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Let's Stay Together: Using Glucose Gel to Reduce Neonatal Hypoglycemia and Promote Breastfeeding

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Published In/Presented At

Galluzzo, K. (2022). Let's stay together: Using glucose gel to reduce neonatal hypoglycemia and promote breastfeeding. Poster presented at Lehigh Valley Health Network, Allentown, PA.

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Let's Stay Together: Using Glucose Gel to Reduce Neonatal Hypoglycemia and Promote Breastfeeding

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Background

- Transient neonatal hypoglycemia is one the most frequent newborn problems in the first 48 hours of life. At risk infants include:2
- LGA, SGA, early gestation infants
- Infants born to diabetic mothers
- Infant formula supplementation and/or IV dextrose = most frequent treatments for hypoglycemic infants
- May disrupt maternal-infant bond
- Transfer to higher level of care often needed
- In late 2019, nurse residents (NR) in an academic Magnet® hospital noted an increase in neonatal NICU transfers related to hypoglycemia
- Prompted an evidenced-based practice project using IOWA model⁴ asking, "In neonates at risk for hypoglycemia, does the use of glucose gel, compared to no glucose gel, reduce the percentage of neonates admitted to the NICU for treatment of hypoglycemia?"

Evidence

Use of buccal glucose gel:

- Reduces:
- Hospital LOS/cost⁶
- NICU admissions for hypoglycemia⁶
- Reduced recurrence rate of hypoglycemia⁶
- Supports:
- Maternal/infant dynamic through reduced separation
- Exclusive breastfeeding at discharge
- Parental satisfaction⁶

AWHONN identifies breastfeeding as one of the most important health behaviors affecting the morbidity and mortality among women and children.1

Methods

December 2019 NR presented evidence/PICOT question to interprofessional

Children's Hospital

Quality team

neonatal hypoglycemia

January-October 2020 October 2020 275 RNs educated on Organizational revised neonatal

pathway updated Nursing collaborated with pharmacy to secure product and clinical infomatics to integrate protocol into EMR

Conclusions Dextrose gel is:

hypoglycemia protocol

November 2020

New protocol

integrated into

clinical practice

Effective

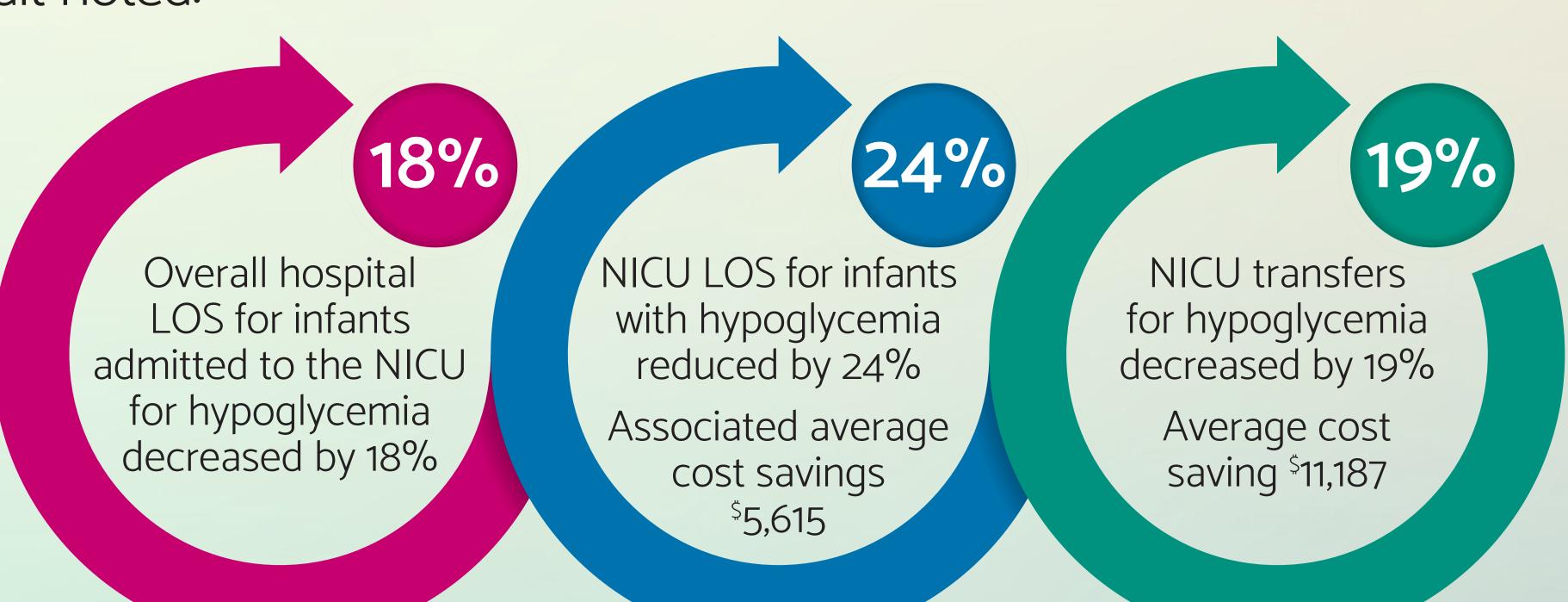
- Well tolerated by infants
- Easy to administer
- Inexpensive

These efforts can be replicated within any organization to empower

clinicians to positively contribute to the health of women and newborns worldwide.



A post-intervention (December 2020-December 2021) retrospective chart audit noted:



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