



Talk With Me Baby: Language Nutrition in the NICU Pilot Study



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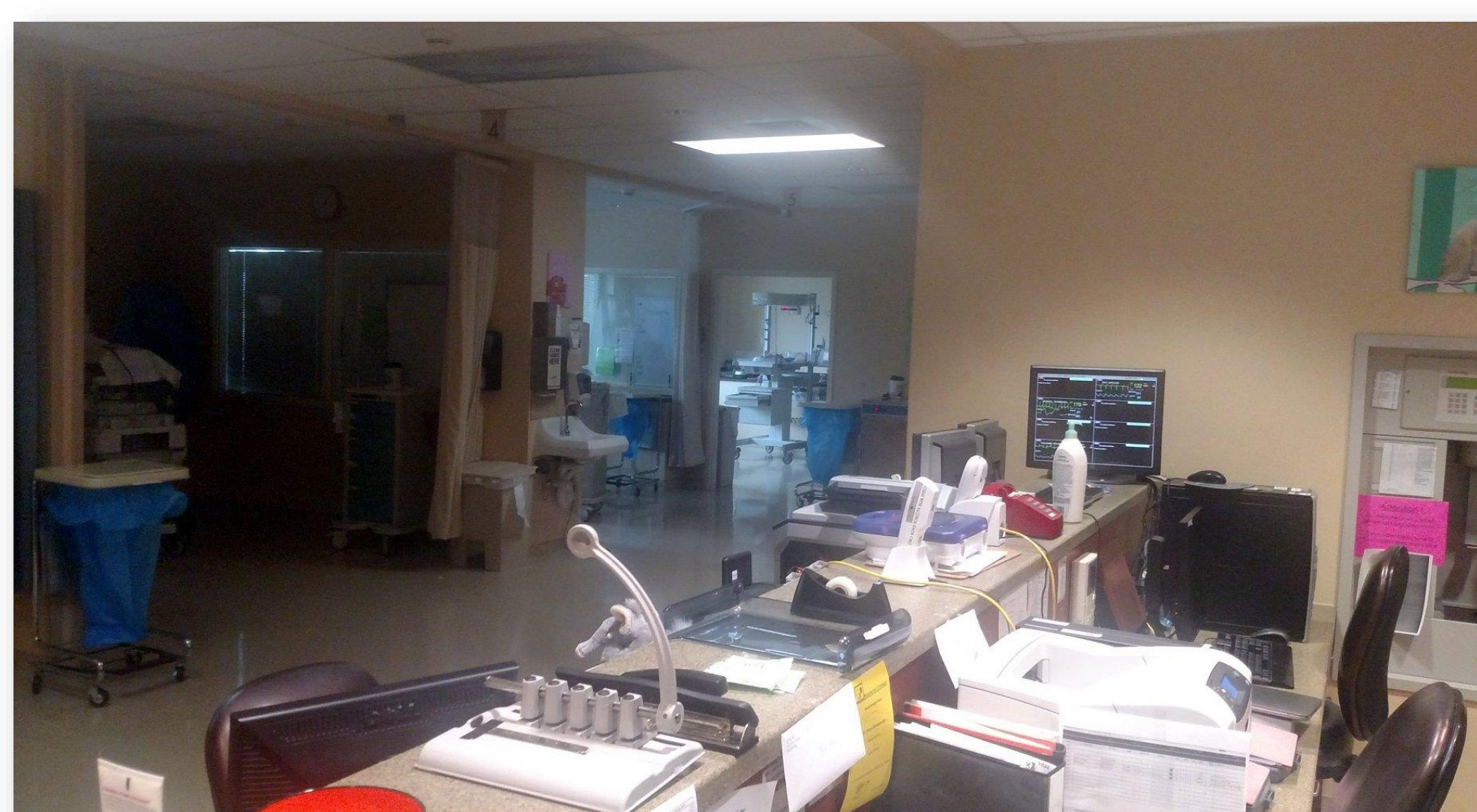
Background

Early exposure to language has a strong effect on vocabulary development by age 3, which is predictive of reading proficiency by the end of third grade (NICHD ECCRN, 2002; Dickinson & Tabors, 2001; Harris, Golinkoff & Hirsh-Pasek, 2011).

Rand and Lahav (2013) suggest that deprivation of a language rich environment in the NICU may explain linguistic deficiencies among premature infants. Caskey, Stephens, Tucker, and Vohr, (2015) found that increased parental talk with preterm infants in the NICU is associated with improved early cognitive and language outcomes. Unfortunately, few language focused interventions and studies in the NICU exist.

Purpose

The proposed study seeks to assess the extent to which *TWMB* nurse-led maternal “language nutrition” training influences the language enrichment and development of a sample of neonates in the NICU. This study represents the first evaluation study of this state-wide initiative to train nurses to transfer language nutrition skills to all parents. This study evaluates the effect of the *TWMB* *intervention* on the transfer of capacity from nurses to parents to deliver language nutrition to babies and on child language outcomes.



Specific Aims

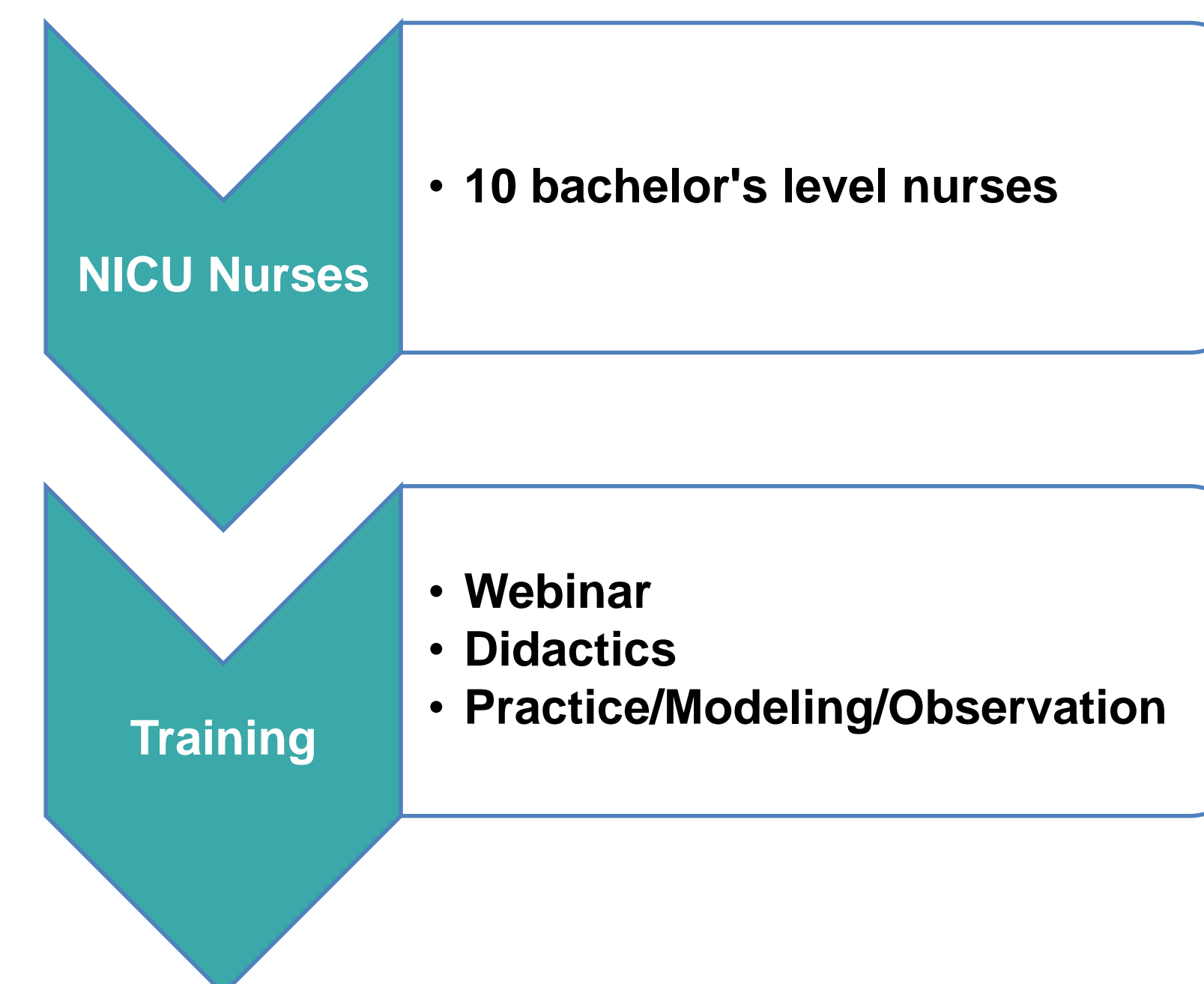
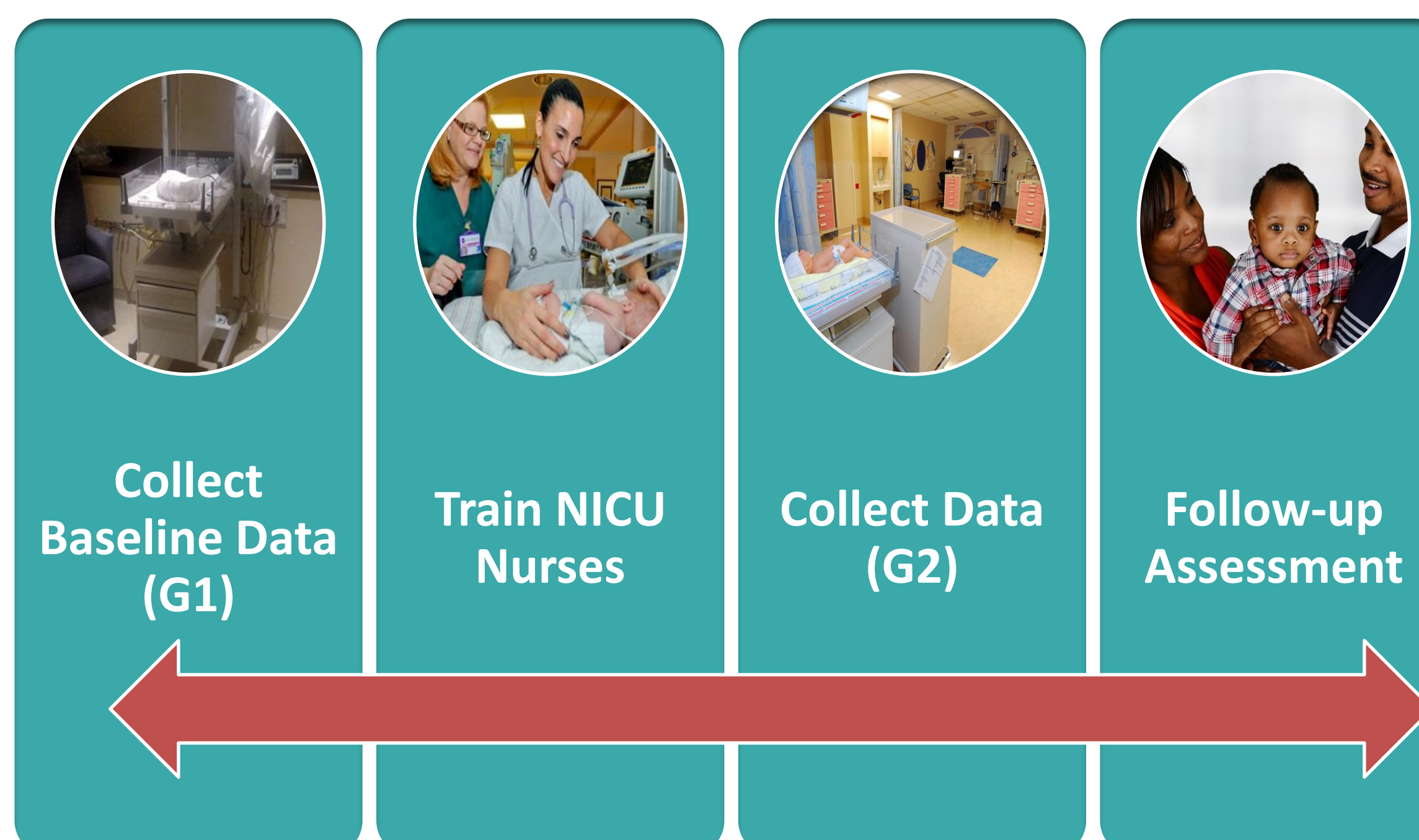
Aim 1: To determine the extent to which nurse-led language nutrition training (LNT) affects a mother’s ability to communicate with her neonate effectively.

Aim 2: To determine the extent to which the *TWMB* in-person seminar training affects the ability of nurses to educate parents about language nutrition.

Aim 3: To characterize and compare maternal-infant linguistic interactions (e.g. adult word count, conversational turns, and child vocalizations) among the intervention and control groups in the NICU and at 2 months of age, as measured by LENA.

Methods

We are recruiting 50 maternal-infant dyads from a small suburban Level III Neonatal Intensive Care Unit (NICU) that serves an economically diverse population. The inclusion and exclusion criteria were designed to limit the sample to late preterm and term infants (>34 weeks) who are at low risk for acute and chronic morbidities. We will use prospective birth cohort observational approach.



Measures

- LENA (NICU and 2 Months)
- Nurse Training Pre/Posttest
- Caregiver Performance-based Assessment (NICU) (e.g., video of parent/infant interactions and rating rubrics)
- Discharge Summary (e.g., neonatal morbidity, birth history, and demographic characteristics)
- Nurse/Provider focus groups

