

# Preemie Progress: What's new at the Janeway NICU

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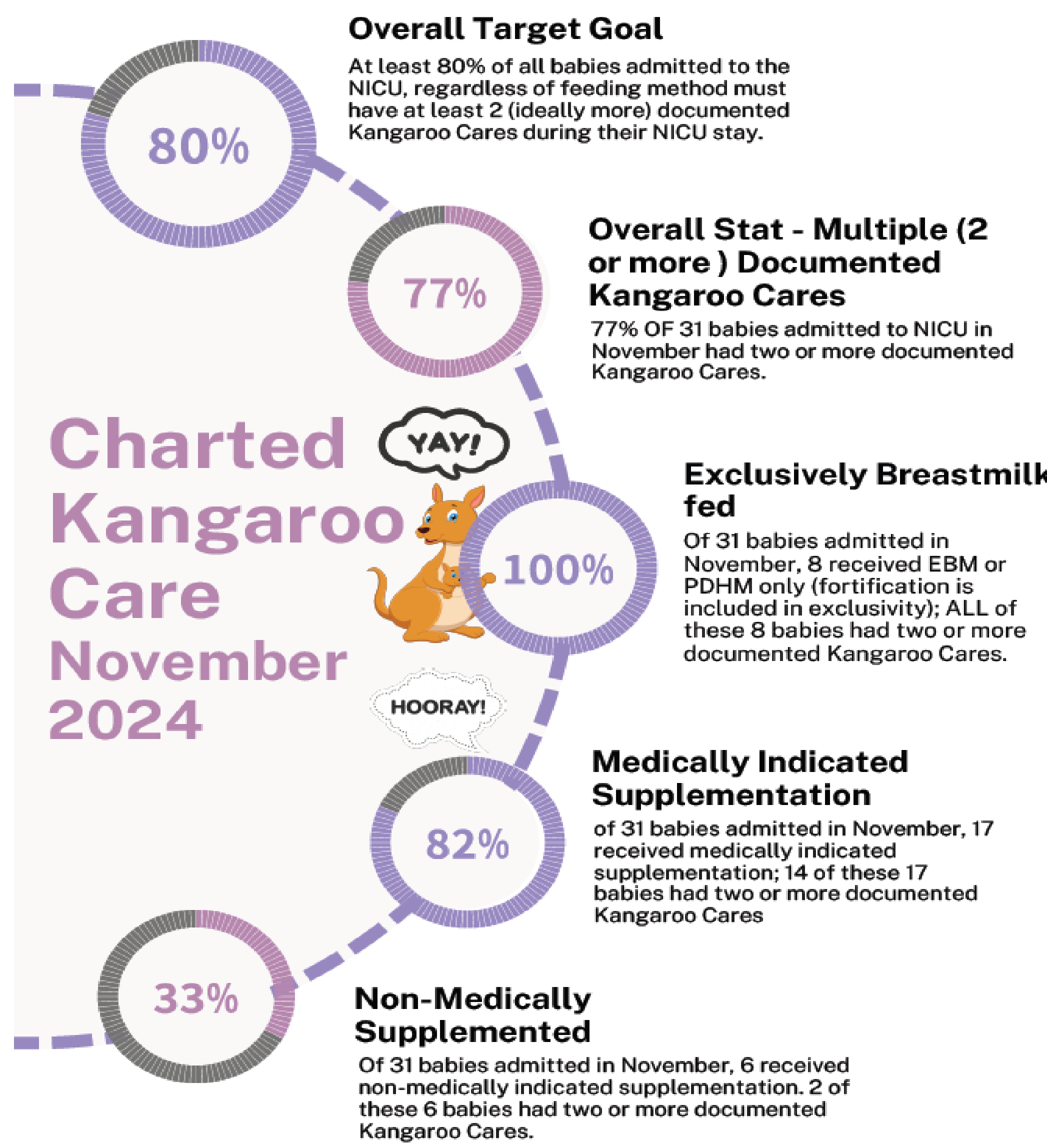
## Brain Health

### Supporting and Enhancing NICU Sensory Experiences (SENSE)

- Launched September 2023
- Aimed at optimizing the early NICU environment to promote better outcomes for infants and families following high-risk birth.
- Improves early brain development through positive sensory exposures as well as improve parent participation in the NICU.
- One-on-one teaching with our NICU Occupational Therapist for families with infants <32 weeks GA.



## Skin to Skin Successes



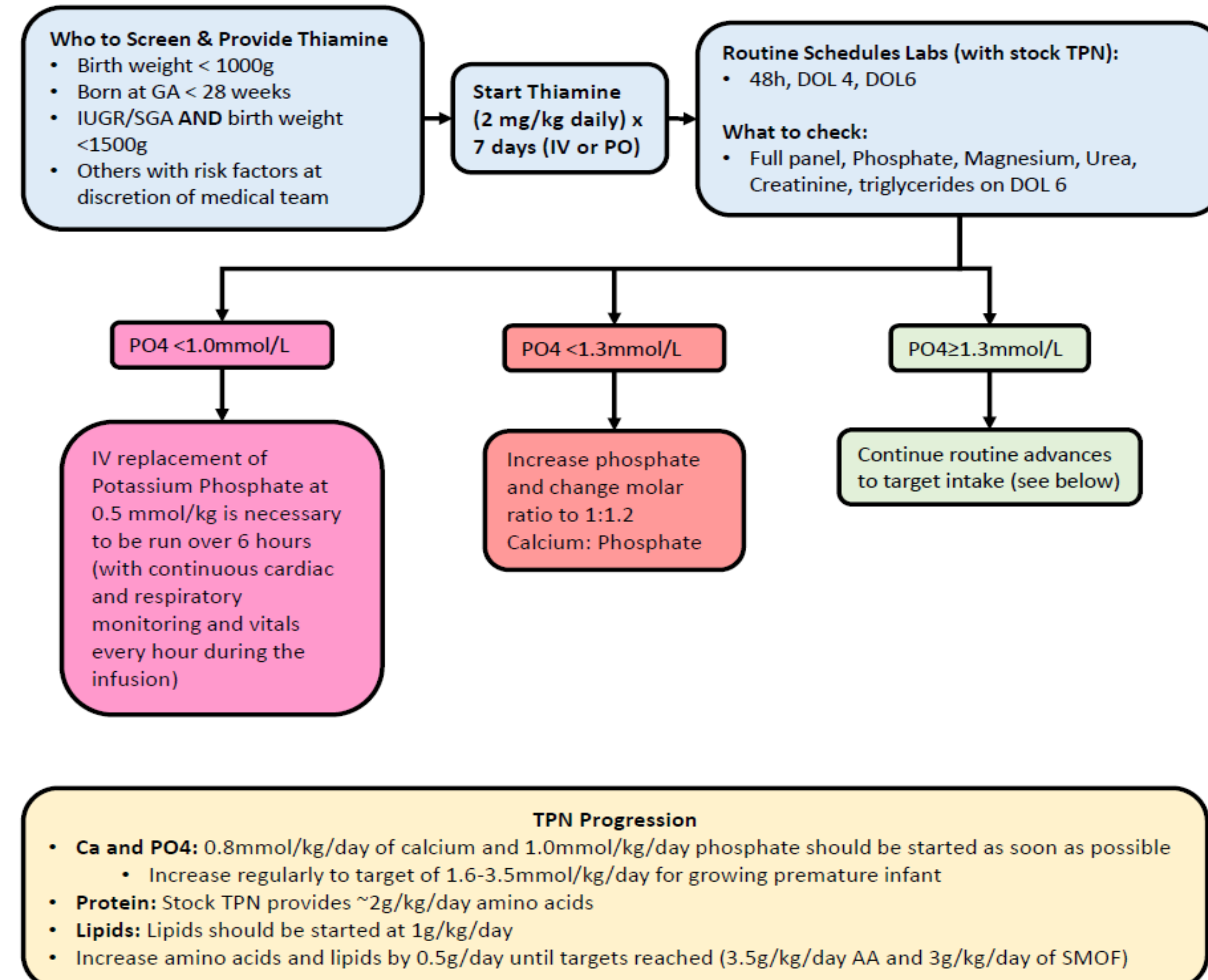
### Kangaroo-A-Thon November 17-30<sup>th</sup>

- We achieved a combined total of 5720 documented minutes of Kangaroo Care!
- That's an average of 409 minutes a day!

### Student Research Project

- Pre/post implementation of SENSE
- On average, infants with GA 32<sup>+0</sup> – 33<sup>+6</sup> weeks who received the SENSE program had longer length of stay (p = 0.043), higher breastfeeding success rate at discharge (p = 0.018), performed Skin-to-Skin care more frequently (p = 0.005), with shorter average duration (p = 0.011).
- Limitations include a relatively small sample size and a short pre- and post-intervention period for data collection.

## Feeding & Nutrition

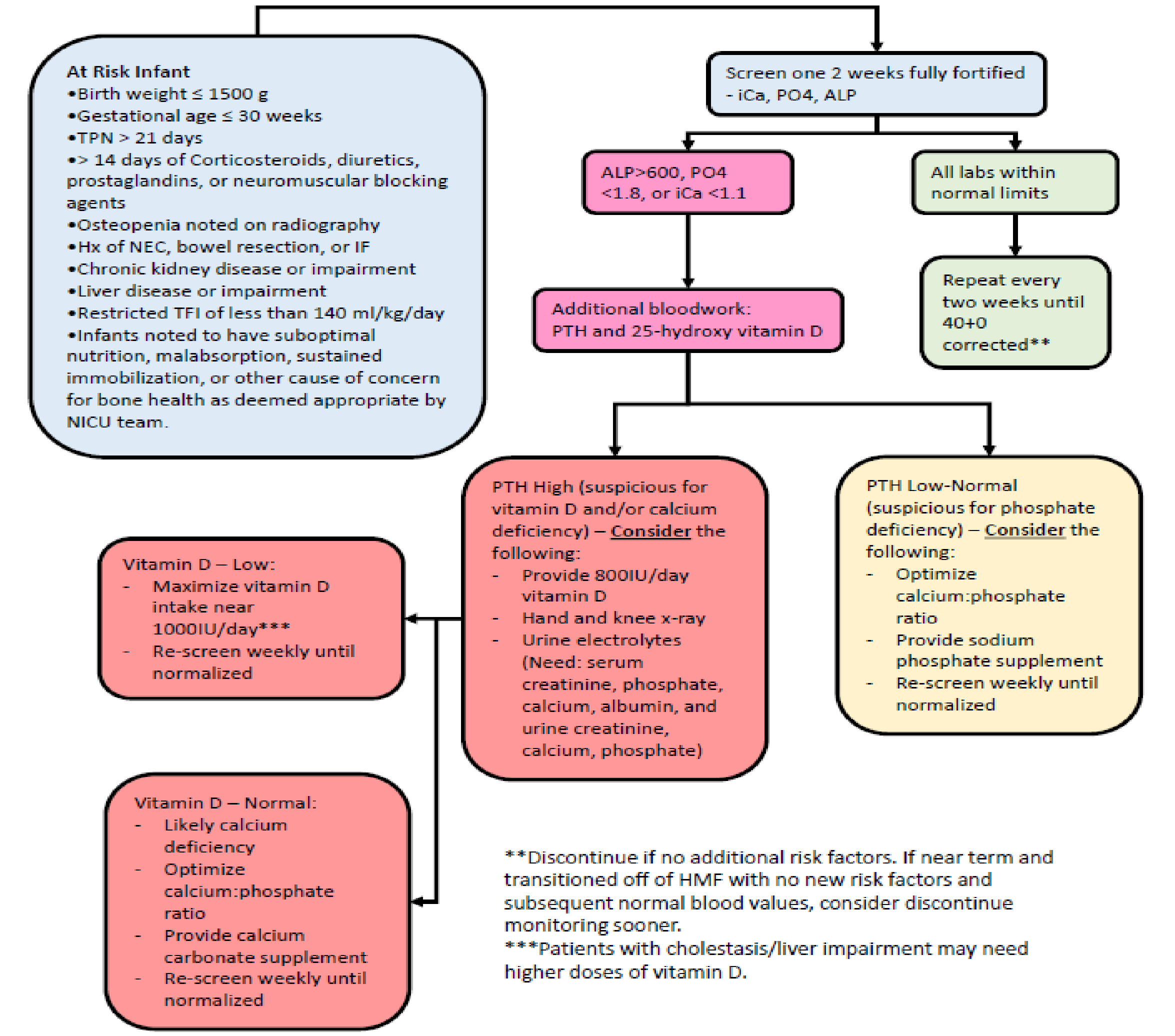


### Refeeding-like Syndrome Screening and Monitoring

- Refeeding-like syndrome (RFLS) is a potentially fatal condition that can occur when nutritional intake abruptly increases after a period of malnourishment. In neonates, RFLS can arise when feeding is initiated after birth if they are undernourished in-utero.
- High-risk groups such as IUGR or SGA neonates are born with deficient reserves of essential nutrients. This malnourishment may be attributable to placental insufficiency or lack of nutrient stores that form during the third trimester of pregnancy.
- The signs and symptoms of RFLS include hypophosphatemia, abnormal fluid and electrolyte levels, as well as metabolic and clinical complications. Hypophosphatemia typically becomes apparent within 3-5 days following refeeding or even earlier in high-risk populations.

### Metabolic Bone Disease Screening and Monitoring

- Metabolic bone disease of prematurity (MBD) is a condition that is characterized by reduced mineralization of bones in preterm infants.
- MBD is most frequently observed in infants born <1000g or <28<sup>+0</sup> gestational age as the last trimester of gestation is a critical period for the development of bones and mineralization. Other medical conditions (e.g., liver disease) or medical therapies (e.g., parenteral nutrition, corticosteroid therapy) further put neonates at risk of poor bone mineralization.
- Management of MBD can be improved through decreased use of parenteral nutrition and early enteral feeding with fortified feeds and vitamin D supplementation.
- Prevention and management strategies include providing adequate nutrition, especially with appropriate levels of calcium, phosphorus, and vitamin D. Close monitoring and intervention are crucial to address any signs of metabolic bone disease and prevent complications.



## Coming Soon!

- Revised Enteral Feeding guideline
- Standardized TPN guidelines – risk stratified
- A closer look at time to first feed/time to full feeds
- Student projects for MBD, RFLS and Nutritional Outcomes of Preterm infants receiving TPN

### Baby Friendly Initiative – PLATINUM designation!

