

Accelerating Time to First Kangaroo Care in the NICU: A Multidisciplinary Approach

Neonatal Intensive Care Unit

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Background

Skin-to-skin (STS) care offers numerous benefits for newborns including enhanced vital sign stability, growth, sleep organization, temperature regulation, and bonding. Our NICU actively participated in a statewide collaborative aiming to increase positive parental touch in the NICU. Aligning with our organization's strategic goals, the NICU team focused on reducing the time to first skin-to-skin contact.

SMART Aim:

Decrease time to first skin-to-skin by 30% from baseline by June 30, 2023

Methods

- Multiple interventions were implemented over the past two years to achieve our goal:
 - Staff survey to identify perceived barriers to STS
 - Weekly "Developmental Rounds" facilitated by the NICU CNS, NPD, Occupational Therapist, and Neonatologist.
 - Collaboration with the EIS team to optimize Epic, streamlining STS documentation into a single flowsheet and add rows to capture barriers to STS
 - Chart audits by the NICU CNS and volunteer NICU RNs to establish the baseline and ongoing metrics
 - Development of a STS dashboard to sustain improvements
 - Bi-Monthly review of data, successes, and opportunities for improvement during NICU Collaborative Practice Meetings and RN Staff Meetings

Reference

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Figures

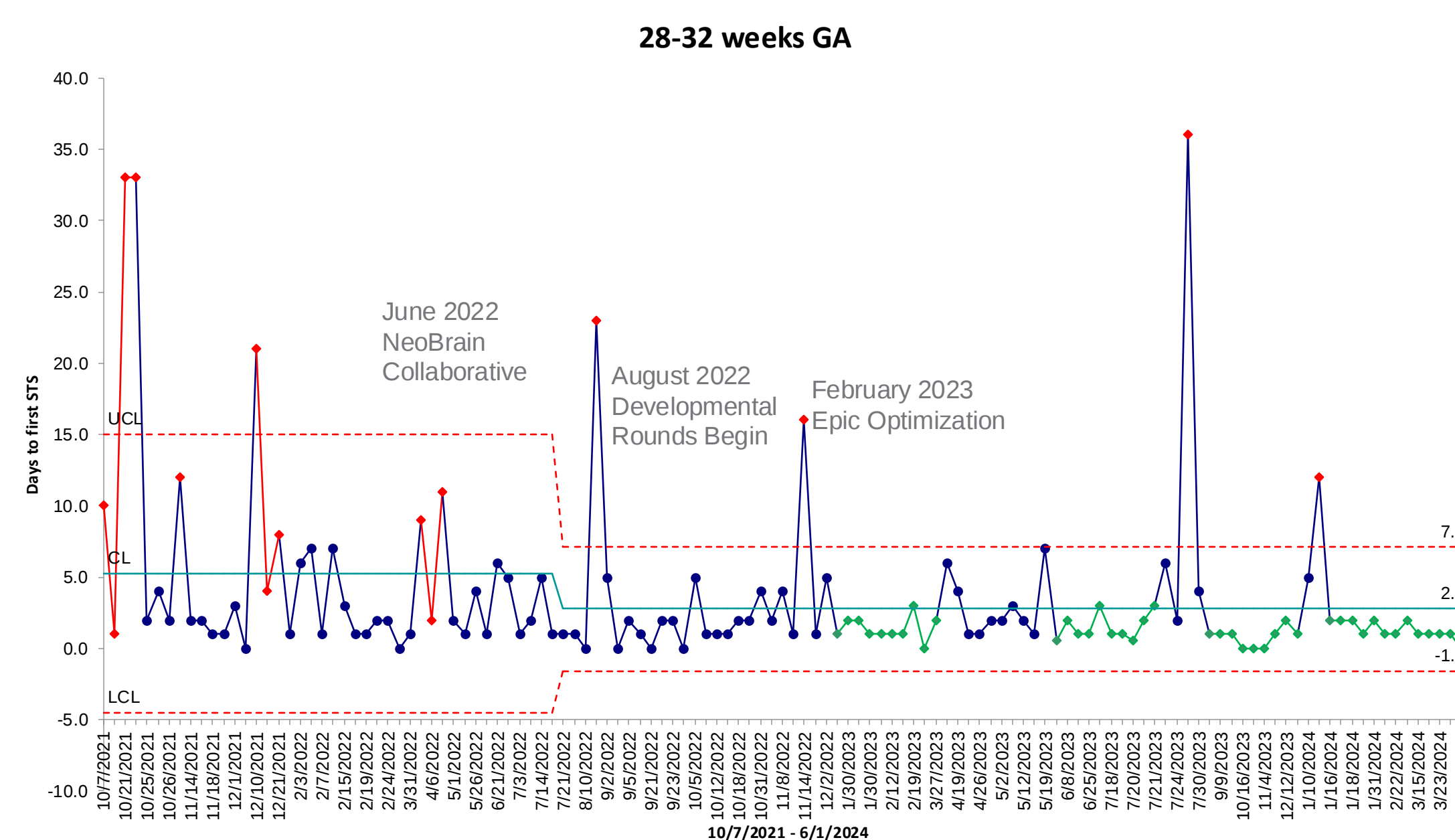


Figure 1:
X-Chart demonstrated days to first skin to skin in 28-32 week gestational age newborns

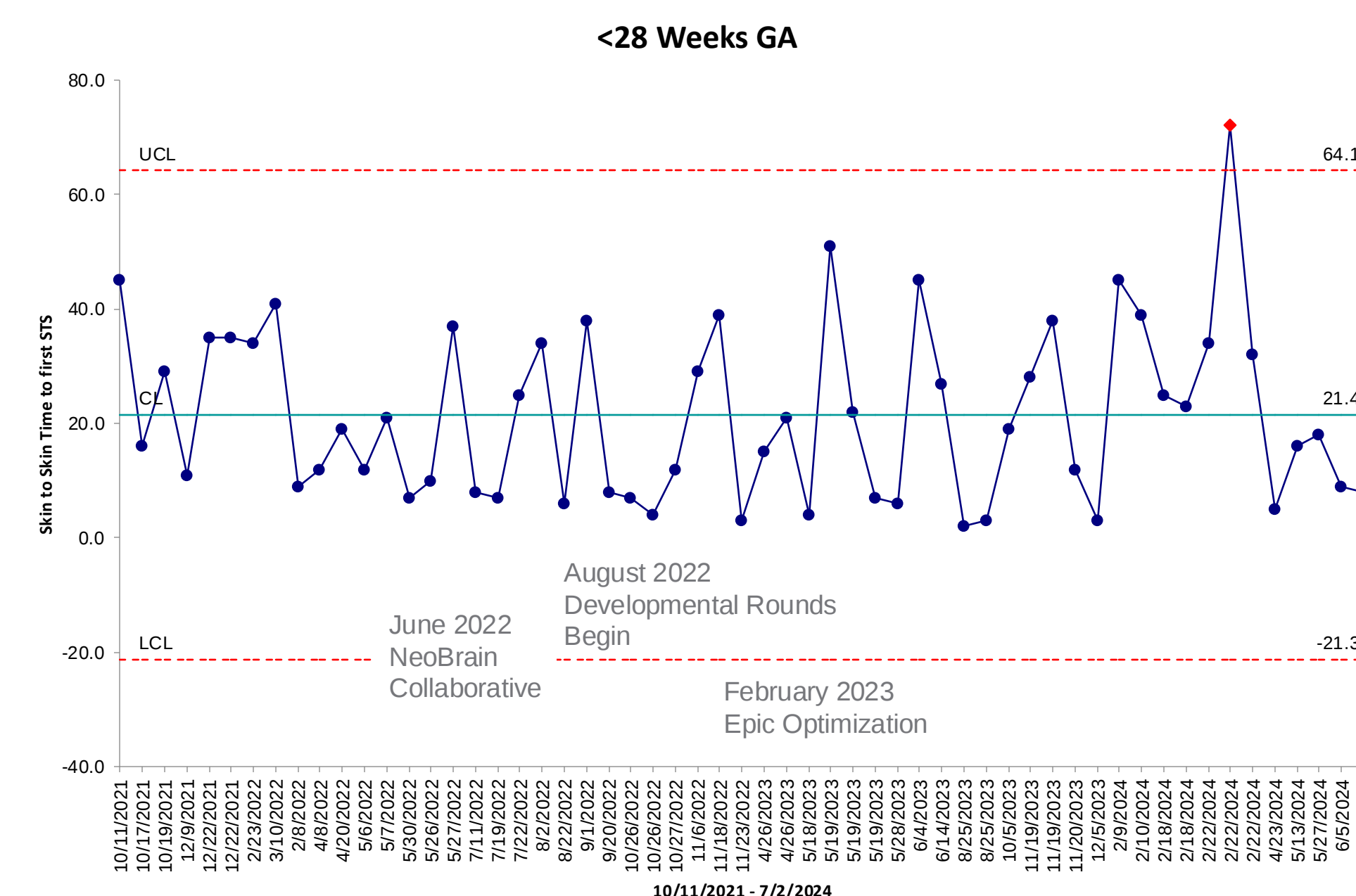


Figure 2:
X-Chart demonstrated days to first skin to skin in <28 weeks gestational age newborns

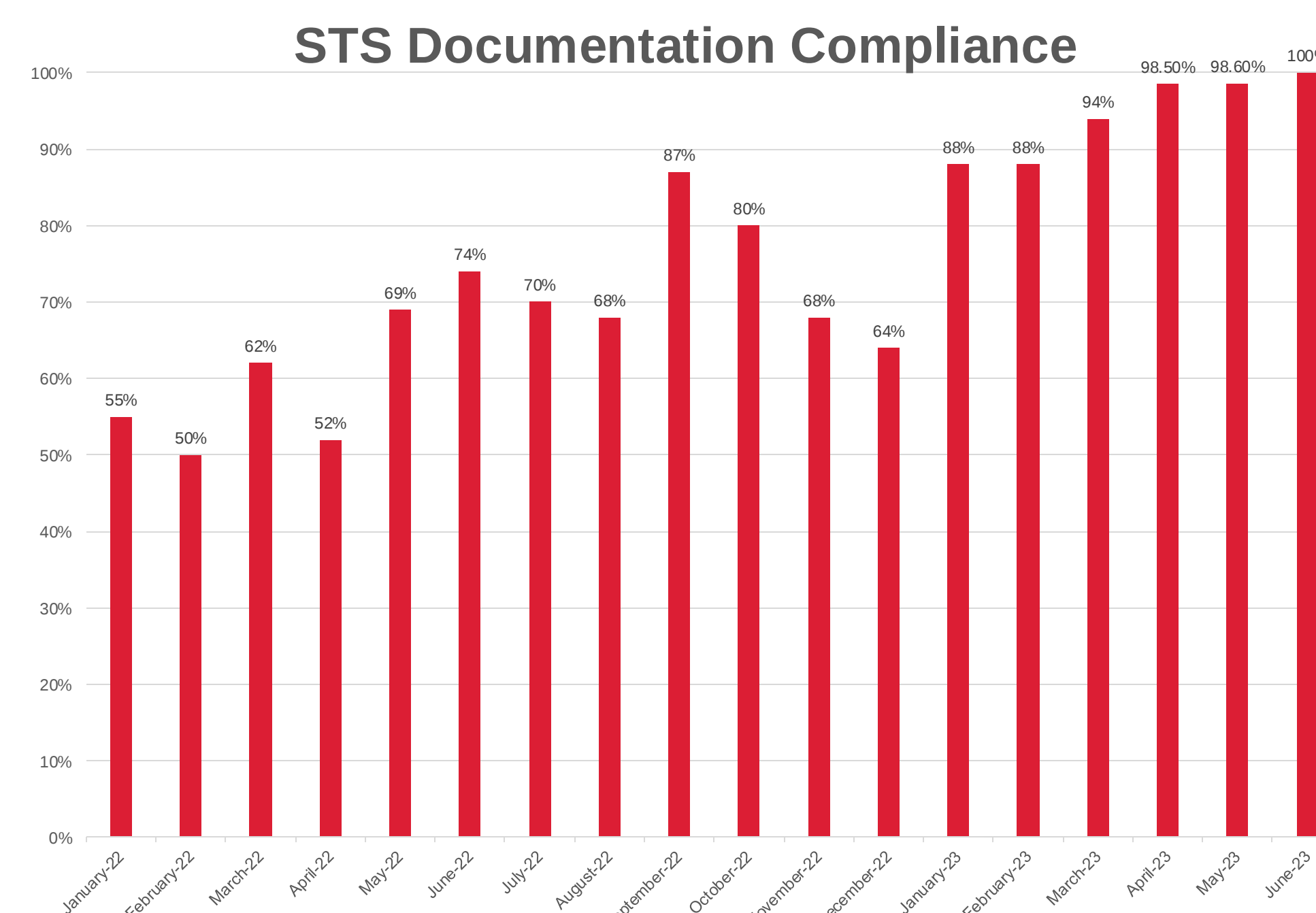


Figure 3
Compliance with documentation of STS Holding in Epic

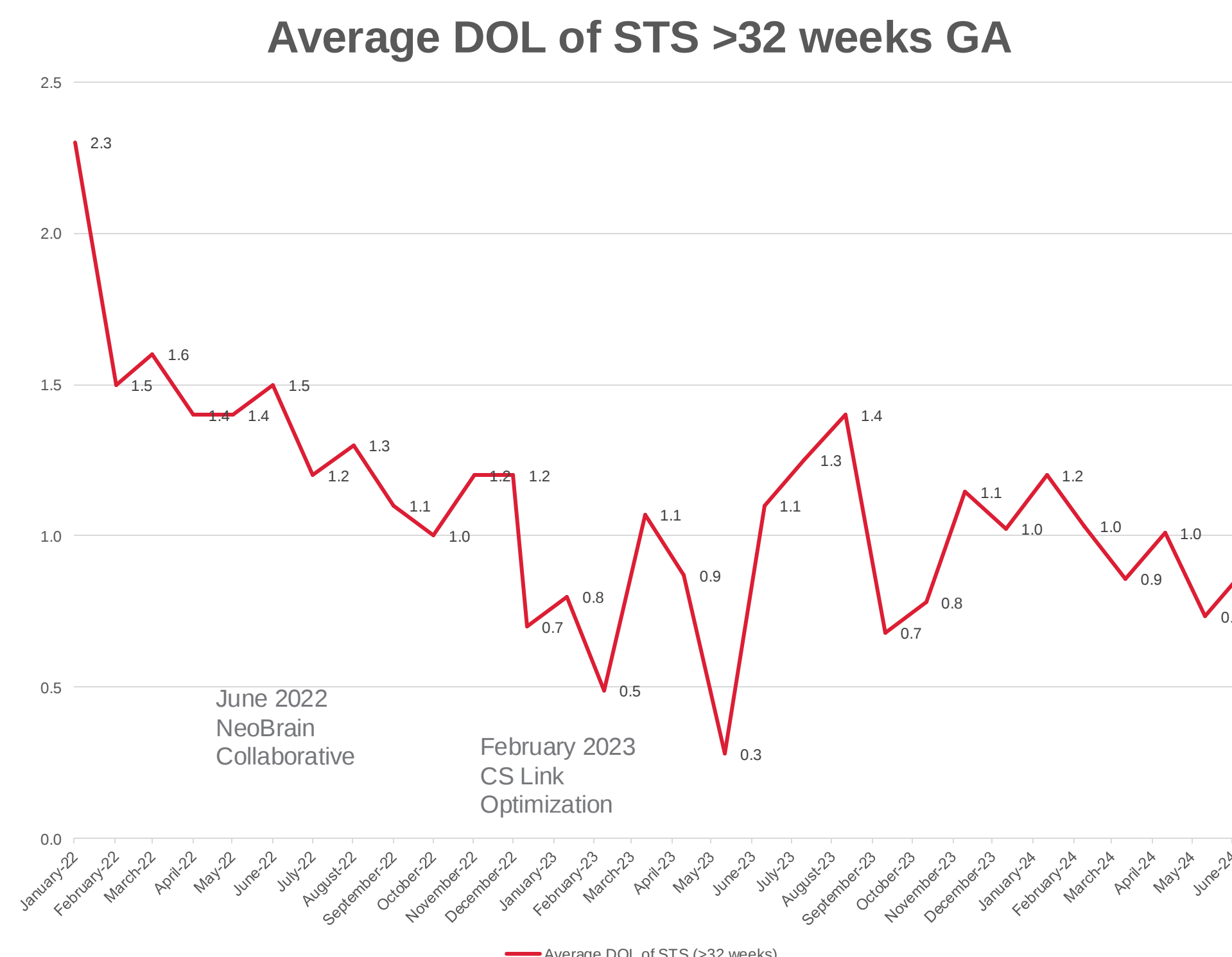


Figure 4
Day of Life to first Skin to Skin in >32 week newborns

Results

- Baseline: STS was documented approximately 60% of the time prior to interventions (January-June 2022, Figure 3).
- Following the Epic optimization, documentation rates significantly improved to 88-99%.
- When analyzing data, infants were stratified by gestational age to identify trends and areas for improvement.
- Baseline days to first STS:
 - >32 weeks average of 1.6 days of life (Median: 1.5 days; n=462)
 - 28-32 weeks average of 9.6 days of life (Median: 4.8 days, n=37)
 - <28 weeks average of 18.1 days of life (Median: 12.3 days, n=16).

Data was regularly presented to the NICU team during collaborative practice and NICU staff meetings. Throughout the past two years, the average time to first skin-to-skin contact has decreased in two of the three groups:

- >32-weeks average of 1.1 days of life (Median 1.1 days, n=1566; **31% decrease from baseline**)
- 28-32 weeks average of 3.1 days of life (Median 1 day, n=97; **35% decrease from baseline**),
- <28 weeks average of 20.7 days of life (Median 18, n=41; **14% increase from baseline**).

Discussion

Our NICU's improved timing of achieving first skin-to-skin contact was influenced by multiple factors. The ongoing multidisciplinary education and support provided during developmental rounds proved highly impactful. Moving forward, we aim to further enhance time to first skin-to-skin contact, focusing specifically on the <28-week population, who face the most barriers to STS.

Acknowledgements

We would like to acknowledge the entire NICU team for their commitment to excellence in human caring. Additionally, we would like to acknowledge the California Perinatal Quality Care Collaborative for establishing the NEOBrain collaborative. Lastly, we would like to acknowledge the CSMC COOL team and EIS for assisting with updates to Epic to help improve documentation of STS and developing a dashboard to reduce manual data collection which has helped improve sustainability.