



2024 Hypertension (HTN) Sprint Report

Minnesota Perinatal Quality Collaborative (MNPQC)

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Executive Summary

The Minnesota Perinatal Quality Collaborative (MNPQC) initiated a Hypertension Sprint to build on the foundational work developed to address the growing challenges associated with hypertensive disorders of pregnancy (HDP) during our initial hypertension initiative. This sprint focused on two core interventions: promoting the use of Blue Bands for identifying high-risk patients and increasing the adoption of low-dose aspirin (LDA) as a preventive measure. This report outlines the background, methodology, and key achievements of the sprint, emphasizing its impact on participating facilities and the long-term benefits for perinatal care in Minnesota.

MNPQC Background

The **Minnesota Perinatal Quality Collaborative (MNPQC)**, founded in 2018, is a nonprofit organization dedicated to improving perinatal health outcomes in Minnesota. MNPQC is part of a network of **Perinatal Quality Collaboratives (PQCs)** supported by the Centers for Disease Control and Prevention (CDC), aimed at fostering partnerships among hospitals, healthcare centers, public health institutions, and community organizations. By using evidence-based frameworks from the **Institute for Healthcare Improvement (IHI)**, MNPQC has become a key player in improving maternal and infant health outcomes through quality improvement initiatives.

MNPQC currently collaborates with a network of **35+ organizations**, including academic institutions, healthcare providers, and local/state agencies. In 2022, MNPQC joined the **Alliance for Innovation on Maternal Health (AIM)**, a national initiative promoting safety bundles designed to enhance maternal care. MNPQC's Hypertension Sprint draws on this extensive network, leveraging the collective expertise of clinical champions, public health professionals, and patients to achieve systemic improvement in perinatal healthcare.

HTN Sprint Introduction

The Hypertension (HTN) Sprint brought together 11 hospital teams from across Minnesota with a focus on addressing risk reduction in the context of hypertensive disorders of pregnancy. The overarching goal was to ensure that the healthcare teams were better equipped to identify and manage hypertension-related risks throughout pregnancy and postpartum. To achieve this, the sprint focused on (1) utilization of low dose aspirin to reduce the risk of HDP in high-risk populations, (2) implementation of Blue Bands for patients with HDP to serve as a visual tool to alert healthcare providers to patients at risk

for hypertensive complications, and (3) postpartum remote monitoring as a means of reducing postpartum risk. By educating providers on best practices and facilitating the early identification of at-risk patients, the sprint sought to improve outcomes and reduce maternal morbidity and mortality related to hypertensive disorders.

Project Structure

Hospital Teams

The Hypertension Sprint engaged **11 hospital teams** across Minnesota, including but not limited to:

- Aspirus St. Luke's Duluth
- Ridgeview Medical Center
- Lakewood Health System
- Essentia Health Crow Wing
- CentraCare- Sauk Centre
- Sleepy Eye Medical Center
- Lakeview Hospital
- Northfield Hospital + Clinics
- Hennepin Healthcare
- MHealth Fairview University of Minnesota Medical Center
- Health Partners Hudson

9 of the 11 teams have integrated or are working to integrate Blue Bands into their standard perinatal care practices. Teams receive ongoing support, training, and access to resources to ensure successful implementation.

Broader Engagement

In addition to the hospital teams, the sprint saw engagement and attendance from **20+ various organizations statewide**, including:

- Urban Community Clinics
- Rural Community Clinics
- Emergency Departments
- Birth Centers

- County Health Departments
- Department of Health

These additional attendees played a critical role in the sprint, contributing valuable perspectives and resources. Their involvement helped enhance the outreach and impact of the sprint, fostering a broader network of support and collaboration across different sectors of the perinatal care system statewide.

Project Faulty

Lead Faculty: Dr. Bethany Sabol (MHealth Fairview)

Dr. Sabol's expertise in hypertensive disorders of pregnancy and quality improvement science was instrumental in guiding the sprint's development and execution. Her career-long focus on maternal safety and healthcare quality has led to innovations such as postpartum home blood pressure monitoring programs, which improve outcomes for hypertensive patients.

Content Experts

- **Meredith Wells, BSN, RNC-OB (CentraCare)** – Presented on the implementation of Blue Bands at **St. Cloud Hospital** and shared insights on maternal hypertension management.
- **Mallory Cummings, MHA, RN, PHN & Dr. Lori Swanson, MBA-HM, RN, PHN (Aspirus St. Luke's Duluth)** – These content experts discussed the integration of Blue Bands and LDA screening in the **Duluth** area, focusing on their collaboration with public health nurses and community initiatives like **Heart to Heart**.
- **Dr. Bethany Sabol, MD, MAS (Faculty Lead) (MHealth Fairview)** – Dr. Sabol, a specialist in hypertensive disorders of pregnancy, brought her expertise to guide the overall sprint, with a focus on quality improvement and implementation science. Her experience with programs like **HOPE-BP**, which involves postpartum home blood pressure monitoring, was instrumental in shaping the hypertension management strategies used in this initiative.
- **Bridget Buckaloo, MSN, RN (Delaware PQC)** – Provided valuable lessons learned from the Delaware PQC's low-dose aspirin initiative, offering practical resources and guidelines for Minnesota teams to adopt.
- **Rebecca Penders, PhD, RNC-OB, C-ONQS (Washington State Dept of Health/Providence)** – Presented on the successful implementation of Blue Bands

in Washington State, offering insights into managing hypertensive disorders at a state level.

- **Melissa Warde, MHA (Oklahoma PQC)** – Shared her experiences with the **Oklahoma Perinatal Quality Collaborative’s** statewide LDA awareness campaign, highlighting best practices and barriers encountered during the initiative.
- **Bekah Bischoff, Patient Family Partner (MoMMA’s Voices)** – Emphasized the importance of incorporating patient voices and equity into maternal health initiatives.

Tools and Resources

Throughout the sprint, MNPQC provided various tools and resources to participating teams, including:

- **Blue Band Pre-Implementation Checklist:** A comprehensive guide designed to ensure that hospital teams are fully prepared to integrate Blue Bands into their perinatal care practices. It included key steps such as reviewing current protocols, training staff, and coordinating with relevant departments to align on goals and procedures. The checklist serves as a structured tool to streamline the preparation process and address potential challenges before the official rollout.
- **Blue Band Booklet:** Provides details on the purpose and benefits of the Blue Bands, instructions for proper application, details on two implementation options, and recognition and treatment guidelines for hypertensive disorders of pregnancy. The booklet also covers suggested EHR data/metric tracking and includes relevant resources to support effective management and enhance outcomes. It is designed to offer practical tools, examples, and resources to facilitate successful implementation and ongoing use of Blue Bands in clinical settings.
- **AIM Hypertension Bundle:** A comprehensive toolkit designed to improve the management of severe hypertension during pregnancy.
- **Low-Dose Aspirin Guidelines:** Shared best practices and recommendations from leading perinatal health organizations.
- **Educational Webinars and Presentations:** Presentations from faculty and content experts, focusing on hypertensive disorders, LDA use, and Blue Band implementation.
- **March of Dimes Toolkit:** “Low Dose, Big Benefits” guide to promoting LDA use during pregnancy.

These resources helped ensure that hospital teams had the necessary infrastructure and knowledge to successfully implement the sprint interventions.

Results

The Hypertension Sprint yielded several **key outcomes**:

- **Blue Band Adoption:** Nine out of the eleven participating hospital teams committed to implementing Blue Bands in their facilities. These bands serve as a vital tool for identifying patients at risk for hypertensive disorders, allowing for timely interventions.
- **Low-Dose Aspirin Utilization:** The sprint successfully raised awareness and increased the adoption of LDA prescriptions among providers, particularly at the **first prenatal visit**. The use of LDA as a preventive measure is expected to reduce the incidence of preeclampsia and other hypertensive complications in the participating facilities.
- **Collaboration and Knowledge Sharing:** Teams benefited from the shared expertise of national and state-level experts in hypertension management. The opportunity to learn from different regions and apply best practices enhanced the overall success of the sprint.

MNPQC provided an initial supply of **100 Blue Bands** to jump-start implementation in facilities, further emphasizing the importance of proactive patient identification.

Conclusions and Next Steps

The Hypertension Sprint has been instrumental in driving forward best practices in the identification of hypertensive disorders of pregnancy across Minnesota. By implementing Blue Bands and increasing the use of LDA, participating hospitals have taken significant strides toward improving perinatal outcomes and enhancing patient safety.

Moving forward, MNPQC will continue to support the hospital teams through follow-up consultations, ongoing training, and resource sharing. The collaborative plans to scale the use of Blue Bands statewide, ensuring that all Minnesota birthing people benefit from timely intervention. Furthermore, MNPQC will conduct a formal evaluation of the sprint's

impact on maternal outcomes, with a particular focus on **health equity** and reducing disparities in care.

This report marks a pivotal step in the journey to better perinatal health in Minnesota, with continued collaboration as the key to sustaining these efforts.

Acknowledgments

We would like to express our deepest gratitude to **Dr. Bethany Sabol**, the faculty lead for this project, whose expertise in hypertensive disorders of pregnancy and dedication to improving perinatal outcomes were instrumental to the success of the Hypertension Sprint. Her leadership and innovative approaches, particularly in postpartum blood pressure monitoring, have greatly shaped our efforts.

We also extend our heartfelt thanks to the following content experts who shared their invaluable knowledge and experience throughout the sprint:

- **Meredith Wells, BSN, RNC-OB** (CentraCare)
- **Mallory Cummings, MHA, RN, PHN & Dr. Lori Swanson, MBA-HM, RN, PHN** (Aspirus St. Luke's Duluth)
- **Bridget Buckaloo, MSN, RN** (Delaware PQC)
- **Rebecca Penders, PhD, RNC-OB, C-ONQS** (Washington State Department of Health/Providence)
- **Melissa Warde, MHA** (Oklahoma PQC)
- **Bekah Bischoff, Patient Family Partner** (MoMMa's Voices)

Your contributions were critical to the success of this initiative, and we deeply appreciate your time, expertise, and commitment to advancing maternal health.