Mother/Infant Opioid Substance Use Treatment and Recovery Effort (MOSTaRE) Initiative Guide
Welcome to the Collaborative!
We’re glad you’re on the team.

Contact
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Mother/Infant Opioid Substance Use Treatment and Recovery Effort (MOSTaRE) Initiative

Background:
A pressing priority for the Minnesota Perinatal Quality Collaborative (MNPQC) is to address the opioid crisis and impact of substance use disorders (SUDs) on pregnant people and infants. The purpose of the Mother/Infant Opioid and Substance Use Treatment and Recovery Effort (MOSTaRE) is to work with providers, hospitals, and other stakeholders to improve identification, clinical care, and coordinated treatment/support for pregnant and parenting people with substance use disorder and their infants through a family-centered approach to care.

- The prevalence of opioid use disorder in pregnant people at delivery is 6.5 per 1,000.
- SUD was identified as a cause or contributing factor in 31.3 % of pregnancy-associated deaths.\(^1\)
- It is estimated that 55% to 94% of newborns whose mothers consistently used opioids while pregnant (either illicit use or medication-assisted therapy for SUD) will develop neonatal abstinence syndrome (NAS).\(^2\)
- A diagnosis of NAS can include infant withdrawal from any substance not including alcohol such as cocaine, amphetamines, opioids, and benzodiazepines. From 2012 to 2020, there were 3,251 NAS hospital-visits in Minnesota.\(^3\)
- According to MN Medicaid claims data, maternal opioid use disorder and infant NAS diagnoses more than doubled from 2012 to 2020, before the start of the COVID-19 pandemic. The incidence of these diagnoses is increasing fastest among rural residents.
- Unfortunately, rural areas in the state have the fewest neonatal intensive care units (NICUs) and have seen the most closures of hospitals where babies can be delivered.\(^4\) The rate NAS diagnosis has increased from 59.1 per 10,000 live births in 2014 to 102.5 per 10,000 live births in 2019.\(^5\)
- Northern Minnesota has the highest rates of prenatal opioid use. Within these rural communities, the average rate of prenatal opioid use is 9.8%, compared to the statewide average of 1.5% for all Medicaid-covered births.

A key recommendation from the Maternal Mortality Review Committee is “to support statewide improvements for birthing people who have substance use disorders, including adequate identification of substance use in the birthing population, referral to services and support groups, and increased funding to expand treatment and access to treatment throughout the state”.

The MOSTaRE Initiative will emphasize family-centered care that maintains the maternal-infant dyad and will address prevention and treatment of substance exposure during and after pregnancy for both caregivers and infants.

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\(^5\) Hospital Discharge Data, Injury and Violence Prevention Section, Minnesota Department of Health, 2012-2019.
AIM:
By December 2023, our aim is to increase the identification and treatment of substance use disorders (SUDs) in pregnant people and substance exposure in infants by 50% or more in order to improve pregnancy and postpartum outcomes, increase the use of non-pharmacologic methods for treating infants exposed to opioids and reduce the average length of stay for these infants.

Family of Measures
Stratify by race/ethnicity where available.

State Surveillance:
- SUD among pregnant and postpartum people (SS1)
- Severe Maternal Morbidity (SMM) (including transfusion codes) among people with SUD (SS2)
- Severe Maternal Morbidity (SMM) (excluding transfusion codes) among people with SUD (SS3)
- Proportion of pregnancy associated deaths due to overdose (SS4)

Outcome Measures:
- Percent of newborns exposed to substances in utero who were discharged to either birth parent (O1)
- Percent of pregnant and postpartum people who screened positive, received, or were referred to recovery treatment services (O3)
- Length of stay of each newborn exposed to opioids

Process Measures:
- Percent of pregnant and postpartum people screened using a validated tool for SUDs (P1)
- Provider and Nursing education – SUDs (P5)
- Provider and Nursing education - Respectful and Equitable Care (P6)

Structure Measures:
- Resource Mapping/ Identification of Community Resources (S1)
- Patient Event Debriefs (S2)
- General Pain Management Guidelines (S3)
- OUD Pain Management Guidelines (S4)
- Validated Verbal Screening Tools and Resources Shared with Prenatal Care Sites (S5)
### Theory of Change – The Driver Diagram

<table>
<thead>
<tr>
<th>Pregnant and Postpartum Person Theory of Change – Driver Diagram</th>
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<tr>
<td><strong>Primary Drivers</strong></td>
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<td>Stigma</td>
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<tr>
<th>Care Management &amp; Coordination</th>
<th>Discharge preparation</th>
<th>Implement mechanisms for collaboration of care and coordination across care systems and modalities of treatment (Overall “Collaboration Care and Coordination” change ideas below).</th>
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<tr>
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<td>• Utilize Medication Assisted Treatment (MAT) where appropriate. MAT is the standard of care for OUD.</td>
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<td>• Early referral to and collaboration with social services.</td>
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<td>• Create collaborative care teams that provide patient and family support.</td>
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<td>• Promote policy consistent with MN statute change from 2021, which does not mandate reporting of substance use for patients who are engaged in care.</td>
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<td>• Provide equitable and culturally responsive care.</td>
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<td>• Acknowledge and address the impact of social determinants of health, such as access to transportation, food or housing insecurity, and threats to the patient and family’s personal safety.</td>
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<td>Implement comprehensive discharge planning activities, synchronize with discharge.</td>
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Plan for, anticipate, and ensure appropriate postpartum care and treatment, emphasizing the “4th Trimester.” (Overall “4th trimester” change ideas below)

- Establish early postpartum follow-up including obstetric and family planning care, substance use treatment, and naloxone distribution.
- Create a harm reduction-based safety plan (family care plan or plan of safe care) to minimize return to non-prescribed substance use and reduce the risk of overdose.
- Ensure early and timely outpatient follow-up for patients with SUD.
- Where possible, coordinate care with infant’s outpatient providers.
- Establish, where possible, peer recovery and/or other public health support for new parents.

Collect barriers to postpartum and infant follow up and begin action plans

**Infant Theory of Change: Driver Diagram**

<table>
<thead>
<tr>
<th>Primary Drivers</th>
<th>Secondary Drivers</th>
<th>Changes</th>
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<tr>
<td>Identification of substance exposure</td>
<td>Prior to birth or at Birth</td>
<td>Improve parental screening. Create a safe environment for disclosure.</td>
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<tr>
<td>Education</td>
<td>During Stay</td>
<td>Provide education for staff and families on the Family Care Plan (also called “Plan of Safe Care”). Emphasize keeping birth parents and infants together, identifying their support system, collaborating on safety planning, anticipating difficult situations that could come up and providing appropriate support from social services</td>
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<tr>
<td>Family Centered Care</td>
<td>During Stay</td>
<td>Follow Eat, Sleep, Console, or similar Family Centered care plan. Focus on non-pharmacologic care for substance-exposed infants and reduced separation of maternal-infant dyad during hospitalization. Reduce exposure to opioid and other adjunct medications to treat signs and symptoms of opioid withdrawal. Minimize urine or other biological screening methods for substance exposure, particularly when this will not change medical</td>
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management. Emphasize informed consent and open communication with families when these methods are used.

Maintain the maternal-infant dyad, with opportunities for short periods of respite care for the infant as available and appropriate (Overall “Maternal-infant dyad” change idea below).

- Support caregivers in attending to their own healthcare and family needs, particularly as relates to continuing to receive MAT.
- Assist caregivers in recognizing dangerous levels of fatigue and encourage them to ask for help in order to reduce the risk of sleep related falls or suffocation.
- Provide some flexibility around visitor policies and other policies that impact a family’s ability to provide support and/or respite to substance exposed infants and their parents.

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<tr>
<th>Family Centered Care</th>
<th>Discharge</th>
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<td>Provide safe, coordinated discharge with birth parent as often as possible.</td>
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<td>Understand the role of child protective services and their current protocols to maximize support to patients and families affected by SUD/OUD.</td>
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<td>Acknowledge the long history of trauma that many communities have around CPS involvement and persistent inequalities in reporting that affect marginalized communities.</td>
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<td>Discuss SUID (previously called SIDS) and sleep asphyxia with families, with emphasis on providing simple risk-reduction strategies.</td>
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<td>Make referrals to family home visiting prior to discharge.</td>
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<td>Identify infant PCP and provide warm handoff with this person prior to discharge. Discuss their comfort level with managing infants who may still be experiencing mild signs and symptoms of withdrawal and/or difficulty gaining weight.</td>
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Overall Benefits for:

**Pregnant People with substance use disorders**

- Improved screening for SUD
- Improved patient, caregiver, and public education about SUD
- Provision of trauma-informed care
- Fostering of collaboration among healthcare providers and across healthcare systems
- Increased patient access to additional support services and medication-assisted treatment (MAT)

**Infants exposed to substances**

- Improved screening for substance exposure
- Increased adoption of nonpharmacologic methods of treating Neonatal Abstinence Syndrome or Neonatal Opioid Withdrawal Syndrome (NAS/NOWS), such as “Eat, Sleep, Console” model.
- Increased emphasis on “rooming in” to promote maintenance of maternal-infant dyad.

**Birthing Facilities:**

- Assistance with implementation of best practice guidelines using information gained from learning collaboratives and tools created by MNPQC.
- Access to educational activities offering continuing education (CE) credits.
- Maintenance of Certification credits offered via the American College of Obstetricians and Gynecologists (ACOG).
- Assistance meeting Centers for Medicare and Medicaid Services (CMS) requirement outlined in the CMS memorandum, to report on Maternal Morbidity Structural Measure.
- Access to Project ECHO for quality improvement education.
- Quality improvement analysis of your organization’s data with comparison to regional/state/national reports.
- Opportunity to add structural measures from Alliance for Innovation on Maternal Health (AIM), which synchronizes MNPQC reporting with other states involved in AIM program.

**Expectations of Birthing Facility:**

- **Approved participation:** Support of initiative from relevant leadership in your facility according to your system hierarchy.
- **Assemble a team:** Identify a team and team leader based on recommended roles below (team sizes may vary based on hospital/system size, minimum of two members):
  - Hospital leadership champions (ideally a champion from both obstetric and infant services)
  - At least one healthcare provider from obstetrics and one from pediatrics
  - Pharmacy representative
  - Bedside nursing staff
  - Navigator/Case Manager/Care Coordinator/Social Worker
- **Attend initiative activities:** All team members actively participate in virtual collaborative activities during the initiative period (estimated 12-18 months).
  - Learning Session 1 – Wednesday September 28, 2022 11:00 am – 2:00 pm
• Monthly Initiative Action Period calls for teams first Wednesday of the month, 12:00-1:00pm with first call on November 2nd.
• Learning Session 2 and/or final Learning Session (Dates TBD)

• **Regular local team meetings:** Commitment to convene team for monthly QI meetings to:
  o Test (PDSA cycles)
  o Implement
  o Monitor/share initiative progress (data collection, feedback from patients, healthcare team members)

• **Monthly reports:** Teams will input data monthly to MNPQC through SimpleQi using the data collection tools to audit up to 30 charts/cases per month.
  o Structural measures survey biannually
  o Present baseline data during Learning Session 1
  o Using PDSA cycles for testing and implementation
  o Develop a spread plan for health systems statewide
  o Evaluation, ongoing and final summary

• **Participation in reports based on Aggregate non-Organization Specific Reports and AIM Metrics.** AIM metrics provides national benchmarking of deidentified hospital measures used to evaluate the Initiatives. MNPQC may publish these reports publicly.

• **Data collection:** As a quality improvement initiative, data is gathered to learn and inform PDSA cycle to result in improvement.
  o MNPQC will not request personal health identifiers (PHIs).
  o Data collection and reporting will be deidentified and any disclosed numbers would be aggregated data to partners.
  o Data will be submitted via the AIM portal.
Data Collection Tool Here
Dear Birthing Facility Leadership,

Thank you for agreeing to partner with the Minnesota Perinatal Quality Collaborative (MNPQC) as one of the birthing facilities to participate in the Mother/Infant Opioid and Substance use Treatment and Recovery Effort (MOSTaRE) Initiative. The MNPQC is a network of organizations, medical providers, content experts and community voices. This letter serves to confirm your approval by highlighting team expectations from your facility in the MNPQC initiative.

By December 2023, our aim is to increase the identification and treatment of substance use disorders (SUDs) in pregnant people and substance exposure in infants by 50% or more in order to improve pregnancy and postpartum outcomes, increase the use of non-pharmacologic methods for treating infants exposed to opioids and reduce the average length of stay for these infants.

We recognize your facility and MNPQC each have different resources, roles, and areas of expertise. Therefore, we agree to work collaboratively in the following areas with the goal to reach multiple benefits related to being a part of the MNPQC initiative for your facility, its staff, and the community.

The MOSTaRE Initiative will emphasize family-centered care that maintains the dyad and will address treatment and prevention of substance exposure during and after pregnancy for both parent and infant.

**Overall Benefits for**

**Birthing People with substance use disorders**

- Improved screening for SUD
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**Birthing Facility Benefits of Participation:**

- Assistance with implementation of best practice guidelines using information gained from learning collaboratives and tools created by MNPQC.
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  - MNPQC will not request personal health identifiers (PHIs).
  - Data collection and reporting will be deidentified and any disclosed numbers would be aggregated data to partners.
  - Data will be submitted via the AIM portal.
The MNPQC looks forward to engaging health system partners to address the opioid crisis and impact of substance use disorders within the pregnant individuals and infant population.

Throughout the collaborative participation, the facility team and MNPQC will document progress of clinic changes and improvement on monthly conference calls and individual reports. Please refer to the “Mother/Infant Opioid Substance Use Treatment and Recovery Effort Initiative Charter” for more information on the role of your facility on this initiative.

We would like each facility to clarify whether there are other leadership that we need to seek approval from and be completed prior to initiation of your participation in the MNPQC MOSTaRE initiative.

Please contact the faculty to inform us of any further steps that need to be taken for this initiative to be successful. If there is any concerns and/or questions, please let us know as soon as possible.

If you agree, please sign and date this letter on the lines provided below and scan/email to info@minnesotaperinatal.org.

Sincerely,

MNPQC MOSTaRE Faculty

Adrienne Richardson, MD  MOSTaRE Chair
Rachel Cooper, MD  MOSTaRE Vice Chair
Todd Stanhope, MD  MNPQC Chair
Jane Taylor, Ed.D.  Improvement Advisor
Susan Boehm, RN, MS  MNPQC Director
Anne Walaszek, MPH  MOSTaRE Faculty
Brittany Gunderson  MNPQC Communications Manager

Approved by Birthing Facility Leadership:

Print name:  ____________________________     Signature:  ____________________________
Role:  ____________________________       Date: ____________________________
| What did we learn? Current state observations | Based on what we learned we want to start learning and working here: |
| What we are proudest of: | Proposed changes based on what we learned. (You may want to refer to the driver diagram to find related change ideas). |
| Problem/situation or gap in care we want to work on: | |