

## Introduction

Preterm infants are at significantly higher risk of sleep related deaths than term born infants.

It is important to model safe sleep (SS) practices for families while their babies are cared for in the NICU to increase the likelihood that these practices will be carried out at home after discharge.

In reviewing the current state in our NICU we found the following:

- Use of many unsafe sleep practices including:
  - Elevation of the head of bed
  - Wearing of hats
  - Cloth placed under the baby's head to prevent emesis from soiling the blanket covering the mattress (i.e. head cloth)
  - Use of developmental positioning devices when no longer needed

Our unit lacked standardized criteria for "readiness" to transition to SS, creating variation, and missed opportunities to model SS practices for families, increasing the risk of sleep related deaths of our infants after discharge.

The focus of our initiative was to standardize the process of transitioning infants born before 32 weeks gestation to SS practices as soon as developmentally appropriate.

### Project Aim:

- Increase SS practices for infants in our unit from baseline of 12% to  $\geq 50\%$  within 12 months of the start of the initiative

### Improvement Process:

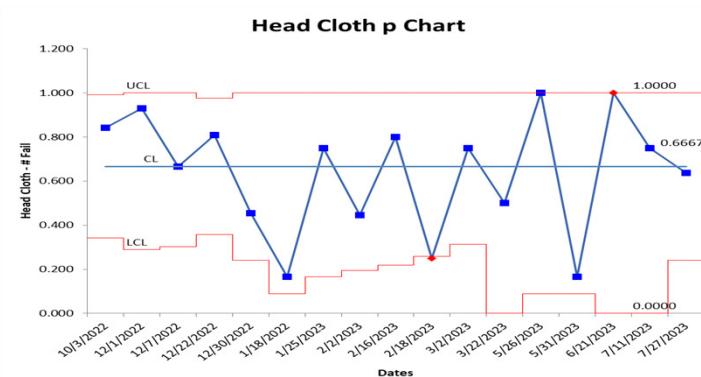
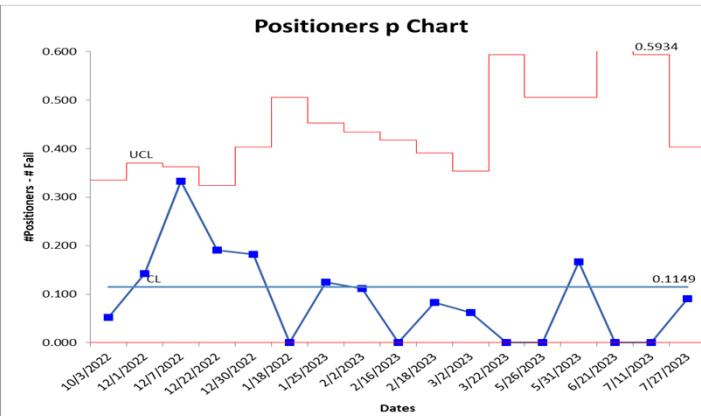
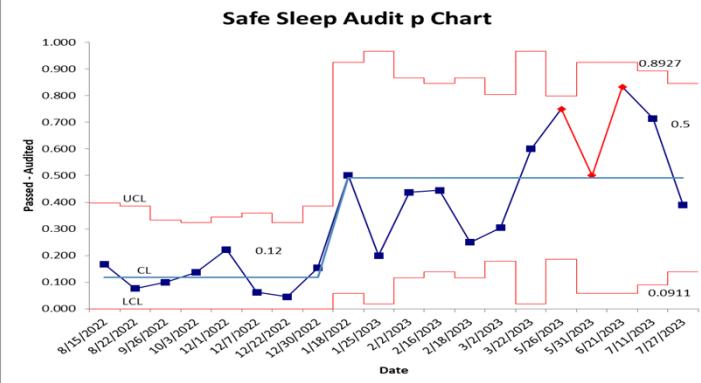
- A multidisciplinary team reviewed the current literature, national SS recommendations and reports on SS initiatives published by other centers.
- We modified and implemented a "Transition Pathway" algorithm, developed by another center, to screen infants for readiness to transition to SS by adding a developmental assessment, performed by PT/OT, to determine infants' readiness to remove positioning supports.
- The process related to the developmental assessment, underwent several PDSA cycles, resulting in PT/OT daily worklists being modified to prompt evaluations of infants within a week of meeting criteria, and the results of the assessments flowing into the daily progress notes of the providers to prompt a SS order.
- A report from our EMR was built to identify patients with existing SS orders and this was used to perform bedside SS audits

## Transition to Safe Sleep Practices in a Level IV NICU

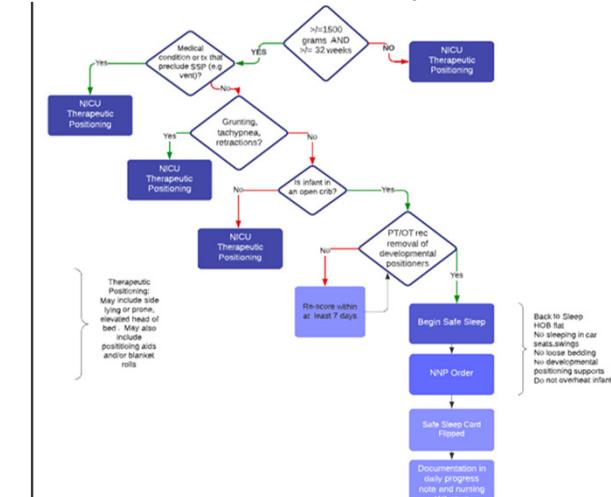
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## Results



## Transition Pathway



## Discussion

- We met our goal  $\geq 50\%$  infants cared for in a SS environment.
- The use of head cloths has been the most difficult practice to change, with 67% of infants found with one in their crib. Efforts to increase the mattress cover blanket supply in the NICU is underway to address this problem.
- With continued efforts we seek to increase compliance with SS to  $\geq 80\%$  within the next 12 months.

## Conclusion

Through this initiative, we have significantly increased the number of infants cared for in a safe sleep environment while in our unit, and thus been able to model this practice for families well before NICU discharge, increasing the likelihood that families will continue to provide safe sleep environments for their babies at home. Ultimately, this will reduce the risk of sleep related deaths in these vulnerable infants.

## Contact

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