Recommendations from the Advisory Committee on Maternal Fatalities and Morbidity Concerning Improving Information Collection on the Incidence and Causes of Maternal Fatalities and Severe Maternal Morbidity

December 27, 2019

Letter from the Committee Chair

The birth of a child is a joyous time of new beginnings and experiences. Tragically, nearly 700 women die each year in the United States as a result of complications during pregnancy or delivery. The loss of a woman during pregnancy, at delivery, or soon after delivery is devastating.

This tragic outcome can be related to a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy. In the U.S., considerable racial disparities exist, with black or African American women and American Indian or Alaska Native women between two and three times more likely to die from pregnancy-related complications than white women.

In July of 2011, the Arizona Maternal Mortality Review Committee (MMRC) began reviewing cases, determining preventability, and making recommendations for action, and has since conducted reviews of over 250 maternal deaths. Findings from MMRC shows that more than half of these deaths are preventable.

Maternal Mortality Review is a process by which a multidisciplinary committee identifies and reviews cases of maternal death within one year of pregnancy. Review committees access multiple sources of clinical and non-clinical information that provide a deeper understanding of the circumstances surrounding a maternal death, as they develop recommendations for action to prevent similar deaths in the future. The goal of the Arizona MMRC program is to identify and characterize maternal deaths to develop prevention opportunities.

The establishment of this Advisory Committee on Maternal Fatalities and Morbidities through Senate Bill 1040 in April 2019 was an opportunity to evaluate our current process, as we continue building upon how we analyze and use maternal health data to prevent future deaths and improve overall maternal health in Arizona. I am very pleased about the results of this process and believe that we have generated a strong set of recommendations for ongoing improvement of our state efforts, including within the Maternal Mortality Review Program.

I would like to commend and sincerely thank my fellow Committee members on their dedication to this process, including their time, insight, and other contributions. Each individual was able to share invaluable experience and perspectives that helped in our construction of well-rounded and reasonable recommendations.

I would also like to express my gratitude to the program staff at the Arizona Department of Health Services on their assistance and support for the meetings and activities of the Advisory Committee.

I would like to acknowledge the Arizona Department of Health Services Director Cara Christ, MD, MS, Prevention Services Assistant Director Sheila Sjolander, and the Administrative Rules Council for their guidance and support.

Lastly, I would like to thank the public for participating in the public hearing and input process; we greatly value the suggestions and comments we received.

Respectfully,

Patricia Tarango, MS
Bureau Chief
Bureau of Women's and Children's Health
Arizona Department of Health Services

Dedicated to Arianna Dodde and to all the women that have been lost during pregnancy, delivery, or postpartum; whose stories inspire us to continue fighting for the health of all mothers in Arizona.

Submitted to:

The Honorable Douglas A. Ducey, Governor, State of Arizona

The Honorable Kate Brophy McGee, Chairperson,
Health and Human Services Subcommittee, Arizona State Senate

The Honorable Nancy Barto, Chairperson,
Health and Human Services Subcommittee, Arizona State House of Representatives

This report is provided as required by Chapter 143 Senate Bill 140.

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Table of Contents

Executive Summary

Approximately seventy women die during their pregnancy, delivery, or in the postpartum period in Arizona each year. Fifteen to twenty of these deaths are because of complications during pregnancy or in the postpartum period. Since 2011, the Arizona Department of Health Services (ADHS) in partnership with a special team of subject matter expert volunteers in maternal health, have reviewed the death of every woman who dies within a year of pregnancy in Arizona. This Maternal Mortality Review Committee (MMRC) determined that 89% of pregnancy related deaths that occurred between 2012 and 2015 were preventable. As maternal deaths increase nationwide and in Arizona, better understanding of the circumstances and preventability of these deaths is critical.

The Advisory Committee on Maternal Fatalities and Morbidity was established in April 2019 following the signing of Senate Bill 1040 by Governor Doug Ducey. The Advisory Committee was tasked with recommending improvements to the processes to collect information on maternal fatalities and morbidities. The Committee convened multiple times from August to December 2019 to discuss the topics prescribed by Senate Bill 1040.

ADHS staff provided technical assistance and facilitated portions of these meetings to support the Committee's work to reach various milestones and a website was built to maintain transparency during this process: http://azhealth.gov/maternalhealth.

The committee developed 26 recommendations to improve data collection. Highlights of what these recommendations will do include:

- Improving how quickly maternal deaths are identified
- Improving the amount and quality of detailed information about the deaths
- Improving how quickly deaths are reviewed, so recommendations and reports can be made public more quickly
- Implementing methods to continuously review and improve efficiencies in data collection and review process along with the quality of data
- Following national guidelines set by the Centers for Disease Control and Prevention (CDC) on the assessment of deaths to develop actionable recommendations to prevent future deaths
- Conducting data review and analysis twice a year on severe maternal medical complications to provide more information that can lead to prevention strategies
- Implementing guidelines to maximize the productivity of the Maternal Mortality Review Committee and align with best practices
- Producing regular reports that identify how deaths and severe complications can be prevented with specific actions that can be taken
- Implementing a process to share more up-to-date information on deaths and the review process with the public, community partners, and stakeholders

The recommendations are intended to result in better and more timely information available for review, which will ultimately aide in producing strategies to prevent these tragic deaths and severe complications related to pregnancy.

Project Background

On April 29, 2019 Governor Doug Ducey signed Senate Bill (SB) 1040. Under an emergency clause, this bill established the Advisory Committee on Maternal Fatalities and Morbidity. The role of the Committee is to recommend improvements to information collection concerning the incidence and causes of maternal fatalities and severe maternal morbidity. As such, the Committee was established to evaluate and compile a list of recommendations for process improvement of the Maternal Mortality Review Committee (MMRC) and the Maternal Mortality Review Program (MMRP), which are included in this report.

Since its establishment in July 2011 the MMRC, convened by the MMRP, has been reviewing all identified maternal deaths in the state. The MMRC is a multidisciplinary team that includes clinicians from urban and rural health centers, public health professionals, and community service providers who meet monthly to review maternal deaths in order to identify preventative factors and provide actionable recommendations for level specific changes. Following the CDC Review to Action model format, the MMRC reviews and categorizes case type in relationship to pregnancy (associated, related, or neither), manner of death, cause of death, and preventability.

All pregnancy-related and pregnancy-associated deaths, or any deaths of women with any indication of pregnancy in the last 365 days, are included for review regardless of the cause of death or the outcome of pregnancy. Yearly there are approximately 70 pregnancy-associated cases, of which 15-20 are pregnancy-related cases. As of December 2019, maternal death reviews for 2016/2017 maternal deaths are being completed. This is in alignment with guidelines from the Centers for Disease Control and Prevention (CDC) requiring that all maternal deaths are identified within one year and reviewed within two years from the date of death.

On June 19, 2019, the Arizona Department of Health Services, began soliciting applications of interested members of the public to participate in the Committee as indicated in SB 1040. A total of 30 applications were submitted to the Department, and 16 members were selected based on relevant work experience, credentials, and current job roles. Open meetings for the Committee were then held on August 30, September 16, October 17, November 14, and December 5, 2019. Additionally, a public hearing meeting was held on October 30, 2019, to collect public input on the recommendations generated by the Committee.

The Committee received technical assistance from the Department to produce a list of recommendations that can be enacted to improve the current process. The MMRP staff was available at each Committee meeting to present on current processes and to respond to any Committee inquiry. The methods for generating recommendations on the MMRC process were chosen at the initial meeting of the Committee on August 30, 2019. Department staff presented a sample set of methodologies as examples of what the Committee could choose to implement, but allowed for additional methods to be incorporated based on Committee interests. The Committee selected key informant interviews of the MMRC and department staff, observational assessments of MMRC meetings, a panel discussion with Department staff and MMRC members, and a guided roundtable discussion among Committee members to utilize the individual insights and expertise of Committee members. The Committee decided on an internal timeline to conduct each of the methodologies within the months of September and October 2019.

A roundtable discussion was held during the second meeting of the Committee and was mediated by a facilitator. The Committee decided to organize recommendations based on the four topics identified during the first meeting: data collection, committee composition, the MMRC review process, and dissemination and implementation of recommendations. For each topic, the committee spent time discussing identified gaps and proposed strategies, as well as contributing their own individual ideas and perspectives on what was needed. Recommendations with general consensus were then recorded into the appropriate topic category. The committee also decided to include recommendations based on the proposed strategies provided by ADHS staff.

On October 30, 2019, a Public Hearing Meeting was held to review the recommendations put forth by the Committee. The public's comments were recorded (pages 16-17) and reviewed by the Committee November 14, 2019. The Committee reviewed and approved the final recommendations on December 5, 2019. These are in pages 22-26 of this report.

The set of recommendations are listed by topical category below.

Topical Category	**Overall Recommendations**
Data Collection Process *>> Maternal Mortality*	● Improve the sensitivity and timeliness of maternal death identification. ● Strengthen and establish partnerships to facilitate a more efficient and comprehensive records acquisition. ● Encourage development and implementation of protocols that streamline the record collection process, particularly for pregnancy-related deaths. ● Develop and implement ongoing quality assurance methods and evaluation of all MMRC processes.
>> Severe Maternal Morbidity	● Identify ways to partner with Indian Health Service (IHS), Tribal or 638 hospital facilities, and other non-HDD reporting facilities to better understand SMM in their sites. ● Follow CDC and/or Alliance for Innovation on Maternal Health (AIM) guidance on the assessment of SMM cases. ● Identify maternal mortality cases in the HDD dataset to support the review process. ● Conduct routine surveillance of SMM twice a year, including the use of key indicators to identify cases in the Health Information Exchange. ● Assess data quality by reporting facility to identify inconsistencies in reporting and code usage. ● Produce annual data quality report on HDD data used to identify SMM cases. ● Consider identification of SMM cases during pregnancy and postpartum, including re-admissions and admissions to the ICU or behavioral healthcare. ● Coordinate and develop MOUs/DSAs with Managed Care Organizations or other content management systems to access core severe maternal morbidity metrics (transfusions and ICU admissions)

Topical Category	Overall Recommendations
MMRC Composition and Governance	● Construct governing guidelines to maximize committee structure and best practices. ● Continue to cultivate the diversity of the committee to introduce additional perspectives in case review and discussion. ● Provide member trainings to bolster confidence in their roles and improve the consistency of the review process. ● Develop and implement clear expectations of committee member attendance and participation.
Maternal Mortality Review Process	● Adopt strategies to improve the efficiency of case reviews, including prioritization of pregnancy-related deaths. ● Adopt strategies that consider equity and appropriate use of care, including but not limited to race, ethnicity, and mode of birth. ● Complete the hiring process for a full time clinical abstractor to respond to questions from the MMRC for each case review. ● Implement continuous quality improvement methods and process measures. ● Establish feedback mechanisms to capture thoughts, concerns, and ideas from committee members. ● Follow CDC guidance and the Review to Action model to produce actionable recommendations. ● Propose a sustainability plan to support the MMRC that includes staffing (program manager, abstractor, and epidemiologist), training, and other items necessary for the MMRC to continue functioning. long-term.
Development of a Dissemination and Implementation Plan of Findings and Recommendations	● Expand infrastructure and establish protocols for timely data analysis and generation of MMRC reports. ● Develop a plan and disseminate MMRC data and findings to stakeholders and partners. ● Create actionable recommendations to direct next steps and result in data to action.

Recordings and materials from all of the Committee's meetings, including the Public Hearing Meeting, are archived and can be accessed here: http://azhealth.gov/maternalhealth

Introduction

Maternal Mortality Review Program Overview

The Arizona Revised Statute (A.R.S. § 36-3501) was amended in April 2011 to establish the Arizona Maternal Mortality Review Committee (MMRC) as a subcommittee to the Child Fatality Review (CFR) Program. Since its establishment in July 2011, the subcommittee convened by the Arizona Maternal Mortality Program (MMRP) has been reviewing all identified maternal deaths in the state. The MMRC is a volunteer multidisciplinary team that includes clinicians from urban and rural health centers, public health professionals, and community service providers who meet monthly to review maternal deaths in order to identify preventative factors and provide actionable recommendations for level specific changes. These committee members, many of whom have participated since the MMRC began in 2011, are invested in identifying strategies for preventing maternal deaths and complications.

The current MMRC consists of 26 external clinical and non-clinical members who represent obstetricians, maternal-fetal medicine specialists, the regional perinatal system of care, directors of nursing, domestic violence service providers, behavioral health specialists, law enforcement, an MCH advocacy organization, public health professionals and Indian Health Services. Committee members are selected after interest is expressed to the Program Manager (PM). The PM and MMRC chairperson review the request to determine membership. The PM provides an overview of the program to all new committee attendees which includes a description of the committee review process and their role as a member. Each committee member signs a confidentiality statement prior to attending a committee meeting and again on an annual basis.

The MMRP has been implemented and coordinated by staff in the Bureau of Women's and Children's Health (BWCH) including an epidemiologist, administrative secretary, and a PM, who also support the Child Fatality Review Committee. Additional MMRP resources have included volunteer clinical nurse abstractor, an MPH volunteer and MPH/Nursing student interns. Annually, the epidemiologist queries death records and identifies cases where the pregnancy checkbox has been marked, indicating the woman was pregnant at the time of death or within 1 year. Additionally, cases with ICD-10 codes (O series or A34) associated with the death are identified. A list of cases that fall within the reproductive age criteria (15-49 years of age) are compiled into a spreadsheet and provided to the PM. The PM then enters information of each death into the Centers for Disease Control and Prevention's (CDC) Maternal Mortality Review Information Application (MMRIA). MMRIA is a repository used to standardize data collection of clinical and non-clinical information surrounding maternal deaths and is used for surveillance, monitoring and examining maternal mortality. Arizona was one of the first states to adopt the MMRIA data system in April 2018 and is centrally hosted on the CDC's server. The Department has an existing Data Sharing Agreement with the CDC for the use and hosting of the MMRIA system. Maternal fatalities associated with pregnancy include the death of a woman while she is pregnant or within one year of her pregnancy. Arizona reviews all pregnancy related and pregnancy associated maternal deaths regardless of the outcome of the pregnancy. This detailed case identification and data flow process of the MMRP is reflected in the enclosed flow chart **(Appendix A)**. A list of relevant definitions is enclosed **(Appendix B)**.

The administrative secretary and other program staff request medical records, law enforcement reports, death certificates from the Office of Vital Records, and other relevant case records and physically retrieve them as they become available. A.R.S. § 36-3503 requires that these agencies release the information to the subcommittee within 5 days of request **(Appendix C)**. The PM and other program

staff follow up when the records have not been provided in a timely manner. For instance, for 2017 deaths, it had taken between 1 and 475 days to receive records once they were requested, with some records requiring up to 4 follow-up requests and additional phone calls before they were received. Once records are received by the PM, the volunteer abstractor reviews each record for pertinent clinical and social information, documents the information in a case narrative, and enters data into MMRIA. Medical and vital statistics records are used to confirm pregnancy within the last year, and cases with no evidence of pregnancy are screened out. Physical records are compiled into folders and stored in locked file cabinets. A tracking log, created by the PM, is used to keep track of records needed, requested, and received for each case.

The MMRC meets the first Monday of each month for two hours and reviews between 6 and 8 cases. Typical attendance is around 25 people, and remote audio/visual conferencing is also made available. The Committee Chair and the PM facilitate the meeting, during which the PM presents a de-identified case narrative summary of each death to the committee. MMRC participation is voluntary and no governing by-laws or protocols exist for the MMRC, including guidelines for the composition of the MMRC. Following the CDC Review to Action model format, the MMRC reviews and categorizes case type in relationship to pregnancy (associated, related, or neither), manner of death, cause of death, and preventability. The MMRC also makes recommendations for prevention at different levels of prevention and assigns them an impact level (small to giant) for each maternal death reviewed. During this time the MMRC may request additional information or records, and choose to table cases for future meetings when this information is available. This process is documented on the MMRIA Committee Decisions Form **(Appendix D)** and entered into the MMRIA database by the PM usually within a week of completing case review. Yearly there are approximately 70 pregnancy associated cases of which 15-20 are pregnancy related cases. On December 4-5, 2018 the CDC Foundation provided technical assistance to the MMRC and MMRP staff on the maternal death review process. CDC Foundation provided the Department with recommendations, which were presented and accepted by the Committee. These recommendations are included in the final list of recommendations.

An overview of the overall maternal death review process is depicted in **Figure 1.**

Figure 1. Overview of a maternal death review.

Adapted from Berg, C.J. (2012). From identification and review to action—maternal mortality review in the United States. Seminars in Perinatology, 36(1), 7-13.

A Maternal Mortality Report was issued June 1, 2017 on the reviews of 141 identified maternal deaths that occurred between January 1, 2012 and December 31, 2015. Findings from these case reviews highlight substantial racial disparities that exist as the rate of American Indian women dying from pregnancy-related causes is 4 times higher than White women. Main causes of death were cardiac and hypertension (40%); hemorrhage (36%); and suicide, homicide, or accidents (24%). The findings also highlighted the preventability of maternal deaths, as 89% of all pregnancy-related deaths were deemed

preventable by the MMRC. The report also provided MMRC recommendations for individuals, communities, first responders, elected officials, and the public. The report was posted on the Department's website and promoted by Director Cara Christ, MD, MS, in her blog. The report was also shared with external partners such as the Board of the Arizona Perinatal Trust (APT), Arizona's perinatal quality collaborative.

Prior to September 2019, the MMRP was unfunded and functioned as a subset of activities within the Child Fatality Review, with no dedicated staff. Recently however, the Department was a recipient of the Preventing Maternal Deaths CDC grant award, a cooperative agreement of $450,000 each year for 5 years. The grant will support the Arizona MMRP in collecting the most detailed, complete data on causes and circumstances surrounding maternal deaths to develop recommendations for prevention. This includes resources for staff and infrastructure support to aid in timely case identification, record collection, and death review. As part of the cooperative agreement, the CDC will provide technical assistance to the Department related to the implementation of and data entry into MMRIA; identification of maternal deaths; data quality improvement; data analysis of MMRIA data; effective data use and dissemination throughout the duration of the cooperative agreement.

Severe Maternal Morbidity

Although surveillance of severe maternal morbidity (SMM) does not fall into the direct purview of the MMRC process, as maternal morbidity has increased nationally and in Arizona, assessing maternal morbidity is an essential piece to understanding maternal health in Arizona. Hospital discharge data (HDD) of delivery hospitalizations are used in this analysis, which are available every six months and collected under Arizona Revised Statute (A.R.S) § 36-125-05 and Arizona Administrative Code Title 9, Chapter 11, Articles 4 and 5. A list of hospitals that report to the HDD database is attached **(Appendix E)**. An algorithm published by the Alliance for Innovation on Maternal Health (AIM) and the CDC is used to identify SMM cases with one or more of 21 diagnosis and procedure indicators based on ICD codes in the HDD record. These indicators include indications of organ-failure, clinical signs and symptoms of morbidity, and management of conditions. This method has been previously used in other states' settings. In 2019, the Department staff received technical assistance from AIM on methods to better identify SMM cases and has begun utilizing an enhanced definition of SMM in their analysis, which incorporates birth certificate data and filters previously identified SMM cases by qualifying criteria, such as transfer of mother in or out of the hospital, length of stay, and maternal death. This enhanced definition will allow for greater sensitivity to identify SMM among other less severe cases of maternal morbidity. Efforts are underway to publish the state's first report on Severe Maternal Morbidity in winter 2019.

Senate Bill 1040

Governor Doug Ducey signed on April 29, 2019, Arizona Senate Bill (SB) 1040 which mandates the formation of an Advisory Committee on Maternal Fatalities and Morbidity to recommend improvements to information collection concerning the incidence and causes of maternal fatalities and severe maternal morbidity **(Appendix F)**. As such, the Committee was established to evaluate and compile a list of recommendations for the process of the MMRC and MMRP, which are included in this report. The SB 1040 mandate also included the following: 1) the Department, in conjunction with the Committee, shall hold a public hearing to receive public input regarded the recommended improvements to information collection; 2) On or before 12/31/19 the Committee shall submit to the chairpersons of the Health and Human Services (HHS) committees a report with recommendations concerning improving information

collection; 3) On or before 12/31/20 the Department shall submit a report to the governor and others on the incidence and causes of maternal fatalities and morbidities that includes all readily available data through the end of 2019. In addition, the bill specified that the Chair of the Committee will be the Department's Director or designee and that the Committee's membership should be comprised of the following individuals: A representative of a contractor from each geographic service area designated by the Arizona Health Care Cost Containment System (AHCCCS); a representative of the Arizona Health Care Cost Containment System; a representative of Indian Health Services; three obstetricians, of which at least two are maternal fetal medicine specialists, who are licensed pursuant to title 32, chapter 13 or 17, Arizona Revised Statutes; a certified nurse midwife who is certified pursuant to title 32, chapter 15, Arizona Revised Statutes; two representatives of nonprofit organizations that provide education, services, or research related to maternal fatalities and morbidity; a representative of this state's health information organization; a representative of a public health organization; and two representatives of organizations that represent hospitals in this state.

Committee Selection Process

On June 19, 2019, the Department published an online form for interested members of the public to submit their applications to participate in the Committee on Maternal Fatalities and Morbidities on the Department's website (http://azdhs.gov/maternalhealth). The application period was 6 business days long and ended at 5:00 PM on Friday, June 28, 2019. Applicants were asked to provide their contact information, relevant education and work experience, and a statement of interest in the Committee. In addition, applicants had to self-nominate to one of the committee representation roles as specified in SB 1040. Resumes/CVs from each applicant were also collected. A copy of the online application form is enclosed **(Appendix G)**.

Thirty applications were submitted to the Department. Applications were reviewed by the Bureau of Women's and Children's Health Chief as the Director's designee and the Assistant Director for the Division of Public Health - Prevention Services to ensure that all committee representation roles were assigned per SB 1040. The selected 16 members were e-mailed a letter of notification signed by the Department Director on July 18, 2019. The notification letters included the committee member's assigned role in the Committee; the purpose of the Committee; and a copy of SB 1040. Pursuant to A.R.S. 38-592 and 38-231 all committee members were required to participate in Public Service Orientation training (also known as Standards of Conduct) and sign a loyalty oath. Applicants who were not selected were notified and invited to participate as members of the public in upcoming Committee meetings.

Committee Membership

Required by Statute	Name	Title	Affiliation
DHS Director or designee shall serve as the chairperson of the committee	Patricia Tarango, MS	Bureau Chief	Bureau of Women's and Children's Health, Arizona Department of Health Services
A Health Plan representative from each geographic service area (3) designated by the Arizona Health Care Containment System	Satya Sarma, MD*	Sr. Medical Director	Care 1st Health Plan (North Region)
	Maritza Jimenez, LPN	Sr. QI Project Manager (Medicaid Programs)	Care 1st Health Plan (North Region)
	Carl Bronitsky, MD	Obstetrician	San Carlos Apache Healthcare (South Region)
	Charlton Wilson, MD	Chief Medical Officer	Mercy Care (Central Region)
Arizona Health Care Containment System (AHCCCS)	Eric Tack, MD, JD	MCH/EPSDT Program Director	AHCCCS
Indian Health Services	Amy Lebbon, MSN, CNM, IBCLC	Director of Women and Infant Service Line	Phoenix Indian Medical Center
Obstetrician licensed pursuant to title 32, chapter 13 or 17, Arizona Revised Statutes	Cynthia Booth, MD	Obstetrician	Banner Payson Medical Center (Rural)
Maternal Fetal Medicine Specialists licensed pursuant to title 32, chapter 13 or 17, Arizona Revised Statutes	Mike Foley, MD	Maternal Fetal Medicine Specialist	Chair-Department of OBGYN COMP, University of Arizona, College of Medicine
	Guadalupe Herrera-Garcia, DO	Maternal Fetal Medicine Specialist	Valley Perinatal
Certified Nurse Midwife, licensed pursuant to title 32, chapter 15, Arizona Revised Statutes	Diana Jolles, PhD, CNM, FACNM	Staff Midwife	El Rio Community Health Center
Non Profit Organizations that provide education, services, or research related to maternal fatalities and morbidity	Breann Westmore	MCH & Government Affairs Director	March of Dimes Arizona
	Mary Ellen Cunningham, RN, MPA	President/RN	Arizona Public Health Association

Required by Statute	Name	Title	Affiliation
State Health Information Organization	Mike Mote	Chief Strategy Officer	Health Current, Arizona's Health Information Exchange
Public Health Organization	Michael Madsen, MD	Medical Examiner	Coconino County Public Health Services District
Hospital Organizations	Sandy Severson, RN	Vice President Care Improvement	Arizona Hospital & Healthcare Association
	Jennifer Carusetta	Executive Director	Health System Alliance of Arizona
A Committee Member from a county with a population less than five hundred thousand	Robert "BJ" Johnson, MD	Maternal Fetal Medicine Specialist	Arizona Perinatal Trust

* Role was reassigned at the request of the representative.

Overview of Meetings

Timeline of Activities

April 29, 2019	Arizona Senate Bill 1040 is passed and signed by Governor Ducey
June 19-28, 2019	Online application open for participation in the Committee
July 18, 2019	Members of the Committee notified of selection
August 30, 2019	Maternal Fatalities and Morbidity Advisory Committee Meeting #1
September 11, 2019	The Department staff provided Committee members with summaries of identified challenges and proposed solutions for 4 key areas: data challenges and gaps, committee composition, MMRC committee process, and dissemination of findings and implementation
September 16, 2019	Maternal Fatalities and Morbidity Advisory Committee Meeting #2
October 1, 2019	First draft of the Committee Report provided by the Department staff to the Committee members
October 15, 2019	Committee member comments on draft #1 returned to the Department
October 17, 2019	Maternal Fatalities and Morbidity Advisory Committee Meeting #3
October 30, 2019	Public Hearing Meeting
November 4, 2019	Second draft of the Committee Report provided by the Department staff to the Committee members
November 12, 2019	Committee member comments on draft #2 returned to the Department
November 14, 2019	Maternal Fatalities and Morbidity Advisory Committee Meeting #4
November 22, 2019	Final draft of the Committee Report due from the Department staff for internal the Department review and publication
December 5, 2019	Maternal Fatalities and Morbidity Advisory Committee Meeting #5

Minutes from each Maternal Fatalities and Morbidity Advisory Committee Meeting are available by email request to maternalhealth@azdhs.gov or by visiting azdhs.gov/maternalhealth and choosing "Advisory Committee;" a list of links to these minutes are also included in **Appendix H.** All meetings complied with Arizona Open Meeting Law as described in A.R.S. § 38- 431.01(A).

Committee Meeting #1: Friday, August 30th

The initial Maternal Fatalities and Morbidity Advisory Committee Meeting convened at the Arizona Department of Health Services, State Laboratory, 250 N 17th Avenue, Igloo Conference Room (1st Floor) in Phoenix, Arizona and via teleconference August 30, 2019. Members of the Committee and public were able to attend in person or via teleconference.

Department staff welcomed and provided the Committee members a brief update on current efforts related to SMM and maternal mortality in the State of Arizona. Information was presented on the newly awarded CDC: Preventing Maternal Death grant that will enable the Department to further enhance and support the work of the Maternal Mortality Review Committee (MMRC). An overview was given of the Governor's Goal Council Breakthrough Project focusing on Maternal Mortality. This work plan is aligned with the work related to SMM and MM efforts including improving surveillance and implementing the Alliance for Innovation on Maternal Health (AIM) safety bundles. The AIM safety bundles include action measures for specific obstetric emergencies at the hospital level. The bundles represent the best practices for maternity care. In addition, Department staff provided an overview of the current process and data collection of the Maternal Mortality Review Committee review process as earlier described.

The Committee reviewed the roles and responsibilities for the committee, as established in Senate Bill 1040, and reviewed methodologies to follow during this process. Through a facilitated process the Committee chose a mixed method approach, to include Key Informant Interviews, Observational Assessments, Panel Discussion and Roundtable Discussion to produce recommendations for the MMRC. An initial timeline was established to guide the committee's work. The Committee instructed the Department to provide a list of challenges and possible recommendations for their review at the next meeting according to four areas of focus; Data Collection Process, Committee Composition, Maternal Mortality Review Process, and Dissemination and Implementation of MMRC Findings and Recommendations. There was no additional input or comments from the public.

Committee Meeting #2: Monday, September 16th

The Maternal Fatalities and Morbidity Advisory Committee Meeting convened at the Arizona Department of Health Services on September 16, 2019. Members of the Committee and public were able to attend in person or via teleconference.

As requested by the Committee, the Department staff reviewed the identified challenges and possible recommendations regarding the Maternal Mortality Review process. The Department staff was available as a panel to answer questions. The Committee's round table discussion was facilitated by Dave Nakashima, contracted facilitator, and centered their recommendations around four areas of focus; Data Collection Process, Committee Composition, Maternal Mortality Review Process, and Dissemination and Implementation Of MMRC Findings and Recommendations.

The Committee planned and set dates for future meetings, the public hearing, and deadlines for drafting the Committee Report to align with the SB 1040 deadline for reporting.

Committee Meeting #3: Thursday, October 17th

The Maternal Fatalities and Morbidity Advisory Committee Meeting convened at the Arizona Department of Health Services, State Laboratory, 250 N 17th Avenue, Igloo Conference Room (1st Floor) in Phoenix, Arizona and via teleconference on October 17, 2019. Members of the Committee and public were able to attend in person or via teleconference.

Dave Nakashima facilitated discussion and editing with the Committee on Draft 1 of the Advisory Committee report. Those committee members in physical attendance were randomly broken into three groups to review, discuss, and edit recommendations as currently written in Draft 1 of the Committee's report. Prior to the meeting, ADHS staff prepared large poster sized pages of each of the four focus areas of recommendations; Data Collection Process, Committee Composition, Maternal Mortality Review Process, and Dissemination and Implementation of MMRC Findings and Recommendations.

The Committee discussed methodology, as there had been no formal key informant interviews. It was decided that and voted on that the Committee was able to organically obtain all the needed information from MMRC members and ADHS staff that they required to make their recommendations. The Committee did identify that structured interviews are an area of opportunity which may be reflected in the recommendations section for ongoing developing processes.

The Committee reviewed dates for future meetings, the public hearing, and deadlines for drafting the Committee Report to assure alignment with the SB 1040 deadline for reporting.

Public Hearing Meeting: Wednesday, October 30th

The Maternal Fatalities and Morbidity Advisory Committee Meeting convened at the Arizona Department of Health Services, State Laboratory, 250 N 17th Avenue, Igloo Conference Room (1st Floor) in Phoenix, Arizona and via teleconference on Wednesday, October 30, 2019. Members of the Committee and public were able to attend in person or via teleconference.

Dave Nakashima facilitated the meeting explaining the public comment process online and in attendance. The Advisory Committee members and ADHS staff introduced themselves to the public. Martín Celaya, Chief, Office of Assessment and Evaluation at ADHS provided an overview of the Advisory Committee selection process, an overview of the previous Committee meetings, and the draft recommendations from the Advisory Committee.

There were two public comments made during the call to the public:

Public Comment 1: Vicente Garcia, representing the Garcia Family.
"My name is Vicente Garcia, and I am sorry I was late. I just wanted to thank everybody here for doing the work you're doing and encourage you to keep on. I lost my daughter. She was giving birth to my grandson, and this, what you guys are doing, is a very powerful thing for my family and I, and every family that has lost loved ones. So, thank you all and keep on, keep on going. Thank you."

Public Comment 2: Roxana Rogers, MSN, representing Choices Pregnancy Centers
"Thank you. My name is Roxana Rogers and I am a professional Director, in charge of nursing and midwifery services for Choices Pregnancy Centers/Choices Pregnancy Centers. We actually

served in 2019, almost close to 10,000 visits of women. We, most all of our women are low income from diverse backgrounds. We know, we presently teach postpartum classes, and we know what you guys are doing is vitally important and community can partner as part of the healthcare system to improve outcomes, and so we are really excited to see what you, what you come up with and we are already looking at some of your recommendations online to change what we teach to better identify and better serve our women in the state."

There were no other comments in the room. There were no other comments online and the Public Hearing concluded. Public comments can be made online until November 8, 2019.

Committee Meeting #4: Thursday, November 14th

The Maternal Fatalities and Morbidity Advisory Committee Meeting convened at the Arizona Department of Health Services, State Laboratory, 250 N 17th Avenue, Igloo Conference Room (1st Floor) in Phoenix, Arizona and via teleconference on November 14, 2019. Members of the Committee and public were able to attend in person or via teleconference.

Kate Lewandowski, Maternal and Child Health Epidemiologist for ADHS, reviewed public comments made in the Public Hearing on October 30, 2019. She also reviewed the comments that were received through the online public comment platform that was available from October 30– to November 8, 2019. There were 3 public comments made, which included asking that the acronym AIM be written out, that the perspective of school and adolescent health professionals be incorporated in the review process, and that findings and recommendations be disseminated to school health officials. A transcript of all public comments from the hearing and survey is provided in the meeting handouts.

Additionally, the Committee reviewed comments received prior to the Committee Meeting #4 and revised Draft 2 of the Committee's report to incorporate all feedback. All revisions were made directly in the report draft during the meeting and were agreed upon by all present Committee members. Dave Nakashima then reviewed the timeline and next steps. The final draft will be completed for internal ADHS review by November 22, 2019, and is on track to be submitted to the legislative committees ahead of the required deadline of December 31, 2019. Madam Chair Patricia Tarango will confirm with legal counsel on the process for final Committee approval of the report and meeting minutes.

Committee Meeting #5: Thursday, December 5th

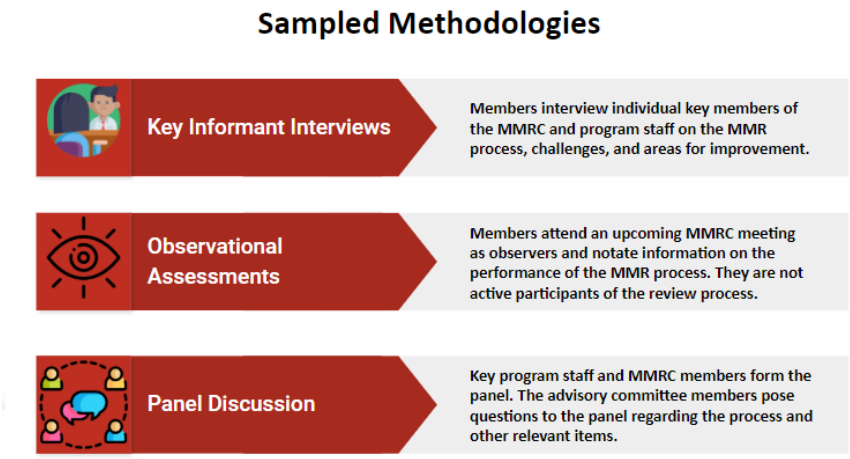
The Maternal Fatalities and Morbidity Advisory Committee Meeting convened at the Arizona Department of Health Services, 150 N 18th Avenue, ALS Training room (4th Floor) in Phoenix, Arizona.

The Committee reviewed the final draft of the report and requested to change the work affiliation of two members to reflect their current work affiliations. Once these changes were incorporated, the Committee voted and approved the final draft of the Committee's report titled, "Recommendations from the Advisory Committee on Maternal Fatalities and Morbidity Concerning Improving Information Collection on the Incidence and Causes of Maternal Fatalities and Severe Maternal Morbidity." The Committee also decided that no further meetings are needed to discuss the report as the report was finalized and approved. The public was given an opportunity for comment; however there were no members of the public in attendance in person or via teleconference Madam Chair Patricia Tarango thanked the Committee for their time and support and adjourned the meeting.

Approach for Selecting Recommendations

The methods for generating recommendations on the MMRC process were chosen at the initial meeting of the Committee on August 30, 2019. Department staff presented a sample set of methodologies as examples of what the committee could choose to implement, but allowed for additional methods to be incorporated based on committee interests (**Figure 2**).

Figure 2. Sample set of methodologies presented to the Committee.



The Committee selected key informant interviews of the MMRC and department staff, observational assessments of MMRC meetings, a panel discussion with Department staff and MMRC members, and a guided roundtable discussion among Committee members to utilize the individual insights and expertise of Committee members. The Committee decided on an internal timeline to conduct each of the methodologies within the months of September and October 2019.

Observational Assessments

Four members of the Committee attended the September 9, 2019 MMRC meeting to observe the case review and recommendation generation processes of the MMRC. Members did not participate in the process and were required to sign a confidentiality statement per MMRC protocols. Members were able to pose questions to the MMRC on items regarding the review process and availability of data. Information collected by these observational assessments were shared with the whole Committee during their second meeting on September 16, 2019.

Panel Discussion

In order to gain insight into existing processes of the Department MMRP staff and MMRC members, a panel discussion took place during the first and second Committee meetings. This included a presentation by key staff during the first meeting overviewing the background and purpose of the MMRC, the process of case identification, selection, and review, and information about maternal morbidity in Arizona. Questions were submitted to staff members during both meetings for clarification on existing or potential methods, as well as limitations to this process. Additionally, a few members of the Committee also serve as members of the MMRC and spoke to their experience and perspective of the process.

Roundtable Discussion

A roundtable discussion was held during the second meeting of the Committee on September 16, 2019 and was mediated by facilitator. The Committee decided to group recommendations based on the four topics identified during the first meeting: data collection, committee composition, the MMRC review process, and dissemination and implementation. For each topic, the committee spent time discussing identified gaps and proposed strategies, as well as contributing their own individual ideas and perspectives on what was needed. Recommendations with general consensus were then recorded into the appropriate topic category. The Committee also decided to include all proposed strategies that had been previously provided by Department staff.

Key Informant Interviews

During the first meeting in August 2019, the Committee had chosen to conduct key informant interviews as part of their selected methods. Following three Committee meetings and completion of other selected methods, including both the panel and roundtable discussions, the Committee felt they had received adequate information from MMRC members and program staff without a need to conduct interviews. On October 17, 2019, the Committee decided not to conduct structured interviews of key informants given the short timeline for report generation (refer to **Timeline of Activities**). The Committee recommended that MMRC members and program staff identify and conduct future key informant interviews after the submission of this report as a way to continue the improvement of the MMRP, such as reaching out to health facility medical records staff and key personnel involved in maternal mortality review in other states.

Recommendations

The following recommendations were drafted as a result of the previously mentioned activities of the Committee, in collaboration with Department staff. Each recommendation is grouped by the four areas of focus that the Committee chose; Data Collection Process, MMR Committee Composition, MMRC Review Process, and Dissemination and Implementation of MMRC Findings and Recommendations. Department staff was also consulted to assess the feasibility and practicality of the proposed recommendations. The recommendations below include action items that are included in the Department's work plan in the CDC Preventing Maternal Deaths grant award mentioned earlier. The recommendations are not listed in any particular order, neither with respect to chronology nor order of significance.

For all areas of recommendations, the Committee recommended that program staff and MMRC members continue the investigative process begun by this Committee, including seeking out potential resources and conducting interviews of key informants to identify additional recommendations and areas for improvement of the MMRP. This might include contacting staff from other states' maternal mortality review programs to learn about their best practices and incorporate those components into the Arizona MMRP.

Data Collection Process

Maternal Mortality

Improve the sensitivity and timeliness of maternal death identification.

- Link identified maternal death cases with birth, fetal death, and HDD to gain additional information
- Determine a mechanism for utilizing the raw year-to-date death file to identify maternal deaths closer to the date of maternal death
- Explore a process for healthcare facilities to report confirmed maternal deaths to the Department within 30 days
    - Collaborate with the Arizona Perinatal Trust (APT) through a Memorandum of Understanding (MOU)/Data Sharing Agreement (DSA) on possible monthly reporting of maternal deaths in APT certified facilities
    - Consider utilizing and building onto existing reporting requirements of birthing facilities, either through the establishment of MOUs with individual facilities or the development of an accountable mandated process for facilities to report confirmed maternal deaths

Strengthen and establish partnerships to facilitate a more efficient and comprehensive records acquisition.

- Build relationships across the state to decrease cycle time from record release
    - Identify sites that have historically experienced records request delays and provide technical assistance, especially for health information management and medical records staff responding to requests
    - Develop a communication campaign for hospitals and other agencies to better understand the purpose of the MMRC and their role in contributing information to investigating maternal deaths
    - Execute MOUs/DSAs with agencies and entities with information that can support the review process including but not limited to AHCCCS, Tribal Governments, DPS, DCS, as such
    - Provide technical assistance to third party or centrally hosted record companies, including identifying a contact person at these entities to assist in timely responses to records requests
    - Emphasize that records for the MMRP are non-discoverable and are de-identified for MMRC use
- Identify additional datasets that can be queried for additional information
- Explore the possibility of data sharing via Health Information Exchange platforms, including the use of key indicators to identify cases of maternal death within the Health Information Exchange (i.e. add pregnancy screening questions to patient intake for pregnancy within 1 year)

- Explore strategies for resources and continued strong support for Health Information Exchange infrastructure development and participation of all health facilities across the state
- Develop screening questions for medical examiners to assist in identification of maternal deaths
- Invite staff members from Arizona Bureau of Vital Records to the MMRC

Encourage development and implementation of protocols that streamline the record collection process, particularly for pregnancy-related deaths.

- Develop a protocol to enforce the time requirement for records request
- Increase real-time availability of records, especially of pregnancy-related deaths

Develop and implement ongoing quality assurance methods and evaluation of all MMRC processes.

- Establish a quality assurance plan with scheduled tasks to be followed on a routine basis by MMRP staff
- Create a checklist to be completed for each maternal death to coordinate the data process
- Reach out to CDC for technical assistance
    - CDC gave technical assistance to the Department on the MMR process in December 2018, and will provide ongoing technical assistance through 2020 as part of the CDC Preventing Maternal Deaths grant award
    - Department was recently awarded the Maternal Mortality Review Grant that begins September 30, 2019, which includes technical assistance

Severe Maternal Morbidity

- Identify ways to partner with Indian Health Service (IHS), Tribal or 638 hospital facilities, and other non-HDD reporting facilities to better understand SMM in their sites
- Follow CDC and/or Alliance for Innovation on Maternal Health (AIM) guidance on the assessment of SMM cases
- Identify maternal mortality cases in the HDD dataset to support the review process
- Conduct routine surveillance of SMM twice a year, including the use of key indicators to identify cases in the Health Information Exchange
- Assess data quality by reporting facility to identify inconsistencies in reporting and code usage
- Produce annual data quality report on HDD used to identify SMM cases
- Consider identification of SMM cases during pregnancy and postpartum, including re-admissions and admissions to the ICU or behavioral health care
- Coordinate and develop MOUs/DSAs with Managed Care Organizations or other content management systems to access core severe maternal morbidity metrics (transfusions and ICU admissions)

Maternal Mortality Review Committee Composition and Governance

Construct governing guidelines to maximize committee structure and best practices.

- Develop governing bylaws for the MMRC to conduct business in a consistent manner:
    - Identify best practices regarding MMRC membership and participation
    - Develop formal committee tenure and term-limits with appropriate rotation of members
    - Draft clear definitions of committee composition and roles
- Consider enacting a separate statute for Maternal Mortality Reviews
- Request technical assistance from the CDC on Committee Composition

Continue to cultivate the diversity of the committee to introduce additional perspectives in case review and discussion.

- Increase participation of non-clinical and consumer MMRC members in the MMRC meeting to enhance the diversity of the MMRC
- Develop a recruitment strategy to support and strengthen the current MMRC composition and address gaps, including behavioral health and substance use disorder specialists, social service agencies, DCS, law enforcement agency representatives, clinical specialists, school and adolescent health professionals, community organizations, Indigenous communities and Native American leaders, survivors, and representatives of various geographical, racial, and socioeconomic populations
- Design a formal process for inviting recruited MMRC members to apply

Provide member trainings to bolster confidence in their roles and improve the consistency of the review process.

- Develop a process manual of the MMRC
- Conduct standardized trainings for MMRC members, including new member orientation and annual refresher trainings for all MMRC members, to highlight the roles and responsibilities of committee members and an overview of the MMRC process
- Distribute additional training materials and resources to members to aid in MMRC review process

Develop and implement clear expectations of committee member attendance and participation.

- Develop and enforce guidelines and attendance expectations for participating organizations and members
- Document commitment by each MMRC member to the mission, vision, and expectations of the MMRC via a participation oath
- Identify challenges to participating in MMRC meetings
- Eliminate barriers to MMRC meeting attendance (webinar, reimbursement of travel, quarterly all day meetings)
- Develop an application process for MMRC membership

Maternal Mortality Review Process

Adopt strategies to improve the efficiency of case reviews, including prioritization of pregnancy-related deaths.

- Prioritize review of pregnancy-related deaths to be closer to when death occurred
- Pre-review cases by a committee subgroup
    - Consider developing specialized subcommittees to review violence related deaths, accidental deaths, substance use related deaths, and pregnancy related deaths to later present findings to MMRC for final approval
- Preemptively organize the review of cases by pregnancy associated vs. pregnancy related and causes of death to increase efficiency in the reviews
- Develop quick reference guides and tools to facilitate the review process
- Complete abstracts well in advance of MMRC meetings and upload to MMRIA for MMRC members to access de-identified case narratives electronically in preparation of the MMRC meeting

Adopt strategies that consider equity and appropriate use of care, including but not limited to race, ethnicity, and mode of birth.

Complete the hiring process for a full time clinical abstractor to respond to questions from the MMRC for each case review.

Implement continuous quality improvement methods and process measures.

- Design and implement a quality improvement process to identify inefficiencies and produce timely solutions
- Incorporate components of the Arizona Management System into committee review for process standardization

Establish feedback mechanisms to capture thoughts, concerns, and ideas from committee members.

- Implement an evaluation with MMRC members feedback to produce practical recommendations
- Internally log missed opportunities and inefficiencies identified in the review process for continuous quality improvement
- Conduct an environmental scan to assess the needs of the MMRC and the MMRC members (meeting times, location, barriers)

Follow CDC guidance and the Review to Action model to produce actionable recommendations.

- Request technical assistance from CDC to the MMRC on developing actionable recommendations
- Follow the Review to Action template to develop case-specific recommendations
- Review recommendations from others states' MMRCs for training

Propose a sustainability plan to support the MMRC that includes staffing (program manager, abstractor, and epidemiologist), training, and other items necessary for the MMRC to continue functioning long-term.

Development of a Dissemination and Implementation Plan for MMRC Findings and Recommendations

Expand infrastructure and establish protocols for timely data analysis and generation of MMRC reports.

- Identify a dedicated epidemiologist or data analyst for data quality review, analysis, and report writing
- Develop a data subcommittee to oversee routine reporting of data from the MMRC
- Develop a standard reporting schedule of data and recommendations from the MMRC
- Develop and publish data dashboards with state-level aggregate process metrics on MMRC activities and recommendations for prevention of maternal deaths, according to the reporting schedule
- Update the maternal mortality landing webpage to report on current MMRC activities
- Develop and publish data dashboards with preliminary data on year-to-date reviewed cases
- Receive technical assistance from the CDC on the use of MMRIA to query timely reports
- Update the Department's Maternal Mortality and Severe Maternal Morbidity landing pages with up-to-date information
- Produce an updated report that includes data from deaths that have occurred since 2016
- Include stratification of data by race and ethnicity, as well as by mode of delivery in the upcoming report

Develop a plan and disseminate MMRC data and findings to stakeholders and partners.

- Develop a dissemination plan with MMRC input
- Develop and implement a robust public awareness strategy on maternal mortality and morbidity, the MMRC, it's activities, findings, and actionable recommendations
- Provide information and materials to MMRC internal and external stakeholders to share with the populations they serve, including a resource with clinical solutions and other recommendations
- Partner with home visitation and other service providers, including school health officials, to provide information about maternal mortality and MMRC recommendations
- Present findings at stakeholder meetings
- Develop and launch a CEUs course for clinical and non-clinical providers on recommendations from the MMRC
- Conduct a statewide summit on severe maternal morbidity and mortality
- Develop a campaign for the general public about maternal death and morbidity

Create actionable recommendations to direct next steps and result in data to action.

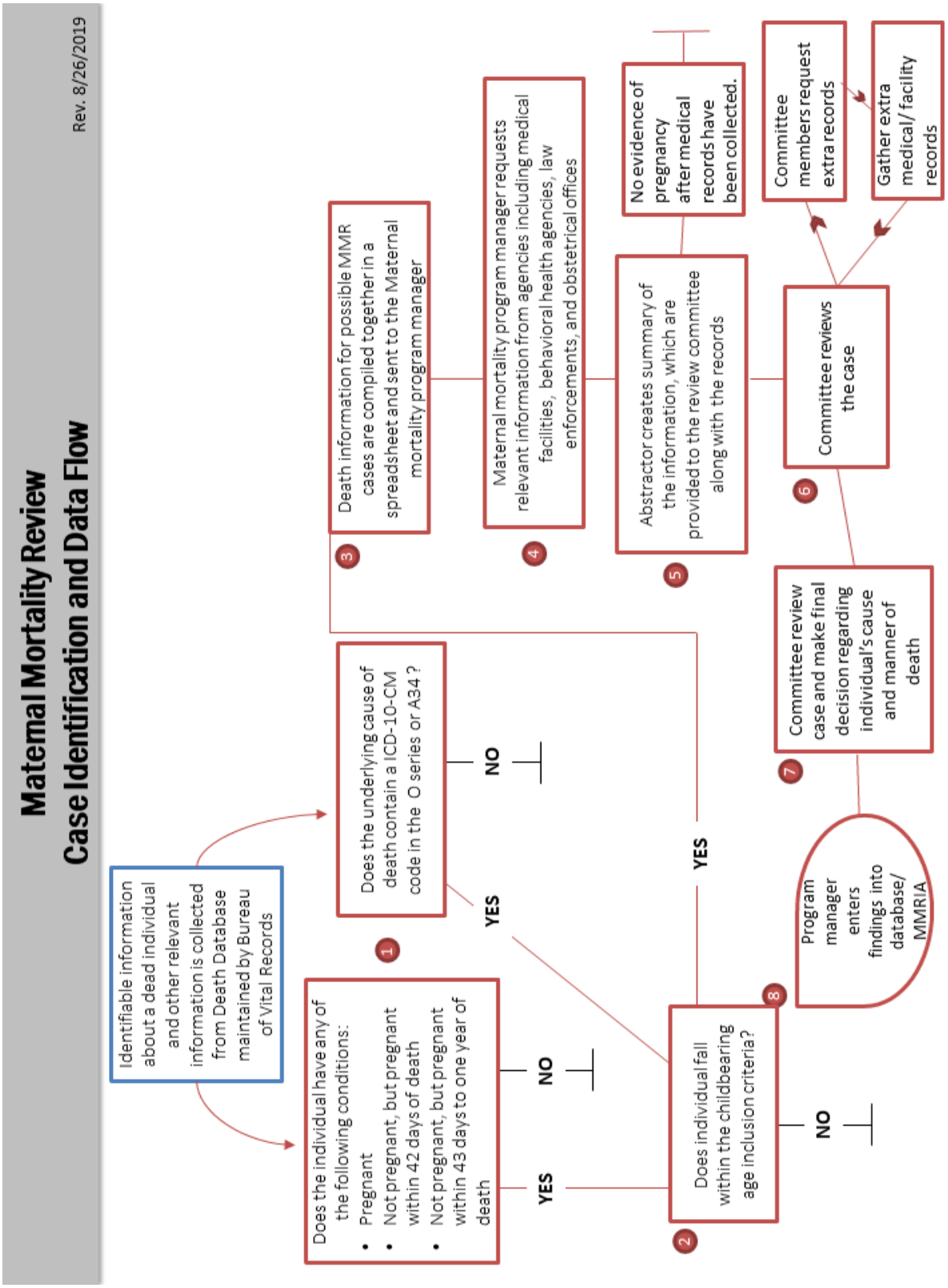
- Utilize the MMRIA committee decision forms to identify case-specific recommendations by the MMRC
- Provide technical assistance to the MMRC on the Policy, Systems, and Environment (PSE) approach to result in actionable data driven recommendations that improve maternal health outcomes
- Analyze recommendations by levels of contributing factors and cause of death to allow for strategies and intervention design
- Explore opportunities for ongoing assessment of activities based on MMRC findings
    - Consider establishing an implementation committee to monitor and track data to action activities
    - Consider developing a strategic action plan with community stakeholders

Acknowledgements

A special thanks to Sheila Sjolander, Assistant Director of the Division of Public Health - Prevention Services at ADHS, as well as all of our Committee members for their commitment to maternal health and the time and effort put into creating these recommendations:

Patricia Tarango, MS;
Dr. Satya Sarma, MD;
Maritza Jimenez, LPN;
Dr. Carl Bronitsky, MD;
Dr. Charlton Wilson, MD;
Dr. Eric Tack, MD, JD;
Amy Lebbon, MSN, CNM, IBCLC;
Dr. Cynthia Booth, MD;
Dr. Mike Foley, MD;
Dr. Guadalupe Herrera-Garcia, DO;
Dr. Diana Jolles, PhD, CNM, FACNM;
Breann Westmore;
Mary Ellen Cunningham, MPA, RN;
Mike Mote;
Dr. Michael Madsen, MD;
Sandy Severson, RN;
Jennifer Carusetta;
and Dr. Robert “BJ” Johnson, MD.

Appendix A. Maternal Mortality Review Case Identification and Data Flow



Appendix B. List of Definitions

1. Maternal Mortality (CDC Definition): Death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes

2. Maternal Mortality (Arizona MMR): the death of a woman while pregnant or within one year of pregnancy

3. Pregnancy-Associated Deaths: the death of a woman while pregnant or within one year of pregnancy, and the cause of death was not directly related to the pregnancy

4. Pregnancy-Related Deaths: the death of a woman while pregnant or within one year of termination of pregnancy, from any cause related to or aggravated by her pregnancy or its management, but not from any other cause of death

5. Maternal Mortality Rate: calculated per 100,000 live births

6. Preventability of Death: is determined based upon the idea that under reasonable conditions something could have been done by an individual, or by the community as a whole, to prevent the death

7. Severe Maternal Morbidity: results from unexpected outcomes of labor and delivery that lead to significant short- or long-term consequences to a woman's health, some of these complications are blood transfusions, organ failure, and stroke.

8. Severe Maternal Morbidity Rate: calculated per 10,000 hospitalization deliveries.

9. Data to Action: a process that uses feedback and actionable data to improve implementation of ongoing programs and quality improvement activities.

Appendix C-1. Sample Records Request Letter

ARIZONA DEPARTMENT OF HEALTH SERVICES

Division of Public Health Services
Office of Injury Prevention
150 N. 18th Ave., Suite 320
Phoenix, AZ 85007
Phone: 602-364-1400
Fax: 602-364-3194
http://azdhs.gov/prevention/womens-childrens-health/injury-prevention/index.php#maternal-mortality

Facility Name
Address:
Phone:
Fax:
Attn: Records

MATERNAL MORTALITY REVIEW RECORDS REQUEST

Decedent Name:	
DOB:	**DOD:**
Last known address:	**Today's Date: September 30, 2019**

Dear Records Department:

The Arizona Maternal Mortality Review Team is reviewing the death of the above listed person which occurred on XX/XX/XXXX.

Pursuant to A.R.S. §36 3503, please provide all records regarding this person, including records related to the death as available. This information is necessary to carry out the team's statutory duties. You may comply with this request by forwarding a copy of the pertinent patient records to: ADHS, Maternal Mortality Review, 150 N. 18th Ave. #320, Phoenix, AZ 85007.

All information and records acquired by the team are confidential and are not subject to subpoena, discovery, or introduction into evidence in any civil or criminal proceeding. The team will use the acquired information and records only as necessary to carry out the team's statutory duties.

Please indicate the action taken by checking the appropriate box below and return this letter along with the records, if applicable, within **5 days of this request.**

If you have any questions or comments, please contact: Kate Lewandowski at (602) 364-3238.

This request is confidential; any violation of this confidentiality is a class 2 misdemeanor.

Sincerely,

Jessica Perfette

Jessica Perfette, MPH
Child Fatality and Maternal Mortality Review Program Manager
Office of Injury Prevention
Arizona Department of Health Services
150 North 18th Avenue, Suite 320, Phoenix, AZ 85007
Office: 602-364-4683
Email: jessica.perfette@azdhs.gov

STAT

ACTION TAKEN: ☐ No records on file ☐ Reports Attached

IMPORTANT: Please notify our office prior to faxing (602-364-1400) so we will have someone available to accept the fax to protect the confidential information of the decedent.

Health and Wellness for all Arizonans

Appendix C-2. Arizona Revised Statute § 36-3503

Arizona Revised Statutes, Title 36 – Public Health and Safety

36-3503. Access to information; confidentiality; violation; classification

A. On request of the chairperson of a state or local team and as necessary to carry out the team's duties, the chairperson shall be provided within five days excluding weekends and holidays with access to information and records regarding a child whose death is being reviewed by the team, or information and records regarding the child's family and records of a maternal fatality associated with pregnancy pursuant to section 36-3501, subsection C:

1. From a provider of medical, dental or mental health care.

2. From this state or a political subdivision of this state that might assist a team to review a child fatality.

B. A law enforcement agency with the approval of the prosecuting attorney may withhold investigative records that might interfere with a pending criminal investigation or prosecution.

C. The director of the department of health services or the director's designee may apply to the superior court for a subpoena as necessary to compel the production of books, records, documents and other evidence related to a child fatality or a maternal fatality associated with pregnancy investigation. Subpoenas issued shall be served and, on application to the court by the director or the director's designee, enforced in the manner provided by law for the service and enforcement of subpoenas. A law enforcement agency is not required to produce the information requested under the subpoena if the subpoenaed evidence relates to a pending criminal investigation or prosecution. All records shall be returned to the agency or organization on completion of the review. Written reports or records containing identifying information shall not be kept by the team.

D. All information and records acquired by the state team or any local team are confidential and are not subject to subpoena, discovery or introduction into evidence in any civil or criminal proceedings, except that information, documents and records otherwise available from other sources are not immune from subpoena, discovery or introduction into evidence through those sources solely because they were presented to or reviewed by a team.

E. Members of a team, persons attending a team meeting and persons who present information to a team may not be questioned in any civil or criminal proceedings regarding information presented in or opinions formed as a result of a meeting. This subsection does not prevent a person from testifying to information that is obtained independently of the team or that is public information.

F. A member of the state or a local child fatality review team shall not contact, interview or obtain information by request or subpoena from a member of a deceased child's family, except that a member of the state or a local child fatality review team who is otherwise a public officer or employee may contact, interview or obtain information from a family member, if necessary, as part of the public officer's or employee's other official duties.

G. State and local team meetings are closed to the public and are not subject to title 38, chapter 3, article 3.1 if the team is reviewing individual child fatality cases or cases of maternal fatalities associated with pregnancy. All other team meetings are open to the public.

H. A person who violates the confidentiality requirements of this section is guilty of a class 2 misdemeanor.

Last Updated 8.22.19

MMRIA

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM 1

REVIEW DATE

RECORD ID #

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.
- ☐ **NOT PREGNANCY-RELATED OR -ASSOCIATED**
  (i.e. woman was not pregnant within one year of her death)
- ☐ **UNABLE TO DETERMINE IF PREGNANCY-RELATED OR -ASSOCIATED**

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

- ☐ **COMPLETE**
  All records necessary for adequate review of the case were available
- ☐ **MOSTLY COMPLETE**
  Minor gaps (i.e. information that would have been beneficial but was not essential to the review of the case)
- ☐ **SOMEWHAT COMPLETE**
  Major gaps (i.e. information that would have been crucial to the review of the case)
- ☐ **NOT COMPLETE**
  Minimal records available for review (i.e. death certificate and no additional records)
- ☐ **N/A**

DOES COMMITTEE AGREE WITH CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? ☐ **YES** ☐ **NO**

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	
OTHER SIGNIFICANT	

IF PREGNANCY-RELATED, **COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH**
Refer to attached page for PMSS-MM cause of death list. If more than one is selected, list in order of importance beginning with the most compelling (1-2; no more than 2 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** ☐ **NO**

WAS THIS DEATH A **HOMICIDE?** ☐ **YES** ☐ **NO**

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:**
- ☐ **UNKNOWN**

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

- ☐ **NO RELATIONSHIP**
- ☐ **PARTNER**
- ☐ **EX-PARTNER**
- ☐ **OTHER RELATIVE**
- ☐ **OTHER ACQUAINTANCE**
- ☐ **OTHER, SPECIFY:**
- ☐ **N/A**
- ☐ **UNKNOWN**

MMRIA

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM 2

COMMITTEE DETERMINATION OF PREVENTABILITY

A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, community, provider, facility, and/or systems factors.

WAS THIS DEATH **PREVENTABLE?** ☐ YES ☐ NO

CHANCE TO ALTER OUTCOME? ☐ GOOD CHANCE ☐ SOME CHANCE ☐ NO CHANCE ☐ UNABLE TO DETERMINE

CRITICAL FACTORS WORKSHEET

What were the critical factors that contributed to this death? Multiple class categories may be assigned to each critical factor.

RECOMMENDATIONS OF THE COMMITTEE

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

CRITICAL FACTOR	CLASS CATEGORY AND DESCRIPTION OF ISSUE	RECOMMENDATIONS OF THE COMMITTEE	LEVEL OF PREVENTION (SELECT FROM MENU BELOW)	LEVEL OF IMPACT (SELECT FROM MENU BELOW)
PATIENT/FAMILY				
COMMUNITY				
PROVIDER				
FACILITY				
SYSTEM				

CLASS CATEGORY KEY (DEFINITIONS ON PAGE 4)

- Delay
- Adherence
- Knowledge
- Cultural / religious
- Environmental
- Violence
- Mental Health
- Substance Abuse
- Chronic Disease
- Childhood abuse / trauma
- Access / financial
- Unstable housing`
- Social Support / isolation
- Equipment / technology
- Policies / procedures
- Communication
- Continuity of care / care coordination
- Clinical skill / quality of care
- Outreach
- Enforcement
- Referral
- Assessment
- Legal
- Other

PREVENTION

- **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 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 through obstetrics (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/ post-partum 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** Post-partum genital tract (e.g. of the uterus/ pelvis/perineum/necrotizing fasciitis)
- ☐ **20.2** Sepsis/septic shock
- ☐ **20.4** Chorioamnionitis/antepartum infection
- ☐ **20.5** 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** Pre-eclampsia
- ☐ **50** Eclampsia
- ☐ **60** Chronic hypertension with superimposed preeclampsia
- ☐ **70** Anesthesia complications
- ☐ **80** Cardiomyopathy
- ☐ **80.1** Post-partum/peripartum cardiomyopathy
- ☐ **80.2** Hypertrophic cardiomyopathy
- ☐ **80.9** Other cardiomyopathy/NOS
- ☐ **82** Hematologic
- ☐ **82.1** Sickle cell anemia
- ☐ **82.9** Other hematologic conditions including thrombophilias/TTP/HUS/NOS
- ☐ **83** Collagen vascular/autoimmune diseases
- ☐ **83.1** Systemic lupus erythematosis (SLE)
- ☐ **83.9** Other collagen vascular diseases/NOS
- ☐ **85** Conditions unique to pregnancy (e.g. gestational diabetes, hyperemesis, liver disease of pregnancy)
- ☐ **88** Injury
- ☐ **88.1** Intentional (homicide)
- ☐ **88.2** Unintentional
- ☐ **88.9** Unknown/NOS
- ☐ **89** Cancer
- ☐ **89.1** Gestational trophoblastic disease (GTN)
- ☐ **89.3** Malignant melanoma
- ☐ **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
- ☐ **90.4** Vascular aneurysm/dissection
- ☐ **90.5** Hypertensive cardiovascular disease
- ☐ **90.6** Marfan's syndrome
- ☐ **90.7** Conduction defects/arrhythmias
- ☐ **90.8** Vascular malformations outside head and coronary arteries
- ☐ **90.9** Other cardiovascular disease, including CHF, cardiomegaly, cardiac hypertrophy, cardiac fibrosis, nonacute myocarditis/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
- ☐ **92.9** Other neurologic diseases/NOS
- ☐ **93** Renal disease
- ☐ **93.1** Chronic renal failure/End-stage renal disease (ESRD)
- ☐ **93.9** Other renal disease/NOS
- ☐ **95** Cerebrovascular accident (hemorrhage/ thrombosis/aneurysm/ malformation) not secondary to hypertensive disease
- ☐ **96** Metabolic/endocrine
- ☐ **96.1** Obesity
- ☐ **96.2** Diabetes mellitus
- ☐ **96.9** 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
- ☐ **999** Unknown COD

CLASS DESCRIPTIONS

DELAY OR FAILURE TO SEEK CARE

The woman was delayed in seeking or did not access care, treatment or follow-up care/actions (e.g. missed appointment and did not reschedule).

ADHERENCE WITH MEDICAL RECOMMENDATIONS

The woman did not accept medical advice (e.g. refused treatment for religious or other reasons or left the hospital against medical advice).

KNOWLEDGE - LACK OF KNOWLEDGE REGARDING IMPORTANCE OF EVENT OR OF TREATMENT OR FOLLOW-UP

The woman 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 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 terrain (e.g. the advent of a sudden storm leads to a motor vehicle accident)

VIOLENCE AND INTIMATE PARTNER VIOLENCE (IPV)

Physical or emotional abuse other than that perpetrated by intimate partner (eg: family member or stranger) IPV: Physical or emotional abuse perpetrated by the woman's current or former intimate partner

MENTAL HEALTH

The woman carried a diagnosis of a psychiatric disorder. This includes postpartum depression

SUBSTANCE USE –ALCOHOL, ILLICIT DRUGS, PRESCRIPTION ABUSE

Woman's substance abuse directly compromised woman's health status (e.g. acute methamphetamine intoxication exacerbated pregnancy-induced hypertension or woman was more vulnerable to infections or medical conditions) Instances of differential treatment by healthcare professionals or facilities (e.g. clinician bias/judgment affected treatment or how teams responded to woman's substance abuse) should be appropriately noted in one of the clinical factors in the description of the issue.

SUBSTANCE USE - TOBACCO

Woman's use of tobacco directly compromised the woman'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 condition(s) (e.g. obesity, cardiovascular disease or diabetes)

CHILDHOOD SEXUAL ABUSE / TRAUMA

Woman experienced rape, molestation, or other sexual exploitation during childhood plus persuasion, inducement or coercion of a child to engage in sexually explicit conduct. Or woman experienced physical or emotional abuse or violence other than that related to sexual abuse during childhood.

UNINSURED/LACK OF ACCESS OR FINANCIAL RESOURCES

Lack or loss of health care insurance or other financial duress that 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) Barriers to accessing care: Insurance, provider shortage, transportation; System issues as opposed to woman's noncompliance led to lack of care. Examples include lack of insurance, non-eligibility, a provider shortage in woman's geographical area, or lack of public transportation

UNSTABLE HOUSING

Woman lived "on the street" or in a homeless shelter OR lived in transitional or temporary circumstances with family or friends.

SOCIAL SUPPORT/ISOLATION - LACK OF FAMILY/FRIEND SUPPORT SYSTEM

Social support from family, partner, or friends was lacking, inadequate and/or dysfunctional (e.g. domestic violence, no one to rely on to ensure appointments were kept).

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 health care facilities or units, (e.g. records not available between inpatient to outpatient or among units within the hospital, such as Emergency Department and Labor and Delivery)

LACK OF **CONTINUITY OF CARE**

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

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/ organizations 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.

FAILURE TO **REFER** OR SEEK 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 were not 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

Appendix E. Contributing Facilities in the Hospital Discharge Database

Inpatient Records in Hospital Discharge Database, by Facility, 2016-2018

Facility Name	City	County	excluded / withheld
REMUDA RANCH CENTER FOR ANOREXIA AND BULEMIA	Wickenburg	Maricopa	
SAGE MEMORIAL HOSPITAL	Ganado	Apache	
WHITE MOUNTAIN REGIONAL MEDICAL CENTER	Springerville	Apache	
BENSON HOSPITAL	Benson	Cochise	
COPPER QUEEN COMMUNITY HOSPITAL	Bisbee	Cochise	
NORTHERN COCHISE COMMUNITY HOSPITAL	Willcox	Cochise	
CANYON VISTA MEDICAL CENTER	Sierra Vista	Cochise	2017 Q3-4
FLAGSTAFF MEDICAL CENTER	Flagstaff	Coconino	2017 Q1-4
BANNER PAGE HOSPITAL	Page	Coconino	
BANNER PAYSON MEDICAL CENTER	Payson	Gila	
COBRE VALLEY REGIONAL MEDICAL CENTER	Globe	Gila	
MOUNT GRAHAM REGIONAL MEDICAL CENTER	Safford	Graham	
LA PAZ REGIONAL HOSPITAL	Parker	La Paz	
ABRAZO ARROWHEAD CAMPUS	Glendale	Maricopa	
BANNER BEHAVIORAL HEALTH HOSPITAL	Scottsdale	Maricopa	
BANNER DESERT MEDICAL CENTER	Mesa	Maricopa	
BANNER DEL E WEBB MEDICAL CENTER	Sun City West	Maricopa	
BANNER UNIVERSITY MEDICAL CENTER PHOENIX CAMPUS	Phoenix	Maricopa	
JOHN C LINCOLN MEDICAL CENTER	Phoenix	Maricopa	
MARICOPA MEDICAL CENTER	Phoenix	Maricopa	
ABRAZO MARYVALE CAMPUS (CLOSED 12/18/17)	Phoenix	Maricopa	
HEALTHSOUTH SCOTTSDALE REHABILITATION HOSPITAL	Scottsdale	Maricopa	
ABRAZO CENTRAL CAMPUS	Phoenix	Maricopa	
HONORHEALTH DEER VALLEY MEDICAL CENTER	Phoenix	Maricopa	
ST LUKE'S BEHAVIORAL HOSPITAL	Phoenix	Maricopa	
ST LUKE'S MEDICAL CENTER	Phoenix	Maricopa	2017 Q3-4
SCOTTSDALE OSBORN MEDICAL CENTER	Scottsdale	Maricopa	
SCOTTSDALE SHEA MEDICAL CENTER	Scottsdale	Maricopa	
TEMPE ST LUKE'S HOSPITAL	Tempe	Maricopa	2017 Q3-4
BANNER THUNDERBIRD MEDICAL CENTER	Glendale	Maricopa	
BANNER BAYWOOD MEDICAL CENTER	Mesa	Maricopa	
HEALTHSOUTH VALLEY OF THE SUN REHAB	Glendale	Maricopa	
BANNER BOSWELL MEDICAL CENTER	Sun City	Maricopa	
WESTERN ARIZONA REGIONAL MEDICAL CENTER	Bullhead City	Mohave	2017Q1-2018Q2
HAVASU REGIONAL MEDICAL CENTER	Lake Havasu C	Mohave	
KINGMAN REGIONAL MEDICAL CENTER	Kingman	Mohave	
SUMMIT HEALTHCARE REGIONAL MEDICAL CENTER	Show Low	Navajo	
LITTLE COLORADO MEDICAL CENTER	Winslow	Navajo	
NORTHWEST MEDICAL CENTER	Tucson	Pima	
ST JOSEPH'S HOSPITAL (Tucson)	Tucson	Pima	
ST MARY'S HOSPITAL	Tucson	Pima	
TUCSON MEDICAL CENTER	Tucson	Pima	
BANNER UNVERSITY MEDICAL CENTER TUCSON CAMPUS	Tucson	Pima	
BANNER CASA GRANDE MEDICAL CENTER	Casa Grande	Pinal	
VERDE VALLEY MEDICAL CENTER	Cottonwood	Yavapai	2017 Q1-4
YAVAPAI REGIONAL MEDICAL CENTER	Prescott	Yavapai	
YUMA REGIONAL MEDICAL CENTER	Yuma	Yuma	
KINDRED / CURAHEALTH HOSPITAL - PHOENIX (CLOSED 10/14/17)	Phoenix	Maricopa	
HEALTHSOUTH REHAB INSTITUTE OF TUCSON [2650 North Wyatt Dr]	Tucson	Pima	
HOLY CROSS HOSPITAL	Nogales	Santa Cruz	
HEALTHSOUTH REHAB. HOSPITAL OF SOUTHERN AZ [1921 W. Hospital Dr]	Tucson	Pima	
LOS NINOS HOSPITAL (CLOSED 9/30/17)	Phoenix	Maricopa	
SELECT SPECIALTY HOSPITAL - PHOENIX [350 W. Thomas]	Phoenix	Maricopa	
KINDRED / CURAHEALTH HOSPITAL - TUCSON	Tucson	Pima	
GUIDANCE CENTER (THE)	Flagstaff	Coconino	
CHG HOSPITAL OF TUCSON	Tucson	Pima	
ABRAZO ARIZONA HEART HOSPITAL	Phoenix	Maricopa	
MAYO CLINIC HOSPITAL	Phoenix	Maricopa	
SIERRA TUCSON	Tucson	Pima	
SONORA BEHAVIORAL HEALTH HOSPITAL	Tucson	Pima	
CORE INSTITUTE SPECIALTY HOSPITAL (THE)	Phoenix	Maricopa	
SELECT SPECIALTY HOSPITAL - SCOTTSDALE (closed 8/17/16)	Scottsdale	Maricopa	
CHANDLER REGIONAL MEDICAL CENTER	Chandler	Maricopa	

Inpatient Records in Hospital Discharge Database, by Facility, 2016-2018

Facility Name	City	County	excluded / withheld
ST JOSEPH'S HOSPITAL AND MEDICAL CENTER	Phoenix	Maricopa	
ABRAZO SCOTTSDALE CAMPUS	Phoenix	Maricopa	
SELECT SPECIALTY HOSPITAL - PHOENIX DOWNTOWN [1012 E. Willetta]	Phoenix	Maricopa	
BANNER HEART HOSPITAL	Mesa	Maricopa	
PHOENIX CHILDRENS HOSPITAL	Phoenix	Maricopa	
HAVEN SENIOR HORIZONS / HAVEN BEHAVIORAL HOSPITAL OF PHOENIX	Phoenix	Maricopa	
WICKENBURG COMMUNITY HOSPITAL	Wickenburg	Maricopa	
ARIZONA SPINE AND JOINT HOSPITAL	Mesa	Maricopa	
YUMA REHABILITATION HOSPITAL	Yuma	Yuma	
GREENBAUM SPECIALTY SURGICAL HOSPITAL	Scottsdale	Maricopa	
PROMISE HOSPITAL OF PHOENIX	Mesa	Maricopa	
ABRAZO WEST CAMPUS	Goodyear	Maricopa	
ARIZONA ORTHOPEDIC AND SURGICAL SPECIALTY HOSPITAL	Chandler	Maricopa	
BANNER UNIVERSITY MEDICAL CENTER SOUTH CAMPUS	Tucson	Pima	
BANNER ESTRELLA MEDICAL CENTER	Phoenix	Maricopa	
ORO VALLEY HOSPITAL	Oro Valley	Pima	
GILBERT HOSPITAL (CLOSED 6/18/18)	Higley	Maricopa	
VALLEY VIEW MEDICAL CENTER	Fort Mohave	Mohave	
YAVAPAI REGIONAL MEDICAL CENTER EAST	Prescott Valley	Yavapai	
MOUNTAIN VALLEY REGIONAL REHABILITATION HOSPITAL	Prescott Valley	Yavapai	
AURORA BEHAVIORAL HEALTH SYSTEM	Glendale	Maricopa	
MERCY GILBERT MEDICAL CENTER	Gilbert	Maricopa	
MOUNTAIN VISTA MEDICAL CENTER	Mesa	Maricopa	
SCOTTSDALE THOMPSON PEAK MEDICAL CENTER	Scottsdale	Maricopa	
BANNER GATEWAY MEDICAL CENTER	Gilbert	Maricopa	
KINDRED / CURAHEALTH HOSPITAL - NORTHWEST PHOENIX	Glendale	Maricopa	
WINDHAVEN PSYCHIATRIC HOSPITAL	Prescott Valley	Yavapai	
WESTERN REGIONAL MEDICAL CENTER CANCER HOSPITAL	Goodyear	Maricopa	
CHANGEPOINT PSYCHIATRIC HOSPITAL	Lakeside	Navajo	
HEALTHSOUTH EAST VALLEY REHABILITATION HOSPITAL	Mesa	Maricopa	
BANNER GOLDFIELD MEDICAL CENTER	Apache Junctio	Pinal	
AURORA BEHAVIORAL HEALTHCARE - TEMPE	Tempe	Maricopa	
VALLEY HOSPITAL	Phoenix	Maricopa	
BANNER IRONWOOD MEDICAL CENTER	San Tan Valley	Pinal	
OASIS HOSPITAL	Phoenix	Maricopa	
SCOTTSDALE LIBERTY HOSPITAL (was FREEDOM PAIN HOSPITAL)	Scottsdale	Maricopa	
FLORENCE HOSPITAL AT ANTHEM (CLOSED 6/18/18)	Florence	Pinal	
HONORHEALTH REHABILITATION HOSPITAL	Scottsdale	Maricopa	
KINGMAN RMC - HUALAPAI MOUNTAIN CAMPUS	Kingman	Mohave	
ST JOSEPH'S WESTGATE MEDICAL CENTER	Glendale	Maricopa	
OASIS BEHAVIORAL HEALTH HOSPITAL	Chandler	Maricopa	
PALO VERDE BEHAVIORAL HEALTH	Tucson	Pima	
QUAIL RUN BEHAVIORAL HEALTH	Phoenix	Maricopa	
PHOENIX CHILDRENS HOSPITAL - MERCY GILBERT MEDICAL CENTER	Gilbert	Maricopa	
DIGNITY HEALTH - ARIZONA GENERAL HOSPITAL	Laveen	Maricopa	
TMC - GEROPSYCHIATRIC CENTER AT HANDMAKER	Tucson	Pima	
GREEN VALLEY HOSPITAL / SANTA CRUZ VALLEY REGIONAL HOSPITAL	Green Valley	Pima	
HACIENDA CHILDREN'S HOSPITAL	Mesa	Maricopa	
COBALT REHABILITATION HOSPITAL (opened 01/13/16)	Surprise	Maricopa	
CORNERSTONE BEHAVIORAL HEALTH EL DORADO (opened 11/01/16)	Tucson	Pima	
COPPER SPRINGS (opened 05/05/16)	Avondale	Maricopa	
DIGNITY HEALTH EAST VALLEY REHABILITATION HOSPITAL (opened 10/13/16)	Chandler	Maricopa	
DIGNITY HEALTH - ARIZONA GENERAL HOSPITAL - EAST MESA (OPENED 11/8/18)			
REHABILITATION HOSPITAL OF NORTHERN ARIZONA (OPENED 2/23/18)			

Appendix F. Arizona Senate Bill 1040

Senate Engrossed

State of Arizona
Senate
Fifty-fourth Legislature
First Regular Session
2019

SENATE BILL 1040

AN ACT

ESTABLISHING THE ADVISORY COMMITTEE ON MATERNAL FATALITIES AND MORBIDITY.

(TEXT OF BILL BEGINS ON NEXT PAGE)

- i -

Be it enacted by the Legislature of the State of Arizona:

Section 1. Advisory committee on maternal fatalities and morbidity; membership; report; delayed repeal

A. The advisory committee on maternal fatalities and morbidity is established to recommend improvements to information collection concerning the incidence and causes of maternal fatalities and severe maternal morbidity. The director of the department of health services shall appoint the members of the advisory committee. One of the members of the advisory committee shall be from a county with a population of less than five hundred thousand. The director or the director's designee shall serve as chairperson of the committee.

B. The advisory committee consists of the following members:

1. A representative of a contractor from each geographic service area designated by the Arizona health care cost containment system.

2. A representative of the Arizona health care cost containment system.

3. A representative of Indian health services.

4. Three obstetricians, of which at least two are maternal fetal medicine specialists, who are licensed pursuant to title 32, chapter 13 or 17, Arizona Revised Statutes.

5. A certified nurse midwife who is certified pursuant to title 32, chapter 15, Arizona Revised Statutes.

6. Two representatives of nonprofit organizations that provide education, services or research related to maternal fatalities and morbidity.

7. A representative of this state's health information organization.

8. A representative of a public health organization.

9. Two representatives of organizations that represent hospitals in this state.

C. On or before December 31, 2019, the advisory committee shall submit to the chairpersons of the health and human services committees of the house of representatives and the senate, or their successor committees, a report with recommendations concerning improving information collection on the incidence and causes of maternal fatalities and severe maternal morbidity.

D. This section is repealed on July 1, 2020.

Sec. 2. Department of health services; report; delayed repeal

A. On or before December 31, 2020, the department of health services shall submit a report to the governor, the speaker of the house of representatives and the president of the senate, and shall provide a copy to the secretary of state, on the incidence and causes of maternal

fatalities and morbidity that includes all readily available data through the end of 2019.

B. This section is repealed on July 1, 2021.

Sec. 3. Emergency

This act is an emergency measure that is necessary to preserve the public peace, health or safety and is operative immediately as provided by law.

Appendix G. Online Application Form for Committee Membership

Maternal Fatalities and Morbidity

Application for Participation in the Advisory Committee on Maternal Fatalities and Morbidity

On April 29, 2019, Governor Ducey signed Senate Bill 1040 establishing the Advisory Committee on Maternal Fatalities and Morbidity. This Act identifies the Arizona Department of Health Services' Director or Director's designee as the Chairperson of the Committee and establishes the requirements for membership. All members of the committee will be appointed by the Arizona Department of Health Services' Director. The purpose of this Committee is to recommend improvements to information collection concerning the incidence and causes of maternal fatalities and severe maternal morbidity.

The Advisory Committee will hold a public hearing in fall 2019 to receive public input on the recommended improvements and submit a report with recommendations to the chairpersons of the health and human services committees of the house of representatives and the senate, or their successor committees on or before December 31, 2019. We ask individuals that are interested in participating as a member of the Advisory Committee to complete the form below and attach an updated resume/CV. Submissions will be accepted up until **5:00pm on Friday, June 28, 2019** ADHS will contact the selected individuals by July 19, 2019.

Any questions can be sent to maternalhealth@azdhs.gov.

Name *

First Last

Address *

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

United States

Country

Preferred Contact Phone Number*

– ### –

Email *

Occupation *

Affiliated Business/Organization Name*

Affilitated Business/Organization Address*

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

United States

Country

1. Please describe your interest in becoming a member of this committee (limit 100 words)*:

Maximum of **100** words. ***Currently Used:0 words.***

2. Please list your education, current employment and licenses (if applicable)*:

3. Please list associations and memberships with professional organizations*:

Committee Position Representation: (select the one that best describes your profession or organization)
ADHS is in contact with these entities to identify a representative to participate in the committee.

- ☐ A Health Plan representative from each geographic service area (North, Central, and South) designated by the Arizona Health Care Containment System(3)
- ☐ Arizona Health Care Containment System*
- ☐ Indian Health Services (1)
- ☐ Obstetrician licensed pursuant to title 32, chapter 13 or 17, Arizona Revised Statutes. (1)
- ☐ Maternal Fetal Medicine Specialists licensed pursuant to title 32, chapter 13 or 17, Arizona Revised Statutes. (2)
- ☐ Certified Nurse Midwife, licensed pursuant to title 32, chapter 15, Arizona Revised Statutes (1)
- ☐ Nonprofit organization that provide education, services or research related to maternal fatalities and morbidity (2)
- ☐ State Health Information Organization* (1)
- ☐ Public Health Organization (1)
- ☐ Hospital Organization (2)

Please confirm the following by signing the statement below:I understand the roles and responsibilities of the Advisory Committee as described in the statute. All of the information that I've provided is an accurate reflection of my experience and credentials.

Digital Signature *

Date *

/ /

MM DD YYYY

Upload a resume/cv *

Choose File No file chosen

Appendix H. Links to Maternal Fatalities and Morbidities Advisory Committee Meeting Agenda, Minutes, and Handouts

All resources can be found on our website or by visiting azdhs.gov/maternalhealth and selecting "Advisory Committee." Additional requests can be sent to maternalhealth@azdhs.gov.

1. Maternal Fatalities and Morbidities Advisory Committee Meeting #1, August 30, 2019
    - Agenda
    - Approved Minutes
    - Presentation & Handouts
2. Maternal Fatalities and Morbidities Advisory Committee Meeting #2, September 16, 2019
    - Agenda
    - Approved Minutes
    - Presentation & Handouts
3. Maternal Fatalities and Morbidities Advisory Committee Meeting #3, October 17, 2019
    - Agenda
    - Approved Minutes
    - Presentation & Handouts
4. Public Hearing Meeting, October 30, 2019
    - Agenda
    - Approved Minutes
    - Presentation & Handouts
    - Draft Recommendations
5. Maternal Fatalities and Morbidities Advisory Committee Meeting #4, November 14, 2019
    - Agenda
    - Approved Minutes
    - Presentation & Handouts
6. Maternal Fatalities and Morbidities Advisory Committee Meeting #5, December 5, 2019
    - Agenda
    - Approved Minutes