



# sentara nurse

## Dextrose Gel Use to Increase Breastfeeding Exclusivity Rates and decrease Maternal Infant Separation

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### Introduction

Neonatal hypoglycemia has traditionally been managed by increased breastfeeding and use of formula. Recent evidence suggests that the use of dextrose gel to treat neonatal hypoglycemia can improve breastfeeding rates and decrease maternal infant separation. In our effort to increase our breastfeeding rates and decrease maternal infant separation from NICU admissions, we trialed the use of dextrose gel at four sites and introduced the use of the gel system-wide. This presentation discusses on the process involved in changing the nursing practice in the maternal-infant /Obstetric inpatient setting.

### Purpose

To determine if the use of 40% dextrose gel for the treatment of asymptomatic neonatal hypoglycemia in infants greater than or equal to 35 weeks:

- (1) decrease admission to nursery for IV dextrose treatment,
- (2)decrease formula use by breastfeeding infants
- (3)increase breastfeeding exclusivity rates at discharge

### Approach to Transform Practice

Journal Club presentation on one OB unit of the seminal article on the use of dextrose gel in the management of neonatal hypoglycemia

Encouragement from leadership by unit nurse educator and nurse researcher for RN to do full review of the literature and review the level of evidence.

Presented to result of literature review to the Maternal Infant Nursing Practice Forum and SMJH Pediatrics section where approval was received to take to the Sentara Pediatrics Committee

Sentara Pediatrics committee approved a six month trial

### Implementation Strategies

Educational:

- Team composed of representatives from 4 hospitals in the trial met monthly to develop algorithm based on American Academy of Pediatrics and order set
- Team trained staff at staff meetings via PowerPoint that had slides and talk over of the gel administration process
- Time for hands on practice
- Had volunteer unit-based champions
- Posters in the nursery with algorithm and trial order set

### Data Collection

- Glucose gel data collection tool developed to track each infant's initial blood glucose, repeat blood glucose after gel dose, and infant's risk criteria
- Clarity reports and Joint Commission Core Measure PC 05 for exclusive breastfeeding rates
- CaseMix reports for admission rates to NICU for dx neonatal hypoglycemia

### Outcomes

- Parents pleased with an option that was other than formula and that kept infant with them
- Nurses found it easy to administer

### NICU Admissions

Hospital	Before gel introduction	After gel introduction
SWRMC	1	1
SOH	3.2	2.8
SRMH	4.8	3
SMJH	2.2	2.5

### Breastfeeding Exclusivity Rates

Hospital	Before Gel Introduction	After Gel Introduction
SWRMC	68.4	66.3
SOH	57.3	59.4
SRMH	68.4	63.2
SMJH	82.1	82.1

- Hospitals in the trial had small delivery numbers
- Data did not take into consideration the number of those mothers who requested formula supplementation for reasons other than low blood glucose level

- Approval from the Sentara Nursery Committee to take system-wide
- Sub-committee formed to develop new algorithm for neonatal hypoglycemia management, policy and procedure, and job aid

### Implications for Future Practice

- Increase in breastfeeding exclusivity rates (a Joint Commission core measure)
- Decreased maternal-infant separation which leads to increased maternal satisfaction and potential increase in HCAPS scores
- Decreased costs in newborn hospitalization in NICU, saving thousands of dollars per infant