

# Hypoglycemia

For glucose < 70mg/dl

**History**

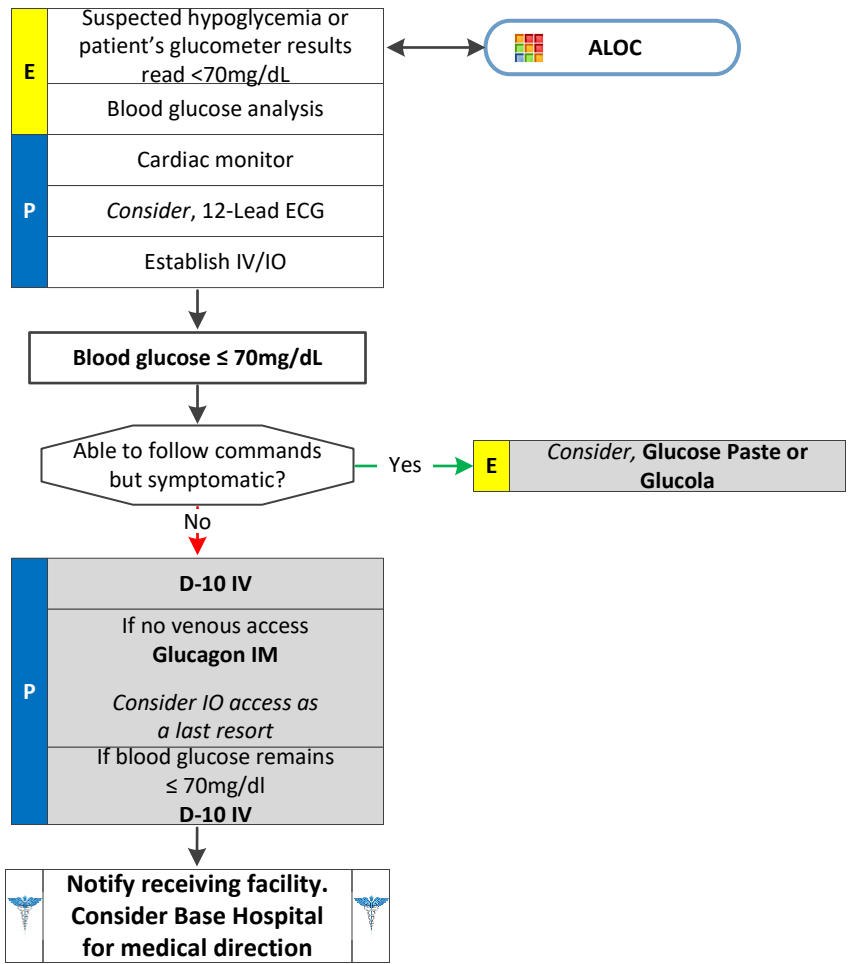
- Past medical history
- Medications
- Recent blood glucose check
- Last meal
- Compliance with diet/meds
- Blood sugar log

**Signs and Symptoms**

- Altered mental status
- Combative or irritable
- Diaphoresis
- Seizure
- Nausea or vomiting
- Weakness

**Differential**

- Alcohol or drug use
- Toxic ingestion
- Trauma or head injury
- Seizure
- Stroke
- Altered mental status
- Sepsis

















Adult Medical Treatment Protocols

# Hypoglycemia

For glucose < 70mg/dl

## Troubleshooting Display Messages

### Display Messages

Display	Reason	Action
	Invalid Hematocrit	Repeat with new test strip, using capillary whole blood from the finger or forearm or venous whole blood collected with sodium heparin blood collection tube. If error persists, call for assistance.
	Temperature Error Too Cold/Too Hot	Move meter and test strips to area between 41°F-104°F; wait 10 minutes for System to reach room temperature before testing.
	Sample Not Detected or Using Wrong Test Strip	Retest with new TRUE METRIX™ PRO Test Strip and larger sample.
	Used Test Strip, Test Strip outside of vial too long, Sample on top of Test Strip.	Repeat with new test strip. Make sure sample is touched to edge of test strip (not top). If error persists, call for assistance.
	Meter Error	Call for assistance.
	Test Strip Error, Very high blood glucose result - higher than 600mg/dL	Retest with new Test Strip. If error persists, call for assistance. If you have symptoms such as fatigue, excess urination, thirst, or blurry vision follow your healthcare professional's advice for high blood glucose.
	Test Strip Removed During Test	Retest with new test strip. Make sure result is displayed before removing test strip.
	Communication Error	Call for assistance.
	Low or Dead Battery	<b>Low:</b> About 50 tests can be done before battery dies. <b>Dead:</b> Battery Symbol appears and beeps before meter turns off.
	WARNING!! Out of Range - High Results > 600 mg/dL	 <b>WARNING!!</b> Retest with new test strip. If result is still "Hi" (High) or "Lo" (Low) contact Doctor immediately. 
	Out of Range - Low Results < 20 mg/dL	
	Broken Display	Do not use meter for testing. Call 1-800-803-6025.

If error message still appears, any other error message appears, or troubleshooting does not solve the problem, call for assistance.

Common error messages for the True Metrix Pro (GDH-FAD) glucometer

### Pearls

- It is safer to assume hypoglycemia than hyperglycemia if doubt exists.
- Recheck BGL after each D-10 or Glucagon administration.
- Patients with prolonged hypoglycemia may not respond to Glucagon.
- Response to Glucagon can take 15-20 minutes.
- Consider IO access to give D-10 solution early in patients who are critically ill and hypoglycemic.
- Do not place IV in lower extremities.
- Do not administer oral glucose to patients that are not able to swallow or protect their airway.
- Quality control checks should be maintained per manufacturer's recommendation for all glucometers.
- Patients refusing transport to a hospital after treatment of hypoglycemia:
  - Oral agents: Patients taking oral diabetic medications should be strongly encouraged to allow ambulance transportation to a hospital. They are at risk of recurrent hypoglycemia that can be delayed for hours and require close monitoring even after a prehospital blood glucose level of greater than 70mg/dl has been achieved. Patients who meet criteria to refuse care should be instructed to contact their physician immediately and consume a meal with complex carbohydrates and protein now.
  - Insulin agents: Many forms of Insulin now exist. Longer acting Insulin places the patient at risk of recurrent hypoglycemia even after a prehospital blood glucose level of greater than 70mg/dl has been achieved. Patient who meet criteria to refuse care should be instructed to contact their physician immediately and consume a meal with complex carbohydrates and protein now.