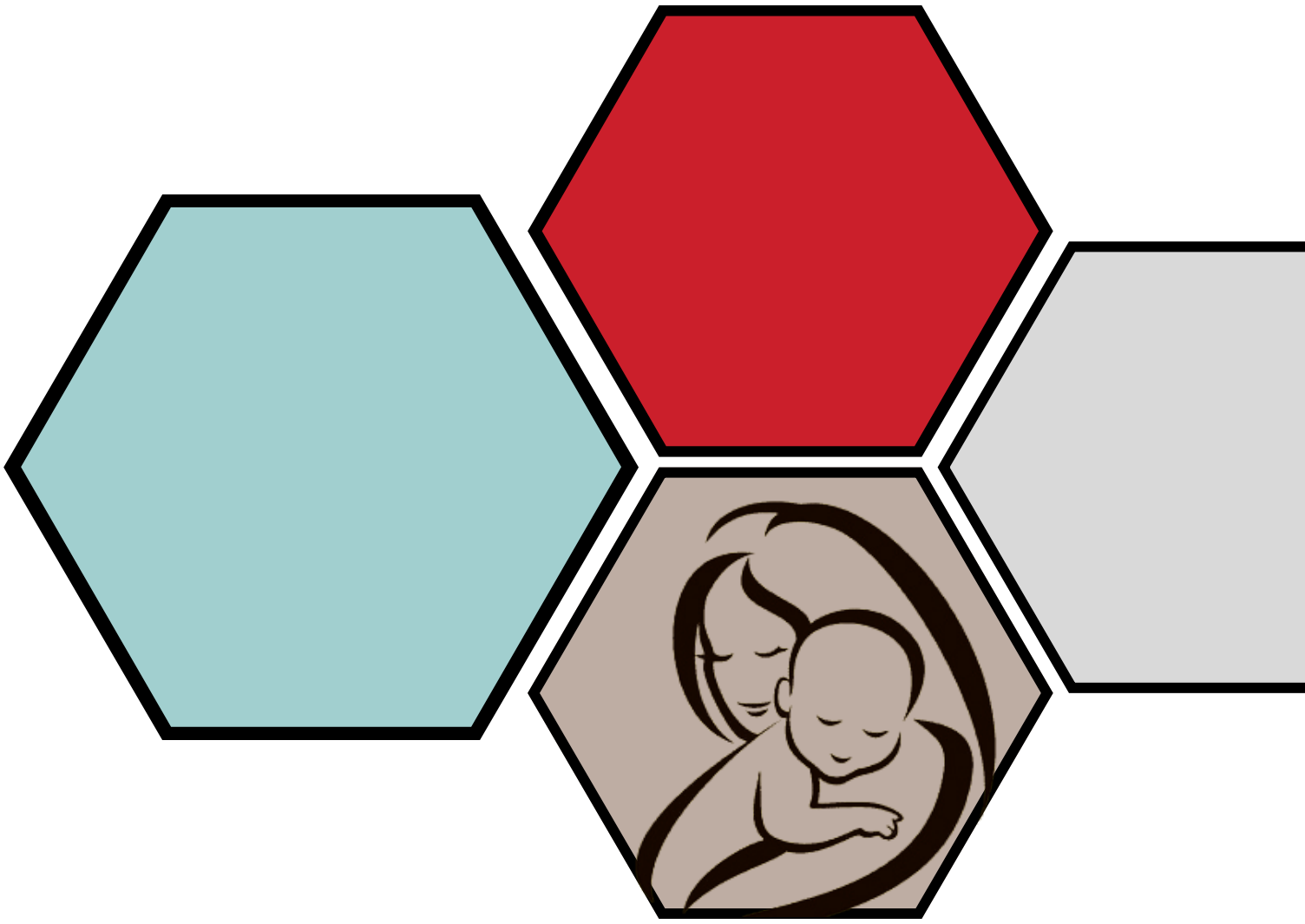
2024

Transforming Perinatal Care in Nebraska: NPQIC Summit Highlights



The Nebraska Perinatal Quality Improvement Collaborative

NPQIC

Acknowledgments

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Executive Summary

The Nebraska Perinatal Collaborative's 9th Annual Summit: Transforming Perinatal Care for All Nebraskans was held on Friday, September 27, 2024, in Omaha. A record-breaking 120 people were in attendance, including providers, nursing leaders, public health professionals, academics, community organizations, and policymakers from across the state. The Summit provided a platform for this multidisciplinary audience to deepen their knowledge of the state of Maternal and Infant Health in Nebraska and identify opportunities for quality improvement.

Maternity care is failing many pregnant mothers and newborns in our country and right here in Nebraska, especially Black and Brown people, rural families who are geographically isolated, and those whose incomes are near or below the federal poverty threshold. Optimizing the quality of perinatal care is impossible without equity in care delivery. We know we can do better!

The intent of this Summit was for key partners to gain insight into the current state of maternal health and what each sector can do to make it safer for women to experience pregnancy. Presentations covered birth equity in Nebraska, maternal mortality with a focus on mental health and substance use in pregnancy, data for QI lived experience integration, perinatal nutrition, and the reemergence of syphilis.

This summary report shares key takeaways from each presentation and NPQIC's recommended strategies to transform perinatal care and address policies, systems, and environments impacting maternal health for all Nebraskans.

Call to Action

Much like the rest of the United States, Nebraska is experiencing a maternal health crisis. Non-Hispanic Black and Native American mothers continue to experience a disproportionate burden of both morbidity and mortality. Across all geographic regions in Nebraska, maternal morbidity most impacts mothers who: are over age 35, utilize Medicaid, have an annual median income less than $31,009, and identify as non-Hispanic Black. Notably, a steady increase in gestational diabetes and obesity significantly contributes to maternal morbidity and preterm birth. We must take action now to reverse these trends and right the injustices.

NE has the 4th highest percentage of counties in the U.S. defined as maternity care deserts

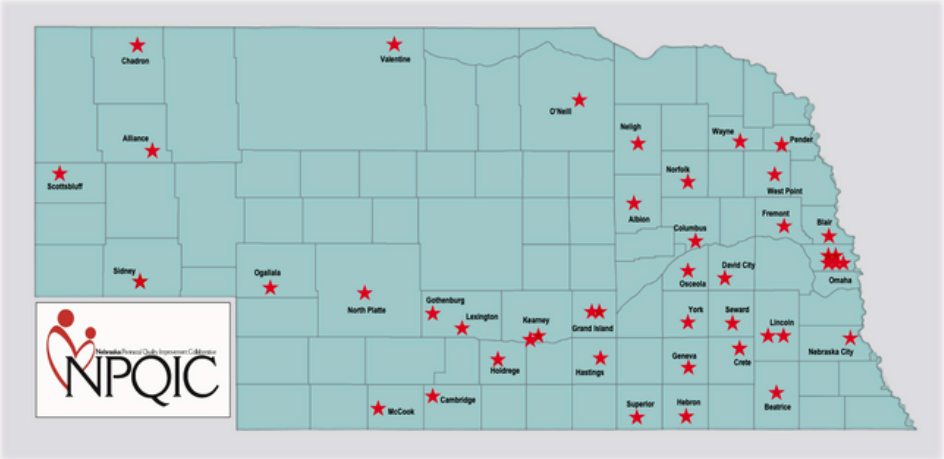
NE ranks among the worst 15 states for infant mortality rates among Black or African American mothers

NE received a D on the 2024 March of Dimes Report Card (Compared to F in 2023)

NE received a D on the 2024 U.S. Maternal Mental Health State Report Card (Compared to D- in 2023)

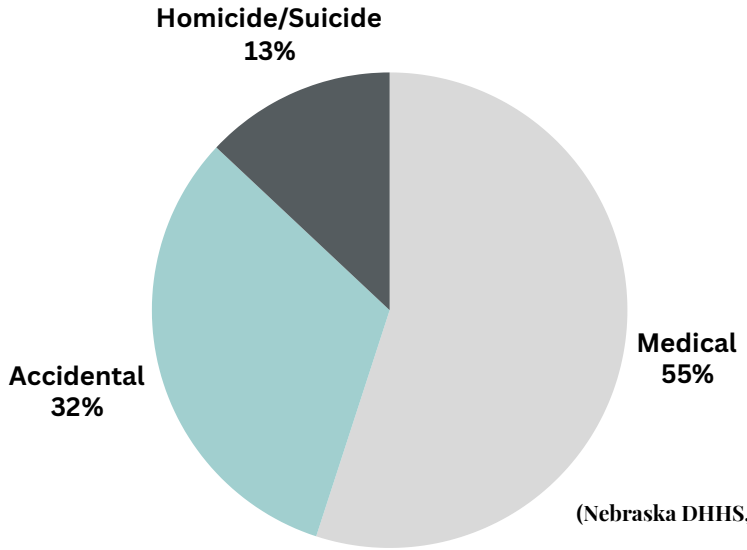
Pregnancy-associated Deaths by Race/Ethnicity, Nebraska 2017-2021:

- **Non-Hispanic White: 60%**
- **Non-Hispanic Black: 20%**
- **Hispanic/Other: 14%**



Since 2017, 10 birthing facilities have stopped providing obstetric services in Nebraska, including 9 Critical Access Hospitals and 1 Free Standing Birth Center.

Pregnancy Associated Deaths by Category, Nebraska 2017-2021 (N=50)



(Nebraska DHHS, 2023)

82% of pregnancy-associated deaths were considered preventable!

Keynote Speaker
Arthur James, MD, FACOG

Dr. James is a former Obstetrician, Gynecologist, and Pediatrician dedicated to serving underserved populations and advancing health equity. He is a former Associate Professor at The Ohio State University Wexner Medical Center and National Children's Hospital. Dr. James serves on multiple health boards and leads efforts to address infant mortality and health equity.

Transforming Perinatal Care for All: "Racial Birth Equity in Nebraska: Moving Forward Together"

The persistence of racial disparities in birth outcomes is the most problematic MCH challenge facing this nation. Racism, both historical and contemporary, is the root issue for the disparities.

While overall infant mortality rates (IMRs) have declined, the Black/White infant mortality ratio disparity has actually increased from 1980 to 2020 in Nebraska and the nation. Large social inequalities have persisted over a century and contributed to disparities in IMRs.

In order to achieve equity, we must reduce the Black infant mortality ratio at a faster pace than we improve the white infant mortality ratio, without compromising the pace of IMR for whites.

- Unless we change this trend, Black babies in NE will have to wait until **2059** to experience the same opportunity of surviving the 1st year of life as white babies did in 2019.
- The thought of striving to improve the rate of survival for one group at a faster pace than for another group bothers many people, yet the white IMR has been improving at a faster pace for decades.

"Our ability to **prevent infant deaths and to address long-standing disparities** in infant mortality rates between population groups is a barometer of our society's commitment to the health and well-being of all women, children and families"

- Secretary's Advisory Committee on Infant Mortality (SACIM)

Nebraska could become the first state in the nation to achieve black/white equity in infant mortality.

It will take all of us: policy, public health, clinical, community, mother and family, pediatric, and obstetrical care.

Keynote Speaker
Michael Warren, MD, MPH, FAAP

Dr. Michael Warren is a public health pediatrician and the Associate Administrator of the Maternal and Child Health Bureau (MCHB) in the Health Resources and Services Administration (HRSA). Dr. Warren served in various roles at the Tennessee Department of Health and as a Medical Director in the Governor's Office of Children's Care Coordination.

Accelerate Upstream Together to Improve Perinatal Health and Achieve Equity

The Healthy People 2030 objective for infant mortality is to reduce the rate to 5.0 or fewer per 1,000 live births. Overall, IMR in Nebraska is 5.4 per 1,000 live births. However, non-Hispanic Black and American Indian infants experience IMR rates approximately three times higher.

- In Nebraska, infant mortality is primarily caused by preterm birth (28.3%), congenital anomalies (23.6%), Sudden Unexpected Infant Death (SUID) (17.6%), and other perinatal conditions (13.6%).
- Causes differ significantly across racial and ethnic groups. For example, the leading cause of death for non-Hispanic Black infants is preterm birth (58.7%). In contrast, 73.2% of non-Hispanic American Indian/Alaska Native infant deaths are attributed to SUID.

What would it take us to reach equity in NE?

› Prevent **12** Black infant deaths per year ‹

ACCELERATE - We must move quickly. It is unacceptable that in the U.S., 20,000 babies die each year before their first birthday or that the long-standing disparities continue to persist.

UPSTREAM - Public health efforts focus on preventing adverse outcomes before they occur, while healthcare provides care once injury or illness has already occurred.

TOGETHER - Families and communities must be at the center, as they know their needs and hold the answers. Effective work requires collaboration across public health, community organizations, academia, healthcare providers, and governments.

Life Course Trajectory

- Much of the baby's health is often linked to the mother's health long before pregnancy. Therefore, improving women's health throughout their lives is essential for better health outcomes.
- While healthcare contributes 15-20% to overall well-being, non-clinical factors- including genetics, community environment, and local policies- have an outsized role in overall health and well-being.
- We must address social and structural determinants of health to improve health outcomes.

"As a nation, we cannot view the current infant mortality rate as acceptable, nor can we continue to accept that Black, NHPI, and AI/AN babies have lower chances of surviving their first year of life than do their White, Hispanic, and Asian counterparts. **We must accelerate the reduction of infant mortality rates, with a particular focus on accelerating equity**"

Invited Speaker
Marcela Smid, MD, MA, MS

Dr. Smid is a Associate Professor at the Department of Obstetrics and Gynecology at the University of Utah. Dr. Smid is a member of the Society for Maternal-Fetal Medicine and the medical director of the Substance Use & Pregnancy - Recovery, Addiction, Dependence (SUPeRAD) speciality prenatal clinic.

Maternal Mortality Review Committees (MMRC), Substance Use Disorder and Mental Health: Connecting the Dots from Public Health Data to Hospitals

Key Takeaways

INTERLINKED: There is a critical link between substance use and mental health, which are the leading causes of maternal death nationwide.

EVIDENCE: Data is essential for driving change. Without accurate information, progress is impossible.

RESOURCES: We need dedicated staff and better screening to capture substance use. While patients may be hesitant to disclose, asking them opens the door.

SCREENING: Universal toxicology testing is not recommended.

ASSESSMENT: For patients referred to substance use treatment, testing with documented rationale is advised, even those they may not fully disclose or be aware of, is essential to effective treatment.

INVESTIGATION: If an infant exhibits signs of withdrawal, umbilical cord testing may be performed to help identify potential substance exposure.

PROGRESS: Change is a gradual process; small steps lead to meaningful progress. Improvements may be imperfect; that's part of the journey.

MMRCs' Role in Maternal Death

MMRCs are multidisciplinary teams composed of various care disciplines that conduct comprehensive reviews of deaths among individuals who were pregnant or within one year postpartum. The NPQIC serves as the action arm of Nebraska's MMRC.

MMRCs make six key decisions for each death reviewed:

1. Was the death pregnancy-related?
2. What was the cause of death?
3. Was the death preventable?
4. What were the critical contributing factors to the death?
5. What are the recommendations and actions that address those contributing factors?
6. What is the anticipated impact of those actions if implemented?

MMRCs provide recommendations while Perinatal Quality Collaboratives are key in ensuring implementation. Alliance for Innovation on Maternal Health safety bundles are excellent tools for supporting these efforts.

"The way we show we value maternal life is by putting resources toward preventing loss."

Invited Speaker
Carol Gilbert, PhD, MS

Dr. Carol Gilbert is an Assistant Professor in the Department of Health Promotion at the UNMC College of Public Health. She also serves as a Senior Health Data Analyst for CityMatCH. Dr. Gilbert previously held a faculty appointment in the Division of Child Health Policy within the Department of Pediatrics at UNMC's College of Medicine.

Data for Quality Improvement 101

When data quality problems happen in patterns, the data gives us a biased picture. This can happen when:

- Someone is not recorded
- Certain information about them is missing
- Inaccurate information is recorded.

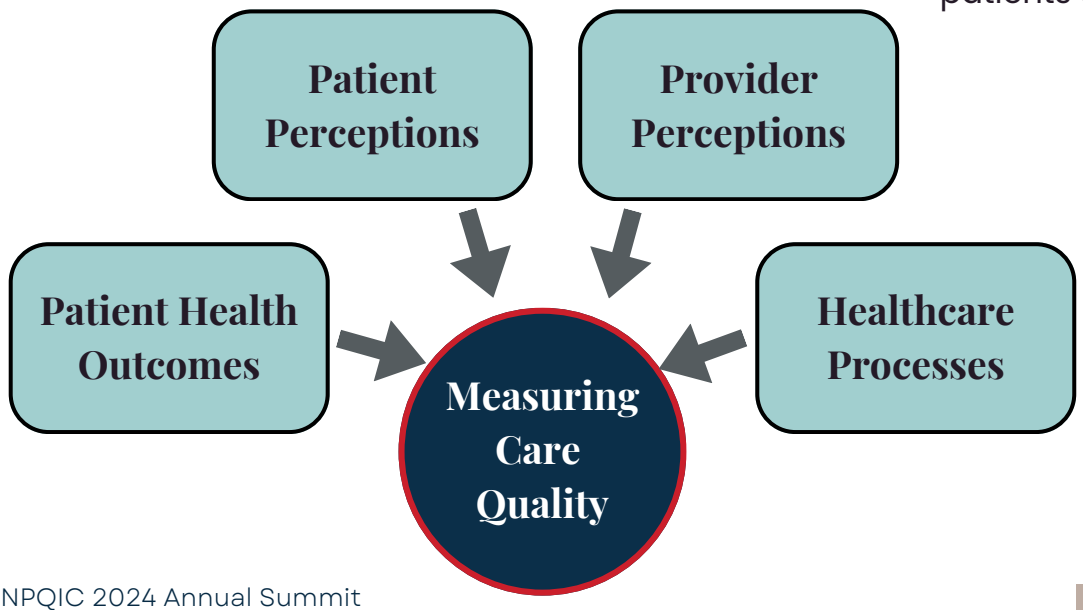
> "Data doesn't show us the whole picture. But it does give us a map."

Linking other data sources to vital records helps us track who is missing. These sources of vital record data could include births, fetal deaths, infant deaths, and maternal deaths.

The individuals who need the most help are often the ones who do not disclose risk factors or do not enroll in supplemental programs so the data is still not complete. Respectful care improves communication and increases the likelihood that patients will voice concerns and feel comfortable sharing things like race/ethnicity and social determinants of health risk factors. **Respectful care is vital to healthcare quality**.

What can we do?

- Ensure our data includes everyone, or doesn't systematically exclude any groups
- Improve self-reporting of key equity variables such as race, ethnicity, spoken language, public insurance, etc.
- Ask the patient questions to ensure accurate information and avoid assumptions
- Combine systems and improve effieciency to avoid overburdening patients and staff



Invited Speakers
Lived Experience Integration Forum

- Bekah Bischoff: Program Manager of the MoMMAs Voices Program
- Lucy Battles and Tomeka Isaac: MoMMAs Voices Patient Family Partners

MoMMA's Voices Lived Experience Integration

MoMMA's Voices is a comprehensive program of the Preeclampsia Foundation dedicated to empowering mothers and families by amplifying their voices, especially those who have been historically marginalized. The initiative brings together diverse partners to advocate for improved maternal health outcomes.

Building Better Connections with Patients: Truly *listen*, don't just hear

- Use clear, accessible language—avoid medical jargon
- Respect the expertise patients bring from their own experiences
- Foster a two-way understanding between patients and providers

Key Considerations for Integrating Patient Family Partners

- "Those closest to the pain should be closest to the conversation"
- Patients should be active collaborators, not just recipients of care.
- Recognize patients as experts in their own experiences.
- Acknowledge the trauma and courage of patients.
- Approach each case with an open mind, understanding that what may seem like a successful outcome to providers could be viewed by patients as a trauma.

Practical Ways to Involve Patients:

Review surveys, present at grand rounds, participate in employee onboarding, lead support groups, integrate real-life patient stories into simulations, etc.

Patient Partner Recruitment Sources:

Social media, WIC offices, daycares, churches, Momma's Voices.

Compensation for Patient Family Partners:

Monetary compensation, Patient and Family Partner (PFP) training, Swag/merchandise, Professional development opportunities, Authorship, and Practical support (parking, Uber, childcare) for events.

Advice to Clinical Staff

- Find a connection and be authentic. Relate to patients/bond with them to make them feel more comfortable advocating for themselves or asking questions. -**Lucy.**

- Deliver bad news with empathy and compassion, always prioritizing the patient. "Our experiences make us who we are. When I walk into a medical setting, I'm a different person because of my experience." -**Tomeka.**

- "If I could have one thing gone differently, I wish my nurse could have sat by my side and said that what I went through was traumatic and it's ok not to be ok." -**Bekah**

www.mommasvoices.org

Invited Speaker
Jessica Knurick, PhD, RDN

Dr. Jessica Knurick is a registered dietitian with a PhD in nutrition science. As a researcher and consultant, she specializes in perinatal nutrition, helping women navigate the complexities of prenatal and postpartum dietary guidelines. Jessica is passionate about empowering women to thrive during and after pregnancy. She educates her audience on social media, addressing common misconceptions and providing evidence-based strategies for optimal health.

Perinatal Nutrition: A Fresh Look at Nourishing the Pregnant and Postpartum Body

The Current State of Perinatal Nutrition:
Over **50%** of expecting mothers don't meet the recommended quantity for component food groups. Along with that, the quality of their diet drops nearly **50%** during pregnancy. Considering these factors, **one-third** of all pregnancies are below the required vitamin D, E, iron, and magnesium. This issue continues into the postpartum period, as **40%** of women report a notable gap in care, and diet quality continues to decline. Vitamins can aid with nutrient repletion, healing, and lactation support.

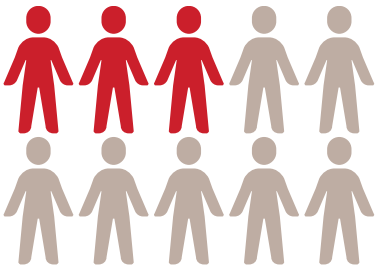
Tips for Clinicians:

- **Patient-Centered Nutrition**
  - Consider cultural factors
  - Assess for food security
  - Educate and build patient understanding around basic nutrition knowledge
- **Inclusive Nutrition**
  - Shift from "don't eat" to "do eat" phrasing
- **Stress the Importance of Vitamin Supplementation**
- **Provide Handouts and Brochures**
- **Keep Up with Social Media Trends**
  - Be ready to combat misinformation that is currently trending
- **Collaborate with Registered Dietitians**

Key Guidelines to Follow During Pregnancy:

- Focus on Healthy Dietary Patterns, not good/bad foods
- Caloric Intake:
  - First trimester: no change
  - Second trimester: Increase ~340 kcals
  - Third trimester: Increase ~450 kcals
- Macronutrient Needs:
  - Carbohydrates
  - Proteins
  - Fatty Acids
- Micronutrients:
  - Folate and Choline

1/3 **are lacking required vitamins**



Over 50% don't meet recommended quantity for component food groups

Invited Speakers
David Greiner, MD and Jennifer Berger, MD

Dr. David Greiner is currently the chief resident of OB/GYN at UNMC. He is in his 4th year of residency, having graduated from Saint Louis University School of Medicine in 2021. Dr. Greiner will begin a Maternal Fetal Medicine fellowship at the University of Minnesota in 2025.
Dr. Jennifer Berger completed medical school at Kansas University School of Medicine in Kansas City, KS. She completed her Pediatric Residency at the University of Nebraska Medical Center and obtained her Board Certification in Pediatrics in the Fall of 2022.

The Re-Emergence of Syphilis: New Screening Recommendations and Maternal/Neonatal Case Reviews

Nebraska mandates syphilis screening only in the first trimester of pregnancy. Two testing methods exist:

Treponemal (TP-PA, FTA-ABS, MHA-TP, TPHA, CLIA):

- Detect specific T. pallidum antibodies
- Remains positive after infection

Non-treponemal (RPR and VDRL):

- Detect cell damage
- Titer calculation (ratios like 1:4, 1:8)
- Used for initial screening, treatment response, and reinfection detection
- Can have false positives

For infants:

- Avoid treponemal tests (lifelong positivity)
- Use the same non-treponemal test as the mother
- Draw blood directly from the infant, not the cord
- Subsequent evaluation includes: blood count, lumbar puncture, ophthalmologic and long bone exams

All exposed infants require infectious disease consultation. Without immediate testing, syphilis symptoms may manifest later in development.

Early congenital syphilis signs typically appear within the first 3 months after birth but may present up to age 2:

- Hepatomegaly
- Bone abnormalities (60-80% of cases)
- Failure to gain weight or thrive
- Snuffles (rhinitis)
- Rash that begins as small blisters and later changes to copper-colored
- Flat or bumpy rash
- Skeletal abnormalities

Late congenital syphilis signs appear after age 2:

- Hutchinson teeth (notched and peg-shaped teeth)
- Bone pain
- Blindness
- Hearing loss or deafness
- Deformities of the nose with flattened nasal bridge
- Saber shins (bone problem of the lower leg)
- Scarring of the skin around the mouth, genitals, and anus.

National Statistics

207,255 Syphilis cases → **3,761** Infants born with syphilis

10X more babies born with syphilis than a decade prior

231 Stillbirths

51 Infant deaths

Of cases could have been prevented with proper testing and treatment

High Risk Nebraska Counties

The CDC recommends all counties above 4.6/100,000 should be screening all sexually active people between the ages of 15-44.

- Buffalo
- Dakota
- Dawes
- Dodge
- Douglas
- Gage
- Holt
- Knox
- Lancaster
- Madison
- Richardson
- Saunders
- Scottsbluff
- Sherman
- Thurston
- York

Recommendations

Nebraska perinatal populations are facing a number of major threats, including shrinking access to maternity care, persistent infant and maternal mortality disparities. Additionally, while mental health conditions, substance use disorders, and chronic health conditions are increasingly more prevalent, resources are limited and underutilized. Efforts to transform perinatal care for all Nebraskans must be: **visionary, innovative, experiential, and integrative.**

VISIONARY

To disrupt decades-long disparities, perinatal care teams must examine the larger picture and strategize radical, long-term approaches.

- Prioritize improvements in data quality, access, and standardization across systems.
- Provide targeted support to rural and geographically isolated communities. Design creative and sustainable solutions to address maternity care deserts.
- Support the NE MMRC and NPQIC's role in examining and preventing maternal deaths. Explore causes of death by demographic group to determine targeted interventions.
- Focus on improving women's health across the lifespan.

EXPERIENTIAL

Patient experience is paramount. Engage families and communities, as they know their needs and hold the answers. Effective work requires collaboration across public health, community organizations, academia, healthcare providers, and governments.

- Prioritize providing patient-centered care while truly listening to patients & families. Include patients as active collaborators in their care. Acknowledge trauma. Approach each case with an open mind. Recognize patients as experts in their own experiences.
- Recruit patient representatives and compensate them for their time and context expertise. Integrate patient experience data in quality measures.

INNOVATIVE

Trends in maternal and infant health are ever-changing. The clinical and public health communities must remain current in knowledge about emerging and ongoing threats to maternal and infant health.

- Update Syphilis protocols: Screen in first and third trimester and again at birth. Counties with high rates should test everyone of childbearing age.
- Implement the Prenatal Plus program at maternity care clinics. Increase awareness and streamline enrollment in WIC and presumptive eligibility for Medicaid services.
- Improve self-reported collection of race, ethnicity and social determinant data. Avoid assumptions.
- Enhance the workforce by establishing dedicated QI positions with protected time.

INTEGRATIVE

To transform perinatal care, teams must approach clinical care in new ways.

- Integrate diverse voices and increase collaboration with public health, community, and patient family partners in QI. Compensate patients appropriately for their time and context expertise.
- Implement validated, equitable universal screening protocols for mental health and substance use. Enhance services and resources to refer patients for support.
- Screen for social needs and connect patients with resources.
- Encourage healthy patterns and behaviors across the lifespan to improve perinatal health. Collaborate with dietitians, mental health providers, and others.

NPQIC Goals for 2025

Goal 1: Center equity at the core of our work

Goal 2: Achieve initiative aims and sustain momentum

Goal 3: Empower hospital teams through education and data-driven insights

Goal 4: Foster meaningful patient and community engagement to drive QI efforts

VISION

We envision a future where every mother, infant, and family in Nebraska experiences equitable, high-quality perinatal care regardless of race, geography, or economic status. We envision a comprehensive healthcare system that eliminates disparities, prioritizes maternal and infant well-being, and ensures safe, dignified pregnancy and childbirth experiences for all Nebraskans.

MISSION

The Nebraska Perinatal Collaborative is dedicated to transforming perinatal care by advancing health equity, fostering collaborative innovation, and driving continuous quality improvement. We bring together diverse stakeholders to develop data-driven strategies to improve maternal and infant health outcomes. We will work to reverse negative trends in maternal and infant health, pushing for policy changes, improved healthcare access, and comprehensive perinatal care across Nebraska.

Resources

Access the links below to learn even more about the state of maternal health in Nebraska and the United States.

2024 Nebraska DHHS Severe Maternal Morbidity Report 2017-2021

2023 Nebraska DHHS State Maternal Death Review Team Annual Report: 2017-2021

2023 Nebraska DHHS State Child Death Review Team Annual Report: 2021

2024 U.S. Policy Center for Maternal Mental Health State Report Card

2024 NE March of Dimes Report Card

2023 March of Dimes Where You Live Matters: Maternity Care Deserts and the Crisis of Access and Equity in Nebraska

CDC: County-Level Syphilis Data

HRSA Maternal Child Health Bureau Infant Health

California Prevention Training Center Congenital Syphilis Algorithm

Nebraska Prenatal Plus Program

MoMMAs Voices

MyPlate Pregnancy and Breastfeeding

Nebraska Perinatal Quality Improvement Collaborative
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Subscribe to NPQICs newsletter for updates, educational opportunities, and collaboration. Or contact the NPQIC team here.