

# MM Glucose management for COVID-19 patients (GENERAL CARE)

## **WHEN TO CONSULT ENDOCRINOLOGY**

### **1. All patients with Type 1 diabetes:**

Patient must ALWAYS have BASAL INSULIN ON BOARD or they go into DKA

Patients using insulin pumps in the hospital must meet pump criteria and sign a pump contract.

### **2. Patients with mild DKA** (Anion gap 12-17 and pH > 7.24). Use Subcutaneous DKA Protocol

### **3. Patients with Type 2 diabetes:**

a. BG > 350 mg/dl x 2 while on appropriate treatment or considering insulin drip

b. Pregnant patients

### **4. Cystic Fibrosis Related Diabetes**

## **HOW TO MONITOR GLUCOSE:**

1. Continuous glucose monitors (CGMs): Patients who have CGMs prior to admission can continue use for TRENDING BG in the hospital. **Point of care checks with the hospital meter are needed for insulin dosing and intervention (CGM may not be accurate).** Patients using their CGM will need to sign a hospital CGM contract.

2. Bundle POC BG checks with other interventions, including insulin administration for reducing contact. Meal and sliding scale insulin should be bundled.

## **HOW TO TREAT: STRESS HYPERGLYCEMIA/No Known Diabetes**

### **A. PATIENT NPO WITH BG > 180 MG/DL**

**Step 1:** Sliding scale RAPID ACTING insulin every 4h or REGULAR insulin every 6h - start with moderate scale and escalate to high.

**If still uncontrolled, consider adding basal insulin as below:**

**Step 2:** BASAL – LONG ACTING INSULIN daily

or

NPH- twice a day 2/3 dose in am and 1/3 in pm - **helpful for patient on steroids**

### **B. PATIENT EATING with BG >180-200 mg/dl before a meal**

1. Scheduled RAPID ACTING INSULIN – with meals. Use half dose when < 50% of meal is consumed.

2. Tube feeding: Regular insulin q6h.

## **HOW TO TREAT: TYPE 2 DIABETES**

**DISCONTINUE ORAL AND NON-INSULIN INJECTABLE ANTIDIABETIC MEDICATIONS (exception below).**

**A. ON ORALS ONLY AT HOME:** Use stress hyperglycemia insulin protocol above

**B. ON INSULIN OR NON-INSULIN INJECTABLE AGENTS (GLP1-RA) AT HOME:**

1. BASAL - 50-75% of home dose. Use closer to 50% if NPO or with eGFR < 40

2. MEAL – RAPID ACTING INSULIN - continue 50% of home dose

3. CORRECTION SCALE – LISPRO Low dose for Total Daily Dose(TDD) of  $\leq 40$  units, moderate dose for TDD of 40-80 units, high dose for TDD  $\geq 80$  units, bundled with meal doses

4. Consider continuing or initiating DPP-4 Inhibitors (linagliptin or sitagliptin) in addition to basal insulin for postprandial hyperglycemia. Sitagliptin requires dose adjustment for decreased EGFR.

5 Titrate doses daily to maintain BG goal of 140-180 mg/dl

Abbreviations- MM Michigan Medicine, DKA- Diabetic ketoacidosis, GLP1-RA- Glucagon-like peptide-1 receptor agonist, NPO- nothing by mouth, eGFR- estimated Glomerular filtration rat