Perinatal Quality Collaborative of North Carolina

Newborn Hypoglycemia Prevention and Care (NHPC) Charter

Problem Statement:

Hypoglycemia is one of the most frequently encountered problems in the first 48 hours of life and low glucose concentrations are perhaps the most common biochemical abnormality seen by providers caring for newborns. Unfortunately, the optimal strategy for managing this problem remains elusive and is a matter of differing interpretations of the available literature.

Making guidelines for managing low glucose concentrations in the first days of life safe and easy to follow, while at the same time promoting increased maternal-infant interactions and increased breastfeeding rates, is critical for all practitioners caring for newborns.

Mission:

PQCNC NHPC perinatal quality improvement teams (PQITs) will share strategies and lessons learned to track performance, identify specific areas of focus, develop potentially better practices and employ QI methodologies to establish a standard of care within North Carolina hospitals including:

- Provide the education and support necessary for risk identification, prevention, clinical identification and management of newborn hypoglycemia in NC hospitals
- Partner with patients and families to optimize care and support for newborns with hypoglycemia
- Identify and address disparities in care related to clinical practice
- Systematize clinical care processes of the asymptomatic hypoglycemic newborn to promote sustainability

Aim:

By January 2020, PQITs in NC hospitals will utilize defined best practices to create a standard of care for screening, initiation, and management of hypoglycemia in newborns greater than or equal to 35 weeks within the first 48 hours of life.
Scope:

Working with PQITs in participating centers, the initiative will focus on identifying and treating symptomatic newborns with signs and symptoms of hypoglycemia and asymptomatic newborns at-risk for hypoglycemia within the first 48 hours of life.

Method:

Invite teams from Newborn Nurseries and Neonatal Intensive Care Units to participate in the collaborative organized by PQCNC including learning sessions, web conferencing and coaching, to support PQIT’s use of quality improvement strategies to implement elements of the action plan.

Measurement Strategy:

Outcomes/Goal Statement:

To create a standard of care in PQCNC hospitals that:

- Supports the development and implementation of a protocol for management and care of symptomatic newborns with signs and symptoms of hypoglycemia and asymptomatic newborns at-risk for hypoglycemia in 100% of participating hospitals
- Decreases the number of IV infusions for hypoglycemia by 25%
- Decreases the number of newborn transfers to a higher level of care by 25% solely for the diagnosis of hypoglycemia
- Monitor use of weaning protocol to decrease duration of IV infusion
- Decrease non-breastmilk supplementation for hypoglycemia by 20%
- Systematize clinical care processes of symptomatic newborns with signs and symptoms of hypoglycemia and asymptomatic newborns at-risk for hypoglycemia to promote sustainability