

3-2023

## Plagiocephaly and Associated Head Deformities in the NICU: The PLAY Bundle

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### Recommended Citation

Kubik, Ashley BSN-RN; Welton, Jenna BSN-RN; Gonzales, Kelly PhD, APRN-NP, FNP-C; Holmes, LeAnn DNP, APRN, FAANP; and Struwe, Leeza PhD, MSN, RN, "Plagiocephaly and Associated Head Deformities in the NICU: The PLAY Bundle" (2023). *Posters and Presentations: College of Nursing*. 22.

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**Plagiocephaly and Associated Head Deformities in the NICU: The PLAY Bundle**

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**INTRODUCTION:** Approximately 10% of infants are premature, often needing NICU care where head deformities from lying supine for prolonged periods may develop. Lack of nursing knowledge, limited family involvement, inadequate PT/OT, & poor positioning can increase risk of deformities.

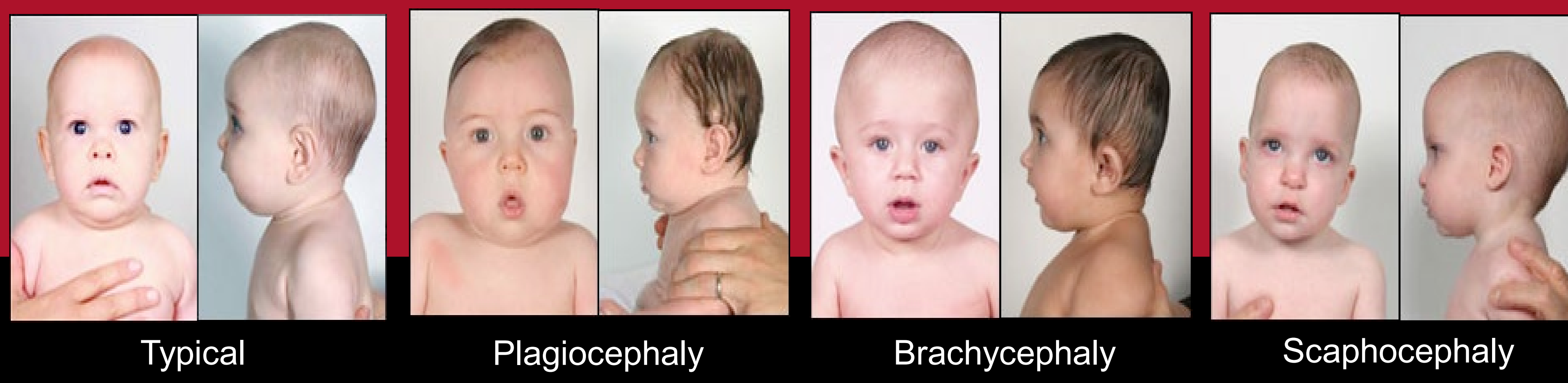
**AIMS:** Improve current standard of care by implementing interprofessional nursing bundle for earlier detection & intervention of positional plagiocephaly in a level IV NICU

- #1: Increase nursing knowledge & identification of asymmetrical head shape
- #2: Increase family comfort & confidence with repositioning
- #3: Increase nursing practice & documentation of repositioning, assistive devices, & family education
- #4: Increase PT/OT consults & involvement with bundle initiation
- #5: Compare head measurements pre- & post-bundle implementation

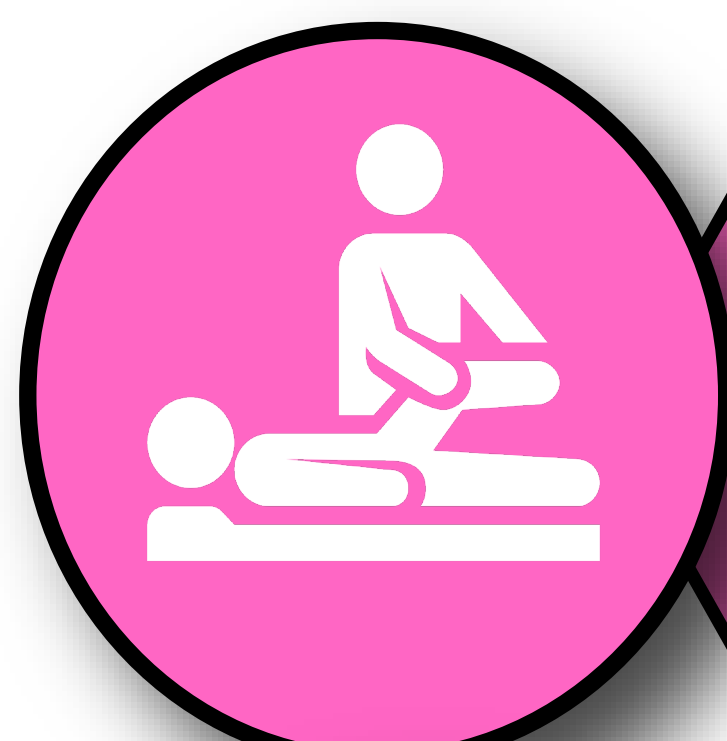
**METHODS**

- 37 infants inpatient Level IV NICU
- Hybrid II Research Design for Quality Improvement
- Embed PLAY Bundle in EHR

# Embedding a nursing order for PT in EHR increased early intervention of NICU head deformities

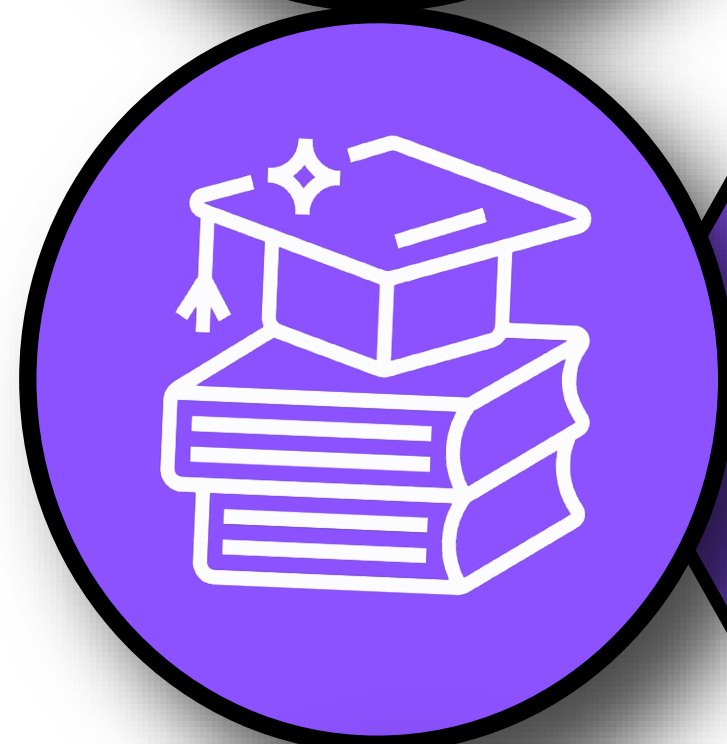


## THE PLAY BUNDLE



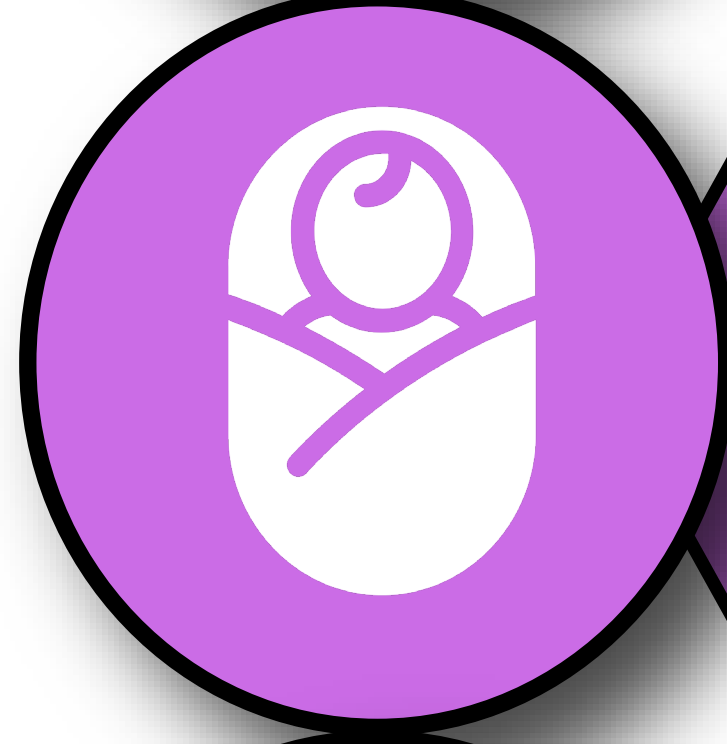
### Positioning/PT Involvement

Timely, documented repositioning by RNs + PT involvement with referrals & measurements



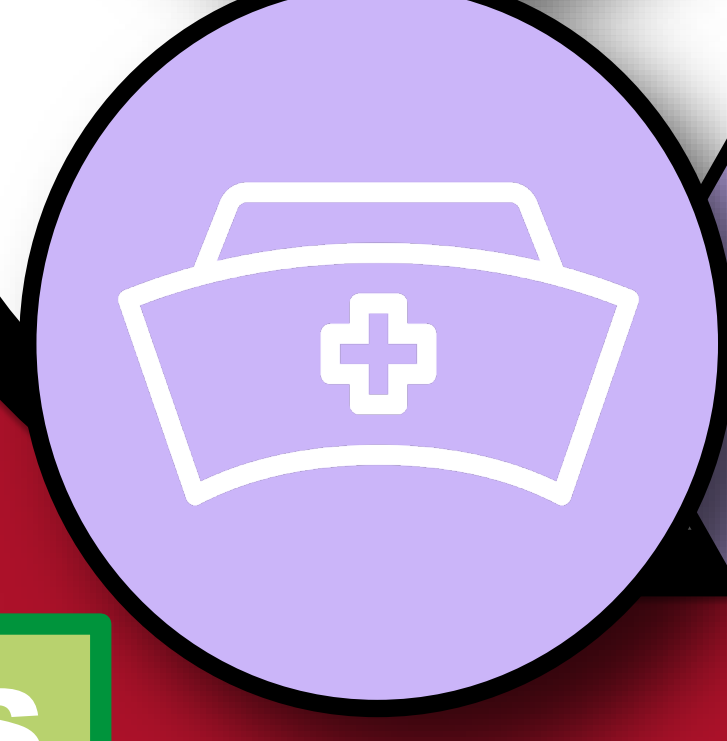
### Learning & Education

Teaching parents & RNs about plagiocephaly & associated head deformities with various methods



### Assistive Devices

Using proper aids to position and align patients



### YOU & Accountability

What YOU do as an RN that influences change in head shape & your role in prevention.

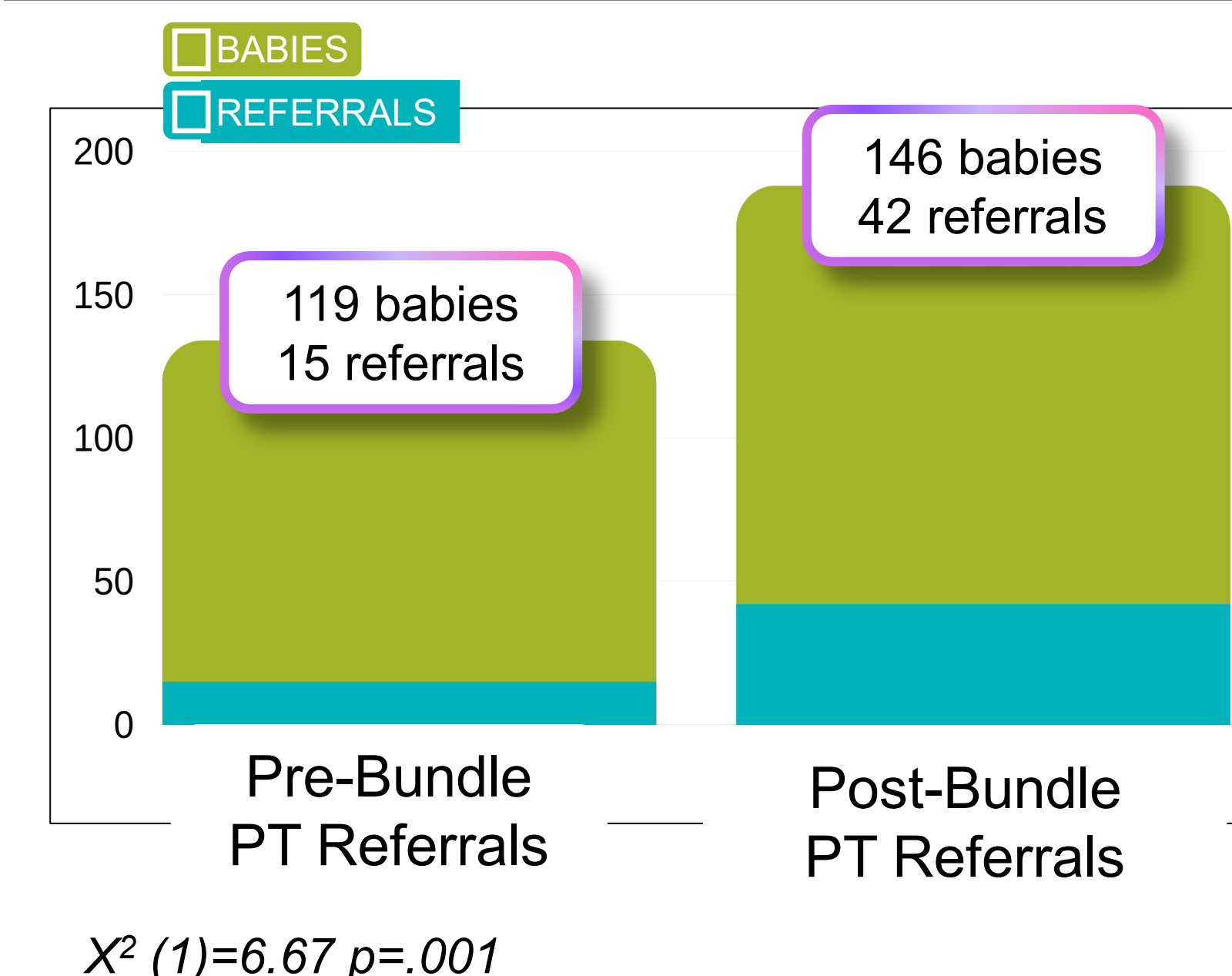


**INSTRUMENTS:**

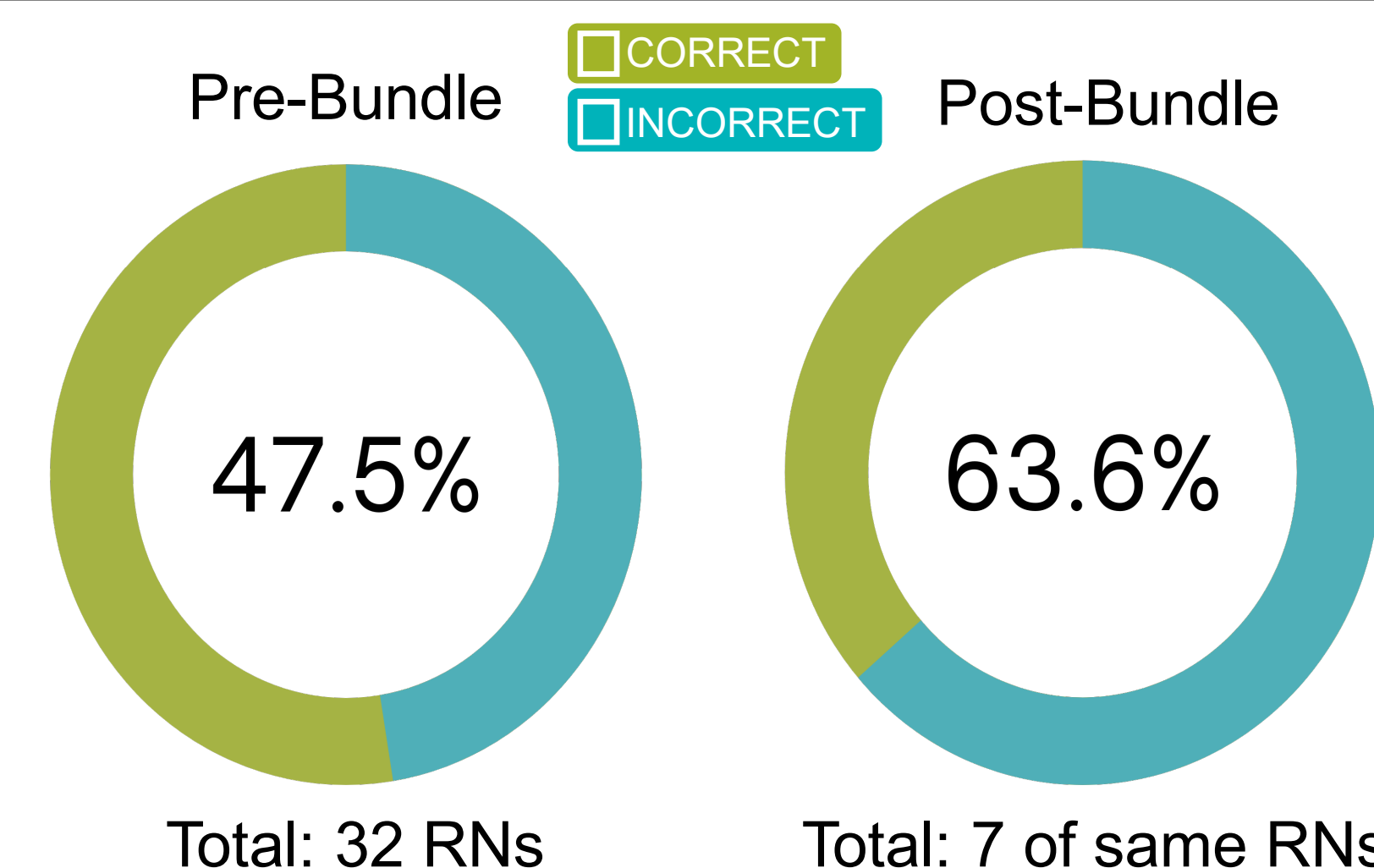
- Pre/post nursing survey
- Cranial calipers
- Children's Healthcare of Atlanta Severity Scale
- Caregiver education
- Pre/post Caregiver Confidence & Comfortability Survey's
- EHR release for PT consult
- Bedside Standardization Sheet for current head shape
- Staff Educational PowerPoints

## CONCLUSIONS

### PRE-POST BUNDLE REFERRALS



### RN KNOWLEDGE ASSESSMENTS



Mean knowledge score increased from 5.86 (1.77) to 7.00 (1.53) increase of 1.14 ( $p=.103$ )

## CLINICAL IMPLICATIONS

Bedside RNs can increase early diagnosis & intervention through embedded EHR orders

Repositioning is multifactorial and nursing-driven based on clinical judgement

RN & family positioning education can decrease head deformities

Early interventions may reduce family cost burden (helmet therapy) and stress

SCAN ME!



REFERENCES