Late Preterm Infant Report 1

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Late Preterm Infant Community of Practice Project Goals:

- This initiative aims to cultivate a community of learning to improve care practices and outcomes for the late preterm infant (LPI) population.
- Create a multidisciplinary hospital-based community of learning in which participants share care policies, workflows, and clinical practices.
- Increase awareness of the unique LPI population and improve outcomes.

Background

The National Institute of Health (NIH) defines late preterm infants as newborns between 34 0/7 – 36 6/7 weeks of gestational age.[1] Late preterm infants, specifically those born at 34 0/7 to 36 6/7 weeks' gestation, are at highest risk for feeding problems, jaundice and readmission to hospital within the first few weeks. Compared to term babies, neonatal and infant mortality rates are significantly higher among late preterm infants.[2] The Late Preterm Infant Community of Practice project, was initiated by the VNPC to address the many challenges that this unique population face and to create a space for hospitals to share care policies, workflows and clinical practices. This project timeline was from March 2026 to October 2026 with 30 facilities involved in the first survey.

Introduction

This report outlines the work being done by special care nurseries (SCN), neonatal intensive care units (NICU), and level one facilities with respect to the three themes identified through the first phase of the initiative. Through the three themes identified in this initiative, data is shared monthly along with topics selected in advance based on literature and clinical guidance. Monthly meetings are driven by hospitals collaborating with one another to address challenges faced among various facilities.

This report summarizes the key findings in the care of late preterm infants from the Late Preterm Infant Community of Practice project. This report analyzes the first three survey topics covered during the Late Preterm Infant Community of Practice project, site characteristics, thermoregulation and hypoglycemia. The overall ratio of facilities represented through the site characteristics survey was 18 SCN/NICU facilities to 12 level 1 facilities.

Project Themes:

- **Site characteristics:** baseline survey, aiming to collect overall characteristics of facilities across the state.
- **Thermoregulation:** skin to skin, use of isolette, temperature concerns.
- **Hypoglycemia:** feeding, use of glucose gel, IV management

Site Characteristics

Figure 1.

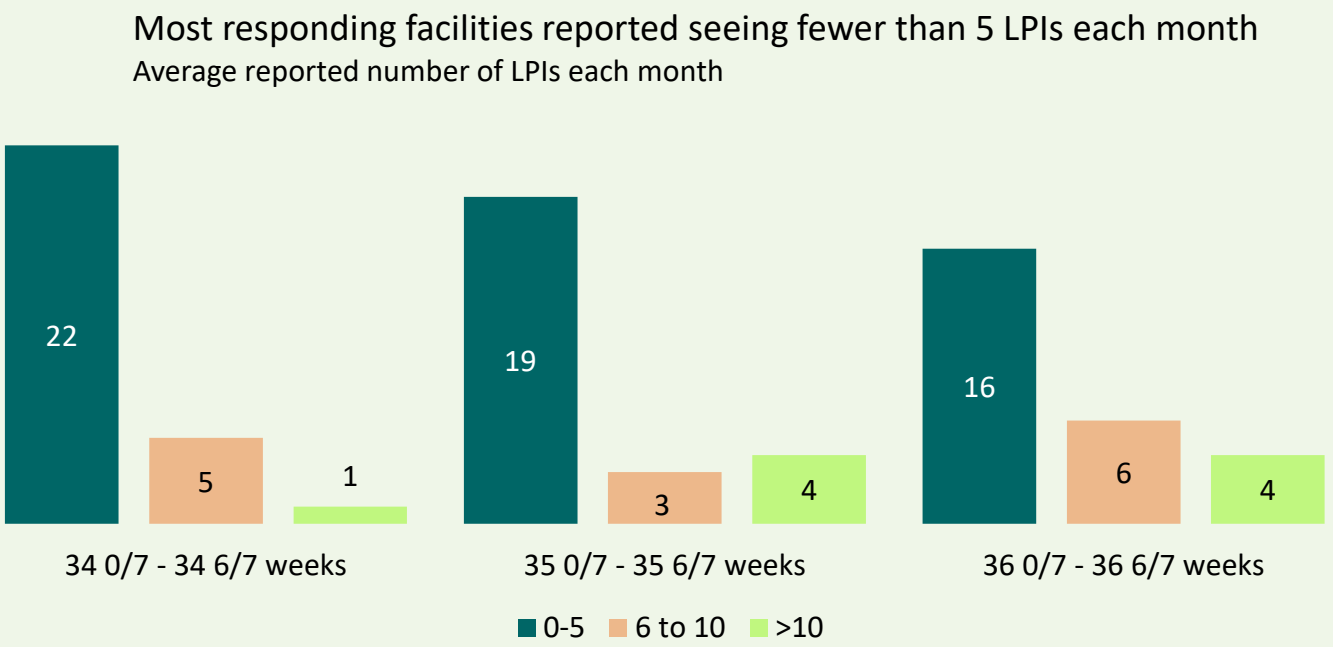
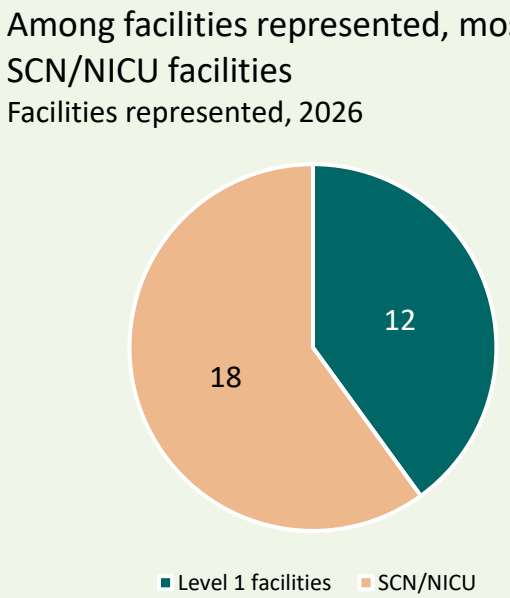


Figure 1 above expresses the average number of reported late preterm infants each month across 30 facilities responding to the site characteristics survey. Among 34–36-week infants, facilities responded that they see 0-5 late preterm infants most frequently.

Comparatively, figure 2 below expresses facilities that were represented within the first survey. Among the 30 facilities that responded to the site characteristics survey, 60% of facilities represented special care nurseries or neonatal intensive care units. Additionally, 40% of facilities responding represented level 1 facilities.

Figure 2.



Definitions

SCN: Special Care Nursery – Provides care for infants born at 32 weeks or more and weighing ≥1,500 grams with moderate, rapidly resolving issues, or those convalescing from intensive care.[4]

NICU: Neonatal Intensive Care Unit – providing highest level subspecialty surgical and medical care for complex critical illnesses.[4]

Level 1 facility: Evaluates, stabilizes, and provides basic care for normal newborns, and stabilizes infants born 35-37 weeks until transfer, plus cares for minor problems.[4]

Site Changes Over Time

Thermoregulation changes made: Survey 2, March 2026, N = 21

Figure 3.

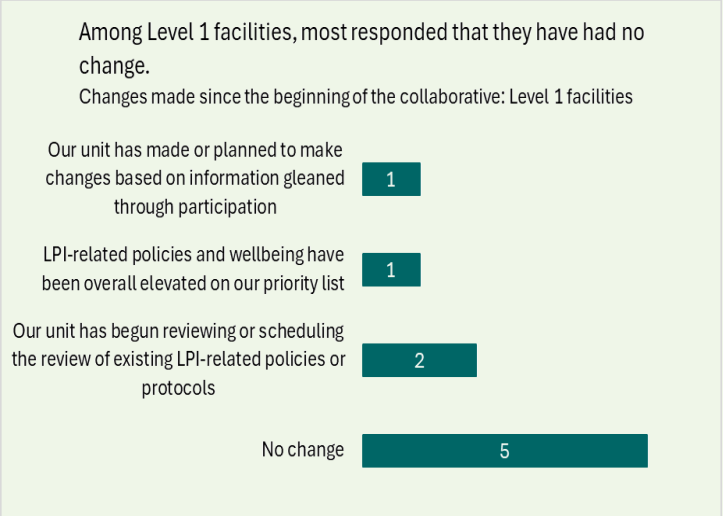
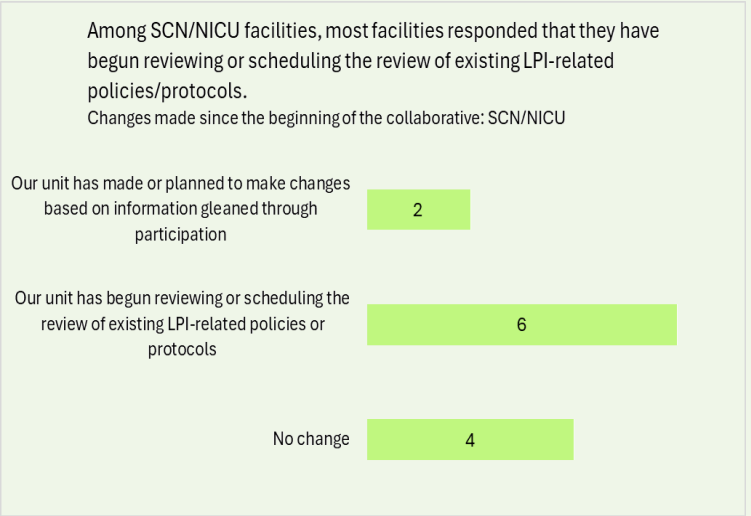


Figure 4.



Among level 1 facilities participating in the thermoregulation survey, 56% of facilities responded that they have had no change since the beginning of the collaborative. Comparatively, among level 1 facilities in the hypoglycemia survey 83% responded that they had no change from the beginning of the collaborative (N=5). This shows that among the first 3 months of the project; level 1 facilities experienced no changes.

Comparatively, SCN/NICU facilities participating in the thermoregulation survey 50% responded that they have begun the process of reviewing or scheduling the review of existing LPI-related policies or protocols with a total of 6 facilities reporting this. With respect to the hypoglycemia survey, changes made since the beginning of the survey show SCN/NICU facilities moved from reviewing or scheduling the review of protocols, to beginning to write new policies or protocols.

Hypoglycemia changes made: Survey 3, April 2026, N= 16

Figure 5.

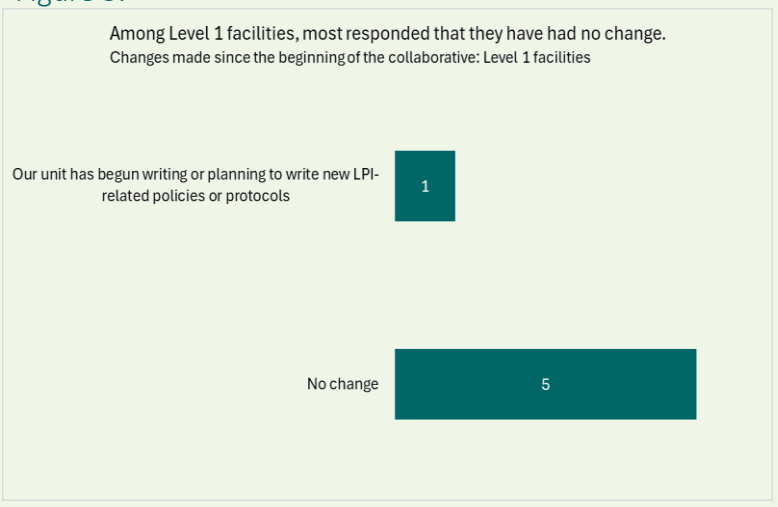
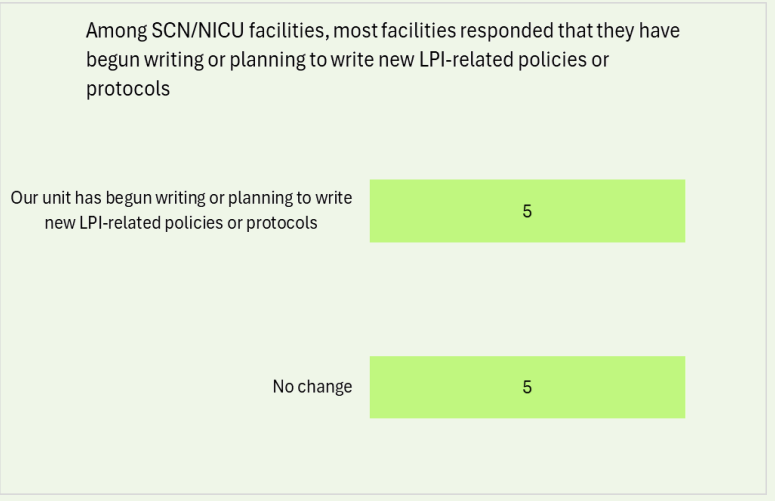


Figure 6.



Site Characteristics

Figure 7.

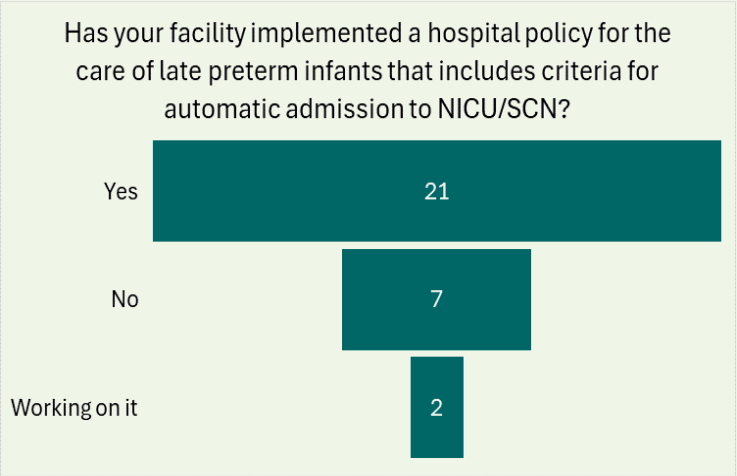
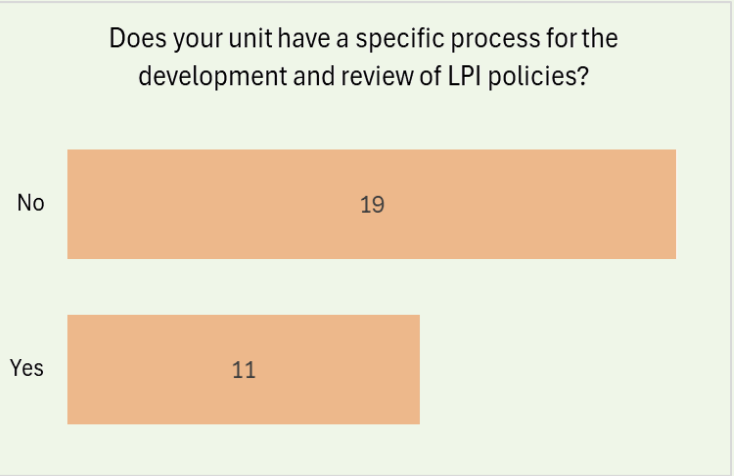


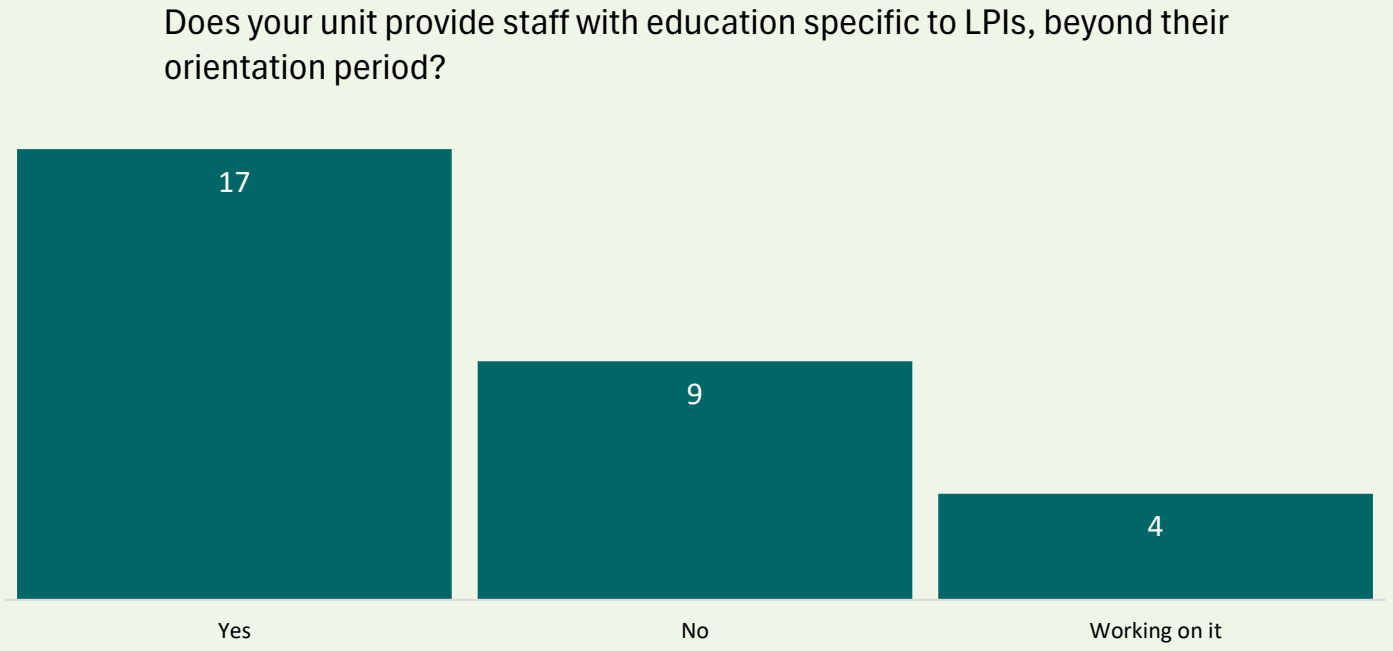
Figure 8.



The first survey of this project focused on nursery site characteristics, aimed at determining the overall structure that is in place for the care of late preterm infants. Figure 7 above shows that among facilities that responded to the site characteristics survey, 70% of facilities responded that they have implemented a hospital policy for the care of late preterm infants that includes specific criteria for automatic admission to the NICU/SCN (N=21). Figure 8 above expresses that when asked about a unit specific process for the development and review of LPI policies, 37% of facilities responded that they do not have a specific process in place compared to 63% of facilities responding with yes, they do (N=30).

The below figure expresses staff education among units specific to LPIs, beyond their orientation period. Among facilities that responded to the site characteristics survey, 56% of facilities responded that, yes, their unit provides staff with education specific to LPIs beyond their orientation period, compared to 13% of facilities responding that they are working on it (N=30).

Figure 9.



Thermoregulation

Figure 10.

Based on your experience with late preterm infants delivered at your hospital (34 0/7 - 36 6/7 weeks) who are initially stable, what typically happens during the first hour after birth? (Please answer based on your general impression or experience.)

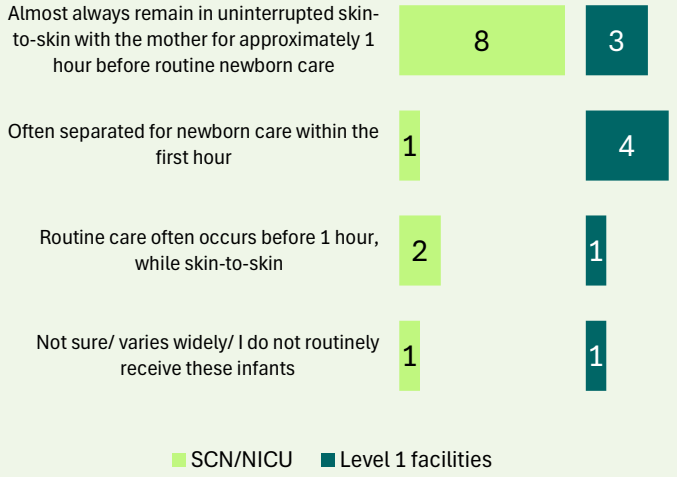


Figure 11.

In your experience, what most commonly leads to interruption of skin-to-skin for stable LPIs in the first hour of life?

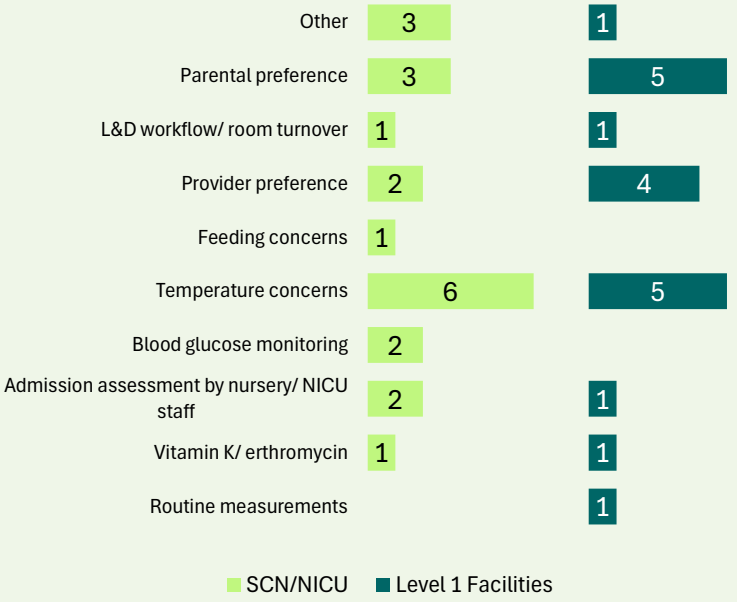


Figure 10 shows that among SCN/NICUs during the first hour after birth, 67% of LPIs almost always remain in uninterrupted skin-to-skin with the mother. Among level 1 facilities, 44% of LPIs are separated for newborn care within the first hour after birth. Figure 11 above shows that temperature concerns most commonly lead to interruption of skin-to-skin, with 28% of facilities reporting this. Figure 12 expresses that 78% of facilities utilize an infant warmer for stabilization or resuscitation immediately after delivery. Figure 13 expresses the delivery room or operating room environment for cesarean births of late preterm births with 48% of facilities reporting as often cool from a neonatal perspective.

Figure 12.

At your facility, how are LPIs core temperature maintained in the normal range when they require resuscitation immediately after delivery?

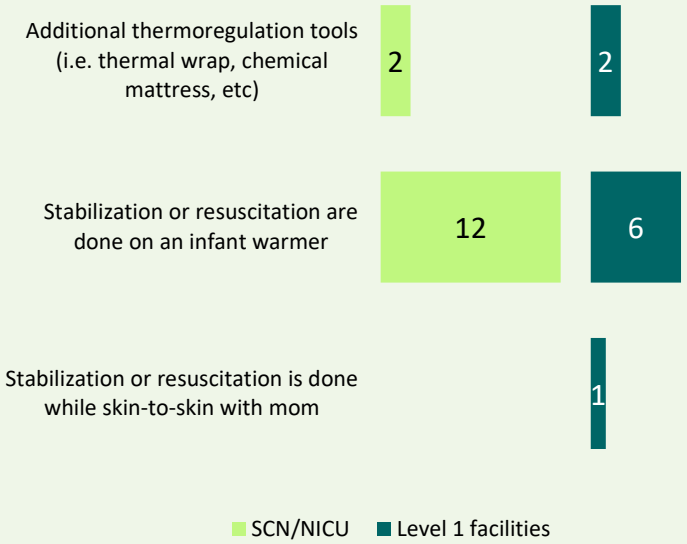
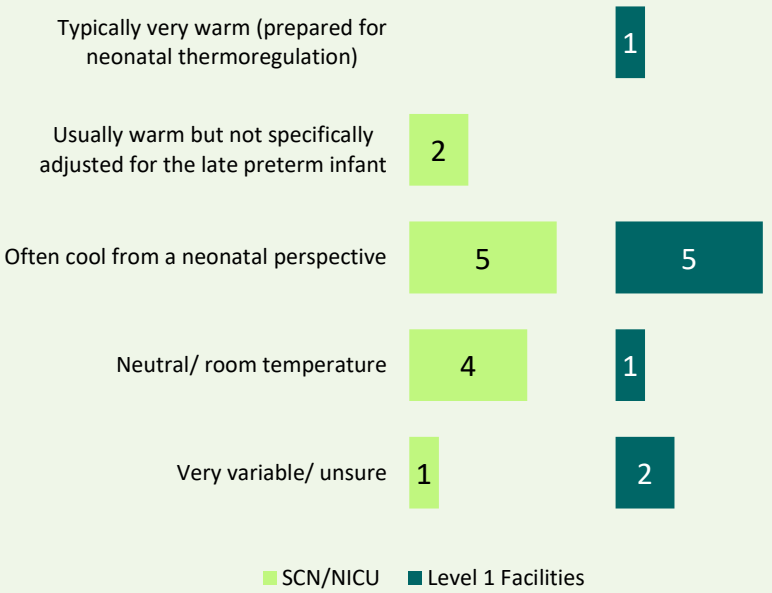


Figure 13.

Which of the following best describes the delivery room or operating room environment for cesarean births of late preterm infants at your hospital.



Thermoregulation

Figure 14.

When late preterm infants delivered by cesarean birth are hypothermic upon arrival on your unit, what are the most common contributing factors in your experience?

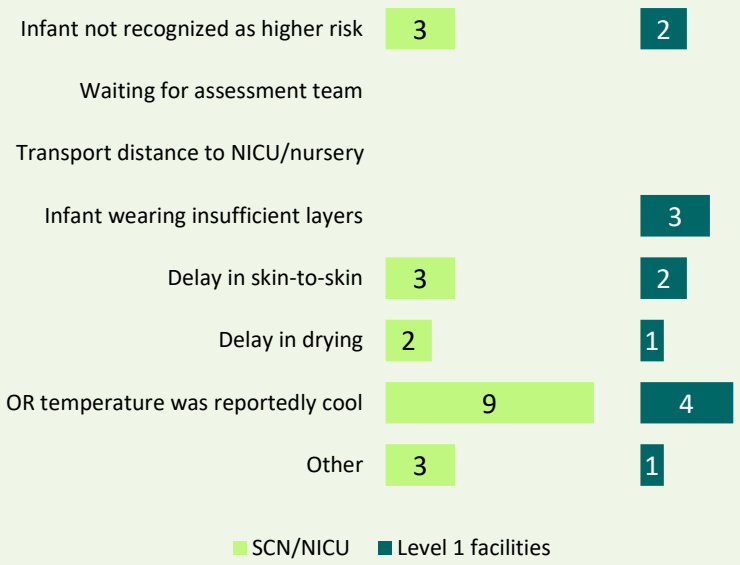


Figure 15.

How are LPIs with hypothermia rewarmed on your unit (select all applicable)?

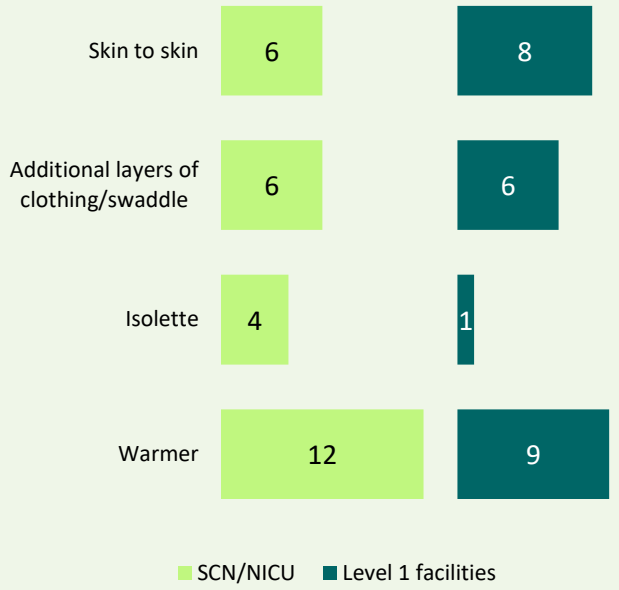


Figure 14 shows that among SCN/NICUs and level 1 facilities, 39% of facilities reported that when LPIs delivered by cesarean birth are hypothermic upon arrival, the most common contributing factor was OR temperature was reportedly cool. Figure 15 shows that 40% of facilities identified using an infant warmer when rewarming LPIs with hypothermia. Figure 16 expresses that 21% of facilities would place an LPI in an isolette dure to hypothermia (temperature less than unit minimum). Figure 17 expresses that 44% of SCN/NICU facilities indicated 1800 grams as the minimum weight required for LPIs to wean out of an isolette.

Figure 16.

On your unit, which of these criteria would be an indication to place LPI in an isolette?

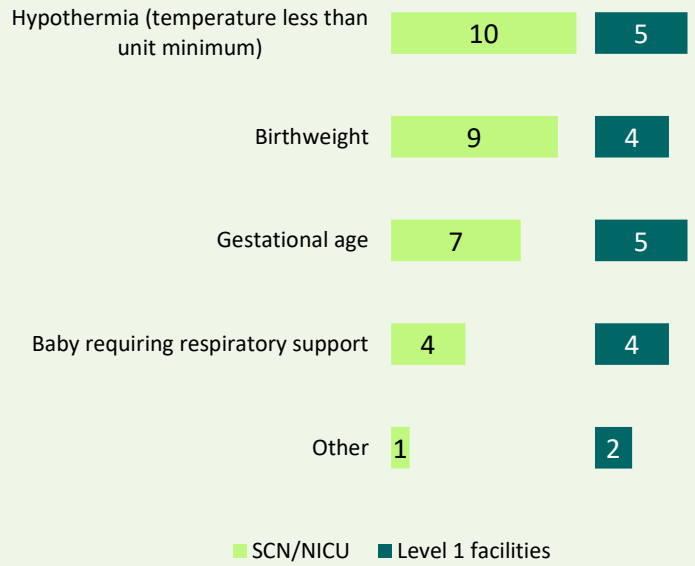
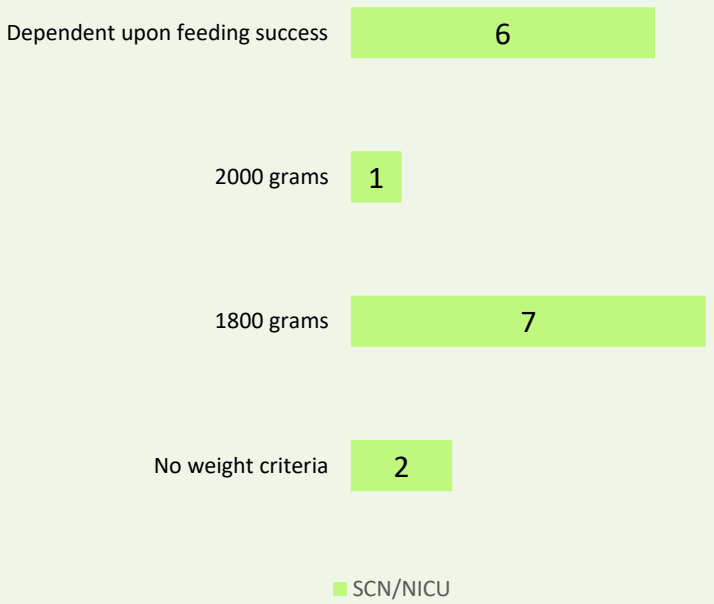


Figure 17.

Is there a minimum weight required for LPIs to wean out of an isolette?



Hypoglycemia

Figure 18.

What is the minimum duration of blood glucose monitoring for healthy, stable LPIs on your unit?

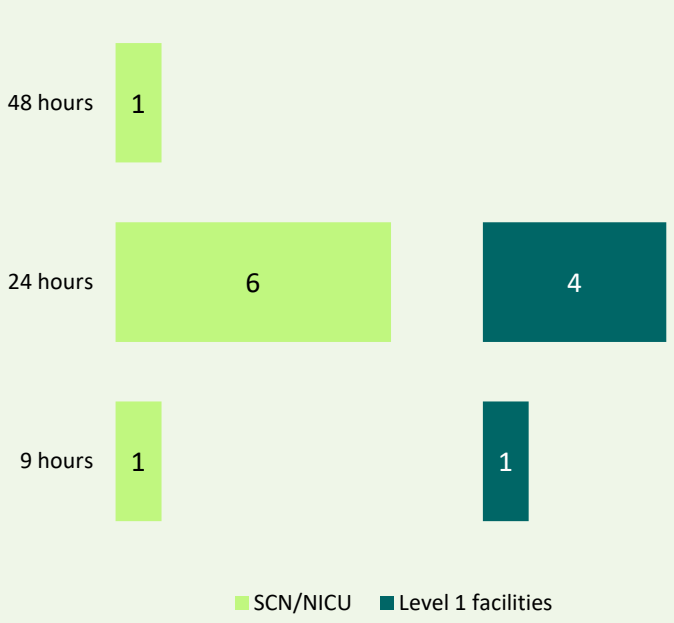


Figure 19.

Which of the following interventions are routinely utilized on your unit to treat transient hypoglycemia in otherwise healthy, stable LPIs?

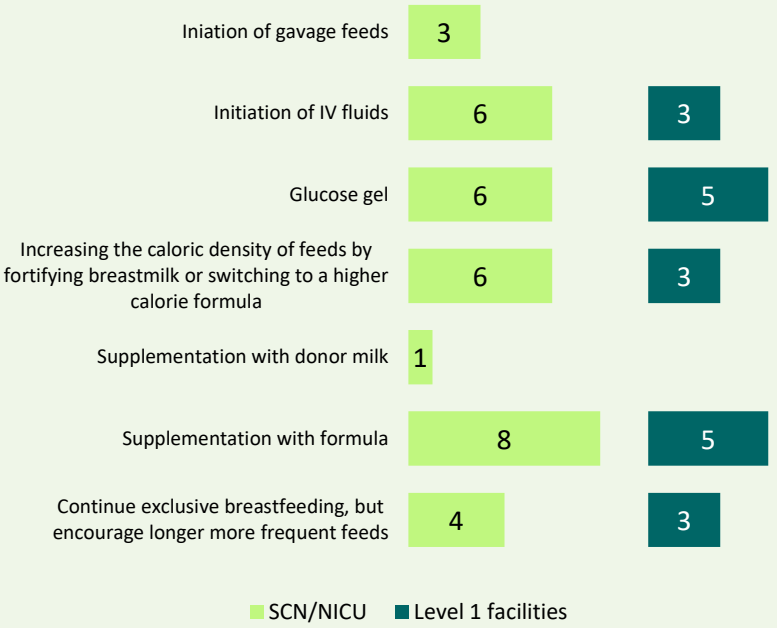


Figure 18 shows that among 77% of SCN/NICUs and level 1 facilities 24 hours is the minimum duration of blood glucose monitoring for healthy, stable LPIs. Figure 19 expresses the interventions that are routinely utilized on units to treat transient hypoglycemia, with 24% of SCN/NICU facilities reporting the intervention utilized is supplementation with formula. Among level 1 facilities, 53% of facilities reported interventions utilized are supplementation with formula, and glucose gel. Figure 20 and 21 express that among both level 1 and SCN/NICU facilities, all facilities responded that their unit has a blood glucose monitoring protocol for LPIs and their unit has a hypoglycemia treatment protocol (N=10 yes, N=6 no).

Figure 20.

Does your unit have a blood glucose monitoring protocol, including for LPIs?

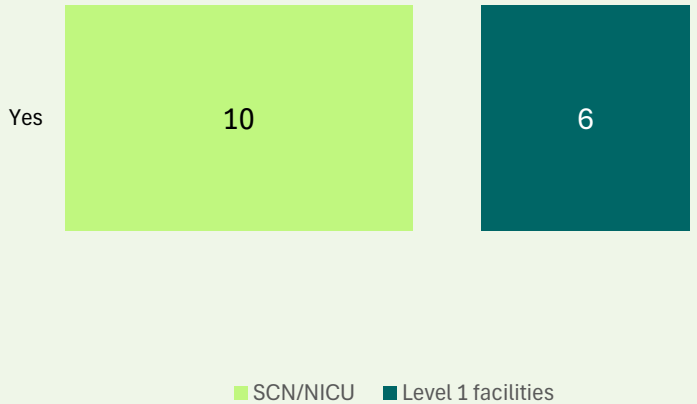
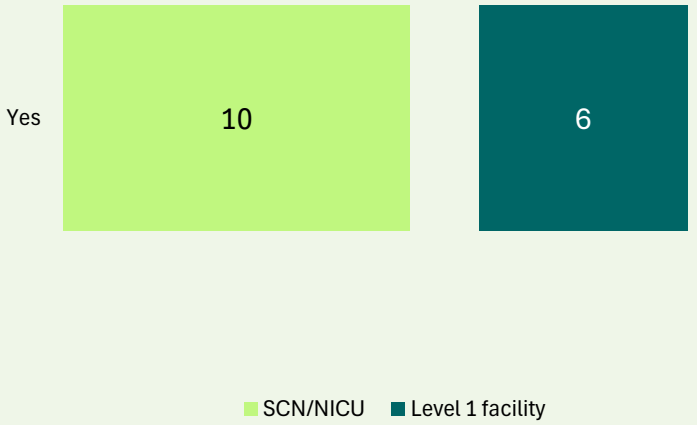


Figure 21.

Does your unit have a hypoglycemia treatment protocol?



Discussion/Conclusion

This report summarizes the key findings in the care of late preterm infants from the Late Preterm Infant Community of Practice project. Through the first survey, 50% of SCN/NICU facilities reported that they had begun reviewing or scheduling the review of LPI policies and protocols, this moved to 50% of facilities beginning to write new policies/protocols by the second survey. Additionally, facilities identified that the average number of late preterm infants reported are a volume of 0-5. This data identified a need for additional surveillance with respect to the care of the late preterm infant. Specific areas needing additional information that were identified through the first phase of this project were, respective to thermoregulation temperature concerns, and hypoglycemia. The VNPC's Community of Practice Project identified areas of intervention that shape the need for an additional quality improvement process focused on quantitative data, building off the work done in this project.

Methods

The data that is reflected within this report is qualitative rather than quantitative and is reflecting current data (2026). There were two facility types that were included in this project, special care nurseries/neonatal intensive care units, and level 1 facilities. Facility data for each survey reflects a different makeup due to facilities being able to respond to each survey as they see fit.

Limitations/ Footnotes

The late preterm community of practice project focused on identifying the care of LPIs across facilities and identifying improvement. Therefore, the data that is reflected within this report is qualitative rather than quantitative. Additional limitations of this data are that there is currently no framework from the Alliance for Innovation on Maternal Health (AIM). Therefore, the metrics are based on topics of each month of data collection to promote learning driven by hospitals collaboration.

References

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