

Michigan Maternal Mortality Surveillance

Translating Recommendations into Action

Maternal Mortality Surveillance in Michigan

The death of a woman during pregnancy, at delivery, or within a year after the end of pregnancy is a tragedy. Sadly, approximately 80 women die each year in Michigan. As the public health authority with statewide responsibilities, the Michigan Department of Health and Human Services (MDHHS) investigates maternal deaths via the Michigan Maternal Mortality Surveillance (MMMS) program.

Michigan Maternal Mortality Review Committee (MMRC)

The MMMS program works in partnership with a multidisciplinary Maternal Mortality Review Committee (MMRC) to review cases of maternal death, identify contributing factors present in each death, and identify both medical and nonmedical interventions to improve systems of care, social services, and community support.

Michigan Maternal Mortality Surveillance Recommendations Workgroup

The Michigan Maternal Mortality Surveillance Recommendations Workgroup was assembled in June 2022 and the primary focus of this workgroup is to translate MMRC recommendations into quality improvement actions at the provider, facility, system, community and patient levels.

Through strategic planning, the workgroup identified three priority recommendations for implementation which include:

1. The committee and MI-AIM staff will work toward full implementation of the AIM safety bundles: Obstetric Hemorrhage, Severe Hypertension in Pregnancy; Maternal Sepsis, while working to adopt & implement the Safety Bundles:
 - a) Safe Reduction of Primary Cesarean Birth (+AIM)
 - b) Cardiac Conditions in Obstetric Care
 - c) Care for Pregnant and Postpartum People with Substance Use Disorder
 - d) Perinatal Mental Health Conditions
 - e) Postpartum Discharge transition
2. Implement a comprehensive state-wide education initiative to address pregnancy and its intersection with mental health, sexual abuse, intimate partner violence (IPV), trauma, substance use, and chronic health conditions, as well as its increased occurrence in populations of birthing persons who are most vulnerable and marginalized.
3. Offer birthing persons wrap-around services to help align systems of care and transform every interaction into a potential opportunity for change.

The MMMS Logic Model shown below is a visual representation of the activities and intended outcomes of workgroup efforts.

Michigan Maternal Mortality Surveillance (MMMS) Recommendation Workgroup – Logic Models

Recommendation #1: The committee and Michigan Alliance for Innovation on Maternal Health (MI AIM) staff will work toward full implementation of the MI AIM patient safety bundles: Obstetric Hemorrhage, Severe Hypertension in Pregnancy, and Maternal Sepsis while working to adopt & implement the additional patient safety bundles. ****Note: italicized and bold font indicate activities MDHHS is acting upon.***

Inputs	Activities	Outputs	Outcomes – Impact		
			Short-Term	Intermediate	Long-Term
Michigan Health & Hospital Association (MHA) Obstetrics Initiative (OBI) Regional Perinatal Quality Collaboratives (RPQCs) Medicaid Michigan Alliance for Innovation on Maternal Health (MI AIM) MMMS Recommendation Workgroup	<ol style="list-style-type: none"> <i>Evaluate what barriers, if any, exist for collaborations between MI AIM, OBI, RPQCs, etc.</i> <i>Request a presentation for the MMMS Recommendation Work Group on the existing processes focused on bundle implementation.</i> <i>Request a meeting with Medicaid to increase understanding of pay for performance projects, the rebid process, and potentials for financial incentives for participation in safety bundles.</i> <i>Conduct a survey to hospitals to understand barriers to bundle implementation.</i> Explore funding opportunities to support hospitals implementing safety bundles. 	<ol style="list-style-type: none"> Barriers identified for collaboration between MI AIM, OBI, RPQCs, etc. Presentation provided to MMMS Recommendation Work Group on bundle implementation. Meeting with Medicaid held. Survey to hospitals developed, administered, and results evaluated on barriers to bundle implementation. Evaluation of funding opportunities to support hospitals implementing bundles. Toolkit developed and distributed with trainings, 	Increase collaboration with MI AIM and other projects (OBI, RPQCs, etc.). Increase awareness of and the importance of the safety bundles with birthing hospitals.	Increase number of hospitals fully implementing the hemorrhage and hypertension safety bundles at gold levels.	Increase number of hospitals that are implementing the CMQCC Sepsis Safety Bundle. Increase number of hospitals implementing the AIM Health Equity bundle Improve birth outcomes. Decrease in maternal mortality and morbidity.

Hospitals		case vignettes, etc. on implicit bias.			
Community members	<p>6. Develop a resource document/toolkit with trainings, case vignettes, etc. on implicit bias developed and distributed.</p> <p>7. Identify which birthing hospitals are accredited by the Joint Commission and review for any statements/recommendations/etc. from the Joint Commission on safety bundles and distribute through MHA.</p> <p>8. Work with RPQCs to allow for MI AIM updates during meetings to enhance partnerships and coordination of work.</p> <p>9. Evaluate what barriers and supports are needed to have MI AIM members join RPQC meetings.</p> <p>10. Explore opportunities to collaborate with MI AIM on collecting stories to improve maternal outcomes.</p> <p>11. Provide MI AIM with entities that may be able to assist with data collection.</p>	<p>7. Review for existing recommendations/statements from Joint Commission on safely bundles. Distributed to MHA, if applicable.</p> <p>8. Meet with RPQC leadership to discuss potential for MI AIM updates along with barriers to having MI AIM staff join RPQC meetings.</p> <p>9. Meet with RPQC leadership to discuss potential for MI AIM updates along with barriers to having MI AIM staff join RPQC meetings.</p> <p>10. Meet with MI AIM staff to identify ways to collaborate to elevate stories.</p> <p>11. Identify unique partnerships for hospitals to asset with data collection.</p>			

Recommendation #2: Implement a comprehensive state-wide education initiative to address pregnancy and its intersection with mental health, sexual abuse, intimate partner violence (IPV), trauma, substance use, and chronic health conditions, as well as its increased occurrence in populations of birthing persons who are most vulnerable and marginalized. ****Note: italicized and bold font indicate activities MDHHS is acting upon.***

Inputs	Activities	Outputs	Outcomes – Impact		
			Short-Term	Intermediate	Long-Term
Michigan Primary Care Association (MPCA) Federally Qualified Health Centers (FQHCs) Maternal Infant Health Program (MIHP) Office of Recovery Oriented Systems of Care (OROSC) Overdose Fatality Review MC3 Perinatal Michigan Coalition to End Domestic and Sexual Violence (MCEDSV)	1. Request a meeting with MPCA to increase understanding of their work with FQHCs, FQHC reimbursement services, funding streams. 2. Connect the MCEDSV with MPCA to collaborate and share resources available for health centers. 3. Increase awareness of 211 and the resources available. 4. Increase awareness of	1. Meeting held with MPCA. 2. Connected MCEDSV with MPCA to identify ways to share resources and collaborate. 3. Information about 211 and resources distributed to partners, stakeholders, and general public through distribution channels. 4. Information and resources on the OROSC programs distributed	Increased provider awareness of MC3 perinatal. Increased quality collaboration with Medicaid covered home visiting programs.	Increased FQHCs that have integrated primary care services. Maternal Child Health (MCH) issues elevated to legislators.	Improve birth outcomes. Decrease maternal mortality and morbidity. Birthing people connected to services that intersect with pregnancy. Funding/infrastructure for resources/programs that support birthing people sustained and/or increased. Stigma around mental health, SUD, etc. reduced.

Community members/people with lived experience	OROSC programs that prioritize pregnant persons.	through communication channels.			
Community-Based Organizations (CBOs)	5. <i>Distribute MC3 resources through communications channels (social media, list serves, professional societies, etc.).</i>	5. MC3 resources distributed through communication channels.			
Foundations		6. Meeting held with MC3 Perinatal to see if they have stories, data, etc. to share.			
MMMS Recommendation Workgroup	6. <i>Request a meeting with MC3 Perinatal to explore if they have stories, data, etc. that can be shared.</i>	7. MC3 resources along with other counseling services collected and distributed to providers.			
	7. Share resources that providers can have in their offices/share with patients on MC3 Perinatal along with CBOs that provide free counselling and support.	8. Meeting with Medicaid held.			
	8. <i>Request a meeting with Medicaid covered home visiting</i>	9. One page informational sheets developed and distributed.			

	<p><i>programs to identify ways to collaborate along with if there is any maternal mortality data that would be beneficial to share.</i></p> <p>9. <i>Create a one-page informational sheet that lists causes of death due to mental health, IPV, substance use disorder (SUD), and Chronic Disease to promote prevention.</i></p>				
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Recommendation #3: Offer pregnant and parenting persons wrap-around services to help align systems of care and transform every interaction into an opportunity for change. ****Note: italicized and bold font indicate activities MDHHS is acting upon.***

Inputs	Activities	Outputs	Outcomes – Impact		
			Short-Term	Intermediate	Long-Term
Doula Networks Home Visiting Programs Michigan Health & Hospital Association (MHA) Medicaid Baby Courts Doula Prison Program Faith-Based Community	1. When available, promote the optional doula registry through networks. 2. <i>Meet with home visiting programs to hear about programs that serve any interested pregnant person or postpartum person.</i> 3. Develop a list of available services available to pregnant or postpartum persons to distribute to providers through MHA. 4. <i>Request a meeting with Medicaid to increase understanding of</i>	1. Doula registry promoted through networks and various communication channels. 2. Meeting(s) held with home visiting programs. 3. List of available resources to pregnant and postpartum persons developed and distributed through MHA. 4. Meeting held with Medicaid. 5. Informational sheet developed and distributed. 6. Information about the Respectful Care	This is already in-process: Advocate for reimbursement by Medicaid for doula support before, during and after pregnancies. Improved provider to patient/patient to provider communication as a result of an increase in pregnant and postpartum people being connected to doulas, community health workers (CHWs), family support professionals, and home visiting programs.	Encourage providers and hospital discharge planners to use doulas, community health workers, family support professionals and home visiting programs to improve access to care and provide peer support to pregnant and parenting women. Women need to be connected to family support programs/services (home visiting, doulas, CHWs, etc.) to facilitate communication between patient and provider to elevate the patients' voice/concerns.	Improved policies in criminal justice facilities for incarcerated pregnant and postpartum people having access to quality services including wrap around services.

	<p><i>pay for performance projects, the rebid process, and potentials for financial incentives for participation in safety bundles.</i></p> <p><i>5. Create a one-page informational sheet that lists causes of death due to mental health, IPV, SUD, and Chronic Disease to promote prevention along with vignettes to use for educational purposes.</i></p> <p><i>6. Promote the use of the AIM Respectful Care Bundle.</i></p> <p><i>7. Meet with staff from the Baby Courts, Prison Doula, and faith-based projects to learn about their efforts and</i></p>	<p>bundle distributed to networks and through various communication channels.</p> <p>7. Meetings held with staff from Baby Courts, Prison Doula, and faith-based projects.</p>			
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	<i>identify ways to partner.</i>				
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List of abbreviations – Michigan Maternal Mortality Surveillance Logic Models

Acronym	Definition
CBO	Community-Based Organizations
CHW	Community Health Worker
CMQCC	California Maternal Quality Care Collaborative
FQHC	Federally Qualified Health Centers
IPV	Intimate Partner Violence
MCEDSV	Michigan Coalition to End Domestic and Sexual Violence
MHA	Michigan Health & Hospital Association
MI AIM	Michigan Alliance for Innovation on Maternal Health
MIHP	Maternal Infant Health Program
MMMS	Michigan Maternal Mortality Surveillance
MPCA	Michigan Primary Care Association
OBI	Obstetrics Initiative
OROSC	Office of Recovery Oriented Systems of Care
RPQC	Regional Perinatal Quality Collaboratives
SUD	Substance Use Disorder