cardiovascular disease, including CHF, cardiomyopathy, cardiac fibrosis, non-acute myocardial/NOS
91 Pulmonary conditions (excludes ARDS-Adult respiratory distress syndrome)
91.1 Chronic lung disease
91.2 Cystic fibrosis
91.3 Asthma
91.9 Other pulmonary disease/NOS
92 Neurologic/neurovascular conditions (excluding CVAs)
92.1 Epilepsy/seizure disorder
92.2 Other neurologic diseases/NOS
93 Renal disease
93.1 Chronic renal failure/End-stage renal disease (ESRD)
93.2 Other renal disease/NOS
95 Cerebrovascular accident (hemorrhage/thrombosis/anurysm/ malformation) not secondary to hypertensive disease
96 Metabolic/endocrine
96.1 Obesity
96.2 Diabetes mellitus
96.8 Other metabolic/endocrine disorders
97 Gastrointestinal disorders
97.1 Crohn’s disease/ulcerative colitis
97.2 Liver disease/failure/transplant
97.9 Other gastrointestinal diseases/NOS
100 Mental health conditions
100.1 Depression
100.9 Other psychiatric conditions/NOS
998 Unknown COD
CONTRIBUTING FACTOR DESCRIPTIONS

DELAY OR FAILURE TO SEEK CARE
The provider or patient was delayed in referring or accessing care, treatment, or follow-up care/service.

ADHERENCE TO MEDICAL RECOMMENDATIONS
The provider or patient did not follow protocol or failed to comply with standard procedures (i.e., non-adherence to prescribed medications).

KNOWLEDGE - LACK OF KNOWLEDGE REGARDING IMPORTANCE OF EVENT OR OF TREATMENT OR FOLLOW-UP
The provider or patient did not receive adequate education or lacked knowledge or understanding regarding the significance of a health event (e.g., shortness of breath as a trigger to seek immediate care) or lacked understanding about the need for treatment/follow-up after evaluation for a health event (e.g., needed to keep appointment for psychiatric referral after an ED visit for exacerbation of depression).

CULTURAL/RELIGIOUS, OR LANGUAGE FACTORS
Demonstration that any of these factors was either a barrier to care due to lack of understanding or led to refusal of therapy due to beliefs (or belief systems).

ENVIRONMENTAL FACTORS
Factors related to weather or social environment.

VIOLENCE AND INTIMATE PARTNER VIOLENCE (IPV)
Physical or emotional abuse perpetrated by current or former intimate partner, family member, or stranger.

MENTAL HEALTH CONDITIONS
The patient carried a diagnosis of a psychiatric disorder. This includes postpartum depression.

SUBSTANCE USE DISORDER – ALCOHOL, ILLICIT/ PRESCRIPTION DRUGS
Substance use disorder is characterized by recurrent use of alcohol and/or drugs causing clinically and functionally significant impairment, such as health problems or disability. The committee may determine that substance use disorder contributed to the death when the disorder directly compromised a woman’s health status (e.g., acute methamphetamine intoxication exacerbated pregnancy-induced hypertension, or woman was more vulnerable to infections or medical conditions).

TOBACCO USE
The patient’s use of tobacco directly compromised the patient’s health status (e.g., long-term smoking led to underlying chronic lung disease).

CHRONIC DISEASE
Occurrence of one or more significant pre-existing medical conditions (e.g., obesity, cardiovascular disease, or diabetes).

CHILDHOOD SEXUAL ABUSE/TRAUMA
The patient experienced rape, molestation, or one or more of the following: sexual exploitation during childhood plus persuasion, inducement, or coercion of a child to engage in sexually explicit conduct, physical or emotional abuse or violence other than that related to sexual abuse during childhood.

LACK OF ACCESS/FINANCIAL RESOURCES
System issues, e.g., lack or loss of healthcare insurance or other financial duties, as opposed to woman’s noncompliance, impacted woman’s ability to care for herself (e.g., did not seek services because unable to miss work or afford postpartum visits after insurance expired). Other barriers to accessing care: Insurance non-eligibility, provider shortage in woman’s geographical area, and lack of public transportation.

UNSTABLE HOUSING
Woman lived “on the street,” in a homeless shelter, or in transitional or temporary circumstances with family or friends.

SOCIAL SUPPORT/ISOLATION – LACK OF FAMILY/FRIEND OR SUPPORT SYSTEM
Social support from family, partner, or friends was lacking, inadequate, and/or dysfunctional.

INADEQUATE OR UNAVAILABLE EQUIPMENT/ TECHNOLOGY
Equipment was missing, unavailable, or not functional, (e.g. absence of blood tubing connector).

LACK OF STANDARDIZED POLICIES/PROCEDURES
The facility lacked basic policies or infrastructure germane to the woman’s needs (e.g., response to high blood pressure, or a lack of or outdated policy or protocol).

POOR COMMUNICATION/LACK OF CASE COORDINATION OR MANAGEMENT/ LACK OF CONTINUITY OF CARE (SYSTEM PERSPECTIVE)
Care was fragmented (i.e., uncoordinated or not comprehensive) among or between healthcare facilities or units, (e.g., records not available between inpatient and outpatient or among units within the hospital, such as emergency department and labor and delivery).

LACK OF CONTINUITY OF CARE (PROVIDER OR FACILITY PERSPECTIVE)
Care providers did not have access to woman’s complete records or did not communicate woman’s status sufficiently. Lack of continuity can be between prenatal, labor and delivery, and postpartum providers.

CLINICAL SKILL/QUALITY OF CARE (PROVIDER OR FACILITY PERSPECTIVE)
Personnel were not appropriately skilled for the situation or did not exercise clinical judgment consistent with current standards of care (e.g., error in the preparation or administration of medication or unavailability of translation services).

INADEQUATE COMMUNITY OUTREACH/RESOURCES
Lack of coordination between healthcare system and other outside agencies/agencizations in the geographic/cultural area that work with maternal child health issues.

INADEQUATE LAW ENFORCEMENT RESPONSE
Law enforcement response was not in a timely manner or was not appropriate or thorough in scope.

LACK OF REFERRAL OR CONSULTATION
Specialists were not consulted or did not provide care; referrals to specialists were not made.

FAILURE TO SCREEN/INADEQUATE ASSESSMENT OF RISK
Factors placing the woman at risk for a poor clinical outcome recognized, and the woman was not transferred/transported to a provider able to give a higher level of care.

LEGAL
Legal considerations that impacted outcome.

OTHER
Contributing factor not otherwise mentioned. Please provide description.
## APPENDIX G: MMRC MEETING AGENDA TEMPLATE

<<MM/DD/YYYY>>, <<00:00 a.m. - 00:00 p.m.>>
<<Location>>, <<Street Address>>, <<City>>, <<State>> <<ZIP>>

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Co-Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 9:10</td>
<td>Open Meeting/Introductions</td>
<td>Co-Chair</td>
</tr>
<tr>
<td>9:10 – 9:15</td>
<td>Topic-Specific Updates Present and Discuss</td>
<td>Staff Member, Other, i.e. Subject Matter Expert</td>
</tr>
<tr>
<td>9:15 – 9:30</td>
<td>Recommendations to Action Update Share and Discuss</td>
<td>Group</td>
</tr>
<tr>
<td>9:30 – 9:45</td>
<td>Sign Confidentiality Statement All case information, including</td>
<td>Coordinator or Lead Abstractor</td>
</tr>
<tr>
<td></td>
<td>decedent names, provider names and facility names must remain anonymous.</td>
<td></td>
</tr>
<tr>
<td>9:45 – 10:00</td>
<td>Overview of Cases Identified for Review that are within Scope from Preliminary Review of Vital Records Present</td>
<td>Coordinator or Lead Abstractor</td>
</tr>
<tr>
<td>10:00 – 12:00</td>
<td>Case Reviews 20-30 minutes per case • Review Case Narratives and Core Elements Summaries • Complete Committee Decisions Forms</td>
<td>Group</td>
</tr>
<tr>
<td>12:00 – 12:30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>12:30 – 3:00</td>
<td>Case Reviews 20-30 minutes per case • Review Case Narratives</td>
<td>Group</td>
</tr>
</tbody>
</table>
Synopsis and Conclusion

Today we reviewed ___ (NUMBER) deaths. We determined ___ were pregnancy-related, ___ (NUMBER) were pregnancy-associated but not related, ___ (NUMBER) were (UNABLE TO BE DETERMINED). We determined ___ (NUMBER) to be preventable, and we made the following recommendations: _____________.

Upcoming Meeting Dates:

- << MM/DD/YYYY >>
- << MM/DD/YYYY >>
- << MM/DD/YYYY >>
- << MM/DD/YYYY >>

Upcoming Conferences <<Examples>>:

American College of Nurse Midwives Annual Meeting <<mm/dd/yyyy>>
ACOG District __ Annual Meeting <<mm/dd/yyyy>>
APPENDIX H: NOTES ON FACILITATIVE GROUP LEADERSHIP

Facilitative Group Leadership recognizes the value of bringing together individual strengths. This approach promotes ease of process and enables work to be done by:

- **Focusing on making individual connections.** All human beings have an intrinsic need to be understood and to have a sense of value and worth; facilitators focus on enabling and empowering people to fulfill their potential.
- **Enabling a productive group process in which members work together as a cohesive unit.**

Facilitative Leadership Roles:

- **Leader/Manager:** Clarifies issues, stimulates discussion, manages committee process, focuses and summarizes discussion, intervenes as needed.
- **Referee:** Encourages differing opinions, mediates conflicts, corrects erroneous information, and relieves tension.
- **Facilitator:** Encourages listening to ALL viewpoints, involves and protects ALL participants, accepts silences without criticism.

Facilitative Leadership Skills:

An effective manager of committee dynamics:

- Maintains awareness of committee dynamics
- Communicates effectively
- Actively listens (paraphrases, summarizes, reflects)
- Questions and seeks clarification in a non-critical manner
- Encourages authenticity and maintains trust in the group

Managing Group Dynamics:

The ability of committee members to interact and relate with each other is a key factor in determining how successful they will be in accomplishing their goals and reaching their vision. Therefore, the leadership of a committee must be familiar with the various aspects of group dynamics and continually nurture and foster a unified and cohesive working environment. A cohesive environment should not prevent diversity of thought or opinion but rather help the committee avoid losing sight of its scope, mission, scope, and vision.

**Group Roles:** Benne & Sheats (1948) identified various roles that members of a group may fulfill. The roles either add value or reduce value.

There are three distinct categories of roles to be aware of:
1. **Group Task Roles**
2. **Personal/Social-Maintenance Roles**
3. **Dysfunctional/Individualistic Roles**

Some of the more common roles are listed below. The roles in green are value-adding roles and those in red are value-reducing roles.

4. **Group Task Roles: Work Roles** *(Necessary to accomplish the task at hand)*
   - Initiator/Contributor: Generates new thought and ideas
   - Information Seeker: Asks for clarification of ideas
   - Information Giver: Provides information to clarify and help analyze
   - Opinion Seeker: Asks for clarification of the values related to a suggested group action
   - Opinion Giver: Shares his or her beliefs, attitudes, or concerns
   - Integrator: Pulls group suggestions together in relational manner
   - Orienter: Helps to keep the group focused
   - Procedural Technician: Assists with meeting logistics
   - Recorder: Responsible for capturing ideas

5. **Personal/Social Roles: Maintenance Roles** *(Contribute to the positive relations and functioning of the group)*
   - Encourager: Offers praise and empowers individuals to contribute
   - Harmonizer: Attempts to resolve conflict
   - Compromiser: One of the parties in a conflict who actively works to resolve the conflict
   - Gatekeeper/Expediter: Helps to keep the communication channels open
   - Observer/Commentator: Accepts what others say and do (solely a listener but not an active contributor). Only seen as value-added if he or she helps to act on group decisions.

6. **Dysfunctional/Individualistic Roles**: Special care should be taken with members who take on these roles as they have great potential to interfere with positive group relations and impede progress.
   - Aggressor: Tries to gain status by consistently making condescending and/or hostile comments
   - Blocker: Consistently and negatively rejects others' ideas; unreasonable, stubborn, goes off on tangents, yet provides nothing constructive on his or her own
   - Recognition Seeker/Special Interest: Attempts to draw attention to self through boasting and self-promotion; uses the group setting as a personal sounding board
   - Disrupter: Continually changes topics, brings up old settled business
   - Dominator: Tries to take over authority and make decisions for the group
   - Help Seeker: Disparages him- or herself to gain sympathy/empathy for personal challenges
Additional Resources

- How to be a Great Facilitator: [http://www.youtube.com/watch?v=qgbc-uCSRaw](http://www.youtube.com/watch?v=qgbc-uCSRaw)

APPENDIX I: MATERNAL MORTALITY REVIEW SUCCESS STORIES

Maternal Mortality Review - Success Stories from Five States:

Five types of success, ranging from data improvement and clinical intervention to public health promotion

Florida: Getting Urgent Maternal Mortality Messages to Providers

In a timely response to communicate about placental disorders, the Florida Pregnancy-Associated Mortality Review (PAMR) committee issued an Urgent Maternal Mortality Message in December 2015. The one-page electronic message summarized clinical guidelines and PAMR recommendations to improve clinical recognition and management, as well as community awareness, of placenta accreta and subsequent risk of hemorrhage. The team decided to focus on hemorrhage as related to placenta accreta as Florida’s PAMR data shows hemorrhage as both the most preventable and the leading cause of pregnancy-related death in Florida. At the same time, the Florida Perinatal Quality Collaborative (FPQC) was implementing a quality improvement project in 34 Florida birthing hospitals on reduction of obstetric hemorrhage. The Urgent Maternal Mortality Message was distributed to Florida District XII ACOG membership, placed on the FPQC website for download and distributed at the FPQC annual conference in April 2016.

To promote a sustained focus on moving recommendations to action, the Florida PAMR team formed the PAMR Action Subcommittee in September 2015. The purpose of the subcommittee is to develop succinct, clear messages to promote and improve maternal outcomes. The goal is to utilize professional and community partnerships to distribute the messages.

Georgia: Case Identification, Data Quality and the Pregnancy Checkbox

The Georgia Maternal Mortality Review Committee (GA MMRC) is working closely with the Georgia Department of Public Health (GDPH) to improve the reporting and quality of data found in the pregnancy checkbox on the death certificate. This collaboration arose out of a discovery by GA MMRC that a mistake was made in approximately 1 in 4 cases where the pregnancy check box was marked. In these cases, the marks incorrectly indicated that a woman had been pregnant at the time of her death – or pregnant within a year of the time of her death – when that was not the case. This resulted in wasted resources by the GA MMRC.

The GA MMRC brought the issue forward and is now working closely with the Georgia Department of Public Health (GDPH) to improve reporting and the quality of data found in the pregnancy checkbox on the death certificate. The quality assurance pilot project includes performing a linkage of death certificates with birth certificates to confirm the pregnancy status of the deceased. For the cases that do not link, GDPH staff works with GA MMRC members to contact the individual who signed the death certificate to confirm the status of the checkbox; in cases where the checkbox is found to be in error, a timely correction is made that ensures valid data and efficient use of committee resources.
Michigan: Increasing Access to Substance Use Disorder Treatment for Pregnant Women

The Michigan Maternal Mortality Surveillance (MMMS) Injury Committee identified that Substance Use Disorders (SUD) not only existed as a contributing factor during pregnancy – or within the one year following a pregnancy – but accounted for the direct cause of death in more than one-third of the injury-related maternal deaths that occurred from 2010-2014. As a result, the MMMS Injury Committee has successfully undertaken several cross-collaborative action steps to increase knowledge of maternal mortality due to SUDs and to begin addressing gaps in services in women’s health programs, state policies, and systems of care. In 2013, medical provider education was presented to the Michigan Section of ACOG regarding coordination of care with mental health outpatient services and enrollment of pregnant women in the Maternal Infant Health Program (MIHP), which is the largest statewide home visiting program for Medicaid beneficiaries. MIHP also has evidence-based screening tools and risk identification for substance use disorders involving both alcohol as well as other prescription and illegal substances. Finally, the MMMS Injury Committee plans to work with the Michigan Prescription Drug and Opioid Abuse Task Force to address the growing prescription drug and opioid problem in Michigan and to develop strategies for the prevention and treatment of opioid abuse in pregnant women.

New Jersey: Public Health Promotion and Pedestrian Safety

The New Jersey Maternal Mortality Review Team received at least two cases where young women died in motor vehicle accidents while crossing a busy county road. Pertinent documents described a common location of death and that the women lived in a low-income dwelling, had young families, and that a store across the street was the closest place to buy food. The Department of Health contacted the Department of Highway and Traffic Safety who responded by placing a traffic light and crosswalk at this point in the road. Without the New Jersey maternal mortality review, many more may have been seriously injured or killed.

Ohio: Obstetric Emergency Simulation Trainings

The Ohio Pregnancy-Associated Mortality Review (PAMR) surveyed maternity units across the state to uncover training needs and preferences. Based on the results, the Ohio Department of Health contracted with Ohio State University to provide simulation training for obstetric providers in three rural Ohio communities. Three clinical simulations – postpartum hemorrhage, cardiomyopathy, and preeclampsia – were developed based on PAMR cases and designed to engage staff within labor and delivery and postpartum units.

The second phase of this work provided “Train the Trainer” courses for obstetric clinical nurse educators from Level I and II birthing centers including didactics and skills-building sessions. Future plans involve a targeted training effort directed toward the small rural hospitals in the Appalachian counties of southeast Ohio.
APPENDIX J: SAMPLE CASE IDENTIFICATION AND DATA FLOWS

Vital Statistics Conducts Routine Review of Death Certificates: Deaths to Women of Reproductive Age

Linkage of Records

- Death Certificates
- Fetal Death Certificates
- Birth Certificates

- Relink in Case of Delayed Registrations

Pregnancy Checkbox Confirmed?

- NO
- YES

- Death Within a Year of Pregnancy End?

- NO
- YES

- Vital Records Sends to Agency with Data Responsibility

- Vital Records and Pregnancy-Relatedness Information Abstracted into MMRIA

- Data Input into Case Identification Spreadsheet (XLS)

- YES
- NO
CASE IDENTIFICATION
AND DATA FLOWS:

Alternative Reporting

- Media Report of Death/Word of Mouth with Indication of a Relationship to Pregnancy Within Scope of Committee
- Vital Records Registration Information Sought
- Direct Hospital Report of a Death Within Reporting Requirements for Maternal Deaths
- Data Input into Case Identification Spreadsheet (XLS)
REFERENCES


