State of Alaska Severe Maternal Morbidity Review Toolkit 2021

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Introduction

"Severe maternal morbidity (SMM) can be thought of as unintended outcomes of the process of labor and delivery that result in significant short-term or long-term consequences to a woman's health." (5) Health complications can worsen during pregnancy if not identified and managed. In addition, the onset of new conditions attributable to childbirth may further complicate treatment and prenatal care. It is felt that most complications are treatable. (24) According to an analysis of World Health Organization data, significant complications account for nearly 75% of maternal deaths worldwide and include: (6)

- Severe bleeding (mostly bleeding after childbirth)
- Infections (usually after childbirth)
- High blood pressure during pregnancy (preeclampsia and eclampsia)
- Complications from delivery
- Unsafe abortion (6. Gemmill A Et. Al 2014)

The remainder may be caused by, or associated with, infections or chronic conditions like diabetes. The CDC developed severe maternal morbidity (SMM) to measure potentially life-threatening complications of preg-nancy and childbirth. "SMM is nearly 100 times more common than maternal death and has been on the rise nationally." (25,9)

Both maternal mortality and severe maternal morbidity are increasing in the United States. However, when reviewed, maternal morbidity has, in many cases, been determined to be preventable and, as a result, places a greater emphasis on identification and treatment as an essential step in prevention. (1,4) By utiliz-ing this toolkit and developing a system of consistent review, Severe Maternal Morbidity reviews can help compile and shed light on the effectiveness of identification, standards of care, and system issues. This toolkit is designed to help teams identify situations where there are gaps in care. Through identification and improvement, the collective effort helps prevent future harm and maternal death.

Background

After a continuing rise in maternal mortality, the CDC reviewed historical data, taking into consideration increased reporting and new reporting measures resulting in higher numbers. In January 2020, upon completing an extensive review and validation, the CDC published the United States' national maternal mortality rate (MMR) of 17.4 for 2018, putting the U.S. last among similarly wealthy countries. (20) According to a 2020 report from the Commonweatlth Fund, the United States ranked 11th of 11 wealthy countries. The report concludes, "The U.S. has a relative undersupply of maternity care providers, especially midwives, and lacks comprehensive postpartum supports." (33) A tremendous amount of resource and effort have been deployed to improve the Identification of pregnancy-related deaths in the United States and the infor-mation gained is pointing to the increased contribution of chronic diseases to pregnancy-related mortality, "suggesting a change in risk profile of the birthing population". (3) As such, multidisciplinary expert groups recommend all obstetric providers review their cases of severe maternal morbidity to look for opportunities for improvement in care that could lead to improved maternal outcomes and fewer maternal deaths. (12,13) The purpose of this toolkit is to strengthen maternal morbidity identification procedures. Research shows that adverse maternal outcomes are reduced significantly when standards of treatment are reviewed, proto-cols developed, clinical policies implemented and, most importantly, followed. (10,11)

Improvement efforts benefit by having multiple perspectives. A multidisciplinary team can help bring unique insight into systems issues or standards of improvement in patient care. However, systems and stan-dards alone may not be enough to ensure the best in care. A standardized review of cases can help identify systems issues that, if improved, may result in better, more comprehensive care for each patient. (26) By clearly defining and integrating standards of care, Severe Maternal Morbidity reviews can be a form of med-ical audit that may help to maintain or increase adherence to clinical standards and improve quality of care. (8) SMM reviews take on a qualitative approach, utilizing the collective knowledge of the team to ascertain the causes and circumstances surrounding maternal morbidity occurring within the patient population. (5) A key component of the process is that performance is consistently reviewed to ensure that what healthcare providers and community support systems should be doing is being done. If the review finds that this is not the case, your team will then need to develop a framework to enable improvements to meet identified standards and consider where and how teams might collaborate with others within your facility or com-munity to improve the quality of care. To truly succeed and impact maternal morbidity, teams and systems need to commit to acting upon the findings. (5).

About the Toolkit

Understanding the pertinent factors contributing to poor maternal outcomes can help provide the necessary information to improve treatment and clinical recommendations for pregnant people. Familiarizing ourselves with the level of maternal mortality within our communities is not enough, it is only the first step in the journey to help identify, then eliminate, preventable death. This toolkit will assist the reader in exploring a variety of conditions that may contribute to maternal morbidity.

Objectives

- To guide and support health professionals in their efforts to assess quality of care for Antepartum, Intrapartum, and Postpartum patients.
- To develop skilled and capable healthcare staff conducting reviews of maternal morbidity cases that occur in their health facility by following a structured approach.

Target Audience

The toolkit is intended to support people who are working to improve the quality of perinatal care provided mainly at the hospital level. This could include clinicians (obstetricians/gynecologists, anesthetists, intensive care practitioners, pediatricians) and/or neonatologists, general practitioners, midwives, nurses, pharmacists, safety and quality leaders, laboratory technicians, health systems and facility administrators, and policymakers.

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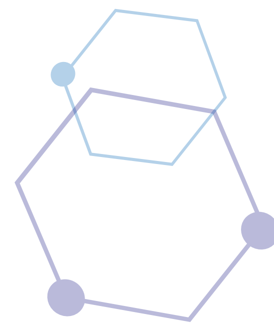


Part One: Maternal Morbidity Reviews (MMR) and How to Complete Them

What is a Maternal Morbidity Review?

There is a lack of agreement on what conditions must be included and the definition of Severe Maternal Morbidity (SMM). To identify priorities for intervention, the World Health Organization has recommended that maternal health surveillance focuses not only on maternal mortality but also on severe acute maternal morbidity. (16)

The American College of Obstetricians and Gynecologists (ACOG) and The Society for Maternal-Fetal Medicine (SMFM) recommend the following clinical definition: (5)

Transfusion of 4 or more units of blood and/or

- Admission of a pregnant or postpartum woman to an ICU
- High sensitivity and specificity and a high PPV (0.85)

** Institutions may choose to incorporate additional screening criteria*

Not all cases meeting screening criteria will be true cases of morbidity. CDC and the Alliance for Innovation in Maternal Health (AIM) have defined Severe Maternal Morbidity to include, "unexpected outcomes of labor and delivery that result in significant short-or long-term consequences to a woman's health." (7,27)

In an attempt to define an internationally standardized definition and conditions of severe morbidity, Dxakpasu, Rinker, and Arbor completed a comprehensive study and review of key factors associated with maternal morbidity, published July 2020. Their findings led to a more descriptive definition which includes maternal conditions associated with illness, not just unexpected outcomes and those conditions associated with prolonged hospitalization or high case fatality. (17) Identifying illness and chronic conditions can highlight the potential of predictable complications, severe maternal morbidity, and thus, the potential need for anticipated treatment of preventable conditions.

- "SMM can be defined as a set of heterogeneous maternal conditions known to be associated with severe illness and prolonged hospitalization or high case fatality." (17)

Severe Maternal Morbidity Review Committee Organization

To begin these reviews, you must first have a standing Severe Maternal Morbidity Committee. Members of this committee can be appointed by hospital or birth facility leadership. Forming this committee may require creating new bylaws. Creating a committee charter will establish the guidelines for the purpose and function of the committee. A sample of a committee charter can be found in Appendix C.

Membership: Committee membership is multidisciplinary and reflects the professional make-up of clinicians and staff who provide or support maternity services within your facility.

Who should review the event? (27)

- Multidisciplinary standing committee at representing facility
- Obstetrical providers (obstetricians, family physicians and/or advanced practice nurses)
- Anesthesia providers
- Obstetric care nurses
- Facility quality improvement team
- Facility administration
- Patient advocate (should be considered)
- Scribe
- If small center, consider partnering with regional perinatal center or outsourcing the review.

Membership could include obstetricians, family physicians, certified nurse–midwives, advanced-practice nurses; anesthesia personnel; registered nurses providing antepartum, intrapartum, or postpartum care; hospital quality improvement team members and administration. To improve patient and family engagement, a public member or patient advocate can be considered. Ad-hoc members representing other expertise can be invited as deemed necessary. Participation provides a great learning opportunity for interns or other clinicians progressing in their academic journey. (19)

The Committee has a chairperson, an individual responsible for minutes, and an individual responsible for data management.

Confidentiality and Protection from Discovery

The Severe Maternal Morbidity Review Committee should require members to sign affidavits of confidentiality. The work should be sanctioned by the hospital and protected from discovery. Alaska State statute determines if protection or authority exists for maternal morbidity review. Facilities should obtain guidance from legal counsel and compliance associated with formation.

ALASKA PEER REVIEW In AS 18.23.005-18.23.070, unless the context otherwise requires, (5) "re-view organization" means:

1. "a hospital governing body or a committee whose membership is limited to health care providers and administrative staff, except where otherwise provided for by state or federal law, and that is established by a hospital, by a clinic, by one or more state or local associations of health care providers, by an organization of health care providers from a particular area or medical institution, or by a professional standards review organization…to gather and review information relating to the care and treatment of patients for the purposes of…."

Severe Maternal Morbidity Review Culture

One of the challenges reported about case reviews is the potential for blame. (15) Reviews are conducted as an expert review rather than a peer review process. The expert review focus is on systems and processes of care, while the peer-review addresses credentialing and formal discipline issues. Any issue identified as peer review in nature needs to follow the standardized peer-review process and should not be part of the expert review. (13) It is important that the expert review remain anonymous and not have any authority or ability to review peer performance.

It is important for the review to maintain a non-judgemental atmosphere, focused on improving systems or processes and how they can reduce preventable morbidity and mortality. The recommendations and findings of the committee should be shared in a just and respectful manner without being disrespectful of clinicians or staff. A recommended value-based philosophy to incorporate is "Just Culture." (1) The "Just Culture" embraces continuous quality improvement with patient safety as the highest in importance. Recognizing system failings should not be attributed to the practitioner, but rather one should draw from the learned experiences to improve system and prevent future harm or injury. "Key principles would include educating caregivers about risk, developing systems that support care and reduce the risk of human error, holding staff responsible for following best practices, creating a safe haven around reporting, and recognizing what can and cannot be controlled." (28,29)

Health Equity and Implicit Bias, Effects on Maternal Health

Every year, 83,570 minority patients die due to health disparities that stem from implicit bias in the health care system (21). As well, the CDC reports during 2011–2016, the pregnancy-related mortality ratios were:

- 42.4 deaths per 100,000 live births for black non-Hispanic women.
- 30.4 deaths per 100,000 live births for American Indian/Alaskan Native non-Hispanic women.
- 14.1 deaths per 100,000 live births for Asian/Pacific Islander non-Hispanic women.
- 13.0 deaths per 100,000 live births for white non-Hispanic women.
- 11.3 deaths per 100,000 live births for Hispanic women.

"The variation in data by race and ethnicity indicates that more can be done to understand and reduce pregnancy-related deaths." (20)

What is Implicit Bias?

As Dayna Bowen Matthews describes in *Just Medicine: A Cure for Racial Inequality in American Health Care*, "A bias is a negative attitude held about one group of people relative to another group of people. However, the distinguishing feature of an implicit bias is that the negative association operates unintentionally or unconsciously." Evidence suggests that the vast majority of provider discrimination causing disparities is a product of implicit, not explicit, bias. "Physicians' implicit biases lead to unintentional and, in some cases, even unconscious discrimination. The resulting biased behavior may directly contradict the physicians' sincerely held, explicit beliefs and intentions to provide excellent care to all patients regardless of their race or ethnicity." (22)

"Unequal Treatment", a 2003 Institute of Medicine report, is noted as the first comprehensive and systematic proof that health disparities (receiving inferior rehabilitative, maternal, pediatric, mental health, and hospital-based medical services) are associated with unequal health care from medical providers to minorities compared with their white counterparts. (22)

A concerted effort must be made to eliminate health disparities or health inequity for facilities to achieve health equity and establish themselves as high-reliability organizations. Health disparities stem from implicit biases in the health care system. Social determinants of health are the factors that pigeon-hole individuals into advantaged or disadvantaged groups. Many of these determinants are also categorical identifiers that trigger implicit bias.

Social Determinants of Health

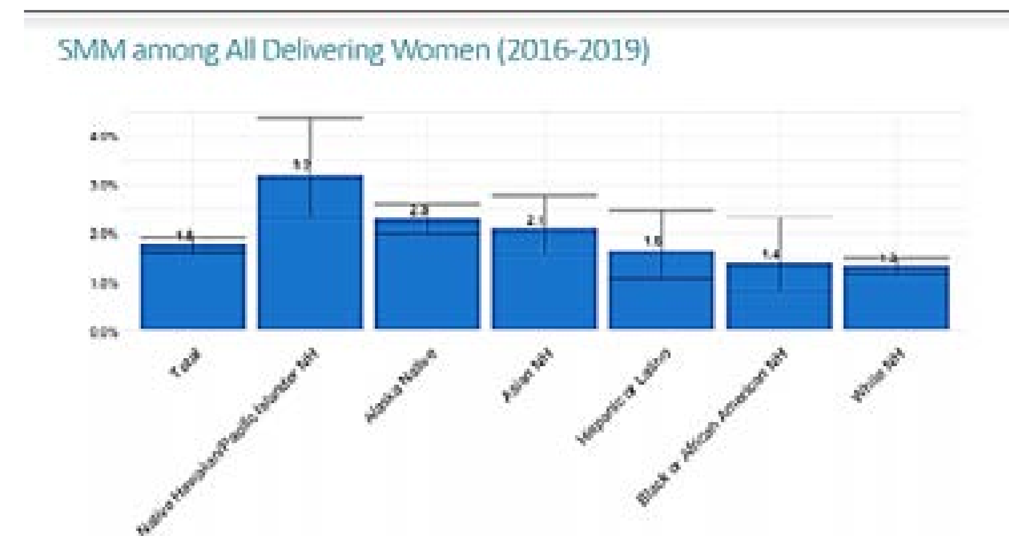
Social determinants of health are conditions in the environments in which people are born, live, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Some of the social determinants of health can increase the likelihood of involvement in violence, drug or alcohol abuse. Factors like education, income, race, ethnicity, religion, culture, language, physical or mental disability, sexual orientation, socioeconomic status, urban center proximity, gender, and proximity to healthy food options qualify as social determinants of health. (23)

According to Dr. Camara Phyllis Jones, MD, MPH, Ph.D, there are three differences that create disparities or inequalities. 1. Differences in the quality of care received within the healthcare system. 2. Differences in access to health care, including preventative and curative services. 3. Differences in life opportunities, exposures, and stresses that result in differences in underlying health status.

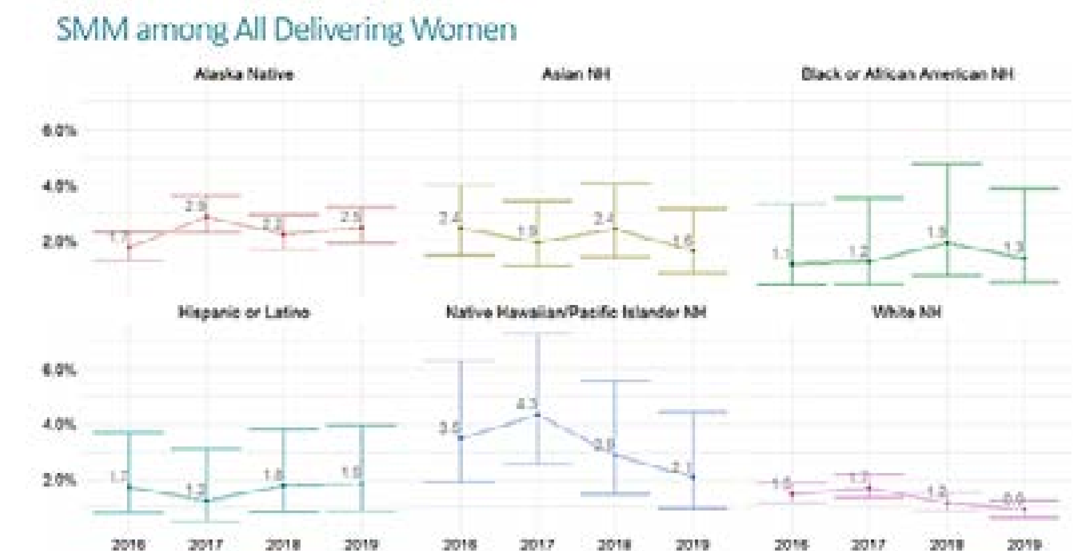
For example, due to providers' implicit bias, race can be a social determinant of health that results in higher or lower quality of care. Income is a social determinant of health that can limit a patient's access to healthcare, say if they are uninsured. Or socioeconomic status is a social determinant of health that can limit an individual's life opportunities to succeed.

In Alaska, data published by the Alaska Division of Public Health, Section of Women's, Children's and Family Health, illustrates the effect of health care disparities in Alaska and how social determinants of health, specifically race, directly impact these outcomes.

The following graphs display rates of severe maternal morbidity among all delivering women in Alaska cumulatively between 2016-2019 and by year. One can see that the groups of people with the highest rates of SMM are Native Hawaiian/Pacific Islanders, followed by Alaska Natives, with Whites seeing the fewest rates of SMM.



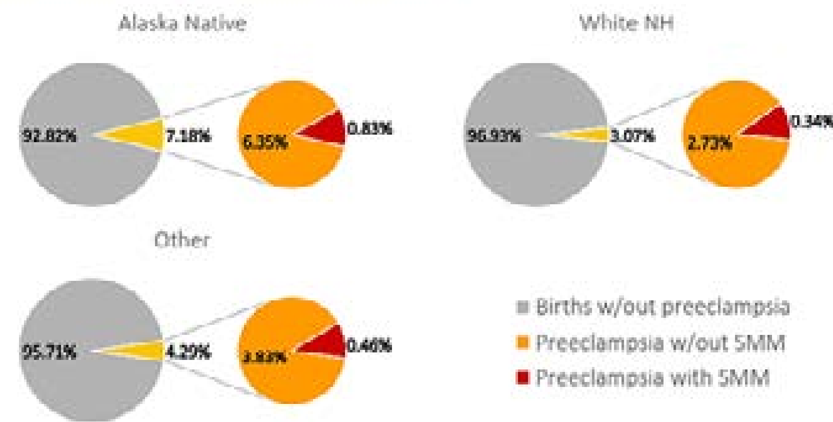
Source: Alaska Division of Public Health, Section of Women's, Children's and Family Health



Source: Alaska Division of Public Health, Section of Women's, Children's and Family Health

Alaska SMM data illustrates that patients from every non-White ethnic group in Alaska suffer from SMM more frequently than White patients.

In addition, the DHSS report notes that Alaskan Natives suffer from preeclampsia most frequently across all race demographics, along with the highest rates of preeclampsia with SMM. White Non-Hispanic patients suffered the least on both accounts.



Source: Alaska Division of Public Health, Section of Women's, Children's and Family Health

And, when it comes to social determinants of health, one's zip code does matter. In a review of Alaska mater-nal deaths during 2017-2018, 12 (75%) of the 16 were from rural communities.

So, what is there to do about inequity and implicit bias?

Mentally, implicit bias can be adjusted for. Here are some tips from Dr. Dayna Matthew for doing just that: (22)

- Do not ignore one's own implicit bias, or actions resulting from implicit bias of others. Everyone holds implicit biases, prejudices, or projects stereotypes onto other groups. The concept of "color-blindness" does not allow for the recognition of health inequity and disparity.
- Actively educate oneself, peers, colleagues, friends, and family about implicit bias. Implicit bias can be overridden; individuals who are highly motivated can modify their automatic responses to implic-it stereotypes and prejudices.
- Instead of ignoring prejudices one does have, work to replace stereotypes through focused mental effort, more exposure to diverse groups, or even stereotype negation training.
- Adjusting for bias can be thought of as breaking a bad habit. The steps for replacing stereotypes are the same: (1) in order to initially decide to stop old behavior, the individual must develop a new cognitive (attitudinal and belief) structure that is consistent with the newly determined pattern of responses.

- Do not stay silent if you hear or notice someone saying or doing something prejudiced or discriminatory. If a person knows their belief is dissented by the group, that person's belief may weaken or dissipate.

Recommendations for Addressing Social Determinants of Health

For the bigger picture, providers and health care systems can work to address social determinants of health as recommended by the Alaska Maternal Child Death Review Committee.

Care

- Create a public health system for home pregnancy care and extended postnatal support
- Make behavioral health and substance abuse services accessible
- Provide advanced care coordination for women traveling from and back to rural communities

Communication

- Ensure provider-to-provider communication and care coordination, at all points of care transfer
- Increase outreach and education about domestic or intimate partner violence
- Provide women with effective prenatal and postnatal, culturally appropriate communication with teach-back and health literacy best practice

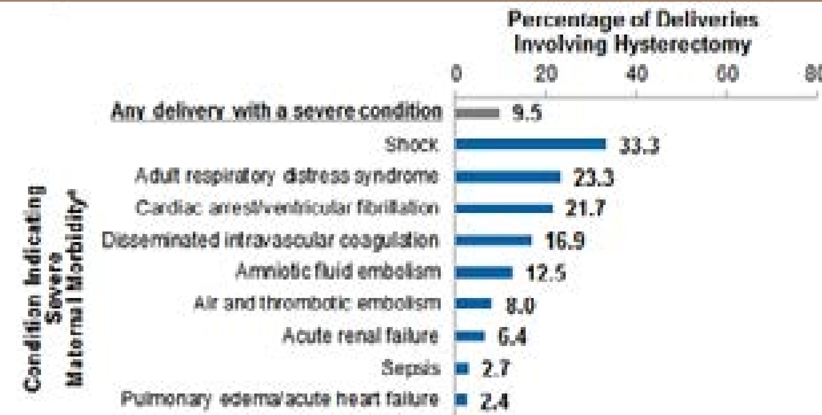
Safety

- Create policies to ensure adequate law enforcement is available in rural areas
- Increase educational materials on alcohol treatment and medications available
- Increase AED availability in public places (MCDR 2020)

Additional relevant concepts from Preventing Maternal Death 2020 Recommendations from the Alaska Maternal Child Death Review Committee (MCDR) include promoting and training all healthcare providers in Implicit Bias Training, Trauma Informed Care, and Adverse Childhood Experiences (ACEs). (21)

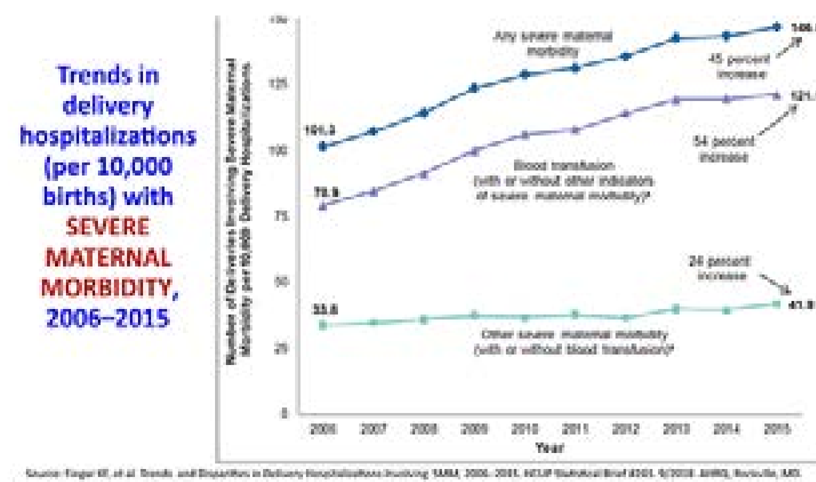
Data Management

The ability to impact negative outcomes and SMM trends is enhanced with the use of sound data. By collecting meaningful data, it will be easier to obtain a better picture of changes to or modifications in practice that can improve maternal care.



To increase the usefulness of data, it should be graphed. Helpful graphs include trend charts, bar graphs, and histograms, which would note the most common morbidity to the least. Using a consistent data form, such as the Severe Maternal Abstraction and Assessment Form (Appendix D), will "facilitate acquisition of analyzable data which can help identify patient, provider, systems, community issues, some of which may be influenceable." (1)

Teams will want to determine the best way to prioritize recommendations and disseminate information learned. Methodologies may include internal clinical team, unit-based, administrative, and external public facing findings. Providing information to your Perinatal Quality Committee, Hospital Patient Safety Com-mittee, medical staff, leadership, or others can assist in developing a system-wide investment in improvement. By providing data to the Alaska State Maternal Health Division, hospitals can support a statewide approach to reducing maternal morbidity.



"De-identified aggregate data reviewed at regional and national levels could help identify trends and, more importantly, opportunities for improvement in the delivery of obstetric health care." (1)

Improvement recommendations can be tracked, prioritized, and supported with im-provement strategies. More information on performance improvement follows in Part Two.

Source for both graphs: AHRQ Healthcare costs & Utilization Project, "Trends and Disparities in Delviery Hospitaliztions Involving Severe Maternal Morbidity", 2006-2015

Part Two: Severe Maternal Morbidity Review Process

Once the Committee is established and members are identified, team members can then have input into the guidelines for the review process. The Committee should establish clear criteria for review, when to debrief, which tool to use, how often you meet, maximum cases reviewed at each meeting, how the infor-mation and recommendations will be disseminated within and without your organization, how recommen-dations will be tracked and prioritized for performance improvement.

What events should be reviewed? (27)

- Antepartum, intrapartum, or postpartum, patients receiving 4 or more units of blood products.
- Antepartum, intrapartum, or postpartum patients who are admitted to an ICU as defined by the center.
- Other pregnant, antepartum, intrapartum, or postpartum patients who have an unexpected and severe medical event – at the discretion of the facility.

Establish Review Criteria

Research indicates the Committee review all pregnant or postpartum women receiving 4 or more units of blood or admitted to an ICU (at a minimum). These criteria may be expanded as needed to include other conditions such as a diagnosis of sepsis. (5,27) A list of conditions and corresponding questions to guide abstraction should be developed to provide consistency in abstraction. Organizations are encouraged to review the CDC or AIM indicators of severe maternal morbidity located in Appendix E to determine spe-cific criteria. These indicators can be extracted by ICD-9 and ICD-10 codes over a specified length of time to help determine the prevalence of indicators representing the highest risk to your patient population. Questions to guide abstraction are included in Appendix B.

The CDC shares that facilities can expand criteria by utilizing the updated list of 21 indicators and corre-sponding ICD codes used to identify delivery hospitalizations with SMM. Both ICD-9 and ICD-10 can be used to track SMM when using administrative hospital discharge data from October 2015 forward. (20)

When to review? (27)

- As close as possible to the time of the event.
- The more severe the event, the closer the timing to review.
- If large birthing facility with several events, consider scheduling regular meeting to do reviews.

"Not all cases that meet criteria for review will represent preventable severe morbidity; some cases of morbidity reflect the underlying health of a woman or her pregnancy and are thus unavoidable. Therefore, simply screening positive for one of the two recommended screening criteria does not constitute a sentinel event, and the rates of occurrence of either criterion (ICU admission and transfusion of 4 or more units of blood) should not be used as a quality metric." (8)

Timing and volume

Kilpatrick Et. Al recommends that reviews: (1)

- Be scheduled close to the occurrence of the event.
- For hospitals with large numbers of births, a monthly or quarterly schedule should be utilized.
- Centers with a low volume of deliveries or obstetric providers may opt to partner with centers within their perinatal region or outsource their reviews to a center with sufficient staff and providers to conduct the reviews. (November 2014)

One may contact the Alaska Perinatal Quality Collaborative for recommendations.

How to review? (27)

- Reviews should be sanctioned by the facility and protected from discovery. Confidentiality statements should be gathered from each committee member.
- Gather all past and current patient medical records and facility records regarding this patient and event.
- Engage a trained reviewer/abstractor to complete Appendix B, the Abstraction Form, including a pertinent synopsis of the event and objective information found in the records.
- Primary review is then presented to the review committee.
- Reviews follow a standard format, such as Appendix B – The Assessment Form.
- Each review provides an assessment of whether there were opportunities to improve outcome.
- Review concludes with recommendations.
- Recommendations are shared with hospital clinicians and multi departmental staff, quality, safety, and leadership.
- Recommendations are prioritized and implemented to evaluate the effects of the suggested changes.

Debrief

Once identified, it is recommended to debrief identified severe maternal morbidity events as soon as possible. Debriefs can help teams identify what went well, what went wrong, and of great importance, how the process can be improved. If debriefs are managed with an open, honest, and non-judgemental assessment, systems and teams benefit from a robust debrief process. A respectful debrief process can strengthen comunication skills and team members' sense of trust. (1, 14,31)

If teams do not debrief, facilities valuable insight may be lost, and teams may never identify system failings nor preventative measures. If reviews do not follow a non-judgmental framework, members may refuse to participate, leading to more significant issues, including an atmosphere of mistrust or fear, which may be detrimental to patient safety. (14,31)

Dr. Scott Tannenbaum and Dr. Chris Cerasoli completed a comprehensive meta-analysis of 46 published and unpublished projects on the team and individual-level debriefs. In their publication "Do Team and Individual Debriefs Enhance Performance?" they arrived at the following conclusions: (34)

- Individuals and teams improve their performance by 20% to 25% through the utilization of "properly conducted debriefs." (February 2013)

The benefits of a debrief as identified by Afterburner include: (14)

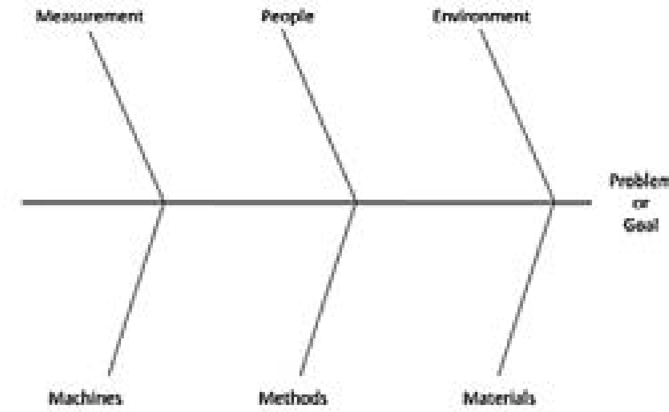
- Closes the loop, provides staff an appropriate means to put the past behind while allowing them to grow from the endeavor prior to moving on.
- Allows your team to capitalize on meaningful learning that time delays could inhibit or prevent.
- It can act as a catalyst for change. If an event is not reviewed, opportunities to correct system errors or failures are missed.
- Can allow teams to identify prominent, recurring root causes preventing them from going unaddressed.
- Lessons learned can result in direct improvement by developing actionable steps to address the identified root cause(s).
- Provides a Rapid, Simple Approach to Continuous Improvement.
- Develops a Culture of Learning, Openness, and Honesty.
- Helps to build current leaders who are tasked with establishing a culture of debriefing and driving adoption in their teams. (October 2020)

The debrief can be utilized in the standardized review process. A sample debrief form is in Appendix D.

Chart Abstraction

Chart abstraction should be completed by individuals trained in the abstraction and review process. Training is important to ensure consistency and thouroughness of data brought forth from the patients' records. The goal of the abstraction is to capture relevant information associated with severe morbidity and specific data that can be incorporated into a narrative with a time-line of the pertinent events. (1)

Establishing and following a consistent process of abstraction and data evaluation will assist in the analysis. Consistency in forms and methodology can assist in the development of meaningful data. (1) Examples of combined abstraction and assessment forms are provided in Appendix D. Tools used to establish a root cause, such as the fishbone diagram, can help identify contributing elements.



Source: Fishbone Diagram, SPC for Ecel https://www.spcforexcel.com/spc-blog/what-cause-and-effect-fishbone-diagram

To assist in the abstraction and the identification of relevant factors, a sample list of disease-specific questions related to the diagnosis and complications associated with severe maternal morbidity is included in Appendix B. The Alliance has provided these types of questions as a guide to be used for any morbidity. In addition, clinical considerations and management tools, including an example list of diagnoses and complications constituting severe morbidity, can be located at the American College of Obstetricians and Gynecologists (ACOG). (27,5)

The Severe Maternal Morbidity Review Committee should receive an informational packet for each patient in review including abstracted data, timelines, pertinent information, and approved forms for their review and assessment.

Assessment

The Assessment Form is completed after reviewing pertinent information by the committee members. The goal of the assessment will be to determine if there are opportunities for improvement, including identified elements that could have changed the outcome. The assessment may lead to prioritized recommendations that may change future patient outcomes. Each recommendation should be referred to the appropriate depart-ment and/or person responsible. (1) As well, to identify recommendations that are critical in nature, one could consider developing a methodology such as color-coding or tiering recommendations based upon pre-identified levels of impact and importance.

Performance Improvement

All facilities should have system-wide approved performance improvement processes that can help keep track of and implement recommendations and assess the effectiveness of change. (1) A useful resource, The Implementing Quality Improvement Projects Toolkit, was developed by AIM to help health care teams successfully implement council products, such as patient safety bundles, and to provide the necessary steps to be successful with improvement strategies. (27) Key strategies include the Institute for Healthcare Improvement's Model for Improvement: (32)

- Forming the Team
- Setting Aims
- Establishing Measures
- Selecting Changes
- Testing Changes
- Implementing Changes
- Spreading Changes (October 2020)

Effective execution of goals requires maintaining consistency, communication, and effective/efficient documentation. In *The Four Disciplines of Execution* by Franklin Covey (18), keys to success include:

- Focus on the Wildly Important
- Act on the Lead Measures: those that will have an impact on achieving the goal
- Keep a Compelling Scoreboard
- Create a Cadence of Accountability

"Exceptional execution starts with narrowing the focus— clearly identifying what must be done, or nothing else you achieve really matters much." (18)

To effectively execute your team's goals, Franklin Covey provides additional guidance:

- Limit your goals to one or two at a time, as too many goals result in the inability to achieve any one goal.
- Ensure timeliness of reporting out; committee members should set a goal of having the notes and action plans back to attendees within 24 to 48 hours post-meeting.
- Meet weekly to establish and share each team member's individual contributions to achieve success, discuss limitations found, barriers to overcome, and make a commitment to engage in an activity to impact the goal the next week.
- Increase the visibility of your goals and outcomes through posters, emails, shared data sites, allowing others to see where you are at in your journey and what your goal is.
- Make the project fun, positive, and celebrate your successes. (April 2016)

Maintaining a solid focus and momentum can be key to engaging committee members as they see the benefits of participating in the review process through the successful implementation of change ideas.

Part 3: Resources

Appendix A: AIM's Review in Brief (27)

What events should be reviewed?

- Antepartum, intrapartum, or postpartum patients receiving 4 or more units of blood products
- Antepartum, intrapartum or postpartum patients who are admitted to an ICU as defined by the center
- Other pregnant, antepartum, intrapartum, or postpartum patients who have an unexpected and severe medical event – at the discretion of the facility

Who should review the event?

- Multidisciplinary standing committee at representing facility
- Obstetrical providers (obstetricians, family physicians and/or advanced practice nurses)
- Anesthesia providers
- Obstetric care nurses
- Facility quality improvement team
- Facility administration
- Patient advocate (should be considered)
- Scribe
- If small center, consider partnering with regional perinatal center or outsourcing the review.

(27) https://safehealthcareforeverywoman.org/council/patient-safety-tools/severe-maternal-mor-bidity-forms/ (April 2020)

When to review?

- As close as possible to the time of the event
- The more severe the event, the closer the timing to review
- If large birthing facility with several events, consider scheduling regular meeting to do reviews

How to review?

- Reviews should be sanctioned by the facility and protected from discovery. Confidentiality statements should be gathered from each committee member
- Gather all past and current patient medical records and facility records regarding this patient and event
- Engage a trained reviewer/abstractor to complete the Abstraction portion of the Assessment Forms, (Appendix B) including a pertinent synopsis of the event and objective information found in the records
- Primary review is then presented to the review committee
- Reviews follow a standard format, such as Appendix B – The assessment form
- Each review provides an assessment of whether there were opportunities to improve outcome
- Review concludes with recommendations
- Recommendations are shared with hospital clinicians and multi-departmental staff, quality, safety, and leadership
- Recommendations are prioritized and implemented to evaluate the effects of the suggested changes

Appendix B: Sample Disease-specific Questions to Guide Abstraction

Disease specific questions to guide SMM Review Process(19)

Hemorrhage

1. Was the hemorrhage recognized in a timely fashion?
2. Were signs of hypovolemia recognized in a timely fashion?
3. Were transfusions administered in a timely fashion?
4. Were appropriate interventions (eg, medications, balloons, sutures) used?
5. Were modifiable risk factors (eg, oxytocin, induction, chorioamnionitis, delay in delivery) managed appropriately?
6. Was sufficient assistance (eg, additional doctors, nurses, or others) requested and received?

Hypertensive disease

1. Was hypertension recognized appropriately?
2. Did the woman appropriately receive magnesium sulfate?
3. Was severe hypertension treated in a timely fashion?
4. Was the woman delivered at the appropriate time relative to her hypertensive disease?
5. Were any complications related to hypertensive disease managed appropriately?

(19) Severe Maternal Morbidity Reporting Long Form (Page 2) https://safehealthcareforeverywoman.org/council/patient-safe-ty-tools/severe-maternal-morbidity-forms/)

Cardiac disease, including Cardio-myopathy

1. Was the cardiac disease diagnosis made in a timely fashion?
2. Was the management of the cardiac disease appropriate?
3. Were appropriate consultants used?
4. Were significant risk factors for cardiac disease recognized?

Thrombotic disease

1. Did the patient receive appropriate thromboprophylaxis?
2. Was the diagnosis of thromboembolism made in a timely fashion?
3. Were significant risk factors for thromboembolic disease recognized?

Infectious disease, sepsis

1. Was the diagnosis of sepsis or infectious disease made in a timely fashion?
2. Were appropriate antibiotics used after diagnosis? How long to treatment?
3. Did the woman receive appropriate volume of intravenous fluids?
4. Were significant modifiable risk factors for infectious complications identified?

Appendix C: Committee Charter

Sample Committee Charter

Title:

Severe Maternal Morbidity Committee

Purpose/Role:

The purpose of this Committee is to identify severe morbidity, an important step in prevention and treatment. By utilizing systematic Severe Maternal Morbidity review, the Committee will shed light on the effectiveness or deficiency in prevention efforts, standards of care, and system issues. The Committee will identify those situations where taking corrective action can prevent similar – or more serious – incidents from happening in the future and help improve maternal health with the goal to prevent maternal morbidity.

Mission/Vision:

To provide the highest level of care for Antepartum, Intrapartum, and Postpartum patients.

Short-Term/Long-Term Goals:

Collaborate with multi-disciplinary leaders, staff, and key stakeholders to identify patients with maternal morbidity, provide review of clinical services, identify prevention efforts or systems solutions to reduce maternal morbidity.

Mid-Term Goals:

Establish excellence in care with standardized practice, promote the sharing of best practices, and advancement of data-driven initiatives to prevent maternal morbidity.

Long-Term Goal:

Eliminate preventable maternal morbidity for our patients.

Composition/Ownership/Duty Reporting:

Here, it may be helpful to note who is on the Committee and how the chair and members are appointed or determined, how or if members can decide who is a part of their Committee, and who is able to vote concerning matters for the Committee.

The Severe Maternal Morbidity Committee is a joint committee of Medical Staff, Hospital Administration, Nursing Leadership, Quality and Patient Experience.

Membership Composition:

List those members that are key to the success of the Committee. For example: Perinatal Lead, OBGYN, Chief Medical Officer, Chief Maternal Health Medical Officer, Chief Nursing Officer, Director Safety and Quality,

Representatives from: Laboratory, Pharmacy, Registration, Revenue Cycle

Here you may want to lay out what types of duties

and responsibilities members of the Committee hold. For example, they might be advisory, decision, performance, or representation roles. You may also want to include who the roles and duties are held accountable to.

Committee Structure & Responsibilities:

The Committee consists of a Chair, Note Taker, Case Abstractor, and Data lead.

Chair:

Lead the Committee to establish a Committee charter and articulate the vision for the Severe Maternal Morbidity Committee. Responsibilities include:

- Ensure Committee is formed under appropriate structured authority, incorporated into Medical Staff By-Laws as necessary
- Update the charter annually
- Establish the agenda for committee meetings

Note Taker:

Provide accurate notes from the meeting to include:

- Timely dissemination of notes, from the meetings within 24-38 hours post meeting
- Utilize a standardized format for note taking to include status of agenda items, action items, and follow up needed

Case Abstractor:

Provide case abstraction of identified maternal morbidity cases for review following Committee authorized forms and processes.

Data Lead:

Maintain all data for the Committee including number of case identified, cases meeting criteria of maternal morbidity, morbidity diagnosis and ICD-10 codes, outcomes from review including categorization of reviews by, at a minimum, the following categories:

- Antepartum, Intrapartum, and Postpartum
- Demographics
- Patient Characteristics
- Diagnosis
- Morbidity Category, Primary Cause of Morbid-ity
- Recommendations by category including staff education, preventative care, systems change, policy change, public education, or other topics of interest.

Possibly include a "Clinical Champion":

Develop structure for outreach and collaboration recommendations and efforts put forward by the Committee.

Authority and Responsibilities/Duties:

1. Committee is charged with determining guidelines and specific actionable goals for eliminating maternal morbidity for patients receiving services provided by our organization.
2. Dissemination of information: The Committee is responsible to provide a monthly report to the Patient Safety Committee/ Quality Leadership Team regarding actionable items, next steps, process recommendations, specific goals, and progress toward goals.
3. The Committee Chair will provide a quarterly report of Committee findings, recommendations, goals, and outcomes to the Chief Medical Officer who will share the findings with Executive Team.

Meetings:

Include how often your Committee will be meeting based upon morbidity data analysis and volume of cases.

Meeting Practices:

- How members establish priorities and goals through vote, or process.
- How member others can bring items to the agenda for the Committee's consideration.

Terms:

One year with no limitations.

Appendix D: Review Forms

Each of the forms listed can be located on ASHNHA's Website and customized with your organization's logos and contact information:

- Debrief Form
- Severe Morbidity Review Short Form
- Severe Morbidity Review Long Form

ASHNHA ALASKA STATE HOSPITAL & NURSING HOME ASSOCIATION

The debrief form provides an opportunity for obstetric service teams to review the sequence of events, successes, and barriers to a swift and coordinated response to ANY critical event – see reverse side.

Instructions: Complete debrief form as soon as possible after event. Obtain input from as many participants as possible. Remember: Debriefing is meant to be a learning experience and a way to address both human factors and systems issues to improve the response for next time. There is to be no blaming/finger-pointing.

Type of event: Type Date of event: Type

Location of event: Type **Time of event:** Type

Person completing form: Type

Members of team present: (check all that apply)

☐ Primary RN	☐ Charge RN	☐ MFM leader
☐ Other RNs	☐ Neonatology Personnel	☐ Anesthesia Personnel
☐ Nurse Manager	☐ Resident(s)	☐ Antepartum team (RNs, PA, Fellow Resident)
☐ Unit Clerk	☐ OB/Surgical tech	
☐ Primary MD	☐ Patient Safety Officer	

Is there specific protocol for the type of event experienced? ☐Yes ☐No

If so, copy and paste the protocol here: Type

OB Associated: IDENTIFICATION & RESPONSE	
Was patient assigned a hemorrhage risk? ☐ Low ☐ Medium ☐ High ☐ Not done Volume of Blood Lost: Type Method: ☐ Formal quantification ☐ Visual estimation ☐ Both	Time severe level of hypertension Recognized: Type Time 1st line antihypertensive administered: Type Number of doses needed to reach target blood pressure: Type

RECOGNITION & TEAMWORK

Were there any delays in:

☐ Recognition? Why? Type

☐ Notification? Why? Type

TEAM

All roles filled:

☐ Primary Physician ☐ Primary Nurse ☐ Charge Nurse ☐ Secondary Nurse ☐ Documentation ☐ Runner ☐ Anesthesia

Debrief Form is adapted from Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY & Alaska Native Medical Center Anchorage, AK debrief forms.

Short Form and Long Form are courtesy of Council on Patient Safety Alliance in Women's Healthcare. Severe Maternal Morbidity Reporting Long Form

https://safehealthcareforeverywoman.org/council/patient-safety-tools/severe-maternal-morbidity-forms/)

Appendix E: CDC and AIM Criteria for Diagnoses

The CDC currently uses 21 indicators to identify maternal morbidity. Below is a list of 21 indicators that can be queried via ICD-10 and ICD-9 codes to identify delivery hospitalizations wtih SMM. Institutions who utilize the CDC list may be able to create a report of all patients with key indicators utilizing administrative hospital discharge data. The methodology will assist in the dentification of cases for review from October 2015 and beyond.

1. Acute myocardial infarction
2. Aneurysm
3. Acute renal failure
4. Adult respiratory distress syndrome
5. Amniotic fluid embolism
6. Cardiac arrest / ventricular fibrillation
7. Conversion of cardiac rhythm
8. Disseminated intravascular coagulation
9. Eclampsia
10. Heart failure / arrest during surgery or procedure
11. Puerperal cerebrovascular disorders
12. Pulmonary edema / Acute heart failure
13. Severe anesthesia complications
14. Sepsis
15. Shock
16. Sickle cell disease with crisis
17. Air and thrombotic embolism
18. Blood products transfusion
19. Hysterectomy
20. Temporary tracheostomy
21. Ventilation

Appendix F: Diagnosis and Complications Constituting Severe Morbidity

Diagnosis and complications constituting severe morbidity can be located on the American College of Obstetricians and Gynecologists (ACOG) website.

Table 1. Example List of Diagnoses and Complications Constituting Severe Maternal Morbidity*	
Severe Maternal Morbidity	Not Severe Morbidity (insufficient evidence if this is the only criteria)
The College lists multiple diagnositc codes to be considered. "Facilities should review all cases that meet at least one of these screening criteria to determine whether the case is truly a severe maternal morbidity; to characterize the events, diagnoses, and outcomes involved; and to determine if an identified morbidity is judged to have been potentially avoidable and, thus, present opportunities for system change and improved future performance. Not all cases that meet criteria for review will represent preventable severe morbidity; some cases of morbidity reflect the underlying health of a woman or her pregnancy and are thus unavoidable." (Obstetric Care Consensus, OC Number 5, September 2016) (Reference 5)	

Appendix G: Internet Resources & References

Alaska Perinatal Quality Collaborative

American College of Obstetricians and Gynecologists

California Maternal Quality Care Collaborative

Council on Patient Safety on Woman's Healthcare / Alliance for Innovation on Woman's Healthcare (AIM)

Quality Improvement: Implementing Quality Improvement Projects

State of Alaska Statute: Alaska Peer Review in AS 18.23.030

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Anchorage office -
1007 W. 3rd Ave, Suite 301
Anchorage, AK, 99501
(907) 646-1444

Juneau office -
426 Main Street
Juneau, AK, 99801
(907) 586 -1790

alaskahha.org