



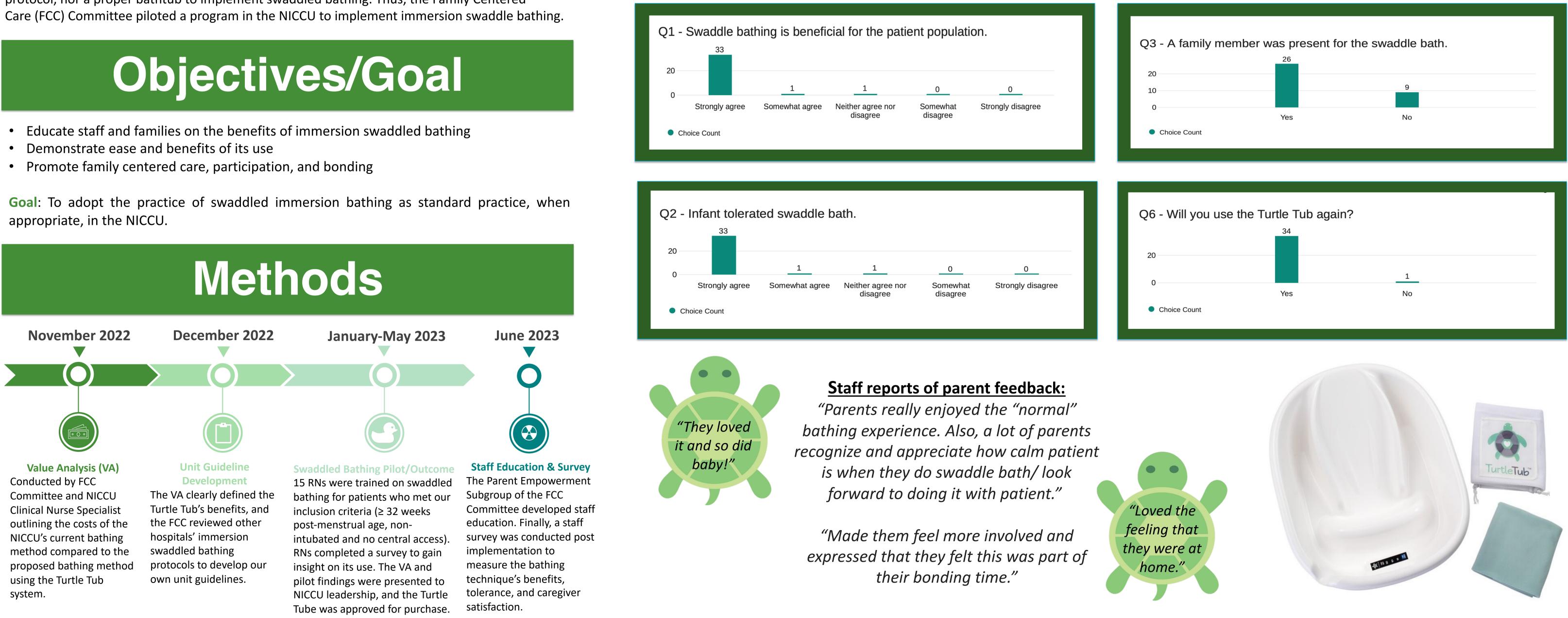
## Introduction

Bathing protocols vary in the Neonatal Intensive Care Unit (NICU) depending on acuity and gestational age. Hospitalized infants in the NICCU and those born premature are at higher risk for stress and agitation during conventional sponge baths. Premature infants are also at added risk for heat loss and hypothermia due to decreased brown fat deposits, large body surface area compared to body mass, thinner skin and inability to maintain flexion of their extremities.

An immersion-swaddled bath, also known as a swaddled bath, is a developmentally appropriate, neuroprotective bathing technique that employs the principles of swaddling to bathe the infant. Each limb is individually un-swaddled, washed, rinsed, and re-swaddled. The benefits of swaddled bathing include:



Swaddled bathing is supported over other bathing techniques by the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) as well as the National Association of Neonatal Nurses (NANN). The CHLA NICCU did not have a standardized tub or swaddle bathing protocol, nor a proper bathtub to implement swaddled bathing. Thus, the Family Centered



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# **Data Collection**

## Pilot Survey

## **Staff Education**

## Pilot survey questions (n=17):

- Swaddle bathing is beneficial for the patient population (strongly agree, agree, neutral, disagree, strongly disagree)
- Infant tolerated bath (strongly agree, agree, etc.)
- Infant was easy to calm, and VS remained stable (strongly agree, agree, etc.)
- A family member was present (yes/no)
- Family member was engaged (yes/no)
- Family member was happy with swaddled bath (yes/no)



# **Post-Pilot Staff Survey Results**

## **Post-Pilot Staff Survey**

Swaddled bathing education in the NICCU is considered a success due to favorable feedback from both staff and family members, and an overwhelmingly positive response from each patient.

### **Staff Response**

Once staff members utilized the swaddled bathing technique, many continued because of how easy it was to use and how calm and content the babies were after their baths. • 100% of staff agreed swaddled baths are beneficial for the patient • 97% of staff plan to utilize the swaddled bathing technique again

## **Parent & Family Response**

Many parents now request to use swaddled bathing once they have experienced it with their child. Parents responded positively to being included in this special bathing process, and all parents that partook in the swaddled bathing "loved it," per staff surveyed. Family centered care is pivotal to infants going home to a supportive environment; thus, engaging parents in activities such bathing not only improves overall caregiver satisfaction but provides a foundation for success post-discharge by increasing their confidence in performing these skills.

### Limitations

While we assessed staff perception of infant tolerance of the swaddled baths, we were unable to measure vital signs to support swaddled bathing due to a limited timeline. Another limitation was the small amount of post survey responses (n=35). Although this gave us insight into the general feelings of staff, it is difficult to generalize to the entire staff without a larger number of responses that is more representative of the whole unit. Limited survey responses were due to the inability of many staff members to utilize the swaddled bathing technique due to patient exclusion criteria

### **Future Implications**

In the future, it would be beneficial to assess actual patient tolerance via vital sign measurement. Additionally, measuring outcomes such as weight gain in infants who received swaddled baths compared to conventional baths would provide reassurance in its benefits longterm. Finally, measuring the effects of swaddled bathing on parent engagement scores in the NICCU would provide insight on how to further increase family centered care.

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# Conclusions

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