Maternal Health Leadership Council Meeting

May 25, 2020
3:30 - 5:00 PM

Agenda

3:30 – 3:40 **Roll call, review agenda and approve minutes**

3:40 – 4:00 **Maternal health partner presentation – Strengthening Families Initiative**
Nicole Campbell, Pregnancy and Postpartum Program Manager
Prevention Bureau – Addictive and Mental Disorders Division, DPHHS

4:00 – 4:10 **Q & A Opportunity with guest presenter**

4:10 – 4:35 **Montana Maternal Health: By the Numbers**
Annie Glover, PhD, MPH, MPA presents on severe maternal morbidity in Montana

4:35 – 4:45 **Q & A Opportunity with Guest Presenter**

4:45 – 4:50 **Updates from DPHHS**

- Perinatal Quality Collaborative (PQC)
- Alliance for Innovation in Maternal Health (AIM)
- Maternal Mortality Review Committee (MMRC)
- Public education campaign

4:50 – 5:00 **Public comment/roundtable questions and discussion**

Meeting materials

- Agenda
- April draft minutes
- Slides on Strengthening Families Initiative
- Slides on *Montana Maternal Health: By the Numbers*
- Draft PQC charter
- List of MMRC members recommended to division leadership

Maternal Health Leadership Council

Meeting Minutes: April 27, 2021: 3:30-5:00 PM: Location: Zoom only

Members Present

Chair, Dr. Tersh McCracken, MOMS Medical Director & Ob-Gyn at Billings Clinic
Tami Schoen, RN, BAN, WIC/CPA at Hill County Public Health Department
Dina Kuchynka, RN, BSN Maternal & Newborn Health Manager at SCL Health – Holy Rosary
Janie Quilici, Perinatal Behavioral Health Counselor at Community Physicians Group
Olivia Riutta, Outreach and Engagement Manager at MPCA
Lisa Troyer, Wellness Consultant at PacificSource
Mary LeMieux, Member Health Management Bureau Chief at Medicaid, and Perinatal Behavioral
Dr. Jean-Pierre Pujol, Medical Director at Blue Cross Blue Shield of Montana
Brie MacLaurin, Executive Director of Healthy Mothers, Healthy Babies
Vicki Birkeland, Nursing Director, Women's Services at St. Vincent's Montana Perinatal Quality Collaborative
Dr. Christina Marchion, Family Medicine/OB at Central Montana Medical Center
Jennifer Wagner, Rural Hospital Improvement Coordinator at Montana Hospital Association
Ann Buss, Title V Director/Maternal & Child Health Supervisor at DPHHS
Jennifer Verhasselt, Senior Director of residential Services at Rimrock in Billings

Members Absent

Dr. Bardett Fausett, Maternal Fetal Medicine Specialist and President/Medical Director at Origin Health
Dr. Steve Williamson, Chief Medical Officer, Billings Area Indian Health Service
Judge Mary Jane Knisely, 13th District Court Judge, Felony Impaired Driving Court (IDC), CAMO Court (Veterans Treatment Court)
Dr. Drew Malany, Ob-Gyn at Women's Health Care Center, PLLC and Chair of Montana American College of Obstetrics & Gynecology (ACOG)
Jude McTaggart, Certified Nurse Midwife at Northeast Montana Health Services

Program Staff Present

Amanda Eby, MOMS Program Coordinator at DPHHS
Jamie Palagi, ECFSD Division Administrator at DPHHS
Stephanie Fitch, MOMS Grant Manager at Billings Clinic
Dr. Annie Glover, Lead evaluator and PI for MOMS at University of Montana
Carly Holman, Research Analyst with the Center for Children, Families, and Workforce Development
Kaitlin Fertaly, Evaluation Service Director at the University of Montana

Public Attendees

Shannon Hauck, RN, CLC-Nurse-Family Partnership Supervisor at Riverstone Health
Brianne Swift, Nurse for commercial prenatal program at Pacific source
Alex Ewing, Health Scientist at CDC
David Goodman, Team Lead for Maternal Mortality Prevention Team at CDC
Jenny Wilkers, ORISE Fellow at CDC
Doug Anderson, Program Manager at RiverStone Health for Family Health Services

Welcome and introductions

Dr. Tersh McCracken opened the meeting and lead roll call. Meeting minutes were approved.

Presentation on the Centers for Disease Control's Levels of Care Assessment Tool (CDC LOCATe)

Alex Ewing, health scientist, gave a presentation on the CDC levels of Care Assessment Tool (LOCATe). It is designed to help states create standardized assessments of levels of maternal and neonatal care. It is based on clinical guidelines, but it is not comprehensive assessment of all prenatal & maternal criteria. The first pilot was tested back in 2013. It has undergone improvements and updates since then. Twenty-one states including Puerto Rico have implemented (at least begun data collection) LOCATe. Once a state expresses their interest of implementing LOCATe, they will work on building support for participation from stakeholders, then collect data and analyze and share results.

Q & A opportunity with guest presenter

Dr. Tersh McCracken asked if Texas was using this tool. Ewing responded by saying that Texas is using a different model. He believes that the American Academy of Pediatrics (AAP) is coming in and doing assessments at the facilities (more in depth than LOCATe). Dr. Tersh McCracken mentioned that the council is going to be asked to consider a subcommittee to guide the implementation and asked what guidance would be needed. Preparation would be needed for facilities such as education on the tool and its use. Ewing recommended to identify one-point person to be in charge at each facility. CDC would send out information that is covered that the facilities would need to gather to fill it out the assessment.

Janie Quilici asked to explain the difference in the numbers between the self-report and LOCATe assessment since the tool is a self-assessment. Why are the numbers different, what does it mean? What does the difference mean? The difference is between what level a facility assumes they are before they actually complete the assessment. The differences could stem from a lack of familiarity with the guidelines because the guidelines change. It's been known to see a discrepancy when you look at the LOCATe criteria for the level that they self-assess as, they typically see that they meet most of them, but you will see a difference in one or two where they are not up to date with the guidelines that they suggest.

JP Pujol wanted to know if it was self-reported. Ewing confirmed that it is self-reported and that it is up to the hospital and facility to input data (trusting the hospital to use resources & capabilities correctly). Goodman mentioned that multiple people check responses. Overreporting is rare. The tool is not to be used for marketing and it isnot to be used for reimbursement. the tool is used to make improvements. Follow up question: How can this tool help? From the CDC website: "This tool can create opportunities for informed conversations among stakeholders who work in the area of risk-appropriate care. Examples of these stakeholders include state and local public health departments, state perinatal quality collaboratives (PQCs), hospital associations, and health care providers working in maternal and neonatal care. The results from CDC LOCATe^{SM} are a starting point for discussions about how states can improve health outcomes for women and infants."

VOTE: LOCATe implementation in MT

Janie Quilici - motion
Vicki Birkeland –seconded motion
Moved and Second - **council unanimously endorsed LOCATe tool**

Maternal Health Partner Presentation – Riverstone health Family Health Services

Doug Anderson, Program Manager at Riverstone health with Family Health Services and Shannon Hauck, Nurse, presented on Maternal Child Health Home Visiting. Anderson explained that they have three major programs: Nurse-Family Partnership, Parents as Teachers, and Maternal Child Health. The focus of the programs is prevention and relationship based. Anderson stated that the three programs are funded through DPHHS. Healthy Spark is a new project, but it hasn't officially launched yet. Vicki Birkeland is the principle investigator of the new project. Health Spark is federally funded and aims to provide support to women suffering from substance use disorders in the perinatal period

Q & A opportunity with guest presenter

Oliva Riutta asked how the services are layered? Anderson said that they encourage referrals. If they see someone struggling anywhere in the prenatal phase, they are asked to make a referral and then RiverStone Health will determine to correct placement. Anderson mentioned that they receive referrals from Child Protective Services (CPS), Hospitals, Providers, Daycares, and WIC. Collaboration is key.

Reports from subcommittees

Payer Subcommittee: The Payer Group did not meet this month and won't meet in May either but is looking to reconvene in June. MOMS staff will do some internal planning on payer data studies after exploring possibilities with Medicaid data.

Education Subcommittee: The group was put on pause for internal planning on how to best use the group. Number one priority is providing feedback on the public education campaign that is being administered by Windfall. Amanda Eby is currently working with the group to get feedback for the campaign. Any other education opportunities that may be pursued will be communicated over email. Eby will report back to the Maternal Health Leadership Council with updates on the campaign.

Updates from DPHHS

- **Perinatal Quality Collaborative(PQC)** - identified group of about twenty people to serve as an expert panel of clinical advisors to create technical content or provide feedback for toolkits to implement the AIM patient-safety bundles They will also serve as technical assistance "coaches" available to provide support to facilities or present as a speaker at learning sessions.
- **Alliance for Innovation on Maternal Health (AIM)** – UM is working to finalize the budget and contract for AIM soon and DPHHS (Amanda) is completing the first draft of the enrollment form for the Montana program manager to review by the end of May.
- **Maternal Mortality Review Committee (MMRC)** – Amanda thanked those who had submitted recommendations for people to serve on the committee. Since she was still receiving recommendations as late as yesterday, just today, a final list of recommendations was submitted to Division Administrator Jamie Palagi for consideration to appoint.
- **Maternal Mortality Review Information Application (MMRIA) User Meeting** – Some of the members of the council in attendance recently attended and Amanda asked for them to share their takeaway thoughts from the meeting. Attendees commented on the powerful information shared on health equity and implicit bias and the interesting perspective of the significance of storytelling to honor mothers' lives.
- **Public education campaign** – the Education Subcommittee is considering revised wording for taglines that accompany the art for the digital advertising and social media campaigns. The Media Campaign Notification Form is still awaiting approval form the Director's office before the campaign can launch.

Public comment/roundtable questions and discussion

No additional comments.

Pregnant and Post-Partum Women; SAMHSA Pilot Grant Project

Nikki Campbell MS CTRS
Program Manager
MT DPHHS - Prevention Bureau
Addictive and Mental Disorders Division

Project Objective

The Montana Department of Public Health and Human Services; Addictive and Mental Disorders Division (AMDD) proposes to enhance substance use disorder (SUD) and family strengthening services for pregnant and postpartum mothers experiencing SUD through the:

Strengthening Families Initiative (SFI)

SFI: Population and area of Focus

- SFI will support pregnant and postpartum women with SUD as a primary diagnosis and their families statewide in Montana.
- SFI will oversee the implementation of this work in collaboration with other DPHHS Divisions including the Child and Family Services Division (CFSD), the Early Childhood and Family Services Division (ECFSD), and Health Resources Division (HRD).

Overview

Montana's support for prenatal and postpartum women with substance use disorders and their families is guided by a shared vision for the future, a service system mission, and guiding principles.

VISION:

Healthy Children, Mothers, and Families

MISSION:

Implement and improve an appropriate statewide system of prevention, treatment, care, and rehabilitation for Montanans with mental disorders or addictions to drugs or alcohol.

Overview Cont'd

GUIDING PRINCIPLES:

1. Recovery is a reality. It can, will, and does happen.
2. We recognize and honor parents as the experts of their children.
3. We prioritize making changes in policies, programs, and funding that promote health equity for all Montanans.
4. We know treatment and recovery happen within a broader social, health, environmental, and cultural context. We recognize this and are committed to supporting women and their families across the social determinants of health.
5. We understand that there are many pathways to recovery and are dedicated to supporting person-centered SUD treatment and recovery.
6. We strive to innovate and grow, ensuring data and evidence drive our work.
7. We value collaborative partnerships and our work with community agencies to best support Montanans.
8. We administer programs with integrity and accountability.

Goals, Objectives, and Strategies

DPHHS' work to support prenatal and postpartum women with substance use disorders and their families is organized into five goals:

1. Equitable Access.
2. Coordination.
3. Workforce.
4. Engagement.
5. Sustainability.

Partners

florencecrittenton

mountain home

RIMROCK

eliminating racism
empowering women
ywca
helena

Partnership for Children

one HEALTH

PublicHealth IN THE 406

Objective of contractual partnerships

The six contracts under this initiative increases the state's capacity to:

- Provide a full continuum of care to this population by increasing the number and capacity of SUD providers
- Piloting two EBPs with similar approaches to treating pregnant/postpartum women for SUD and trauma
- Piloting Montana's first family-based recovery home which includes fathers as an integral and important part of the family system

GOLDEN GOAL:

This pilot project will be reviewed for potential expansion under Medicaid.

GOAL 1: Equitable Access

Pregnant and postpartum women with SUDs and their families equitably receive services and supports to meet their needs across the continuum of care.

- Montana is committed to enhancing its continuum of care to ensure all pregnant and postpartum women with SUDs and their families connect to effective services and supports.
- We work to promote health equity as a state and using data and targeted strategies to address disparities in access and outcomes related to race, ethnicity, tribal affiliation, income level, and geography.
- We are committed to meeting individuals and families where they are to enhance equitable access.

GOAL 2: Coordination

Programs and services are coordinated to provide seamless services, support quality improvement, and avoid duplication.

- Effective cross-program, cross-sector coordination supports improved access, individual and family navigation, provider communication, and outcomes for individuals and families.
- Montana has invested in integrated behavioral health for pregnant and postpartum women through the Meadowlark Initiative and care coordination across the social determinants of health through Meadowlark and other health, family stability, and early childhood projects.
- The Strengthening Families Initiative provides an opportunity to further enhance coordination with specialty SUD treatment and recovery services for pregnant and postpartum women and their families.

GOAL 3: Workforce

Montana has a confident and effective behavioral health workforce that supports the needs of pregnant and postpartum women with SUDs and their families.

- Our success is predicated on having a highly skilled and motivated workforce to build capacity and provide high quality services for women with SUDs and their families.
- Capacity building is focused on increasing the number and quality of behavioral health providers.
- The SFI project specifically addresses existing provider capacity gaps through increased workforce development to expand the number of Licensed Addiction Counselors (LACs), dually licensed mental health and SUD providers, and peer support specialists with specialized training to support pregnant and postpartum women with SUDs and their families.

GOAL 4: Engagement

Families are partners in creating safe, stable, and nurturing relationships and environments.

- We value the experience and voice of people with lived experience in developing, implementing, and evaluating our programs and service systems.
- Montana engages family members as partners and leaders in its efforts to ensure its programs are guided by the principles of inclusion and equity.

GOAL 5: Sustainability

Our policies and funding demonstrate our sustained commitment to supporting pregnant and postpartum women with SUDs and their families.

- The SFI project will enhance our continuum of care, ensuring pregnant and postpartum women with SUDs and their families receive the services and supports they need to thrive.
- We are dedicated to sustaining this work beyond the grant project.
  - Long Term Goal:
- We will work to increase public understanding and community engagement, and will shape our policy, procedure, and funding decisions to reflect our commitment.

PPW Strategic Plan 2020-2023

Montana PPW Strategic Plan 2021-03-30.pdf

Questions?

Thank you!

Nikki Campbell – PPW Program Manager

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ncampbell@mt.gov

MOMS

Montana Obstetrics & Maternal Support

Annie Glover, PhD, MPH, MPA

University of Montana

MOMS Research & Evaluation

Montana Maternal Health: By the Numbers

Learning Objectives

Understand	Understand how maternal mortality and morbidity are measured
Describe	Describe health equity and racial disparities in health
Assess	Assess burden of maternal morbidity and mortality for different groups

Table of Contents

Contextualizing Data

Behind the Numbers

Considerations for data interpretation

- Data illustrate patterns and trends in the population
  - We speak in averages; there are always exceptions, outliers, and extremes
- Avoid drawing individual-level conclusions from population-level data (ecological fallacy)
  - These data should inform policy, not individual clinical decisions
- Each of these numbers represent a real patient with a story, a family, and a community
- Data can describe that variations exist; it cannot fully explain why

Racial disparities are the most dramatic population-level factors in maternal health.

CDC recommends against treating race as a confounder to be controlled for in an analysis

- This can mask higher risks for racial minorities

Instead, stratify by racial categories

- Racism is the risk factor, not race[1]
- Race as a biological risk factor has long been disproven, but is still widely believed (e.g. firewater myth[2], thick skin myth[3])
- Race variable is a proxy measure for exposure to racism
- Racism acts through complex causal pathways, including interpersonal bias, institutional racism, structural racism, historical trauma[4]

How to proceed with data-driven discussions?

- Compare groups to focus resources and interventions, not to stigmatize or stereotype
- Honor the sacredness of motherhood…
  - Likewise, acknowledge the tragic history of motherhood in native communities in Montana
- Continue to study and report racial disparities to prevent invisibility of this public health crisis
- Remember that there is more variation within groups than between groups; treat patients as individuals

Sun Worship in Montana, Charlie Russell, 1907

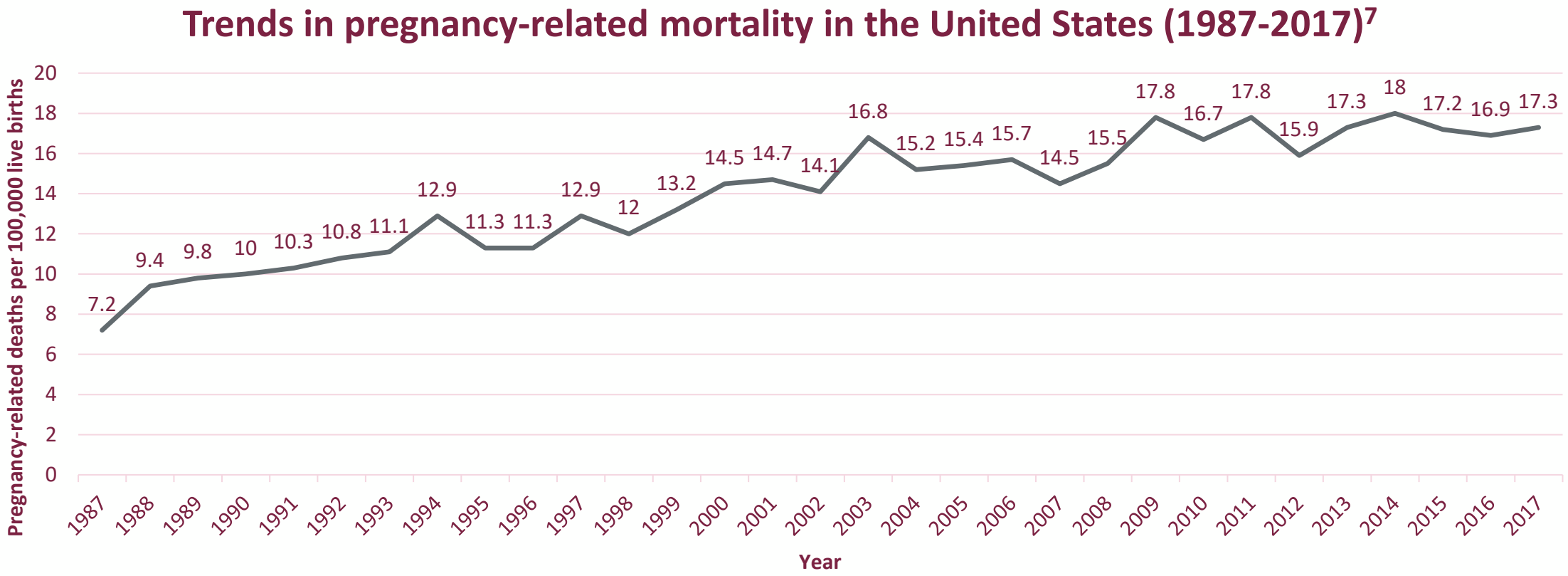
Maternal Mortality

Trends & Comparisons

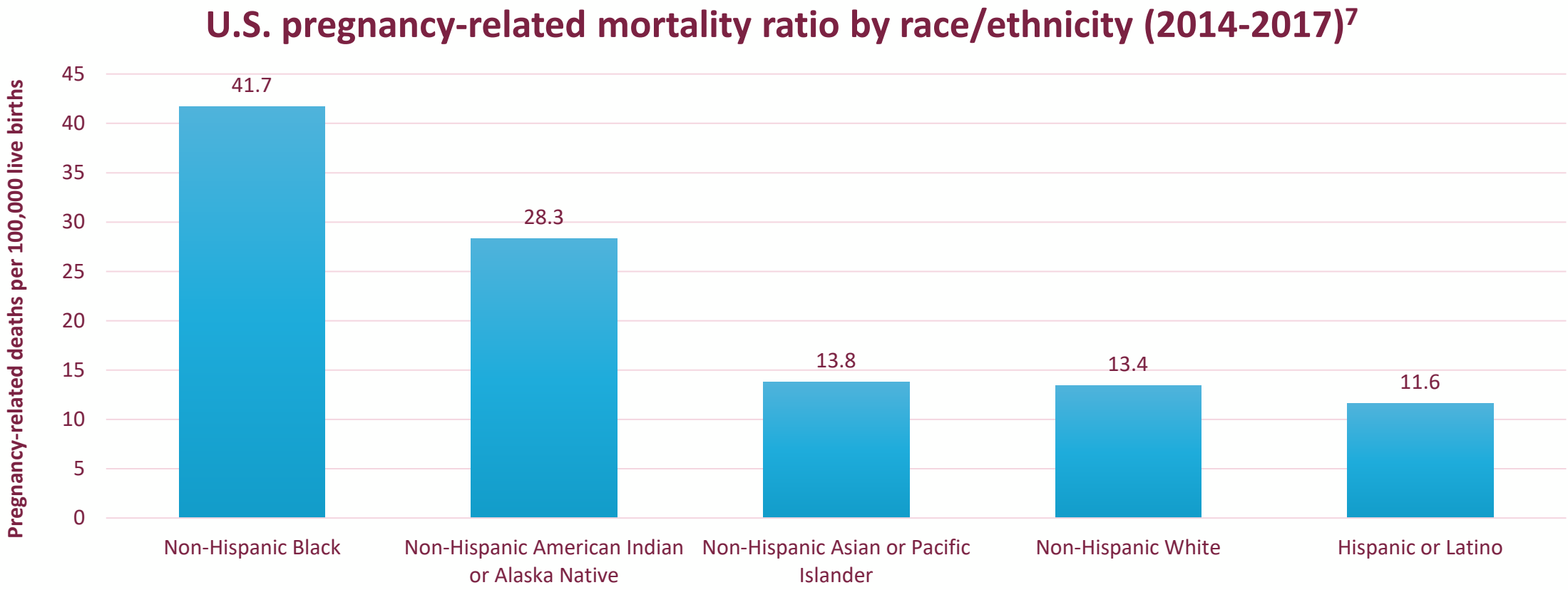
Maternal Mortality Measures

Pregnancy-related death	Pregnancy-related mortality ratio	Maternal death	Maternal mortality rate
• Death while pregnant or within 1 year of the end of a pregnancy—regardless of the outcome, duration, or site of the pregnancy—from any cause related to or aggravated by the pregnancy or its management, excluding accidental or incidental causes	• Pregnancy-related deaths per 100,000 live births (CDC Pregnancy Mortality Surveillance System)	• A death while pregnant or within 42 days of the end of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes	• Maternal deaths per 100,000 live births (CDC National Vital Statistics System, World Health Organization)

National increase in pregnancy-related deaths



Racial pregnancy-related death health disparities



Maternal Mortality Measurement Challenges

- Rare events: Small numbers mean wide confidence intervals and rate instability
  - Hard to measure change over time at the state level
- Per CDC, Maternal Mortality Review Committees are the gold standard in measuring maternal mortality
  - Multi-disciplinary investigations better identify pregnancy-relatedness
  - Montana does not yet have MMRC
- Montana's maternal mortality rate and pregnancy-related death rate, and associated rankings, are not good measures of maternal health in Montana at this time

Montana pregnancy-related mortality

- America's Health Rankings (2013-2017)[8]
  - 40.7 pregnancy-related deaths per 100,000 live births
  - 6th highest rate in the United States
- However…
  - This rate is based on CDC Wonder Database: Underlying Cause of Death, Multiple Cause of Death files
  - This is not CDC gold standard in measuring maternal mortality
- But we can conclude that maternal mortality is a significant problem in our state.

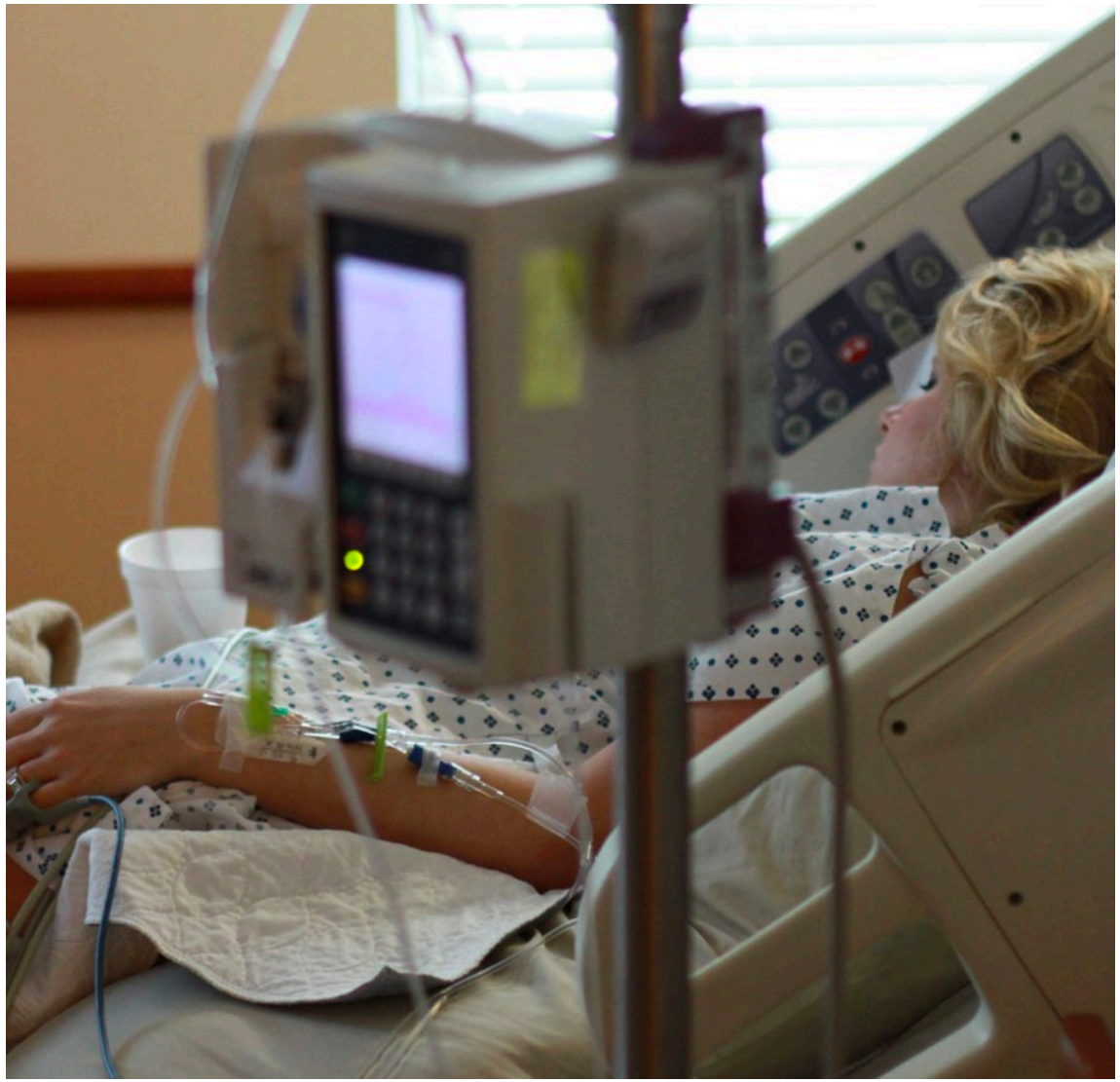
Severe Maternal Morbidity

Hospital-based deliveries in Montana, 2016-2018

Preliminary Analysis

Severe Maternal Morbidity (SMM)

- **Definition**
  - The unintended outcomes of the process of labor and delivery that result in significant short-term or long-term consequences for women's health[5]
- **Operationalization**
  - 21 indicators based on diagnosis and procedure codes from the International Classification of Disease (ICD)[6]
  - Standardized rate reported per 10,000 hospitalized deliveries



Maternal Health Disparities: National Context

Race

- AI/AN SMM rate 206.0 per 10,000 vs. non-Hispanic white SMM rate 139.2 per 10,000[9]
  - There would be a 43.9% reduction in SMM and maternal mortality among AI/AN individuals if AI/AN patients experienced SMM at the same rate as non-Hispanic white patients[10]

Rurality

- Patients from rural communities have 9% greater probability of SMM and maternal mortality[11]
  - Risk varies by degree of rurality[12]
- Overall, obstetric outcomes at Critical Access Hospitals (CAH) are worse than those at high-volume hospitals[13]
  - CAHs perform comparably to non-CAH among low-risk populations[13]

Montana
Severe Maternal Morbidity Study

- De-identified data compiled from the Montana Hospital Discharge Data System (MHDDS), administered by the Montana Hospital Association (MHA)
- Study Population:
  - Included: all hospitalized deliveries to Montana residents at health facilities that participated in the MHDDS from January 1, 2016 to December 31, 2018
    - Represents 83.5% of all births in Montana 2016-2018 compared to vital records
  - Excluded: non-facility births, births at non-participating hospitals (IHS), miscarriages, births to non-Montana residents
- Used CDC definition of Severe Maternal Morbidity (SMM)

Study patient characteristics among hospitalized deliveries in Montana 2016-2018, N= 29,681

- Source: Montana Hospital Discharge Data System
- Rurality categories based on the 2013 National Center for Health Statistics Urban-Rural Classification
  - Small metro: County with at least one urbanized area of 50,000
  - Micropolitan: County with at least one urban cluster of 10,000-49,999
  - Noncore: Rural, no urban cluster
- Large population of missing race data; will be proposing data match to complete this set

Patient Characteristics	N (%)
Payer	
Medicaid	13,335 (44.9)
Non-Medicaid	16,346 (55.1)
Age	
<20 years	1,596 (5.4)
20-34 years	23,862 (80.4)
≥35 years	4,223 (14.2)
Patient rurality*	
Small metro	10,206 (34.4)
Micropolitan	9,679 (32.6)
Noncore	9,796 (33.0)
Race	
White	16,516 (55.7)
American Indian/Alaska Native	2,034 (6.9)
Other	1,462 (4.9)
Declined/Missing	9,669 (32.6)

Most common indicators of SMM by risk category among hospitalized deliveries in Montana, 2016-2018 N= 29,681

Patient Characteristics	Most common	Second most common	Third most common
Payer			
Non-Medicaid	Blood transfusion	Hysterectomy	Acute renal failure
Medicaid	Blood transfusion	Hysterectomy	Eclampsia, puerperal cerebrovascular disorders, pulmonary edema
Patient rurality			
Small metro	Blood transfusion	Hysterectomy	Puerperal cerebrovascular disorders
Micropolitan	Blood transfusion	Eclampsia	Pulmonary edema
Noncore	Blood transfusion	Hysterectomy	Pulmonary edema, severe anesthesia complications, ventilation
Race			
White	Blood transfusion	Hysterectomy	Eclampsia
American Indian/ Alaska Native	Blood transfusion	Hysterectomy	Acute renal failure, puerperal cerebrovascular disorders, severe anesthesia complications, air and thrombotic embolism, ventilation
Other	Blood transfusion	Hysterectomy	Acute renal failure

Relative Risk for SMM by Patient Characteristic

Patients for whom **Medicaid** was the primary payer had **1.3 times greater risk of SMM** than those who did not have Medicaid

Compared to residents of small metro areas, **noncore** patients had **1.9 times greater risk of SMM**

Compared to white patients, **AI/AN** patients had **3.0 times greater risk of SMM**

Bivariate analysis (crude) by patient characteristic among hospitalized deliveries in Montana 2016-2018 N=29,681

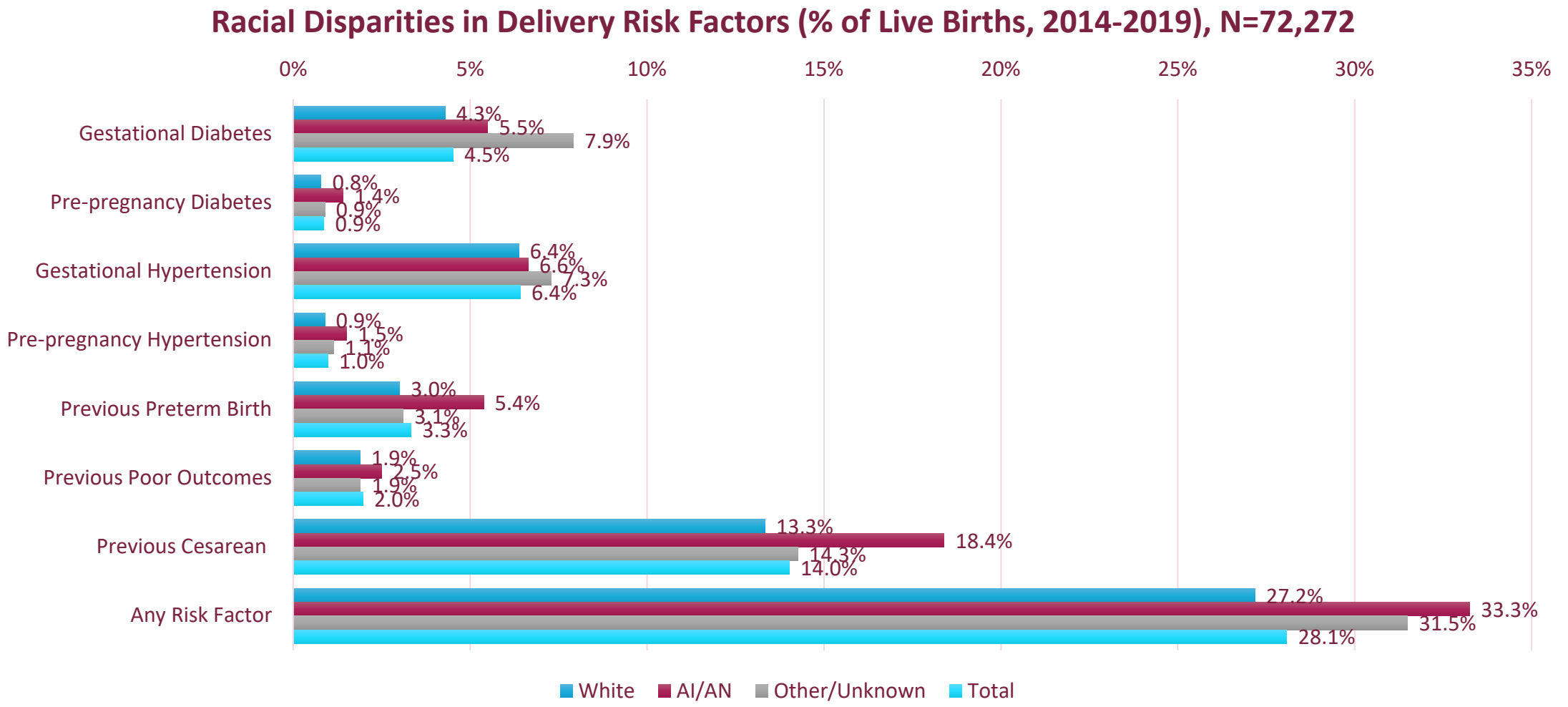
Patient Characteristics	Relative Risk (95% CI)
Payer	
Non-Medicaid	Ref
Medicaid	1.3* (1.0 – 1.6)
Patient rurality	
Small metro	Ref
Micropolitan	1.1 (0.8-1.5)
Noncore	1.9* (1.5-2.5)
Race	
White	Ref
American Indian/ Alaska Native	3.0* (2.1-4.2)
Other	1.4 (0.8-2.4)

*p< .05 ; ** p< .01; *** p < .001
Source: Montana Hospital Discharge Data System

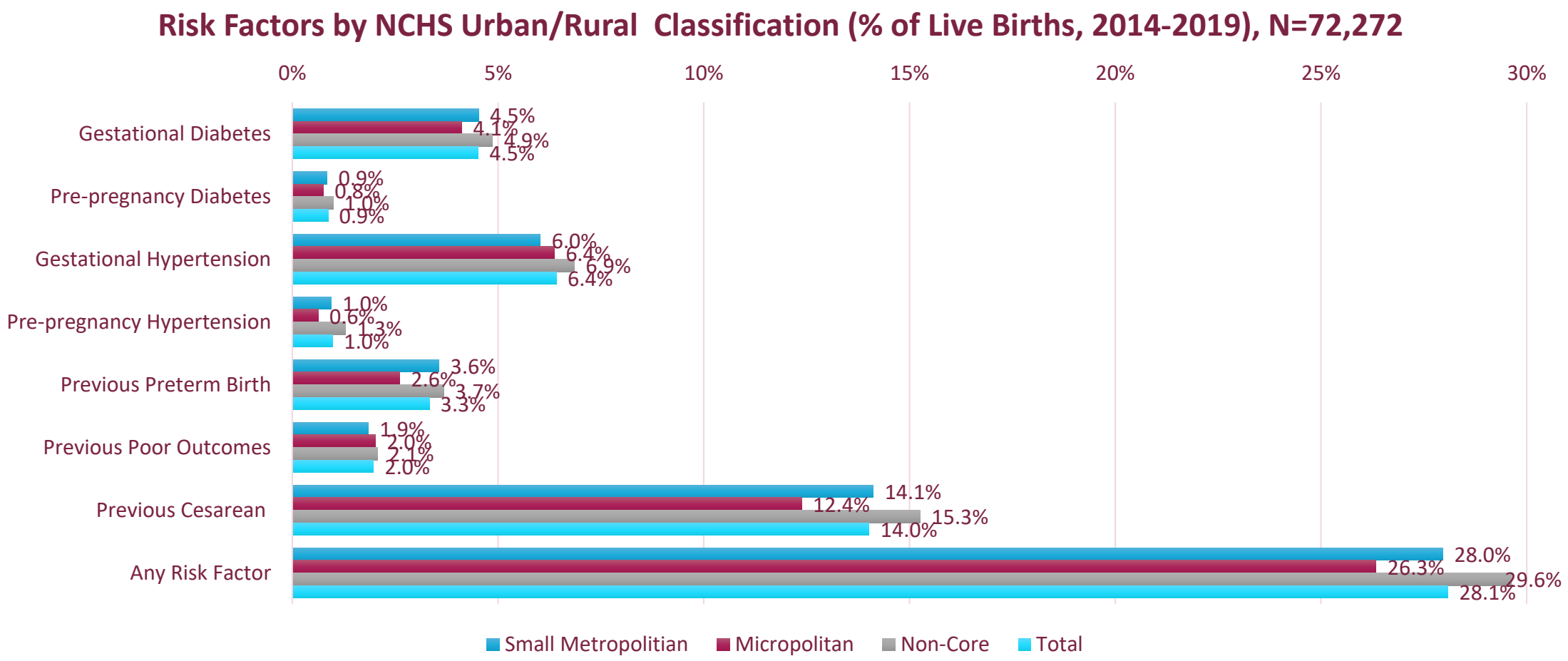
Pregnancy Risk Factors

Montana Birth Records Analysis, 2014-2019

Racial disparities in risk factors at delivery

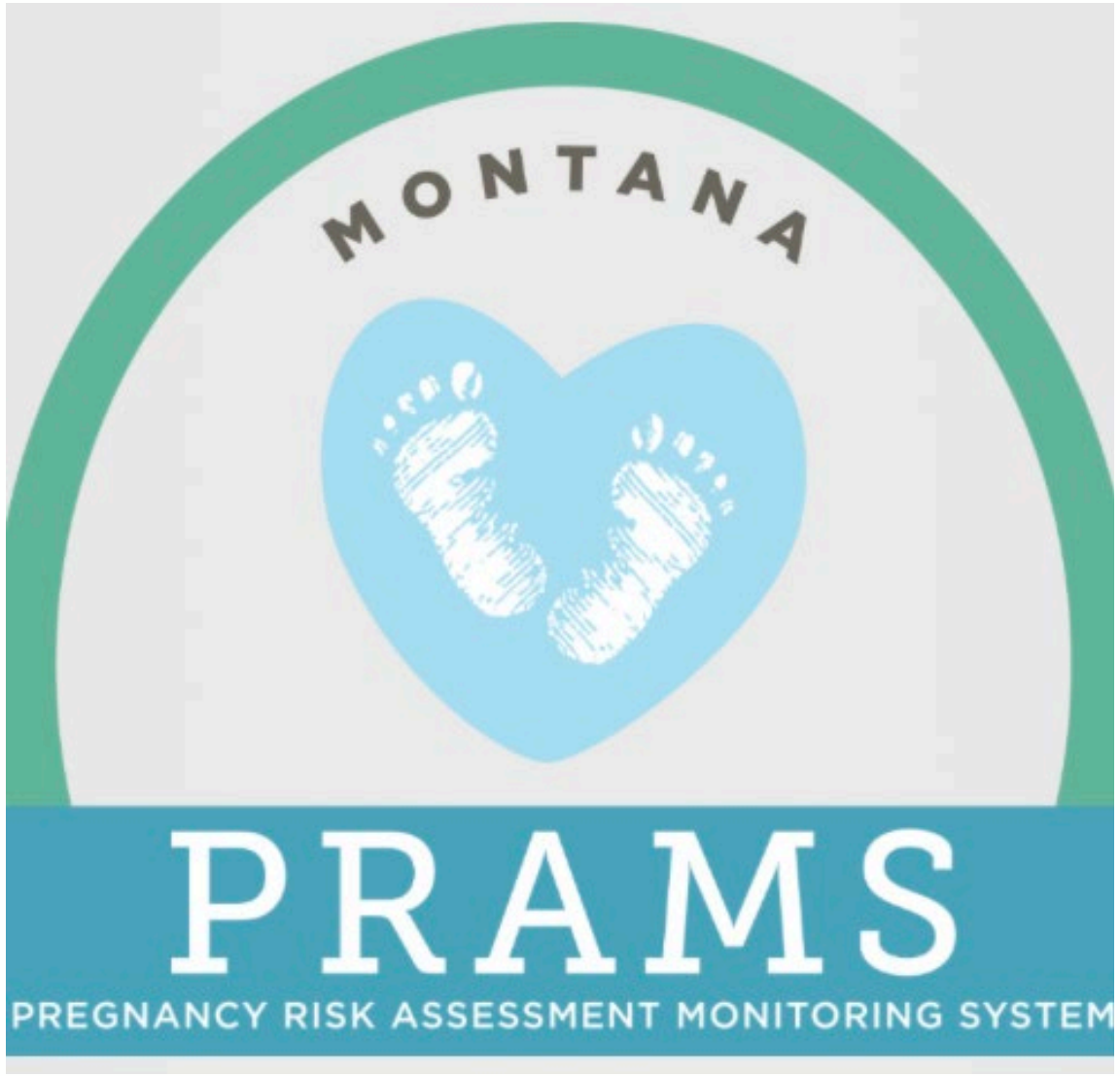


Geographic disparities in risk factors at delivery



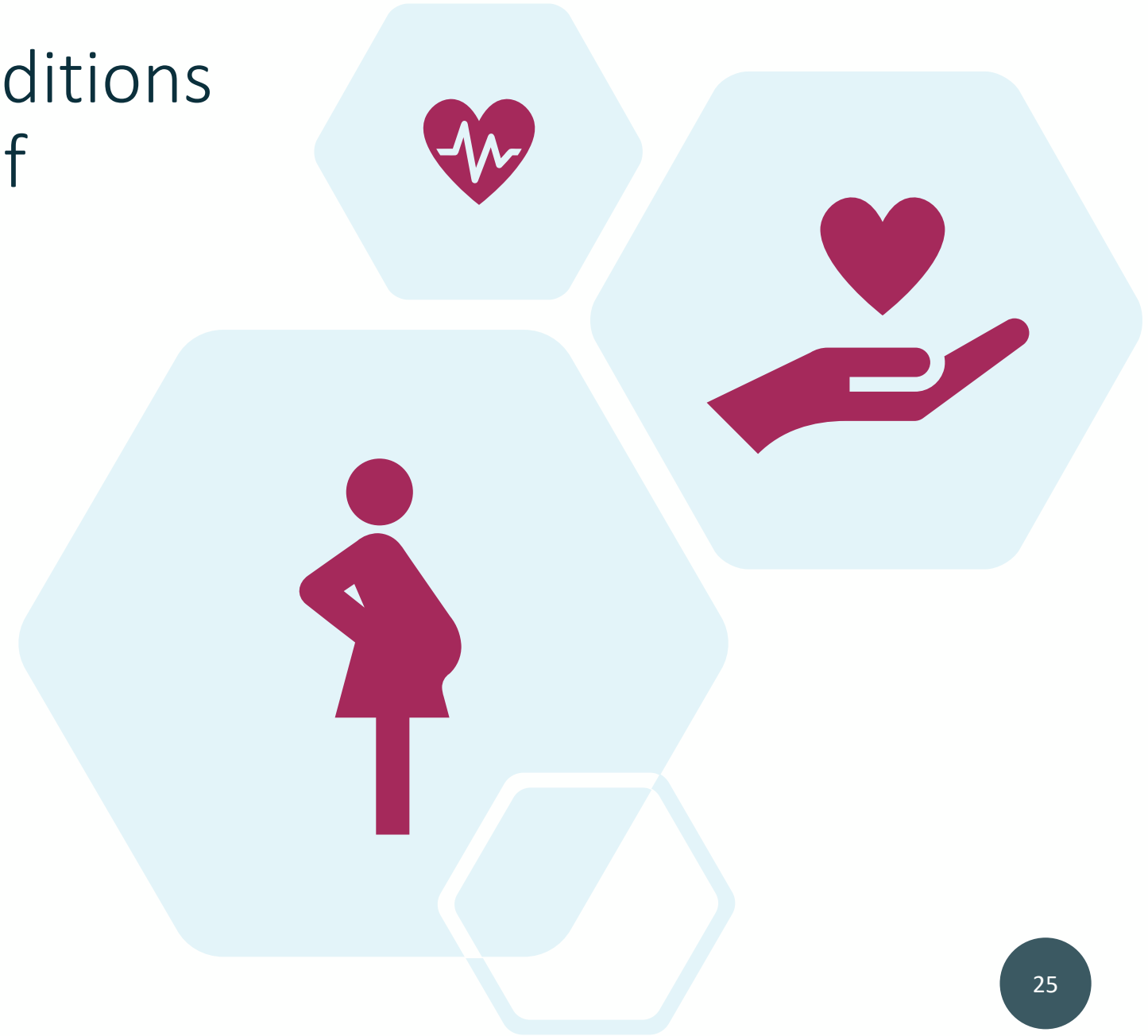
Montana's Pregnancy Risk Assessment Monitoring System (PRAMS)

- Random, population-based survey about maternal behaviors and experiences before, during, and after pregnancy
- Respondents are mailed a survey 3-6 months after delivering, telephone follow-up
- Collaborative effort with CDC
- Montana has conducted PRAMS survey since 2017
- DPHHS Staff:
  - Dr. Miriam Naiman-Sessions, PI and Project Director
  - Carol Hughes, Data Manager

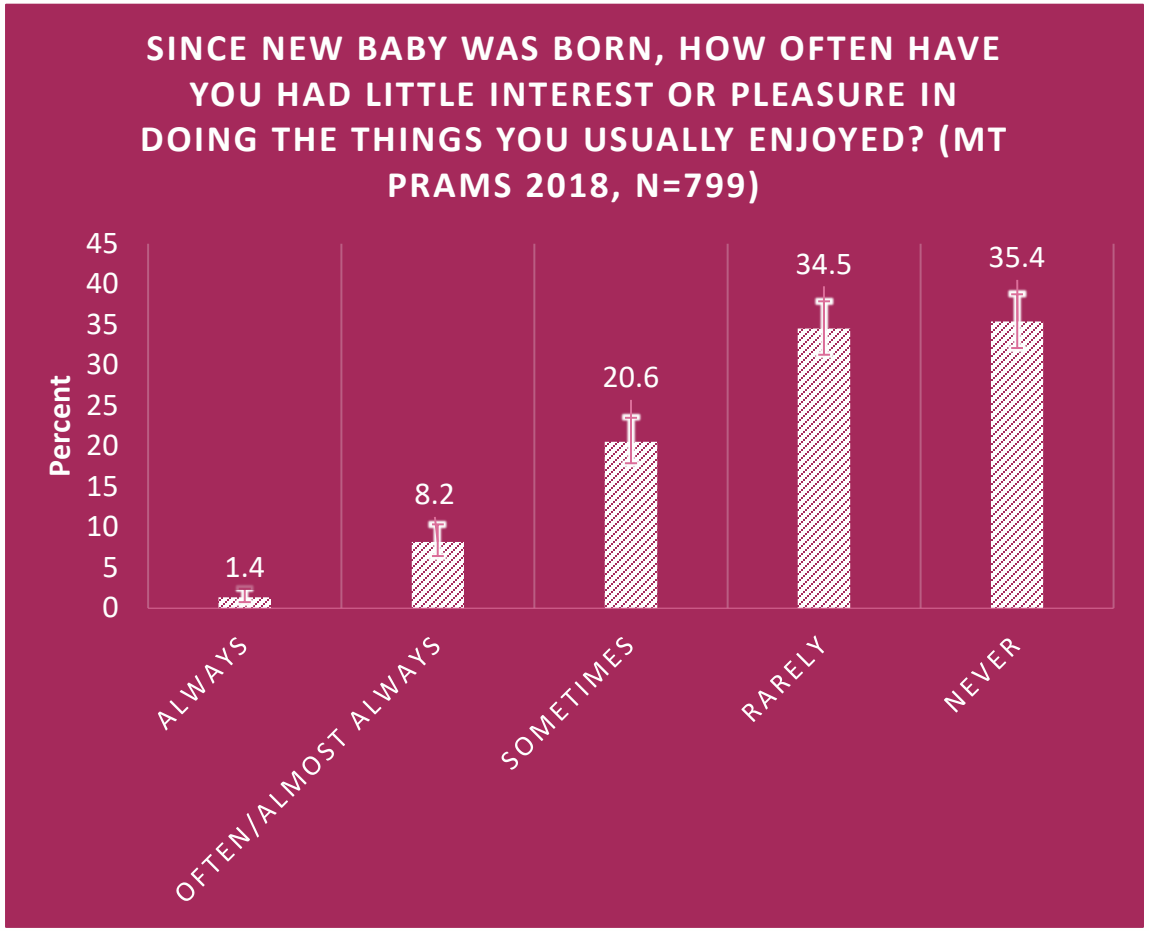


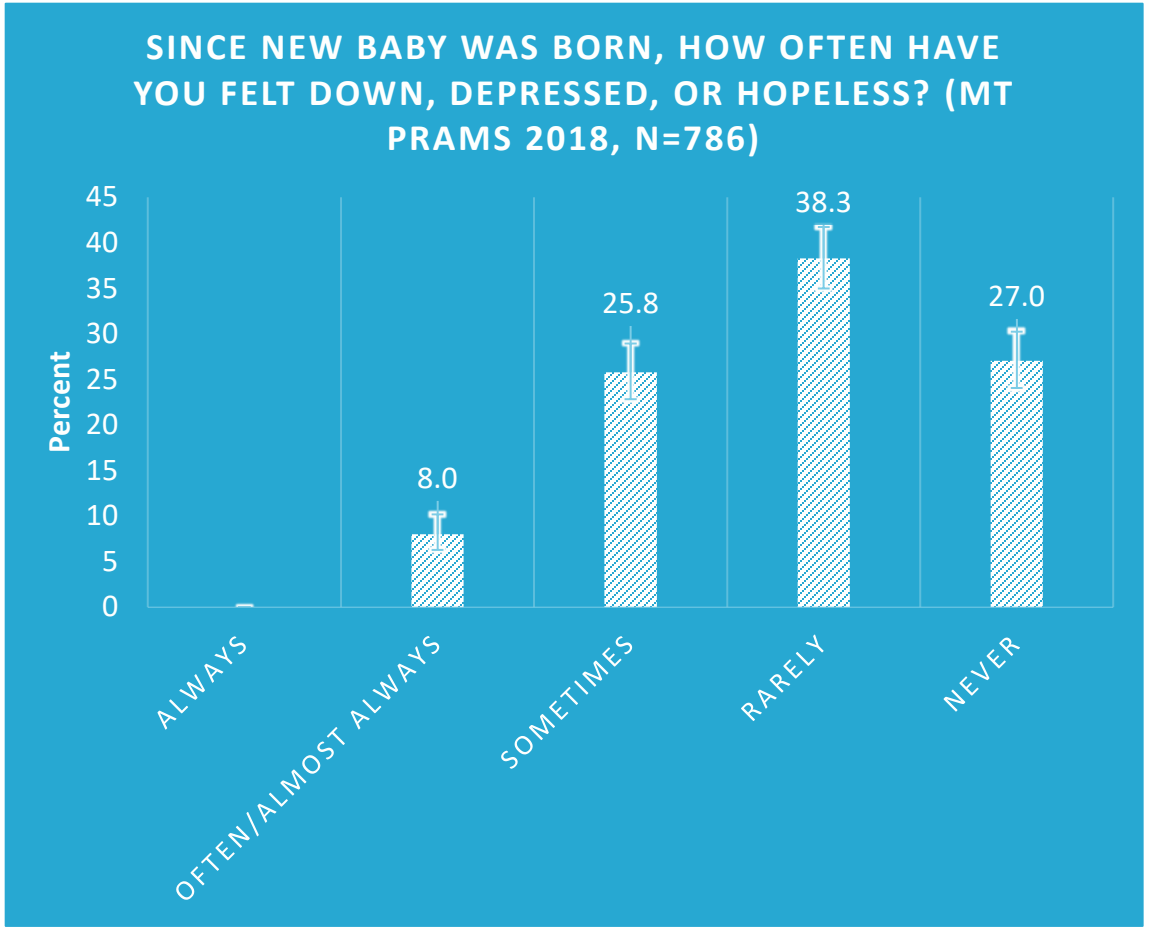
Diagnosed health conditions during pregnancy (Self report, N=806)

- Gestational diabetes: 5.5%
- High blood pressure: 10.2%
- Depression: 16.9%
- Health disparities:
  - Race: No significant difference
  - Rurality: No significant difference



Postpartum Depression





Conclusions & Recommendations

Maternal Mortality

- Montana must invest in MMRC to establish more valid pregnancy-related mortality rate
- Investigations will identify pregnancy relatedness of suicide and substance-related deaths

Severe Maternal Morbidity

- Blood transfusion and hysterectomy is most common SMM subtype in MT
- Rate of eclampsia higher in Montana than the national rate (3.7 per 10,000 vs. 2.0 per 10,000 hospital deliveries)
- National studies on rurality indicate CAH can safely handle low risk patients; higher rate of SMM in rural MT patients indicates need for risk appropriate care

Pregnancy Risk Factors & Conditions

- Racial disparities are more pronounced than geographic disparities indicating need for targeted resources and interventions by and for AI/AN communities
- Depression during pregnancy (16.9%) and in the postpartum period

References

1. ACOG. 2020. Joint Statement: Obstetrics and Gynecology: Collective Action Addressing Racism. https://www.acog.org/news/news-articles/2020/08/joint-statement-obstetrics-and-gynecology-collective-action-addressing-racism

2. 1. Garcia-Andrade C, Wall TL, Ehlers CL. The firewater myth and response to alcohol in Mission Indians. Am J Psychiatry. 1997 Jul;154(7):983-8. doi: 10.1176/ajp.154.7.983. PMID: 9210750.

3. Rana Asali Hogarth, 2019: The myth of innate racial differences between white and black people's bodies: Lessons from the 1793 yellow fever epidemic in Philadelphia, Pennsylvania *American Journal of Public Health* **109**, 1339-1341.

4. O'Reilly, KB. 2020. AMA: Racism is a threat to public health. https://www.ama-assn.org/delivering-care/health-equity/ama-racism-threat-public-health

5. CDC, ACOG,SMFM Definition. Kilpatrick SK, Ecker JL. Severe maternal morbidity: screening and review. *Am J Obstet Gynecol*. 2016;215(3):B17-B22. doi:10.1016/j.ajog.2016.07.050

6. Rates in Severe Morbidity Indicators per 10,000 Delivery Hospitalizalization | Maternal Infant Health | Reproductive Health | CDC. Accessed October 5, 2020. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/smm/rates-severe-morbidity-indicator.htm

7. CDC. 2020. Pregnancy Mortality Surveillance System. https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm

8. CDC Wonder, 2019 report of 5-year (2013-17) pregnancy-related death rate estimate; Rankings by America's Health Rankings, United Health Foundation

9. Creanga AA, Bateman BT, Kuklina E V., Callaghan WM. Racial and ethnic disparities in severe maternal morbidity: A multistate analysis, 2008-2010. *Am J Obstet Gynecol*. 2014;210(5):435.e1-435.e8. doi:10.1016/j.ajog.2013.11.039

10. Kozhimannil KB, Interrante JD, Tofte AN, Admon LK. Severe Maternal Morbidity and Mortality Among Indigenous Women in the United States. *Obstet Gynecol*. 2020;135(2):294-300. doi:10.1097/AOG.0000000000003647

11. Kozhimannil KB, Interrante JD, Henning-Smith C, Admon LK. Rural-Urban Differences In Severe Maternal Morbidity And Mortality In The US, 2007–15. *Health Aff (Millwood)*. 2019;38(12):2077-2085. doi:10.1377/hlthaff.2019.00805

12. Disparities H, Women R. Committee Opinion. *Female Pelvic Med Reconstr Surg*. 2014;20(5):248-251. doi:10.1097/spv.0000000000000113

13. Kozhimannil K, Casey M, Hung P, Prasad S, Moscovice I. The Obstetric Care Workforce in Critical Access Hospitals (CAHs) and Rural Non-CAHs. Published online 2014:7.

Appendix

CDC SMM Measurement

Denominator:

- Hospitalized Delivery: Number of hospitalized deliveries
  - Defined as: a vaginal delivery, cesarean delivery, or a delivery outcome.
  - All miscarriages are excluded
  - All non-facility births excluded
    - Non-facility births only made up 4.1% of all births in Montana from 2016-2018.[12]

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

Montana Perinatal Quality Collaborative

AIM Initiative: Obstetric Hemorrhage (OBH) - Cohort 1

Problem Statement: At 40.7 pregnancy-related deaths per 100,000 live births, Montana has the 6th highest rate in the United States[1]. The Society of Maternal and Fetal Medicine recently released their scorecard on how well states are addressing severe maternal morbidity and mortality based on five major initiatives proven to systematically improve maternal health outcomes. The scorecard shows Montana is one of three states that have implemented only one of the five initiatives[2]. These alarming statistics are a call to action to maternal healthcare providers to step up and work together.

Purpose: Participating birthing facilities will work through the Montana Perinatal Quality Collaborative (MPQC) to implement the Alliance for Innovation on Maternal Health (AIM) core AIM patient safety bundle: Obstetric Hemorrhage. Participating facilities will choose from a set of change ideas to implement a change package that will, in turn, improve maternal health outcomes at their facilities. This change process will be modeled after the Institute for Healthcare Improvement (IHI) Model for Improvement which builds upon the basic tenets of Plan-Do-Study-Act (PDSA) cycles for quality improvement. Participants in this collaborative will learn from each other, support staff, and experts to implement standardized approaches to addressing key factors of maternal morbidity and mortality.

Montana AIM Initiative: Obstetric Hemorrhage seeks to engage participating hospitals in the following activities:

- Readiness: Every unit is ready to respond to an obstetric hemorrhage.
- Recognition & Prevention: Every patient is assessed and patient care is managed so that hemorrhage risk is recognized and, when possible, hemorrhage is prevented.
- Response: Every hemorrhage is responded to in a standardized, stage-based approach and support is provided for patients, families, and staff for each significant hemorrhage.
- Reporting/Systems Learning: Every unit exemplifies a culture of safety, with processes in place to support continuous multidisciplinary learning and improvement.

The Obstetric Hemorrhage Safety Bundle was developed and is supported by the Alliance for Innovation on Maternal Health (AIM). Additionally, resources developed by national partners will be utilized. Standardized approaches to clinical situations have been proven to decrease errors and improve safe care. Montana is grateful to other AIM States which have provided key learning materials for the successful implementation of this Safety Bundle.

[1]CDC Wonder, 2019 report of 5-year (2013-17) pregnancy-related death rate estimate; Rankings by America's Health Rankings, UnitedHealth Foundation. *(This rate is based on the CDC Wonder Database rather than multidisciplinary death investigations and therefore is not the CDC gold standard in measuring maternal mortality.)*

[2] Establishment of maternal mortality review committees; establishment of perinatal quality collaboratives; expansion of Medicaid; reporting of data stratified by race and ethnicity; and participation in the Alliance for Innovation on Maternal Health (AIM) program.

Goals & Objectives: The long-term goal of Montana AIM Initiative is to reduce maternal morbidity and mortality across the State of Montana, thereby making Montana a safer place for mothers and their children.

This will be achieved, in part through the implementation of the the obstetric hemorrhage bundle, by reaching the following objectives:

1. All Collaborative participants will develop and implement a multidisciplinary team in order to respond to every massive hemorrhage by June 2022.
2. Reduce the rate of severe maternal morbidity (SMM) among patients with obstetric hemorrhage by 20% by September 2022.

Specifically, all interested birthing facilities across Montana will engage in the Montana AIM Collaborative over a 12 month period utilizing the IHI Breakthrough Series (BTS) Collaborative model to increase the number of hospitals that fully integrate and sustain implementation of the Obstetric Hemorrhage (OBH) AIM Bundle.

Collaborative Expectations:

The MPQC staff will:

- Provide evidence-based information on subject matter, application of that subject matter, and methods for process improvement, both during and in between Learning Sessions;
- Offer coaching to facility staff; and
- Provide communication strategies and platforms to connect facilities to peers in Montana and other states, and subject matter experts during the Collaborative.

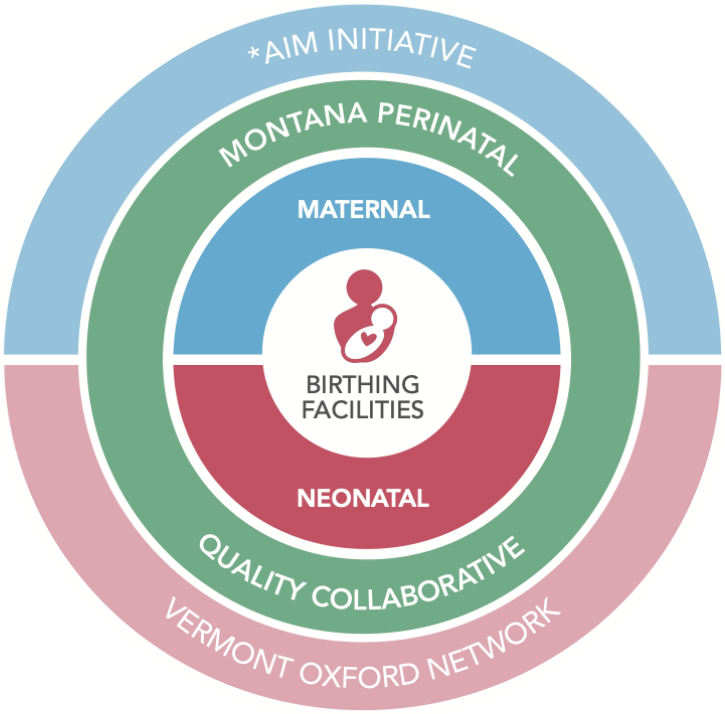
Participating facilities are expected to:

- Perform pre-work activities to prepare for the first Learning Session;
- Connect the goals of the Collaborative to a strategic initiatives in their facility;
- Provide a senior leader to serve as sponsor for the team working on the Collaborative, serve as champion for spread of the changes in practice within their health care system, and attend at least the Second Learning Session;
- Send a team to all Learning Sessions;
- Provide resources to support their team including resources necessary for Learning Sessions, time to devote to testing and implementing changes in the practice and active senior leadership involvement;
- Provide expert staff (Financial, Information System, Clinical Policy Development) to the team on an as needed basis;
- Perform tests of changes in the organization that lead to widespread implementation of improvements in the organization and their office practices;
- Report required data quarterly to the University of Montana and AIM to support AIM enrollment; and
- Share information with the Collaborative, including details of changes made and data to support these changes, both during and between Learning Sessions and for the National Congress. Engaging with peers is critical to the success of a collaborative - facilities will learn from each other in discussions and peer coaching regarding challenges in implementation, strategies to overcome them, weaknesses and success stories.

Montana PQC & Collaborative Structure:

MPQC
MONTANA PERINATAL QUALITY COLLABORATIVE

Becoming an AIM State



* **ACOG –** American College of Obstetricians and Gynecologists, the premier professional membership organization for obstetricians and gynecologists. https://www.acog.org/
* **AIM – Alliance for Innovation on Maternal Health**, a national data-driven maternal safety and quality improvement initiative (funded by HRSA and national ACOG). https://safehealthcareforeverywoman.org/aim/
* **MT DPHHS – Montana Department of Public Health and Human Services** (Title V/Maternal & Child Health Block Grant Program), coordinating body for the AIM initiative, convening the PQC. https://dphhs.mt.gov/ecfsd/mch
* **MHA – Montana Hospital Association**, partner coordinating body supporting the convening, quality improvement, and education of the PQC. https://mtha.org/

  PQC – Learn more about the CDC's guide to perinatal quality collaboratives. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pqc-states.html#
* **UM – University of Montana Rural Institute For Inclusive Communities**, providing data collection and analysis support to hospitals and submitting data to AIM. http://ruralinstitute.umt.edu/

  VON – Vermont Oxford Network is a nonprofit voluntary collaboration of health care professionals working together to improve neonatal care. https://public.vtoxford.org/
* **Yarrow –** Contracted by DPHHS to facilitate the PQC AIM Initiative and provide quality improvement technical assistance to hospitals. https://www.yarrowcommunity.org/

YOU'RE INVITED TO

Improve health outcomes for mothers and babies by:

1. Joining the PQC
2. Participating in the AIM Initiative

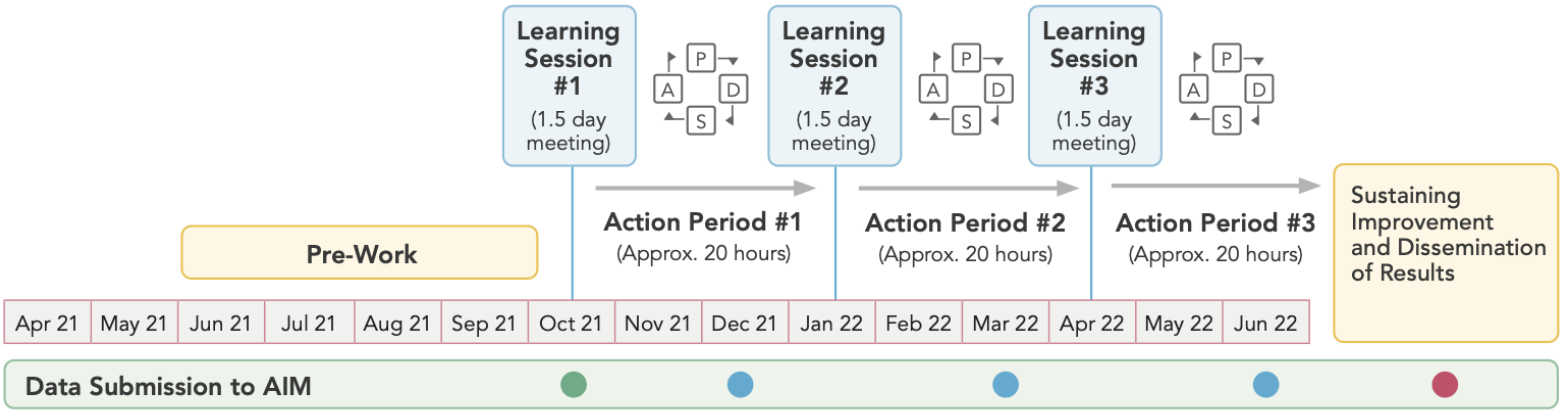
MONTANA DPHHS
YARROW
Rural Institute UNIVERSITY OF MONTANA

MPQC
MONTANA PERINATAL QUALITY COLLABORATIVE

Timeline & Process:

MPQC
MONTANA PERINATAL QUALITY COLLABORATIVE

MPQC Obstetric Hemorrhage Collaborative Process



Pre-Work

- Review Packet (2hrs/person)
- Form Team (2hrs/person)
- Orientation Webinar (2hrs/person)
- Readiness Self-Assessment (5hrs/Team)
- Aim Statement (1hr/Team)
- Storyboard Creation (1hr/Team)
- QI Webinar (2hrs /person)
- Data Webinar (2hrs/person)

Approx. 31 hrs/person over 4 months

Learning Sessions

- Learning sessions will be 1.5 days long and will involve sharing with and learning from other members of the AIM cohort who are implementing the bundle.
- These may be online or in-person.

Action Periods

These are periods of time between each Learning Session when a hospital team works on implementing the AIM bundle change package through PDSA cycles. Additional activites taking place in the Action Periods will include:

- Monthly All Team Calls & Reports
- Data Collection & Reporting
- Site Visits (As Needed)
- One on One Technical Assistance as Necessary (QI, Data, etc.)

Time Requirement: Varies by facility. Minimally, OB leadership/AIM implementation team should plan to attend 2 meetings per month with other cohort members and/or AIM bundle leadership.

Data Submission to UM

- Baseline data submitted after enrollment.
- Process and structure measures submitted quarterly.
- Outcome measures submitted at the end of the bundle.

UM will submit all data to AIM.

MPQC
MONTANA PERINATAL QUALITY COLLABORATIVE

Anticipated Timeline for the Fall 2021 Obstetric Hemorrhage Collaborative Cohort

Action Item	Anticipated Timeframe
Application	
Complete PQC AIM Bundle Survey	Dec 2020 – Mar 2021
Complete MT PQC AIM Bundle Enrollment Form	May – June 2021
Pre-Work (See Pre-Work Packet Attachment)	
Form an Improvement Team	June 2021
Review Charter	June 2021
Attend Orientation Webinar	July 2021
Watch AIM eModules	July 2021
Review Entire AIM Initiative: Obstetric Hemorrhage Bundle Packet, including: • Pre-work Packet • Obstetric Hemorrhage Bundle • Example Change Package • Measurement Strategy • Associated Tools	July 2021
Attend Quality Improvement Basics Webinar	August 2021
Complete Team Roster	August 2021
Complete Readiness Self-Assessment	September 2021
Register for Learning Session 1	September 2021
Develop a hospital improvement team aim statement aligned with the overall Collaborative aim	September 2021
Create Team Storyboard	September 2021
Attend Data Portal & Teams Orientation Webinar	September/October 2021
Learning Sessions and Action Periods	
1st Collaborative Cohort Learning Sessions	**October 2021**
Action Period 1 • Monthly All Teams All Come Action Period Calls • Additional team communications and technical assistance opportunities as scheduled	November 2021 December 2021
2nd Collaborative Cohort Learning Sessions	**January 2022**
Action Period 2 • Monthly All Teams All Come Action Period Calls • Additional team communications and technical assistance opportunities as scheduled	February 2022 March 2022
3rd Collaborative Cohort Learning Sessions	**April 2022**
Action Period 3 • Monthly All Teams All Come Action Period Calls • Additional team communications and technical assistance opportunities as scheduled	May 2022 June 2022

These materials are adapted from:
TexasAIM Plus Obstetric Hemorrhage Learning Collaborative (OBH+) Information Packet. (Version 2. August 16, 2018) TX Health and Human Services.

Contact Us!

Names & Contact	Roles
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Yarrow	
Kirsten Krane • kirsten@yarrowcommunity.org • 406-838-3485 **Anna Schmitt** • anna@yarrowcommunity.org • 406-219-7727	Facilitation Quality Improvement **Questions?** We're a good place to start.
University of Montana - Rural Institute	
Dr. Annie Glover • annie.glover@mso.umt.edu • 406-570-4592 **Carly Holman** • carly.holman@mso.umt.edu • 406-274-5527	Data Collection, Analysis, Reporting

Recommendations for the Montana Maternal Mortality Review Committee				
Name	**Title**	**Organization**	**Discipline**	**Location**
Dr. Clayton "Tersh McCracken		Billings Clinic	Obstetrics and Gynecology	Billings
Dr. Christina Marchion		Central Montana Medical Center	Family Medicine-Obstetrics	Lewistown
Dr. Rob Kurtzman	Montana State Chief Medical Examiner	Montana State Chief Medical Examiner	Forensic Pathology	Billings
Dr. Adrienne Haragan		Kalispell Regional Medical Center	Maternal-Fetal Medicine/Perinataology	Kalispell
Kristen Srna, MSN, RN	Obstetrics Manager AWHONN Montana Chapter Chair	Benefis Hospital Association of Womens Health, Obstetrics and Neonatal Nurses	Perinatal Nursing	Great Falls
Melinda Cline, LCSW, PMH-C, CLC	Private Practitioner	Community Medical Center	Social Work	Missoula
Jana Sund	Certified Nurse Midwife	Postpartum Resource Group - Postpartum Doulas	Community-Based Doula Program	Kalispell
Jennifer Verhasselt, MS, LAC	Senior Director of Residential Services	Rimrock	Addiction Counseling	Billings
Janie Quilici,LAC, LSWC	Perinatal Behaivoral Health Director	Western Montana Mental Health Center/Community Medical Center		Missoula
Pam Ponich	Peer Support Specialist Supervisor and Perinatal Training Hub Coordinator for OneHealth	OneHealth	Community Birth Workers	Miles City
Todd Koch	Lead Epidemiologist	Office of Epidemiology and Scientific Support, DPHHS	Epidemiology	state
Kayla Bragg	Sexual Assault Kit Initiative (SAKI) Coordinator	Department of Justice Division of Criminal Investigation Special Services Bureau	Law Enforcement	state

Mary LeMieux	Member Health Service Bureau Chief	Medicaid		state
Ann Buss	State Title V Program Director			state
Kristi Akelstad	State Title X Program Director			state
Dr. Annie Glover	Director of Research	Rural Institute, University of Montana	Academic Institution	state
Drew Colling	Director of Social Change and Resilience	Montana Coalition Against Domestic and Sexual Violence	Violence Prevention Agency	state
Kate Seaton, JD	Indian Law Attorney	Montana Legal Services Association	Legal Support Services	state
Vickie Thuesen, APRN, WHNP, FNP	Clinical Director	Ag Worker Health & Services (FQHC)		Lolo
Sarah Watson, DO	Medical Director and Physician	Partnership Health Center		Missoula
American Indian recommendations				
Dr. Aaron Wernham	Chief Executive Officer	Montana Healthcare Foundation		
Kassie Runsabove	Program Officer	Montana Healthcare Foundation		
Dr. Steve Williamson	Chief Medical Officer	Billings Area Office of Indian Health Services		Regional
Lee Stiffarm, RN		Blackfeet Community Hospital		Browning
Katie Boggs, RN	Community Health Nurse	Blackfeet Community Hospital		Browning
Mary Lynne Billy	COO	Indian Family Health Center		Great Falls
Rachel Arthur	Senior Care Coordinator	Indian Family Health Center		Great Falls
Mariya Waldenberg, DNP	Chief Clinical Officer	Uran Northern Cheyenne		Lame Deer
April Charlo	Co-Founder of Snqweylmistn (Indigenous Doula Course) and parent educator at Families First Learning Lab in Missoula			

Dale Four Bear	Director	Spotted Bull Treatment Center		Poplar
Lucy Simpson	Executive Director	National Indigenous Women's Resource Council		Lame Deer
Helena Tsafi (or other representative)	Executive Director	Rocky Mountain Tribal Epidemiology Center		Regional
Jennifer Show, FNP		Ft. Belknap Tribal Health Department		Wolf Point