Strengthening the Perinatal System of Care (PSOC) in Maine

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January 2022
• Review Perinatal System of Care Work over the last 2 years

• Discuss implementation of work: Maternal and Newborn Levels of Care (LOC) work and Quality Improvement related to the Perinatal System

• Discuss potential goals and work for next year and how it aligns with your work
Review of Perinatal System of Care Work: Building Perinatal Systems

Infant Mortality Needs Assessment (2019-20)

Improve Care for Pregnant People with SUD and SEI
- Implement Eat, Sleep, Console at Birth Hospitals
- Plan of Safe Care
- MaineMOM Initiative

Safe Sleep Campaign (2019-present)

Perinatal System of Care Workgroup (2020-present)
- Hospital Maternal and Newborn Levels of Care- LOCATE Subgroup
- Risk Assessment for Preterm Delivery Subgroup
- Maternal Transport Subgroup
- Updated EMS Protocols on Obstetric Emergencies and Newborn Care

Upcoming Work (Present)
- Develop policies for expanded Pregnancy and Post-Partum Coverage
- Join Alliance for Innovation on Maternal Health (AIM) QI Work with the Early Childhood Comprehensive Systems (ECCS) Grant
1) Achieve healthy pregnancies & the best possible maternal & birth outcomes in all areas of the state, and across all populations
   • Reduce the Infant Mortality Rate to 4 deaths per 1000 live births over the next 5 years in Maine. (Current 5.5 infant deaths per 1000 live births)
   • Reduce Maternal Morbidity and Mortality Rates up to 12 months post-partum

2) Ensure all mothers and infants receive the right care in the right place at the right time through perinatal regionalization efforts
   • Ensure access to perinatal care for all areas of the state, especially rural, so that all women and infants receive timely and high-quality care
   • Assure appropriate transport of women and infants
   • Measure: % of VLBW babies (<1500g) are born at Level 3 or higher hospitals, Goal 90% (Healthy People 2010/2020) (Current 85.2% in 2017)
• Identified 4 Priority Areas for Rural Health Transformation after 4 Rural Health Listening Sessions in 2019
  • Engaging Communities
  • Strengthening Statewide Infrastructure
  • Support Regional Models for High-Need Services (including Perinatal)
  • Develop Rural Care Model and Payment Pilots
  • Several groups recommended looking at how EMS/Office of Rural Health set up trauma system for blueprint for perinatal system
• Over 40 states have done work on perinatal regionalization and over 20 states have done the LOCATe tool
• Jan-March 2020: Hospitals completed Federal CDC LOCATe tool
• Spring 2020: Initial Data Review: Maine CDC Maternal Child Health Team, MCH Epidemiologists. Perinatal Nurse Outreach Educator; Data sent to Federal CDC for analysis
• Fall 2020: MCDC sent hospitals request for data clarification
• Winter 2020-21: MCH team reviewed how hospitals’ self assessed level of care for maternity and newborn LOC vs LOCATe tool analysis
• February-August 2021: MCH team set up 1 hour virtual site visits with 26 birth hospitals and 3 of 7 non-birth hospitals to review findings
• September 2021: Follow-up visits completed with level 2 and 3 birth hospitals
• Winter-Summer 2021: Maine DHHS worked on draft guidance document around LOC with feedback from hospitals and providers
• Fall 2021: Finalized hospital LOCs and guidance document
• 2022: LOC guidance in place; Develop plan to pilot maternal transport data collection tool and risk assessment tool
Review of Perinatal System of Care Work: Provisional Infant Mortality Data

Rate per 1,000 live births

Q1-Q3

Source: Death certificate data, Maine CDC Data, Research and Vital Statistics Program
2020 and 2021 data are provisional and subject to change.
There were 6 pregnancy associated deaths in 2020. 5 of 6 occurred between 43 days and one year of delivery.

Erika Lichter
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Source: Maine DRVS linked death and birth data, 2020 and Maine MFIMR medical abstraction.
Note: These data are provisional and subject to change.
Next Steps on Implementing Perinatal System of Care Work

Level of Care (LOC) Guidance
LOC Map
Hospital Notification of Changes in Level of Care

Align work with Federal Government Emphasis on Maternal Health
CMS Guidance: evidence-based best practices for hospitals in managing obstetric emergencies
(HRSA RMOMS Opportunity
CDC HEAR HER Campaign

Maine QI Projects:
PQC4ME- AIM Bundle-
Maternal Hypertension
Risk Assessment Tool for Preterm Labor
Maternal Transport Data

Building Systems Focusing on Maternal-Child and Family Health
Introduction

In 2020, Maine Department of Health and Human Services (DHHS) asked all of the hospitals in Maine to complete an assessment from the Federal CDC on maternal and neonatal Levels of Care (LOC) using the LOCATE tool as the state works towards strengthening the perinatal system of care and reducing infant and maternal morbidity and mortality rates. In 2021, DHHS and the Maternal and Child Health Team at the Maine CDC met with each hospital to review their LOCATE tool results and determine the appropriate maternal and newborn LOC. In order to help hospitals assess their facility’s capabilities and LOC, Maine DHHS developed this guidance document which is adapted from the Washington State Department of Health’s Washington State Perinatal and Neonatal Level of Care 2018 Guidelines. This document follows national guidance, including the American Academy of Pediatrics Levels of Neonatal Care and Guidelines for Perinatal Care recommendations to use uniform, nationally applicable definitions, and consistent standards of service to improve neonatal outcomes. The guidance is also consistent with American College of Obstetricians and Gynecologists and Society for Maternal-Fetal Medicine’s Obstetric Care Consensus: Levels of Maternal Care that was updated in August 2019. The Guidelines don’t require individual hospitals to provide the entire scope of service within a LOC; variation may be needed to meet the Guideline objectives and the unique goals of a hospital or region. This document will be reviewed every 3 years.

It is expected that these guidelines will help:
- improve the outcome of pregnancy,
- increase access to appropriate care for pregnant people and newborns, and
- optimize allocation of resources.

This is not a regulatory document. Maine DHHS uses this document as a reference for hospitals applying for Level I, Level II, Level III, or Level IV designations.
Implementation of Work: Hospital Notice of Maternity and/or Newborn Care Changes

- **Temporary or Permanent Termination of Maternity and/or Newborn Care**
  - Hospitals should provide notice of temporary closure at least 30 days prior to the effective date, and 120 days prior to the effective date, for a permanent termination of service. In cases when such notice cannot be done, the hospital should provide notice soon as reasonably practical for a temporary termination of service, by sending a Change in Service Notification to the Maine Department of Health and Human Services Division of Licensing and Certification (DLC).

- **Change in Level of Care for Maternity and Newborn Services (Level 1, 2, 3, or 4)**
  - Provide notice of at least 30 days and within 120 days notice for a proposed change in LOC to the Maine CDC Maternal and Child Health Program Director who will notify the DHHS Chief Child Health Officer.
  - The hospital and the Maine CDC Maternal Child Health Team will meet to discuss the LOC designation and reach agreement on the level of care.
CMS issued guidance on best practices for managing obstetric emergencies in December 2021.

The Condition of Participation for Quality Assessment and Performance Program requires hospitals to develop, implement, and maintain an effective, ongoing, hospital wide, data-driven quality assessment and performance improvement program.

CMS is encouraging hospitals to implement evidence-based best practices for the management of obstetric emergencies, along with interventions to address other key contributors to maternal health disparities.

Highlights Alliance for Innovation on Maternal Health (AIM)/ACOG patient safety bundles.

Adopted annual reporting on new structural quality measure for Hospital Inpatient Quality Reporting (IQR) that asks hospitals to attest whether they participate in a statewide and/or national maternal safety quality collaborative and whether they have implemented safety practices or bundles to improve maternal outcomes.

Aligns with Perinatal Quality Collaborative Work.
Rural Maternity and Obstetrics Management Strategies Program (RMOMS)
Funding to improve access to, and continuity of, maternal and obstetrics care in rural communities through regional aggregated care, coordination of a continuum of care, use of telehealth, and the implementation of financial sustainability strategies.
Geographic coverage: Nationwide
Application Deadline: Apr 5, 2022
Sponsors: Federal Office of Rural Health Policy, Health Resources and Services Administration, U.S. Department of Health and Human Services

- 5 Awards; up to $1,000,000 a year for 4 years

Eligibility requirements
- All domestic public and private entities, including nonprofit organizations, for-profit businesses, faith-based and community-based organizations, tribes, and tribal organizations
- Have demonstrated experience serving, or the capacity to serve, rural underserved populations
- Represent a network composed of participants that include at least 3 healthcare organizations and is inclusive of the 6 required network partner types. 1) at least two rural hospitals or Critical Access Hospitals (CAH); 2) at least one FQHC 3) at least one Medicare certified Rural Health Clinic (RHC), to the extent which these entities are in the network service area and engaged in maternal and obstetrics care 4) at least one Level III and/or Level IV facility 5) regionally and/or locally available social services (home visiting, Head Start) and 6) the state Medicaid agency.
- Has not previously received an award under this program for the same or similar project
Implementation of Work: Quality Improvement/Pilots

- Maine joined the **Alliance for Innovation on Maternal Health (AIM) | ACOG QI work** in October 2021 under The Perinatal Quality Collaborative for ME (PQC4ME) at the Medical Association Center for Quality Improvement (CQI).
- PQC4ME is linked to the Northern New England Perinatal Quality of Care Network (NNEPQIN) based at Dartmouth-Hitchcock.
- Previous PQC4ME projects include the implementation of Eat, Sleep, Console to improve care for Substance Exposed infants, improving Safe Sleep practices, and pilot testing of Maternal Naloxone post-delivery (in process).
- Under the Early Childhood Comprehensive Systems (ECCS) grant, the Maine CDC designated funding to the PQC4ME to help support AIM Bundle implementation and additional projects.
- Maternal Hypertension will be the first AIM bundle in Maine. The QI Project kick off will be on January 26, 2022, 12 noon – 1 pm (webinar) and is open to any interested Maine birth hospitals and other clinical teams. Click on this link to **REGISTER**.
- Other Northern New England states are working on AIM bundles: New Hampshire- maternal SUD; Vermont- post-partum hemorrhage.
Implementation of Work: PQC4ME will Pilot Algorithm for Preterm Labor Birthing and Non-Birthing Hospitals

Algorithm for patient presenting with pre-term labor signs/symptoms

- **DETERMINE** cause/reason of contractions (pelvic and external maternal, and other signs/symptoms of PTL & FPI)
- **DETERMINE** if care needed for uterine bleeding (suggesting placental abruption, placenta previa)
- Check fetal well-being with electronic fetal monitor
- **SEND** for evaluation with intent to uterine cultures if positive
- **PERFORM** sterile speculum exam. Visually review for PROM, cervical length, and prolapse, or focal tenderness in peritonsillar, anterior; uterine tenderness or tender cervix, and/or uterine tenderness or tender cervix
- **PERFORM** digital exam. Assess cervical dilatation and effacement
- **DIAGNOSIS** etiology and incidence

**DELIVERY** may be warranted, consult CONSIDER NGM

**PERFORM** digital exam

- Visual inspection
- Fetal monitoring
- **PERFORM** fetal monitoring
- **DIAGNOSIS** risk of placenta previa

**PERFORM** non-stress and ultrasound (USG)

- **TREATMENT**: 
  - **MONITOR** dynamic, changes of 1 or more, or PROM
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**DIAGNOSIS** etiology and incidence of PTL & FPI

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Implementation of Work:

PQC4ME will Pilot Data Collection Form for Maternal Transports
Implementation of Work: DHHS is Working to Build Systems Focusing on Maternal-Child and Family Health

Perinatal System of Care (Prenatal -1)

Early Childhood Comprehensive Systems (ECCS) Program (Prenatal-3)

Help Me Grow (Birth to 8)
Discuss potential goals and work for next year and how it aligns with your work (Will be narrowed to 3-4). These were discussed at the Quarterly Perinatal System of Care Meeting in December 2021

1. Continue to build infrastructure to Strengthen the Perinatal System of Care in Maine
2. Provide hospitals feedback on QI efforts with annual data collected from birth certificates
3. Start implementation of AIM Bundles in Maine as part of ECCS grant
4. Continue to build pathways for maternal transport
5. Gather more information on gaps in the perinatal system around health equity
6. Develop workforce capacity- look at simulation opportunities for delivery rooms, OB emergency training in rural non-birth hospitals for First Responders, ED staff
7. Provide education around preconception health, chronic disease management during pregnancy, and post-partum health
8. Continue work around improving care for pregnant people with SUD/OUD and Substance Exposed Infants
Thank You!

DHHS Commissioner’s Office

- Amy Belisle, MD, MBA, MPH, Chief Child Health Officer, Amy.belisle@maine.gov

Maine CDC

- Maryann Harakall, MCH Program Director, Maryann.Harakall@maine.gov
- Angie Bellefleur, ECCS Project Director, Angie.Bellefleur@maine.gov
- Kelley Bowden, MS, RN, now Retired Perinatal Outreach Nurse Coordinator for the Maine CDC

Consultant

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