

UW Health Nursing Patient Care Policy & Procedure

Policy Title: Hypoglycemia, Care of the Hospitalized Patient (Adult & Pediatric)

Policy Number: 13.24AP
Category: Nursing Manual
Type: Adult & Pediatric
Effective Date: 12/31/2018

Version: Revision

I. PURPOSE

To ensure safety of pediatric and adult patients at risk for or experiencing hypoglycemia.

II. DEFINITIONS

Hypoglycemia is any blood glucose less than 70 mg per dL. Severe hypoglycemia is any blood glucose less than 40 mg per dL. For children ages five years and younger without diabetes, the laboratory reference ranges will guide the definition of hypoglycemia (Refer to UWHC Nursing Patient Care Policy 11.26, Nova Stat Strip Blood Glucose Meter). Refer to specific provider orders for glucose levels, treatment, and when to notify a provider due to the variability of anticipated normal blood glucose values based on age (including neonates), risk factors, and clinical conditions and treatments.

III. POLICY

- A. The nurse will assess for history of hypoglycemia on admission for patients with a history of diabetes or high blood sugars.
- B. Hypoglycemia treatment will be administered as ordered.
- C. Glucose monitoring will be repeated after hypoglycemia treatment. (See IV.B.4. below.)
- D. A staff person who is competent to perform glucose monitoring must remain in the room after treatment to ensure the repeat glucose is completed per policy. If this is not feasible due to other identified safety concerns (i.e., other patient care needs related to fall risk, emergent clinical demands, etc.), another mechanism must be in place to remind staff of re-check requirement (i.e., use of a timer, remote monitoring, etc.).

IV. PROCEDURE

A. Assessment

- 1. Assess for history of hypoglycemia on admission.
- 2. Assess for signs and symptoms of hypoglycemia which may include the following: shaking, sweating, dizziness/lightheadedness, hunger, headache, "feeling funny," weakness, confusion, numb lips and/or tongue, anxiety, lethargy, and infant sleepiness. NOTE: Patients may have hypoglycemia unawareness and may not display or sense any of the above signs and symptoms of hypoglycemia.
- B. Glucose Monitoring and Treatment
 - 1. Check Point of Care (POC) glucose following policy (Nursing Patient Care Policy 11.26, Nova Stat Strip Blood Glucose Meter).
 - 2. Fingerstick blood glucose results of less than 40 mg per dL should be repeated on the same meter and then sent for laboratory verification according to policy (Refer to Nursing Patient Care Policy 11.26, Nova Stat Strip Blood Glucose Meter.) Results of laboratory verification are NOT required to initiate hypoglycemia treatment.
 - 3. Provide hypoglycemia treatment based on provider orders.
 - 4. Regardless of treatment choice, glucose monitoring must be completed to ensure hypoglycemia has resolved. Treatment and glucose monitoring after treatment should occur immediately with both occurring within 30 minutes after the discovery of the hypoglycemic event. This generally allows for 15 minutes to provide treatment and 15 minutes to recheck the glucose after treatment. If intravenous dextrose 5% or dextrose 10% is used for treatment, a repeat glucose will likely be delayed beyond 30 minutes but should occur within 60 minutes after the discovery of the hypoglycemic event or as



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ordered by the provider.

- 5. Additional treatment should be provided as ordered until hypoglycemia has resolved.
- 6. Once blood glucose has reached 70 mg per dL or greater, glucose monitoring should be repeated within one hour for those patients who had an initial glucose less than 40 mg per dL to ensure that glucose levels continue to remain at or above 70 mg per dL. (For patients whose initial glucose was 40-69 mg per dL, glucose monitoring within one (1) hour should be considered as directed in glucose monitoring orders and adult and pediatric hypoglycemia treatment algorithms.)

C. Documentation

- 1. Document signs/symptoms (if any) and non-medication treatments (e.g., juice) within the patient's clinical record.
- 2. Document cause(s) of hypoglycemic episode (use "unknown" if appropriate).
- Document medications used for treatment in the Medication Administration Record according to policy (UWHC Nursing Patient Care Policy 10.19, Medication Administration).
- 4. Reason(s) should be documented for delayed recheck and/or ongoing efforts to correct hypoglycemia (i.e., initiating antiemetic treatment to promote oral intake, breast feeding, obtaining IV access, patient refusal, etc.)
- D. Notify provider for critical values (Refer to UWHC Nursing Patient Care Policy 11.26, Nova Stat Strip Blood Glucose Meter: Use and Maintenance, and UW Health Clinical Policy 3.3.6., Communication of Critical Results and Critical Tests/Procedures, and if hypoglycemia does not resolve.
- E. Provide patient and/or family education as appropriate about hypoglycemia prevention, signs and symptoms, causes, and treatment. Document teaching/learning outcomes within the Education Activity.

V. UW HEALTH CROSS REFERENCES

- A. Adult Hypoglycemia Treatment Algorithm (see Related section on U-Connect)
- B. Pediatric Hypoglycemia Treatment Algorithm (see Related section on U-Connect)
- C. UW Health Clinical Policy 3.3.6., Communication of Critical Results and Critical Tests/Procedures
- D. Nursing Patient Care Policy 10.19, Medication Administration Using Barcode Scanning Technology
- E. Nursing Patient Care Policy 11.26, Nova Stat Strip® Blood Glucose Meter: Use and Maintenance

VI. REFERENCES

- A. American Diabetes, A. (2019). 15. Diabetes Care in the Hospital: Standards of Medical Care in Diabetes—2019.Diabetes Care, 42(Supplement 1), S173-S181.
- B. Abraham, M.B., Jones, T.W., Naranjo, D., Karges, B., Oduwole, A., Tauschmann, M., Maahs, D.M.
 (2018).ISPAD Clinical Practice Consensus Guidelines 2018: Assessment and management of hypoglycemia in children and adolescents with diabetes. Pediatric Diabetes, 19(Suppl 27), 178-192.
- C. Kulasa, K. & Juang, P. (2017). How low can you go? Reducing rates of hypoglycemia in the non-critical care hospital setting, Curr Diab Rep,17:74.

VII. REVIEWED BY

Inpatient Diabetes Quality Committee
Clinical Nurse Specialists, Diabetes (Adult and Pediatric)
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Nursing Patient Care Policy and Procedure Committee, October 2015



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