1. Assess airway and initiate basic and/or advanced airway maneuvers prn (MCG 1302)

2. Administer Oxygen prn (MCG 1302)

3. Initiate cardiac monitoring prn (MCG 1308)

4. Establish vascular access prn (MCG 1375)

5. Check blood glucose

6. For blood glucose < 60 mg/dL:
   - *Oral glucose preparation* or *Glucopaste 15gm PO (4 years or older)* if patient awake and alert
   - *Dextrose 10% 5mL/kg IV in 1mL/kg increments* per MCG 1309 and reassess
   - Recheck glucose prn after 3mL/kg infused

   **CONTACT BASE** for persistent hypoglycemia for repeat dose of Dextrose 10% 5mL/kg IV in 1mL/kg increments

   Document Provider Impression as *Hypoglycemia* ❶ ❷
   If unable to obtain venous access, *Glucagon (1mg/mL) IM* per MCG 1309
   <1 year of age: *Glucagon 0.5mL IM*, may repeat x1 in 20 min prn
   ≥1 year of age: *Glucagon 1.0mL IM*, may repeat x1 in 20 min prn

7. For blood glucose > 200 mg/dL:
   Document Provider Impression as *Hyperglycemia* ❸

   For blood glucose >250mg/dL
   *Normal Saline 10mL/kg IV rapid infusion* per MCG 1309

8. For poor perfusion:
   *Normal Saline 20mL/kg IV/IO rapid infusion* per MCG 1309
   For persistent poor perfusion, treat in conjunction with *TP 1207-P, Shock/Hypotension*

9. For nausea or vomiting in patients ≥ 4 years old:
   *Ondansetron 4mg ODT*
SPECIAL CONSIDERATIONS

❶ In pediatric patients with hypoglycemia consider causes such as medication error or medication given without appropriate oral intake, infection, or toxins. Survey scene and ask family for types of medications in the home including those in various forms (e.g., pill, patch, drops, salves, inhaled or herbal). Caretakers of pediatric patients should always be encouraged to have patient be transported to the hospital for evaluation as hypoglycemia in this population is rare as compared to adults and is often caused by serious disease or poisonings. Glucagon may not work well in young infants because in these patients there are few glycogen stores, therefore IV dextrose is preferred.

❷ Pediatric patients with hypoglycemia who are successfully treated with oral glucose or Dextrose 10% IV and then their parent wishes to decline transport to the hospital should be discouraged to do so, especially if they have abnormal vital signs, fever, are taking long acting hypoglycemic agents possible ingestion or poisoning, or if they DO NOT have a history of diabetes mellitus as these patients are at high risk for recurrent hypoglycemic episodes.

Long Acting hypoglycemic agents
- Sulfonylureas: gliclazide, glimepiride, glipizide, gliquidone, glyburide, glyclopyramide,
- Thiazolidinediones (TZDs): pioglitazone (Actos), rosiglitazone (Avandia), troglitazone (Rezulin)
- Alpha-glucosidase inhibitors: acarbose, miglitol, voglibose
- Meglitinides – nateglinide, repaglinide
- Combination drugs: glipizide and metformin (Metaglip), glyburide and metformin (Glucovance), pioglitazone and glimepiride (Duetact), pioglitazone and metformin (ACTOplus Met), rosiglitazone and metformin (Avandamet), rosiglitazone and glimepiride (Avandaryl)

❸ Patients with hyperglycemia are at risk for significant volume losses leading to dehydration and electrolyte abnormalities. Fluid resuscitation with Normal Saline is recommended until their glucose can be lowered with medications. Hyperglycemia can also be associated with trauma, infection, or other serious illness. For patients with elevated glucose requiring fluids IV Normal Saline should be given – only those patients who show signs of poor perfusion and an IV cannot be obtained would have an IO placed for fluid resuscitation.