South Carolina Adult Guidelines for Diabetes Care in the Hospital – 2018

Key concepts: documentation of diabetes diagnosis; written blood glucose monitoring protocols; order consistent carbohydrate diet; protocols for treatment of hypoglycemia and hyperglycemia, data collection; standardized order entry; staff education, patient education - hospital and post-discharge; special considerations and patient safety.

Screening for Diagnosis of Diabetes:
To test for diabetes or to assess risk of future diabetes, either Hemoglobin A1C, Fasting Plasma Glucose (FPG), or 2-h 75 g Oral Glucose Tolerance test (OGTT) are appropriate.

An A1C level of 5.7% to 6.4% indicates increased risk for diabetes (pre-diabetes).

The criteria for the diagnosis of diabetes (indicated by one of the following):
1. A1C level of 6.5% or higher
2. FPG level of ≥ 126 mg/dL
3. Two hour OGTT level of ≥ 200 mg/dL

Prevention/delay of type 2 diabetes: refer to support program targeting weight loss of 7% of body weight and physical activity to at least 150 min/week (i.e. Diabetes Prevention Program).

In those identified with prediabetes, identify, and if appropriate, treat other CVD risks.

Reference: American Diabetes Association. Standards of Medical Care in Diabetes- 2018. Diabetes Care. Volume 41, Supplement 1. January 2018 http://care.diabetesjournals.org/content/41/Supplement_1

Diabetes Diagnosis	Diagnosis should be clearly identified in the medical record (MR) by the physician using current classification: Diabetes Type: type 1, type 2, suspect type 1, suspect type 2, CF related diabetes, gestational, pre-diabetes or other (drug or stress induced)
Hemoglobin A1C	Order A1C on all patients with diabetes or hyperglycemia (blood glucose >140mg/dL) if not able to document level in MR within 90 days of admission (excluding gestational) and/or prior to elective surgery to assess glycemic control.
Whole Blood Glucose (WBG) Point of Care (POC) Testing	Written protocols or orders for WBG POC testing to include frequency and individual plan for subsequent monitoring. WBG POC testing results should be available to all members of the health care team. WBG POC testing policy should include limitations of WBG POC testing in critically ill patients defined by the institution (i.e., hypothermia, anasarca, pressors, etc.).
Diet Order	a. Diet orders should be based on body weight and comorbidities (NPO, PO, Enteral and Parenteral Nutrition) b. Consistent carbohydrate should be provided or added to other diet orders c. Written policy/protocol for the coordination of WBG POC testing, insulin administration and meal tray delivery d. Nutrition consult ordered, if indicated
Insulin Therapy	Insulin therapy should be initiated per written orders sets. Insulin therapy is the preferred method during hospitalization. In critical care units, validated protocols for IV infusion is the preferred route of insulin administration with goals for blood glucose levels of 140-180mg/dL. More stringent goals such as 110 -140mg/dL may be appropriate in select patients. In non-critically ill patients, scheduled subcutaneous insulin with basal, nutritional and correctional components is the preferred method with a goal of 140-180mg/dL a. Basal insulin: to control glucose between meals and suppress overnight hepatic glucose production (NPH, glargine, detemir, U-500) b. Prandial/nutritional insulin: to cover carbohydrate load from meals or enteral nutrition - give as rapid acting insulin analog with meals (aspart, lispro, glulisine) c. Correction insulin (give as rapid acting insulin analog): to correct pre-meal hyperglycemia d. The sole use of sliding scale insulin is discouraged.
Hypoglycemia	Written policy, protocol and/or order set for treatment of hypoglycemia. Hypoglycemia is defined as a blood glucose (BG) < 70 mg/dL. Severe hypoglycemia is defined as <54 mg/dL. Written nurse driven protocols and order sets to include: a. Treatment for hypoglycemia and a plan for prevention of hypoglycemia for each patient b. Recheck of WBG POC test within 30 minutes of the first WBG POC test < 70mg/dL c. Adjustment of anti-hyperglycemic regimen, if applicable
Treatment of hyperglycemia (Diabetic Ketoacidosis [DKA] and Hyperosmolar Hyperglycemic Syndrome [HHS])	Written protocols and order sets to include: a. Fluid replacement b. Correct electrolytes c. Low dose insulin therapy d. Hourly BG testing when patient is receiving IV Insulin infusion e. Policy for transitioning from IV Insulin Infusion to subcutaneous insulin regimen (i.e., basal insulin given 2 hours prior to discontinuing IV Insulin Infusion)
Data Collection	Hospitals are encouraged to collect data on incidences of hypoglycemia and reasons as well as other identified opportunities for improvement.
Standardized written protocols and order sets	Standardized written policies, protocols and order sets are recommended to integrate components of care, preserve the necessary complexity of management of diabetes, standardize order entry, protect the safety of the patient, facilitate patient individualization, and permit patient self-management, where appropriate. This includes: a. WBG POC Testing b. Hemoglobin A1C c. Consistent carbohydrate diet d. Hypoglycemia protocol e. Insulin Order Set: Basal, prandial/nutritional and correction f. IV Insulin Infusion, transition from IV Insulin Infusion to subcutaneous insulin administration and transition to home regimen prior to discharge g. Continuous Subcutaneous Insulin Infusion Pump Therapy (CSII)
Staff Education	The following groups have education specific to policies, protocols, order sets and patient management related to diabetes: dietitians and others involved in medical nutrition therapy, staff involved in WBG POC testing, medical staff, nursing staff including advanced practice, pharmacists, physician assistants and interdisciplinary team.
Transitioning for Discharge	Preparing the patient for discharge should include: Medication reconciliation including an explanation of medication changes, pending tests and studies with patient and caregivers Diabetes education (medication, nutrition, exercise, hypoglycemia, hyperglycemia, BG monitoring, sick day guidelines, discharge and contact information) Document in MR a diabetes follow-up appointment after hospital discharge and other provider appointments, if applicable Referral to ADA recognized or AADE accredited Diabetes Self-Management Education/Training (DSME/T) Program if applicable
Specific Settings/Populations	Written protocols and order sets are recommended for the following patients with diabetes: a. Perioperative and pre-procedural b. Gestational

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