



NEWBORN ADMISSION TEMPERATURE STATE-LEVEL REPORT

Data Reporting Period: October–December 2021

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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.

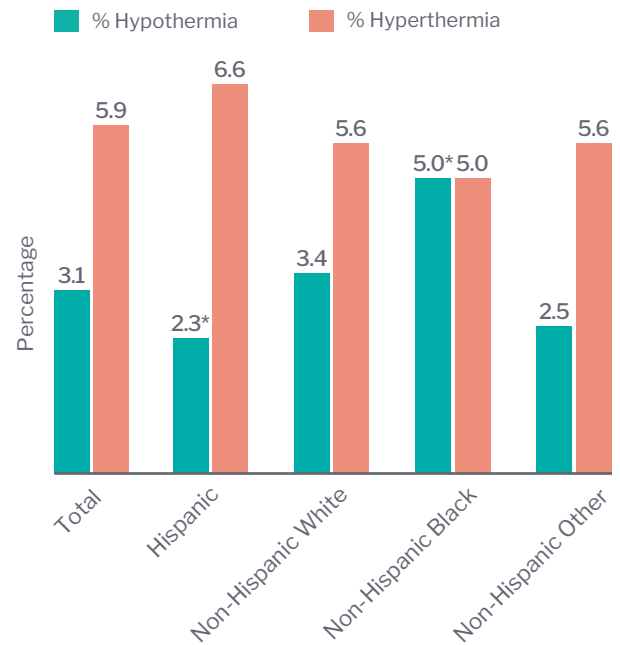
- » Out of 229 birthing hospitals in Texas, 158 (69%) were enrolled in the TCHMB NAT project by this reporting period. To date, this is TCHMB's largest statewide quality improvement initiative.
- » Of 158 enrolled hospitals, 66% (n=105) submitted data for October-December 2021. The overall quality of the data submitted has improved since the previous reporting period, with more hospitals reporting data by race/ethnicity.
- » In the October-December 2021 reporting period, the NAT project covered approximately 58% of annual deliveries in Texas.
- » Among hospitals reporting data in October-December 2021, 3.1% of infants had hypothermia and 5.9% of infants had hyperthermia at admission to the NICU.
- » Among hospitals reporting data in October-December 2021, 0.5% of infants had hypothermia and 3.3 % of infants had hyperthermia at admission to the Mother-Baby Unit.
- » Common strategies used by hospitals to facilitate collection of project data included working with their hospital's IT department to generate reports (38%), changing workflow/clinical processes (23%), and educating clinical staff (33%).
- » Less hospitals reported that reporting data by mother's race/ethnicity, aligning NAT project with current workflow or clinical process, and identifying resources to collect and report the data are barriers to them during this data reporting period, compared to the previous period.
- » Less hospitals reported that NAT project is time-consuming to them, and more hospitals reported that there were no barriers/challenges during this data reporting period.
- » 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 significantly more likely to have hypothermia at NICU admission.

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

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

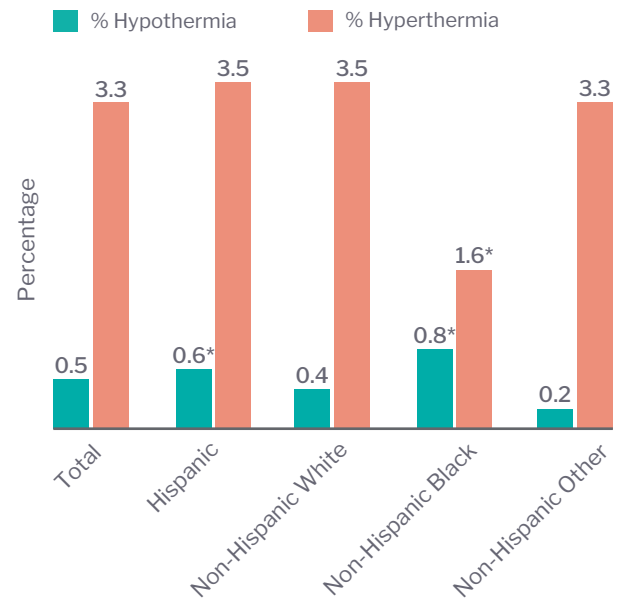


Hypothermia and Hyperthermia in Mother-Baby Unit Admissions by Race/Ethnicity

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

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

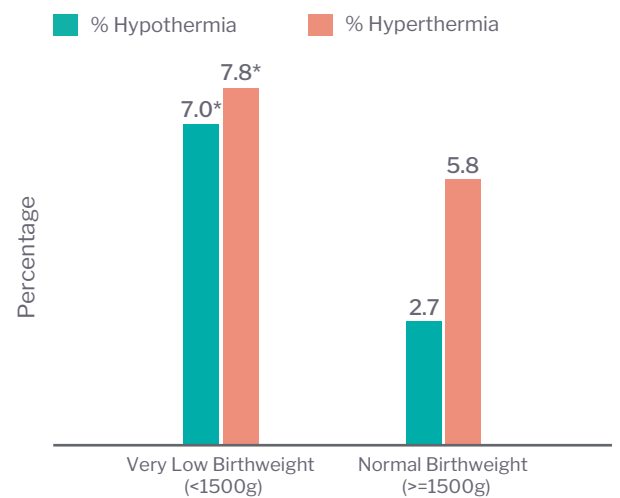
*Significant difference compared to infants of Non-Hispanic White mothers ($p < 0.05$).



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 ($\geq 1500g$) ($p < 0.05$).

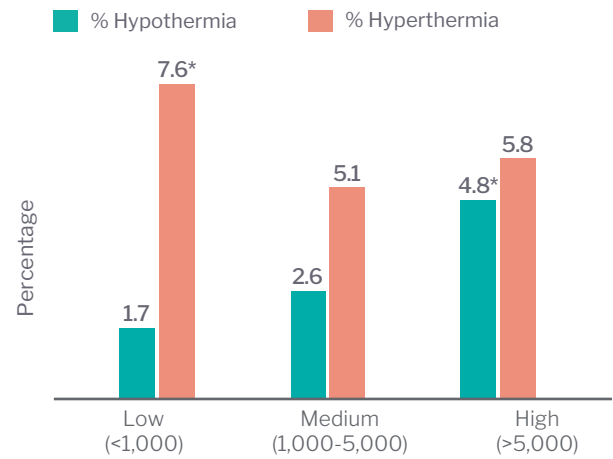


Hypothermia and Hyperthermia in NICU Admissions by NICU Volume

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

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

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

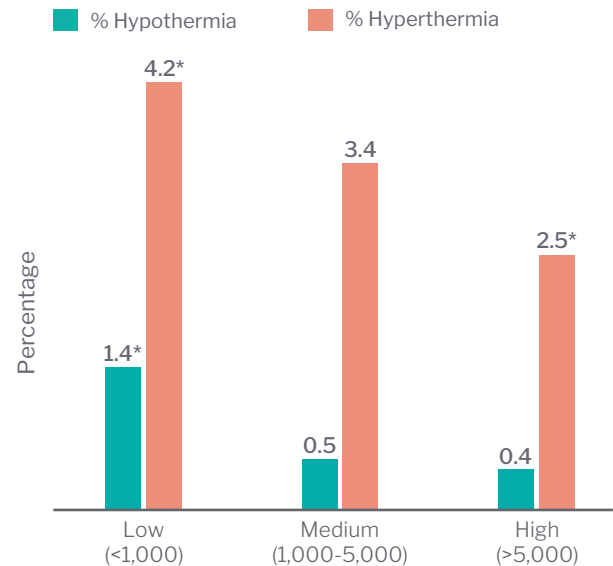


Hypothermia and Hyperthermia in Mother-Baby Unit Admissions by Mother-Baby Unit Volume

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, Mother-Baby 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 hypothermia were significantly more common in Level IV NICUs.

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

