SUMMARY

The goal of the TCHMB Newborn Admission Temperature (NAT) project is to implement evidence-based guidelines to increase the proportion of newborn infants with admission temperatures within normal limits. The broader goal is to increase newborn health care quality and patient safety.

» In the January-March 2022 reporting period, the NAT project covered over 60% of annual deliveries in Texas.

» Out of 229 eligible hospitals in Texas, 159 (69%) were enrolled in the TCHMB NAT project by this reporting period. To date, this is TCHMB’s largest statewide quality improvement initiative.

» Of 159 enrolled hospitals, 76% (n=121) submitted data for January-March 2022.

» Among hospitals reporting data in January-March 2022, 3.7% of infants had hypothermia and 4.6% of infants had hyperthermia at admission to the NICU.

» Among hospitals reporting data in January-March 2022, 0.5% of infants had hypothermia and 3.4% of infants had hyperthermia at admission to the Mother-Baby Unit.

» While these baseline data are preliminary, continued participation of hospitals in the NAT project will help drive improvement in newborn outcomes including reduction in health disparities in Texas.
Hypothermia and Hyperthermia in NICU Admissions by Race/Ethnicity

Compared to infants of Non-Hispanic White mothers, infants of Non-Hispanic Black mothers were more likely to have hypothermia at NICU admission.**

Compared to infants of Non-Hispanic White mothers, infants of Hispanic mothers were less likely to have hyperthermia at NICU admission.**

**Difference was not statistically significant (p<0.05) in this data cycle.

Hypothermia and Hyperthermia in Mother-Baby Unit Admissions by Race/Ethnicity

Compared to infants of Non-Hispanic White mothers, infants of Non-Hispanic Black mothers were significantly less likely to have hyperthermia at admission to the Mother-Baby Unit.

*Significant difference compared to infants of Non-Hispanic White mothers (p<0.05)

Hypothermia and Hyperthermia in NICU Admissions by Birthweight

Compared to infants with normal birthweight, very low birthweight infants were significantly more likely to have hypothermia and hyperthermia at NICU admission.

* Significant difference compared to normal birthweight (>=1500g) (p<0.05)
Hypothermia and Hyperthermia in NICU Admissions by NICU Volume

Compared to medium annual delivery volume hospitals, NICU admissions with hypothermia were significantly more common in high annual delivery volume hospitals.

*Significant difference compared to medium delivery volume hospitals (p<0.05)

Hypothermia and Hyperthermia in Mother-Baby Unit Admissions by Mother-Baby Unit Volume

Compared to medium annual delivery volume hospitals, MotherBaby Unit admissions with hypothermia were significantly more common in low annual delivery volume hospitals.

Compared to medium annual delivery volume hospitals, MotherBaby Unit admissions with hyperthermia were significantly more common in low annual delivery volume hospitals and less common in high annual delivery volume hospitals.

*Significant difference compared to medium annual delivery hospitals (p<0.05)

Hypothermia and Hyperthermia in NICU Admissions by NICU Level

Compared to Level I NICUs, NICU admissions with both hypothermia and hyperthermia were significantly more common in Level IV NICUs.

*Significant difference compared to Level I NICU (p<0.05)