UNIVERSITY of CALIFORNIA, SAN DIEGO MEDICAL CENTER Women & Infant Services	POLICY/PROCEDURE TITLE: **HYPOGLYCEMIA: MANAGEMENT OF NEWBORNS AT RISK**
RELATED TO:	[ ] ADMINISTRATIVE [x] CLINICAL PAGE 1 OF 2
[ ] Medical Center Policy (MCP) [ ] Nursing Practice Stds. [x] TJC [ ] Patient Care Stds. [ ] QA [ ] Other [ ] Title 22	Effective date: Revision date: 9/97, 12/97, 3/98, 9/98, 12/99, 5/03, 3/04, 6/04 Reviewed: 04/08, 5/09, 4/10 Unit/Department of Origin: ISCC, FMCC, Birth Center, L&D Other Approval:

POLICY STATEMENT:

I. To provide guidelines for early identification and appropriate management of the infant with a low blood glucose level.

A. The following groups of infants should have a bedside glucose screen within 30 minutes of life regardless of baby's location:
1. Infants born to diet-controlled diabetic mothers (** For infants born to medication-controlled diabetic mothers, refer to "Infant of the Diabetic Mother – Medication Controlled" policy)
2. Term infants with birth weight > 4 kg (8 lbs., 13 oz)
3. Term infants with birth weight < 2.5 kg (5 lbs., 9 oz)
4. Infants < 37 weeks gestation
5. Infants who have had traumatic deliveries and/or Apgar Score < 7 at five minutes
6. The smaller of discordant twins (defined as ≥ 20% weight difference between infants)

B. Infants exhibiting the following signs and symptoms of hypoglycemia should have a bedside glucose screen when these occur:
1. Temperature <97 degrees
2. Hypertonia or lethargy
3. Jittery movements and/or seizure-like activity
4. Infants with suspected polycythemia
5. Infants with suspected sepsis
6. Abnormal cry
7. Poor feeding
8. Diaphoresis
9. Irritability
10. Pallor
11. Tachypnea > 60
12. Apnea

C. If bedside glucose is ≤ 30 and infant is asymptomatic: *NOTE – Symptomatic infants should be transferred directly to ISCC
1. Draw a *stat* lab glucose and a repeat bedside glucose from the same sample and notify MD/NNP/PNP immediately.
2. Consider IV or give formula by finger/syringe/bottle per provider order.
3. Recheck in 15 minutes. If the infant feeds poorly or needs to be NPO, with MD/NNP order start IV and bolus (1 to 2 cc/kg) of D10W to be followed by an infusion of D10W at 4 cc per kg/hr (7 mg/kg/min glucose).

4. If the second bedside glucose is $\leq$ 45, consult with pediatric provider and/or ISCC staff about a possible transfer of the infant to the ISCC.

D. If the bedside glucose screen is < 45 and the infant is significantly symptomatic so that enteral feedings cannot safely be given, obtain a *stat* lab glucose and transfer the infant to the ISCC for possible IV treatment.

E. If the bedside glucose screen is 30-45, and the infant is not significantly symptomatic, the infant will be put to breast (if a breast fed baby); formula infants will be fed 15 to 20 cc of formula. A repeat bedside glucose will be drawn 30 minutes after feeding. If the repeat test is <45 or if the infant does not feed, obtain a *stat* lab glucose and consult with pediatric provider and/or ISCC staff about a possible transfer of the infant to ISCC

F. In an asymptomatic term or near-term infant, if the bedside glucose is greater than 45, no further screens are needed unless the infant becomes symptomatic.

G. Infants with persistent low bedside glucose should be considered for sepsis evaluation.

RESPONSIBLE PARTY: ISCC, L&D, FMCC Staff

EQUIPMENT:
Bedside glucose meter
Alcohol or Chlorhexidine
Gauze with tape or bandaid
Safety flow lancet
Nipple and bottle
Formula
5 French gavage tube (for finger feeding)
10 or 20 cc syringe (if syringe feeding)

PROCEDURE:

1. Perform bedside glucose test according to Blood Glucose Test for Point of Care Policy and Procedure and Blood Collection Heelstick / Fingerstick Policy and Procedure.

REFERENCES:

American Academy of Pediatrics; Policy Statement: Routine Evaluation of Blood Pressure, Hematocrit, and Glucose in Newborns (RE9322). *Pediatrics.* 1993; 92: 474-476.

Kenner C., & Wright Lott J. (2004). *Neonatal Nursing Handbook*, St. Louis, Saunders.

Merenstein, G.B., & Gardner, S.L. (2010). *Handbook of Neonatal Intensive Care.* (7th ed.) St. Louis. Mosby.

Milic, T. (2008). The Journal of Neonatal Nursing:Neonatal Glucose Homeostasis, 27:3

Polin, R. & Yoder, M.C. (2007). *Workbook in practical neonatology* (4th ed.) Philadelphia. Saunders.

Verklan, M., & Walden, M. (2010) *Core Curriculum for Neonatal `Intensive Care Nursing.* (4rd ed.) St. Louis. Saunders.