

Texas Collaborative for Health Mothers and Babies

Perinatal Data System

Background

Texas has a long-term challenge in improving perinatal outcomes; the state has higher rates of severe maternal morbidity and mortality (SMM) than in the U.S.¹ and is experiencing worsening rates of preterm births and inadequate prenatal care for mother². These poor perinatal outcomes result in increased costs to both families and to the state. In 2019, preterm births in Texas solely related to maternal mental health conditions (7,472 of total 50,183 preterm births) resulted in nearly \$372 million,³ or more than \$49,785 per child in societal costs. Costs accrue to Medicaid and the Children's Health Insurance Program and occur between conception and the child's first birthday. The average hospital cost for a low birthweight infant is estimated to be \$27,200 and \$76,700 for very low birthweight infants, compared with \$3,200 for a normal weight newborn. It costs approximately \$13.4 billion in neonatal intensive care unit hospitalizations annually to care for low birthweight infants. Those who survive to adulthood often experience serious physical and mental problems, which significantly increase the costs of hospitalization throughout their life span⁴. Texas must do better!

The Texas Collaborative for Healthy Mothers and Babies (TCHMB) is the perinatal quality collaborative (PQC) for the State of Texas, and it plays a critical role in driving the perinatal quality improvement (QI) efforts needed to address these issues. It works to improve the quality of care, equity and safety in hospitals for mothers and babies. TCHMB is managed by the University of Texas at Tyler/U.T. System in partnership with the Texas Department of State Health Services (DSHS).

Saving Lives and Saving Money

Timely and accurate data is critical for Texas to make intelligent/data-informed policy decisions and improve its perinatal outcomes. For example, extensive analyses suggest that the observed maternal mortality rates in Texas were likely due in part to reporting errors¹. Texans deserve a high-performing **Perinatal Data System** that will reduce data reporting errors/duplication, enhances the accuracy of critical data collection, increases efficiency and reduces administrative burdens for hospitals who currently report data to multiple entities, and builds the needed capacity that allows for statewide quality improvement (QI) efforts.

Texas has the opportunity now to strengthen its capacity, through the TCHMB to conduct statewide data-informed QI and thereby substantially improving the outcomes of the most fragile newborns and vulnerable mothers in Texas, and (in the long-term) to reduce health care costs to our families and to our state.

A well-developed data infrastructure has been essential for other state PQCs in their quest to improve perinatal health outcomes and create large-scale change. California demonstrated a marked improvement in rates of SMM for every racial/ethnic group as well as a narrowing of Black-White differences following the implementation of a data-based QI initiative⁵. Illinois decreased SMM and maternal mortality from 15% at baseline to 9% during a two-year period following implementation of a data-driven maternal hypertension initiative⁶. **A Perinatal Data System, designed by and for Texas health care providers, is essential for Texas to reduced perinatal healthcare costs by improving the health and safety of the 400,000 babies born yearly in our state and their mothers.**

Requirements of a Perinatal Data System

A Perinatal Data System in Texas needs to be able to do the following:

1. Work to support QI work for both maternal and neonatal care.
2. Provide the essential data to prioritize QI initiatives.
3. Share data back confidentially to hospitals to support their QI efforts.
4. Facilitate performance comparisons with other hospitals, with other regions, and across the state.
5. Allow identification and monitoring of health care disparities in Texas
6. Allow hospitals to view their performance, identify additional areas for improvement, and develop/share strategies.
7. Provide secure physical, administrative, and technical safeguards for data.

The estimated development and ongoing costs associated with a statewide database is approximately \$2.5 million annually, based on analysis of other state systems and current market rates.

Conclusion

The Texas Legislature has prioritized birth outcomes, but efforts to drive these initiatives forward the way it has intended are challenged due to the absence of an integrated data system. Now, more than ever, we need to bolster the state's ability to capture timely and patient-centric data that allows clinicians and hospitals to have a more comprehensive picture of maternal and neonatal health outcomes. This is a tremendous opportunity to be strategic and efficient about documenting, monitoring and interpreting data that will have long-term economic impacts and can accomplish the Legislature's goals of improving the lives of mothers and babies in Texas.

¹Texas Department of State Health Services. *Maternal and Child Health Epidemiology. 2020 Healthy Texas Mothers and Babies Data Book. 2021.*

<https://www.dshs.state.tx.us/healthytexasbabies/Documents/Healthy-Texas-Mothers-and-Babies-Data-Book-2021.pdf>

² March of Dimes. *2021 March of Dimes Report Card for Texas.*

<https://www.marchofdimes.org/peristats/tools/reportcard.aspx?req=48>. Published 2021. Accessed April 14, 2021.

³ Mathematica. *Untreated Maternal Mental Health Conditions in Texas: Costs to Society and to Medicaid. March 2021.* <https://www.mathematica.org/publications/untreated-maternal-mental-health-conditions-in-texas-costs-to-society-and-to-medicaid>

⁴ United Health Foundation. *America's Health Rankings Annual Report. 2021.*

<https://www.americashealthrankings.org/explore/annual/measure/birthweight/state/TX>

⁵ Main EK, Chang SC, Dhurjati R, Cape V, Profit J, Gould JB. *Reduction in racial disparities in severe maternal morbidity from hemorrhage in a large-scale quality improvement collaborative. Am J Obstet Gynecol. 2020;223(1):123.e1-123.e14. doi:10.1016/j.ajog.2020.01.026*

⁶ United States Department of Health and Human Services. *Health Resource & Administration, Maternal & Child Health Bureau. III.A.3. MCH Success Story - Illinois – 2020.*

<https://mchb.tvisdata.hrsa.gov/Narratives/MCHSuccessStory/cf25e224-7efe-49ce-94d4-4832e8f12751>