

The Tennessee Initiative for Perinatal Quality Care (TIPQC) is the state's perinatal quality improvement collaborative, charged with engaging families and communities, hospitals, payors, and practitioners to promote meaningful evidence-based, data-driven improvements to meet national best practices, advance health outcomes, and improve the quality of care through pregnancy, delivery, and beyond for all Tennessee families.

- 17 years of improving healthcare and outcomes across Tennessee
- 34 successful Quality Improvement (QI) projects; current projects: Cardiac Conditions in Obstetric Care, Prevention of Chronic Lung Disease, Prevention of Necrotizing Enterocolitis and BEST for All
- American Board of Pediatrics Portfolio Sponsor since 2009 Tennessee Physicians have earned 6,175 Part 4 MOC Points for Meaningful Participation in 19 TIPQC Infant QI Projects
- Effective and meaningful collaboration with state-wide engagement of families, providers, practitioners, hospital administrators and community organizations
- Robust, centralized project management and data support, including SimpleQI, REDCap, Vermont-Oxford Network, and Alliance for Innovation on Maternal Health (AIM) American College of Obstetricians and Gynecologists (ACOG) integration
- Resource sharing, Webinars, Annual Meetings (with continuing medical education (CME) not otherwise readily available to
 healthcare professionals in smaller hospitals), Education, Learning Sessions, Physician Maintenance of Certification (MOC)
 opportunities, Networking, QI Coaching with hospitals including rural hospitals across the state, and more including:
 - o Bi-annual QI Bootcamps across the state.
 - SIMS Trainings across the state since 2020 and purchasing Simulators for all Tennessee hospitals. Following the SIMS, 96% of hospitals reported the SIMS impacted appropriate assessment of real-life cases with one testimonial of a mom and baby saved due to this SIMS training (podcast #64).
 - o In 2024-25, professional training grants for 220 <u>lactation workforce</u> professionals including Certified Breastfeeding Specialist (CBS), hospital training, supporting 8 IBCLC professional tests, and 11 statewide webinars with 1500 listeners.
 - o In the last five years, purchasing 4,783 Preeclampsia Blood Pressure Cuff kits for 34 hospitals and 50 doulas to provide to at-risk pregnant and post-partum women.
 - o Distributing 277,980 POST BIRTH Warning Signs patient education magnets to 37 hospitals and 50 doulas since 2020. 2020-23, 46 hospitals were also provided a tool kit, online training, and statewide webinars with national experts.
 - Hosting two Post Partum Support International (PSI) training courses in 2024 and 2021 with over 350 attendees; distributing to hospitals and doulas 206,935 PSI magnets and 220,890 PSI brochures, in support of maternal mental health.
 - Hosting 11 Spinning Babies Trainings (2022-24) for 339 healthcare professionals representing 50 organizations to better understand physiological birth and correct/prevent fetal malposition/malpresentation.
 - Catalyst for (1) Managed Care Organizations distributing commercial grade breast pumps, (2) Maternal Mortality Review Committee (MMRC) (required to join AIM), and (3) Blood Pressure Cuffs for at risk mothers.
 - Applying for and receiving ACOG AIM Tennessee Representative (2017- current).
 - o Providing both CME and MOC for participants.
 - Supporting Severe Maternal Morbidities (SMM) Data meetings, hospital learning, data sharing, and site visits.
 - o A robust community resource council with 30 organizational members, and ongoing quarterly meetings.
 - Over 180 podcasts with 12.6K unique listeners (as of 6-23-25).
 - o Close to 8,000 educational video views.

Statewide Improvements Through TIPQC QI Projects

- Through the Tennessee Tiniest Babies Bundle, the Intraventricular Hemorrhage (IVH) project (2022-23), a decrease in targeted infants' mortality rates was seen, from the three-year previous mean of 13.8% to 11.2%.
- 61,642 infants in 27 hospitals statewide received best practice Optimal Cord Clamping (≥ 60 seconds after birth) (2022-2023). This represented a 69% increase in the mean percentage of infants who had optimal cord clamping. Publication
- The Immediate Postpartum Long-Acting Reversible Contraception (IPPLARC) project (2018-2019) led to reduction of barriers to women receiving desired IPPLARC, including increased hospital reimbursement. TIPQC continues to work with TennCare and hospitals resulting in over 4330 desired IPPLARC placed statewide since the project began. Publication
- The <u>Severe Maternal Hypertension Project</u> (2020-22) <u>Impact Statement</u> shows increased timely treatment for severe maternal hypertension in pilot hospital teams by 46% and by 84% in all other hospitals.
- The <u>Safe to Sleep Project</u> (2020-21) saw a 22% increase in safe sleep audits in the hospital setting and increased providing infant caregivers immediate information before discharge after birth about safe sleep. Billboards across the state also targeted this message to parents and caregivers. <u>Publication</u>
- Opioid Use Disorder (2019-20) Wave 1 Impact Statement showed a 20% increase in mothers receiving Medication Assisted Treatment (MAT) at newborn discharge. Narcan prescriptions given prenatally or prior discharge increased ninefold (2% to 20%) and documented Substance Use Disorder (SUD) screening using a validated screening tool increased by 96%. Opioid Use Disorder Wave 2 (2020-21) Impact Statement highlights a 42% increase



in pregnant women screened with a validated screening tool and 90% of opioid exposed newborns discharged had a referral to a pediatric development clinic/specialist.

- The <u>Human Milk for Very Low Birthweight project</u> (2016-2018), showed a reduction in Extrauterine Growth Restriction and improvement in other growth measures, including a significant increase in median discharge weight percentile. Additional improvements included Necrotizing Enterocolitis (NEC) reduced by 37%; human milk for the first feed increased by 20%; jumpstarting the TN Mother's Milk Bank, and all level 3 & 4 NICUs utilizing donor milk. <u>Publication</u>
- Two cohorts of <u>Breastfeeding Promotion</u> (2012-15) projects saw breastfeeding rates increase from 37% to 45% among participating hospitals representing 48% of deliveries in Tennessee. In 2018, the statewide breastfeeding rate was <u>79.1%</u> and TIPQC work in promoting breastfeeding continues in multiple projects. <u>Publication</u>
- <u>Early Elective Deliveries</u> (2012-15) project succeeded in an 83% reduction in early elective deliveries to 3% even below the national standard of 5%. Publication
- The <u>Golden Hour Project</u> (2012-15) showed improvements were achieved and sustained for pre-resuscitation checklists increasing by 17% (greater than 90% reliability) and team briefings increasing by 15% Time to intravenous access decreased from 50 to 42 minutes, glucose infusion initiation decreased from 73 to 60 minutes, and antibiotic dosing decreased by 15 minutes indicating significant progress. <u>Publication</u>
- The Neonatal Abstinence Syndrome (NAS) project (2012-15) saw significant reduction in hospital length of stay and significant increase in introduction of non-pharmacological care for NAS infants. Opioid Exposed Newborns (OEN) project Wave 1 (2019-20) Impact Statement highlights 86% of OENs were able to room-in with their biological mother for at least a portion of their hospital stay and approximately 66% were discharged home to their biological mother. The median length of stay for those OEN who did not require pharmacologic treatment for signs and symptoms of Neonatal Opioid Withdrawal Syndrome was reduced to 5 days, the American Academy of Pediatrics (AAP) guideline. In addition, TIPQC worked with the state to bring Tennessee Early Intervention Services (TEIS) support to OEN infants, and provided national expertise on Eat, Sleep, and Console as well as Neonatal Massage therapy.
- Through the NICU Central Line Associated Blood Stream Infection (CLABSI) Reduction project (2010-12), the state saw dramatic decreases of CLABSIs from a mean of 3.7 per 1000 line days to 1.1 per 1000 line days, a 70% decrease.

Testimonials:

"TIPQC is a leader and trusted partner in reducing preventable maternal and neonatal morbidity and mortality across Tennessee."

Elizabeth Harvey, PhD, MPH Assistant Commissioner of Health

"TIPQC has provided vast amounts of data and tools that have enabled our staff to improve teamwork, improve patient care, network with other healthcare systems, and ultimately make a difference every day for our patients and families."

Deena Kail, BSN, RN, MBA, Jackson-Madison County General Hospital

"I am so proud of this organization and all our providers who have raised the bar for neonatal and perinatal care in Tennessee. Our Tennessee babies have benefited greatly from all that hard work!"

> John Buchheit, MD, East Tennessee Children's Hospital

"I am proud to be a part of an organization committed to improving maternal and infant health in the state. Being able to collaborate with others from around the state who share the same level of dedication and passion is appreciated."

Danielle Tate, MD, FACOG

"Our quality team appreciates the support offered by TIPQC and the other centers involved. This work to improve significantly impacts the outcomes of these tiny patients."

Esmond Arrindell, MD,
Baptist Memorial Hospital for Women

"The impact that the TIPQC Late Preterm project has had on our organization is knowing that we saved a baby's life. During one of our late preterm callbacks, we were able to intervene and ultimately save the baby's life. Our hope is that with this improvement project we will continue to save lives and improve the care and outcomes of all our late preterm babies."

Annette Edens, RN, BSN, TriStar Centennial Women's and Children's Hospital

"TIPQC has changed the culture of clinical care among all neonatal-perinatal providers in TN. It has brought together physicians, NPs, Nurses and other staff to improve quality of care and outcomes of mothers and newborns in all settings."

Ajay J. Talati, MD Regional One Health

"We expected project teams would implement guidelines and improve consistency of care, but we were especially proud of the number of resources developed during the project. The ability to share those resources between the teams is a huge benefit of participation in TIPQC."

Anna Morad, MD, Monroe Carell Jr. Children's Hospital at Vanderbilt

"I have always been impressed at how many different improvement projects TIPQC develops, launches, and sustains so effectively year after year. Having the opportunity to participate in the National Network of Perinatal Quality Collaboratives (NNPQC) meeting helped me realize the extent to which TN is leading the nation in this work. PQCs from other states were looking to TN for ideas and solutions."

Karen Schetzina, MD, MPH Niswonger Children's Hospital

These initiatives are at <u>no charge</u> to hospitals, and in fact, include <u>various free resources</u> from TIPQC such as promotional materials, multi-language patient education, education with state and national experts, site visits, and more.

Your support matters. We sincerely thank you for your commitment to quality and improving outcomes for moms and babies in Tennessee.