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### Baby Bathing: Utilizing Swaddle Sponge Bathing to Promote Hemodynamic Stability in Heart Center Infants

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#### Recommended Citation

Selman, Samantha; Alexander, Bailey; Moock, Caroline; Montazeri, Maryam; Nichols, Danielle; Prather, Lauren; Taylor, Adyssen; and Moreno, Cassandra, "Baby Bathing: Utilizing Swaddle Sponge Bathing to Promote Hemodynamic Stability in Heart Center Infants" (2024). 2023. 2.  
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## Background

- Bathing is important for patient cleanliness, infection prevention, skin care, and family involvement
- Bathing is a frequent element of nursing care
- Stressors during bathing include temperature changes, elevated heart rates, and oxygen fluctuations.
- Hemodynamic instability in infants with limited cardiac reserve can lead to significant clinical decompensation
- Is there a better bath?

## PICOT Question

In hospitalized infants, how does swaddle bathing compared to traditional bathing affect hemodynamic stability?

## Methods

- Literature search
- Current NICU policy evaluation
- Direct observation of bathing techniques and patient tolerance
- Small scale swaddle bathing feasibility trial in ICU and ACCU

## Evidence

### TRADITIONAL BATHING

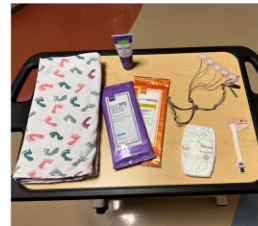
- Traditional baths typically involve submerging the infant in soap and water.
- Studies show that traditional baths impact on stress markers of infants such as temperature control, HR, RR, oxygen saturation, and blood glucose levels.
- The average time spent crying during traditional baths was 43 sec which is roughly 8x longer than with swaddle bathing (Fernandez & Antolin-Rodriguez, 2018)

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### SWADDLE SPONGE BATHING

- Overall swaddle bathing showed a significant decrease in cry time of the NICU infants, temperature changes, and an increase in hemodynamic stability.
- Changes in pre and post bath vital signs such as heart rate, oxygen saturation, and temperature were significantly less (Rudhiati & Murtiningsih, 2022)
- Overall stress of the neonate was decreased during swaddle bathing (Naseri et al, 2023)

**The majority of swaddle bathing evidence is NICU based. Cardiac infants have similar risk factors, therefore, swaddle bathing may benefit the hospitalized cardiac infant population. Consensus across multiple studies shows that swaddle bathing demonstrated decreased temperature and hemodynamic changes and overall stress levels in infants when compared to traditional bathing.**



**Swaddle bathing maintains baby in a developmentally supportive wrapped and flexed position, exposing one limb at a time for cleansing**

## Clinical Practice Implications & Recommendations

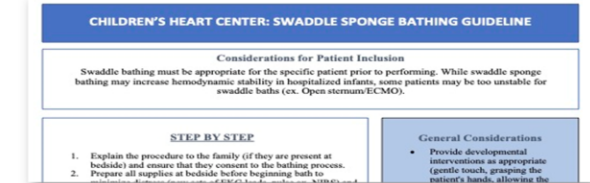
### Feasibility Trial Demonstrated:

- Decreased time off monitors
- Decreased stress levels
- Decreased infant crying
- Increased hemodynamic stability
- Increased bath efficiency
- Increased parent satisfaction

### Key Takeaways:

- Swaddle bathing can be performed with bath wipes, soap & water, or CHG
- Easily modified to meet infants' developmental and clinical needs

### Quick Reference Guide (QRG) created:



## Conclusion

Swaddle bathing is safe and should be implemented in the Heart Center for appropriate patients. Our step-by-step guideline should be utilized to improve patient care.

