



Hypoglycemic Event Analysis Tool (HEAT)

Not Part of Medical Record

Event Date and Time _____

Blood Glucose (BG) Level _____ Investigating Registered Nurse (RN) _____

Calorie Intake at Time of Event: Nothing by mouth (NPO) By mouth (PO) Tube Feeding
 Intravenous (IV) Total parenteral nutrition (TPN) with insulin

- Patient's dietary status changed within 24 hours of event.
- Status change was discussed with the provider.
- Patient ate since last meal.

Amount of meal, prior to event, that was consumed _____% Unknown
Comments for reviewer:

Drug Administration

- Insulin order changed within 24 hours of event.

Time between insulin administration and the meal nearest to event:
_____ minutes **before** meal or _____ minutes **after** meal

Place Patient Label Here

Name _____

Date of Birth _____

ID# _____

Room # _____

Recommendation for an intervention to prevent a similar future event:

Prescriber Notification (Complete shaded section at time of event.)

- Documentation of prescriber notification of glucose trend before event (severe hypoglycemia).
- Documentation of prescriber notification of severe hypoglycemia (BG < 40) at time of event.

Causative Factors—Choose a maximum of three of the most important factors (definitions on back).

Prescribing Related (Dosing not in alignment with patient's medical condition prior to event.)

- Home regimen continued as inpatient
- Event while treating elevated potassium
- Basal-heavy regimen
- High-dose sliding scale insulin
- Sulfonylurea-related hypoglycemia
- Inpatient regimen not adjusted due to:
 - Glucose trend not recognized
 - Significant reduction in steroid dose
 - Decreased nutritional intake
- Event related to outpatient or emergency department drug administration

Contributing and Other Factors

- Diabetic agents received prior to admission
Diabetes Type:
 - Type I
 - Type II
 - Gestational
- Home Diabetic Regimen
 - Insulin
 - Oral agent

Process Related

- Insulin administration and food intake not synchronized
- Point-of-Care (POC) glucose reading not linked to insulin administration
- POC glucose reading not synchronized with food intake

Administration Related

- Wrong drug, dose, route, patient, or time
- Insulin stacking

Monitoring Related

- Insufficient glucose monitoring

Invalid Alert

- Erroneous lab value

Was the medical doctor (MD) notified of the findings?

- Yes
- Not available for discussion

Was the RN notified of the findings?

- Yes
- Not available for discussion



Definition for Causative Factors:

1. **Basal heavy regimen**—Greater than 0.5 Units/kg of basal insulin without any or minimal mealtime insulin OR > 0.3 Units/Kg basal insulin without any or minimal mealtime insulin in patients with renal impairment (CrCl < 30 mL/min).
2. **High-dose sliding scale insulin (SSI)**—Event due to “high” dose SSI being ordered.
3. **Insulin stacking**—Rapid-acting insulin administered and repeated within 3 hours (or less) or regular insulin administered and repeated within 4 hours (or less) resulting in hypoglycemia.
4. **Sulfonylurea-related hypoglycemia**—Sulfonylurea primary cause of or contributed to the event.
Mark especially if sulfonylurea alert fired.
5. **Event related to outpatient or emergency department (ED) drug administration**—Medication given in ED or prior to admission and is the proximate cause of inpatient hypoglycemia.
6. **Insufficient glucose monitoring**—Improper time gap of ordering or drawing of glucose levels.
7. **Glucose trend not recognized**—BG level < 90 and/or significant change in BG levels where current insulin regimen poses a patient safety risk.
8. **Significant change reduction in steroid dose**—Steroid tapered or discontinued without change in insulin requirements.
9. **Decreased nutritional intake**—Event secondary to lack of insulin adjustment in patient with poor food intake, other enteral nutrition, or NPO.

Timeline: Start with event and complete for up to 24 hours prior to event.

Date/ time	POC/ Venous	Scheduled Time	Admin Time	Agent	Dose Ordered	Dose Admin	Correc-tional?	Notes
	(Event)						Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	
							Yes / No	

Optional Narrative: