**DIABETIC KETOACIDOSIS PATHWAY**

**Indication Criteria**
- Hypoglycemia > 200 mg/dL
- pH < 7.3 or bicarbonate < 18 mEq/L
- Ketosis in blood or urine

**Exclusion Criteria**
- Blood glucose < 200 mg/dL
- CORRECTED serum sodium < 130
- Severe neurologic instability
- Concern for cardiac ischemia

**Resuscitation Guide for 2 bag system:**
- **Weight**: > 30 kg = 2x maintenance
- **Weight**: < 30 kg = 1.5x maintenance

**Identify ideal body weight for calculation:**
- **Adolescents**: 22 x height (m)

**Body weight**

**Maintenance rate in context of ideal body weight**

**Considerations:**
- Use recently documented pre-event weight if available
- For obese patients, consider maintenance rate in context of ideal body weight

**Ketoacidosis in blood or urine**
- Signs/symptoms: vomiting, abdominal pain, ketone-stained or foetid breath, hyperglycemia

**Hyperglycemia > 200 mg/dL**

**DKA is defined as:**
- Signs/symptoms: vomiting, abdominal pain, ketone-stained or foetid breath, hyperglycemia
- Serum HCO3 > 17 with normal anion gap AND able to tolerate oral intake
- Serum sodium > 160
- Severe headache and/or vomiting
- Decorticate or decerebrate nerve palsy
- Decreased heart rate
- Significant headache
- Mental status abnormalities or GCS < 14
- Hemorrhagic instability
- Age ≥ 24 months

**Diagnostic lab work:**
- Complete STAT BMP, VBG, and serum beta-hydroxybutyrate
- Hematocrit

**Obtain STAT BMP, VBG, and serum beta-hydroxybutyrate during the hour of fluid resuscitation prior to starting insulin infusion**

**Determination of insulin requirement (in mg/kg):**
- (D: D10 + ¾ NS + 20 K phos + 20 K acetate)
- If hypokalemia (K < 3.5 mEq/L) - start potassium repletion
- After 1L bolus completed, start insulin infusion and standard fluids

**Hemodynamic instability**
- **Consider** end-organ damage (such as neurological, renal, or cardiovascular) if evidence of hypotension

**Intraluminal administration of fluids (NS, LR, etc.)**
- Administer 1L of NS, LR, or other crystalloid fluid of choice, if ordered by Hospitalist team
- In 30 minutes after insulin bolus, turn off insulin infusion and allow patient to eat

**Order food**

**Utilize DKA transition order set**
- Refer to Hospitalist for insulin dosing
- Order food
- Order fluid
- Administer short (based on blood sugar and carb intake) and long acting insulin as needed

**Start insulin pump basal rate and give first insulin bolus**

**Discharge Criteria**
- Reason for DKA identified and addressed
- Patient and/or caretaker has demonstrated ability to complete diabetes management
- Perform self-monitoring of blood glucose, independently calculate insulin doses, administer insulin, identify and treat hypoglycemia and ketonuria

**Final recommendations:**
- Appointments with Endocrinology and PCP (if needed) scheduled
- Discharge all diabetes supplies and prescriptions filled as needed

**Disclaimer:** Pathways are intended as a guide for practitioners and do not indicate an exclusive course of treatment nor serve as a standard of medical care. These pathways should be adapted by medical providers, when indicated, based on their professional judgement and taking into account individual patient and family circumstances.