Timing of Newborn First Bath to Improve Outcomes and Reduce Preventable Transfers to the Neonatal Intensive Care Unit

PURPOSE
This evidence-based quality improvement project was implemented to improve outcomes and to reduce transfers into the Neonatal Intensive Care Unit by delaying the first bath for 12 to 18 hours. Targeted outcomes included: hypothermia, hypoglycemia, and tachypnea.

BACKGROUND
The project was conducted at a 572-bed county teaching hospital. There was a total of 2680 infants included in this project, of which 1132 infants were in the pre-implementation review group and 1548 in the post-implementation group. Excluded infants in the pre-implementation group were those whose bath documentation was missing. Post-implementation exclusions included those who required an early bath due to medical conditions, parental request, or parental refusal for a bath.

METHODOLOGY
Retrospective chart reviews were completed on all well born infants from January 1st through May 8th of 2018. Frontline nursing champions developed the workflow process, along with the parent education, staff education, and communication tools. Multiple forums were conducted which provided staff the opportunity to learn of the new process and to offer feedback and suggestions. Mandatory education from the nursing champions was then presented at the pre-scheduled biannual educational event. EMR reports supplied the comparative patient data from May 9th when the change was implemented, through September of 2018.

RESULTS
Hypothermia was reduced by 37.5% (p = 0.000), hypoglycemia was reduced by 80% (p = 0.000), and tachypnea was reduced by 65% (p = 0.000). Breastfeeding rates improved by 14% (p = 0.391). Ninety percent of the first baths were given after 12 hours of life. Despite these positive outcomes, transfers from Post-Partum to the Neonatal ICU increased by 57%.

IMPLICATIONS
Delay of the first bath provides a supportive, nurturing environment during the newborn transition process. This in turn can result in a reduction of negative sequela, as seen by a decrease in rates of hypothermia, hypoglycemia, and tachypnea, with an increase in exclusive breastfeeding rates.