Protocol: "Best for ALL" Quality Improvement Project

Tennessee Initiative for Perinatal Quality Care (TIPQC)
Inter-Institutional Quality Improvement Project

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EXECUTIVE SUMMARY

This Executive Summary defines the 5 W's (and 1 H) of the TIPQC "Best for All" Quality Improvement (QI) project. The Respectful Care aspects of the overall project are also described.

WHY:

While efforts are underway to prevent maternal and infant mortality in Tennessee, more is needed to reduce disparities in mortality and morbidity. Disparities exist by race/ethnicity, age, income, educational level, substance use disorders, and geographical area of residence. Discrimination is a major contributor to maternal and infant deaths and may be mitigated with education on how to recognize bias and minimize how it affects our patients. Additionally, unmet social needs may be identified and addressed through screening, however screening for social determinants of health is not widespread. Significant opportunities remain for improving care, outcomes and even preventing deaths.

Participating in the TIPQC Best for All Project will help facilities meet recent recommendations from The Joint Commission, WHO, ACOG, and AAP. It will also meet many of the requirements for the new 2024 Center for Medicaid and Medicare Services (CMS) Social Determinants of Health Screening requirements. This is a low-cost project that does not require new equipment or skills. It will also have a minimal data collection requirement. This is an ideal project for any birthing institution whether a larger center which has participated in multiple TIPQC efforts before, or a smaller hospital interested in their first TIPQC project.

Because similar pathways influence care quality and outcomes for mothers and infants, tracking joint maternal-infant disparities, integrating patient feedback, and sharing practices and lessons learned across obstetric and newborn care units is beneficial and synergistic. Because intertwined maternal-infant health disparities continue after birth, thoughtful discharge planning, education, and coordination of follow up utilizing current best practices is essential.

The data supports addressing interpersonal and structural racism and social determinants of health through a joint maternal-infant arm quality improvement project. Integrating a maternal-infant dyad lens to transform care can result in reduction in maternal and infant disparities during the perinatal period and potentially throughout the lifespan.

Maternal Mortality

According to the most recent Tennessee Maternal Mortality Report (MMR), Non-Hispanic Black women are 2.3 times more likely to die from pregnancy related causes compared to Non-Hispanic White women[1]. Discrimination was implicated in almost one fourth of maternal deaths[1]. Tennessee's report linking discrimination to maternal death is echoed in the literature as many Non-Hispanic Black women perceive their race as the driving factor for their mistreatment[2-4]. It is increasingly recognized that racism rather than race is the variable that leads to worse maternal outcomes[4]. Survivors of traumatic birthing experiences report feelings of dismissal, neglect, and disrespect by their healthcare providers[4, 5].

Infant Mortality

Provisional 2022 data suggest that infant mortality increased 3% from 5.44 in 2021 to 5.60 per 1000 live births in the United States[6]. Previously, from 2002 to 2021, infant mortality had declined by 22%. Both neonatal and post neonatal mortality increased from 2021 to 2022[6].

Tennessee had a higher infant mortality rate (6.61 per 1000) than the United States as a whole, ranking 39th and earning a "D" rating by the March of Dimes for preterm birth rates (2023 March of Dimes Report Card | March of Dimes). Tennessee's infant mortality rate increased to 7%. It had previously been 6.18 per 1000 in 2021, although this change was not statistically significant[7].

WHAT: Tennessee hospitals are invited to participate in the Best for All project as members of a Learning Collaborative. The Best for All project consists of the following "RESPECT" strategies:

- **R**ecognize need and increase readiness.
- **E**ducate team members on respectful care and implicit bias.
- **S**creen patients for health-related social needs.
- **P**rovide updated discharge teaching.
- **E**valuate data by reported race/ethnicity, insurance status, and preferred language.
- **C**ommunicate about respectful and equitable care.
- **T**ransform future care and outcomes.

WHO: All Care providers for maternal and infant care including but not limited to members of the obstetric & pediatric care teams, emergency departments (ED), birthing centers, and Intensive care units (ICUs). In addition, hospital administration support is essential to provide team leadership, process development, implementation oversight, and quality measurement.

WHERE: All delivering hospitals, birthing centers, neonatal intensive care units, and well nurseries in Tennessee.

HOW: This project will improve outcomes by addressing Readiness, Recognition and Prevention, Response, and Reporting. These 4 Rs provide a framework for tackling the numerous barriers and gaps to optimal, respectful care for ALL. **Readiness** focuses on patient, provider, and community education as well as development of institutional guidelines and protocols. **Recognition and Prevention** emphasizes the importance of standard protocols and includes the Social Determinants of Health (SDoH) Screening. The **Response** aspect of the bundle focuses on SDoH referrals, access to care, as well as respectful care patient care. Finally, **Reporting/Systems Learning** supports the development of mechanisms to collect data and outcomes, including patient reporting.

A major focus will be a needs assessment, review of existing protocols for the population, and extensive education for the care team on the overall respectful care. The overall format for coordination of the project, like other TIPQC projects, will be via a web-based conference tool. There will be monthly web conferences. The purpose of the conferences is to share "what works and what does not work in our setting" as we realize that any global plan or protocol must work within the context of the local hospital, considering resources, staffing, time commitment, etc. This sharing will assist TIPQC to develop useful guidelines and management protocols/bundles that can be applied in most clinical settings. The final product will be a living product, undergoing constant modification as needed based on the context into which is applied.

***WHEN*:** A limited number of hospitals will participate in the pilot phase of implementation beginning in February -April 2024. The start of the statewide roll-out of the project is planned for May 2024. The project is proposed to end in March 2026.

AIMS, POPULATION, AND MEASURES

Global Aim: Improve Severe Maternal Mortality (SMM) and Infant Mortality and Morbidity at participating Tennessee birthing hospitals by August 2026 for all race and ethnicities. This project specific aim supports broader global aims of reduction in statewide maternal and infant mortality and disparities.

Statewide Aim:

TN Birthing Hospitals will:

1) Have 90% of all key process and structure measures (strategies) in place to reduce infant and maternal disparities based on race/ethnicity, substance use disorders, preferred language, and payor status by August 2026.

2) Demonstrate a 10% improvement in patient satisfaction scores related to receiving respectful care (or optimal birthing experience as it relates to respectful care for all people) during their delivery stay by August 2026, based on the Patient Reported Experience Measures (PREM) survey.

TARGET POPULATION:
All birthing people and newborns in participating Tennessee hospitals.

MEASURES

In this phase, improvements are tested, reviewed, and re-tested (using PDSA cycles) to find a solution.

Measuring for improvement is different from the data collected for research or to prove whether clinical interventions work or not. This type of measurement asks the questions "how do we make it work in our context?" and "how do we know that a change is an improvement?" It is important that you collect the right data for your project.

Groups of measures collected include:

- Outcome measures
    - Reflect the impact on the patient. This may include things like: increase in patient satisfaction with birthing experience.
- Process measures
    - The way systems and processes work to deliver the desired outcome, e.g., physicians and staff completing education to provide an optimal birthing experience for all patients.
- Balancing measures
    - This is what may be happening elsewhere in the system because of the change, e.g., an undesired increase in patients with dissatisfaction during birthing admission.

The measures defined for this TIPQC Best For All Project are detailed in the "Measures: How will we know that a change is an improvement?" section.

<u>Data analysis and display</u>

How will any change be measured, assessed, and displayed in your unit or network? Common tools to present and analyze your data include run charts and statistical process control (SPC) charts. All require a level of knowledge and skill to collate and interpret correctly. Importantly, measurement should not be a 'before and after' audit which is unreliable in measuring true change, but a continuous process over time during which your changes can be evaluated and modified.

Measures will be stratified to report disaggregated race, preferred language, substance use disorder, and payor status data as applicable.

I. Outcome Measures:

Frequency of Collection and Reporting: monthly and quarterly

#1. Tennessee Birthing Hospitals will have 90% of all key Process and Structure measures (strategies) in place.

#2. Demonstrate improvement in Patient Reported Experience Measure (PREM) survey scores by 10% for ALL families during hospital delivery stay by August 2026.

II. Balancing Measures:

Frequency of collection & reporting: monthly.

#1. Percent of less-than-optimal patient experiences by analyzing the Patient Reported Experience Measure (PREM) survey responses of 'disagree/strongly disagree.'

III. Process Measures:

Frequency of collection & reporting: quarterly - Participating hospitals should report the cumulative proportion of completion for each structure measure.

#1. Provider education: Cumulative proportion of delivering physicians, midwives, pediatricians, nurse practitioners and neonatologists who have completed an education training program on Implicit Bias, Equity and Inclusion that includes the unit-standard policy and procedure for addressing equity.

#2. Nursing education: Cumulative proportion of OB, Newborn Nursery, and Neo nurses who have completed an education training program on Implicit Bias, Equity and Inclusion that includes the unit-standard policy and procedure for addressing equity.

IV. <u>Structure Measures:</u>

Frequency of collection & reporting: quarterly - Participating hospitals should report the cumulative proportion of completion for each structure measure.

#1. Hospitals have implemented a protocol for collecting race, preferred language, substance use disorder, and payor data for all birthing patients, collect self-reported data, and tracks and reviews missing data.

#2. Hospital has implemented a protocol to review disaggregated race, preferred language, substance use disorder, and payor data to identify disparities.

#3. Each unit (OB, NICU, Nursery) has implemented a protocol for collecting race, preferred language, substance use disorder, and payor data for all birthing patients, collects self-reported data, and tracks and reviews missing data.

#4. Hospital has implemented standardized social determinants of health screening tools in the electronic record for all pregnant women during delivery admission to link patients to needed resources and services.

#5. Hospitals have implemented a process to monitor if patients received the needed services identified through screening.

#6. Hospital has implemented a strategy for incorporating discussions of social determinants of health and discrimination as potential factors in hospital maternal morbidity reviews.

#7. Hospital has implemented a strategy for sharing expected respectful care practices with delivery staff and patients including appropriately engaging support partners and/or doulas.

#8. Hospital has implemented a strategy to provide all patients the recommended postpartum safety patient education materials prior to hospital discharge, including infant patient safety and urgent maternal warning signs, and where patients call for immediate help with concerns, as well as scheduling early postpartum follow-up.

CHARTER

The Best for All project was selected by stakeholders at the 2023 TIPQC Annual Meeting. If successful, this project will allow hospital systems of care to:

1. Create a culture of respectful care centering patients and their communities.
2. Help patients to access community resources to address the social drivers of health including housing, transportation, mental health support and perinatal care.
3. Ensure all patients receive evidence-based discharge instructions and care coordination.
4. Establish processes and structures that will decrease disparities in adverse maternal and infant outcomes.

Participating institutions will agree to the following: implementing the project as designed, collecting, and submitting the monthly data in a timely manner, and participating in monthly webinars (conferences) and statewide meetings. The TIPQC Maternal and Infant Arm's goals are to work with the medical leaders across the state to implement policies, procedures, and protocols in delivering facilities.

TOOLKIT

See "Appendices."

DATA COLLECTION & REPORTS

Each team should determine the process in which they will collect and capture the outcome, balancing, process, and structure measure for this project. For this learning collaborative, all participating hospitals will implement the respectful care strategies (defined in structure and process measures) and data is reported quarterly. Survey data includes patient level data, collected directly via REDCap. All survey data is aggregated and reported by TIPQC staff. The PREM survey is a validated tool, adapted from the Illinois Perinatal Quality Collaborative.

RECORD RETENTION

Record retention described in the TIPQC Framework protocol will be followed.

RECRUITMENT OF PARTICIPATING INSTITUTIONS

The recruitment strategy described in the TIPQC Framework protocol will be used.

PROCEDURES FOR PARTICIPATING INSTITUTIONS

The data procedures described in the TIPQC Framework protocol will be used. From the protocol: "Each team will be encouraged to develop procedures to support project implementation, data reporting, and change analysis by the local project team. Substantial local latitude is provided to allow flexibility for integration of TIPQC activities into local workflow and schedules, though a minimum frequency and timeliness of data entry is required and is outlined in the project application and data agreement. In this all-voluntary collaborative, multiple data reporting systems and paradigms will be supported to facilitate the broadest possible participation."

TRAINING PLAN FOR PARTICIPATING INSTITUTIONS

In addition to the TIPQC Framework protocol, teams will be offered additional training at the TIPQC Annual Meeting in March 2024, as well as monthly trainings and individual coaching calls.

DURATION OF THE PROJECT

Several pilot teams will begin implementation for several months prior to the project kickoff for all teams. The duration of the project is 1.5- 2 years. Participants or the TIPQC membership at large may ask the Oversight Committee to extend the project or use it as a building block for future projects with complimentary endpoints.

ROLE OF THE TIPQC OVERSIGHT COMMITTEE

The critical role of the TIPQC Oversight Committee is not anticipated to change during this QI project. From the protocol:

- "Throughout the selection, development, pilot testing, and implementation of a project the TIPQC Oversight Committee plays a vital role. The Committee oversees the selection process at the state meeting and is tasked with ensuring that stakeholders who are present can contribute to the selection process. Following project development and pilot testing, the pilot toolkit is reviewed and approved by the Oversight Committee. Upon completion of pilot testing and incorporation of pilot directed modifications, the Oversight Committee reviews and approves the final toolkit for release to potential participants."
- "Throughout all phases of the project, the Oversight Committee will be informed of any concerning trends in balancing measures and of any potential safety issues. Further the Oversight Committee is empowered to halt any quality improvement project at any time. A project will be stopped if a simple majority of the entire Oversight Committee votes to halt the project. Should a majority of the Oversight Committee vote to stop a project, a message will be sent to all participating centers directing them to stop the

project and data collection will be suspended. The message will include both a detailed explanation of the Committee's concerns and a roll call listing of Committee members votes- yes, no, abstain, or not present. Given the multiple levels of evidence-based review employed prior to statewide release of the toolkit, early termination of a project by the Oversight Committee is not expected, but a formal mechanism is included should events arise that warrant pausing or halting project participation.

- "The Oversight Committee controls extensions of project duration, or changes in progress scope and is charged with balancing the cost vs. value of any proposed extension or change within the confines of the resources and mission of TIPQC. The Oversight Committee may vote, again by simple majority, to extend project duration or scope or opt to extend the project until the next state meeting for a general membership vote."

REFERENCES

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6. Ely D DA. Infant Mortality in the United States: Provisional Data From the 2022 Period Linked Birth/Infant Death File. NVSS Vital Statistics Rapid Release. . 2023;33.

7. Dimes Mo. https://www.marchofdimes.org/report-card; 2023.

APPENDICES

- TIPQC Participation and Durable Data Use Agreement (TIPQC Participation and Durable Data Use Agreement.pdf)
- TIPQC Project Application
- Redcap data entry tool
- TIPQC Toolkit