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## Decreasing the Number of Venipuncture Attempts in Infants on a Neonatal Intensive Care Unit

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Decreasing the Number of Venipuncture Attempts in Infants on a Neonatal Intensive Care Unit.  
Laura Grace Holton

**Abstract**

Obtaining intravenous access is a procedure performed on most preterm infants in neonatal intensive care units, for the purpose of obtaining blood samples, administering fluids and medications. Venipuncture is the process of puncturing the skin to insert a needle for IV access and often must be performed multiple times to be successful given the small veins of preterm infants. Research shows that multiple venipuncture attempts can be distressing to hospitalized infants, increases the risk of blood stream infections, and causes lasting vein damage. Literature shows that catheter features such as material and length can affect successfulness of insertion attempts. A NICU in a metro Atlanta hospital has an insertion attempt average of ten sticks, which is above the six-stick limit recommended by literature. The purpose of this project is to implement a process change by replacing the current use of a Braun® 24-gauge catheter with the use of a Smith's Medical Jelco® 24-gauge catheter. The project will evaluate if this intervention decreases the insertion attempt average. Following project approval from the nurse manager and educator on the unit, as well as the materials management team of the hospital, a data sheet will be used by nurses to document insertion attempts for four months using the Braun® catheter, and then for four months using the Jelco® catheter. The goal of the intervention is to reduce the average number of insertion attempts to six or less.

Key words: venipuncture, insertion, attempts, infants, catheter