KANGAROO CARE IN THE NEONATAL INTENSIVE CARE UNIT: A QUALITY IMPROVEMENT PROJECT
Courtney Kuklinski, BSN, RN, DNP Student
University of Missouri-Sinclair School of Nursing

INTRODUCTION
• Prematurity: number one cause of newborn deaths and the second leading cause of death in children under age five (Althabe et al., 2012).
• Currently in the United States one in eight infants is born premature (Althabe et al., 2012).
• The World Health Organization (WHO) set a goal for 2025 to “eliminate remaining preventable preterm deaths, focusing on equitable care for all and quality of care to minimize long-term impairment” (Althabe et al., 2012, p. 7).
• Kangaroo care (KC) has become the standard of care for all preterm infants (Engmann, Wall, Darmstadt, Vlahov, & Claeson, 2013).
• The WHO conducted a saving lives analysis and documents that Kangaroo care (KC) has become the standard of care for all preterm infants (Engmann, Wall, Darmstadt, Vlahov, & Claeson, 2013).
• Kangaroo care education was also shown to increase utilization of kangaroo mother care (KMC) (Jones, 2013).

MATERIALS AND METHODS
Design:
• Descriptive, longitudinal, quality improvement design.

Interventions:
• Parent brochures given on admission
• Nurse training program provided through the computerized education website, HealthStream
• Using a confidence interval of 95%, a maximum of 7.5% margin of error, a population size of 172, with a 50% response distribution, a minimum of 120 charts were required at baseline and follow-up (Raosoft, Inc., n.d.).
• All available charts were utilized at baseline (n = 79) and one-month follow-up (n = 15).
• Descriptive statistics were utilized to provide an overview of the project sample.

Data Collection:
• Nominal level data was analyzed with the Chi-square of independence and the phi coefficient (ϕ) was used as an index to describe the magnitude of the effect from the intervention.
• Ratio level data was analyzed with the Independent t-test and the Cohen’s d coefficient was used as an index to describe the magnitude of the effect.
• The level of significance was set at p ≤ .05.

PITCOT AND PROJECT OBJECTIVES
PICO:
• The following PICO question will guide this QI project: In the neonatal intensive care unit (PICU) which is the influence of KC education (C) on the rate of KC participation (O) among a one-month timeframe (T)?

Objectives:
1) 75% of infants will participate in Kangaroo care in the first 48 hours of life.
2) 95% of infants will participate in Kangaroo care within the first week of life.

RESULTS
Gestational Age (GA):
• Median GA for the baseline group was 34.4 weeks, and 36.6 for the follow-up group which was not statistically significant (t(92) = -2.67, p = .01, 95% CI [-4.42, -6.45].

Birth Weight (BW):
• Mean BW of the baseline group was 2238 grams (SD = 812) and a 2551g (SD = 600) for the follow-up group which was not statistically significant (t(92) = -1.42, p = .16.

What is Kangaroo Care?
Kangaroo care is the practice of parents holding their infant skin-to-skin, providing warmth, easing stress, and bonding. Kangaroo care provides a familiar heartbeat, reassuring voice, and calming contact and touch decreasing infant stress and making your baby feel safe.

KangarooCARE
SITING TO SKIN

What is Kangaroo Care?
Kangaroo care is the practice of parents holding their infant skin-to-skin, providing warmth, easing stress, and bonding. Kangaroo care provides a familiar heartbeat, reassuring voice, and calming contact and touch decreasing infant stress and making your baby feel safe.

KangarooCARE
SITING TO SKIN

What is Kangaroo Care?
Kangaroo care is the practice of parents holding their infant skin-to-skin, providing warmth, easing stress, and bonding. Kangaroo care provides a familiar heartbeat, reassuring voice, and calming contact and touch decreasing infant stress and making your baby feel safe.

KangarooCARE
SITING TO SKIN

CONCLUSIONS
• Objective one: 75% of infants participating in KC in the first 48 hours was not met. Although an increase from 30% to 60% was seen.
• Objective two: 95% of infants participating in KC in the first week of life was not met. An increase from 54% to 67% was achieved.

The implementation of evidence-based parent and nursing education contributed to a clinical improvement in the participation in kangaroo care. The weight at discharge and length of stay were significantly lower in the follow up groups, potentially leading to substantial cost savings.

REFERENCES