



Measure Abbreviation: GLU 02

Measure Description: Percent of cases with perioperative glucose <60 mg/dL with administration of dextrose containing solution or glucose recheck within 90 minutes of original glucose measurement.

NQS Domain: Patient Safety

Measure Type: Process

Measure Summary:

The Treatment of Intraoperative Hypoglycemia measure will tell you the percentage of cases that you administered a dextrose containing solution or checked a glucose level within 90 minutes of when the documented glucose level was less than 60 mg/dL. The purpose of this measure is to prevent prolonged periods of hypoglycemia. Acute hypoglycemia in the perioperative period can lead to inadequate supply of glucose to the brain, resulting in seizures, permanent brain damage, and death. The common signs/symptoms of hypoglycemia are masked by general anesthesia, making vigilance and quick treatment especially important.

GLU 02a: Percent of cases with perioperative glucose <60 with administration of dextrose containing solution or glucose recheck within 90 minutes of original glucose measurement for the time period between Anesthesia Start and Anesthesia End.

GLU02b: Percent of cases with perioperative glucose <60 with administration of dextrose containing solution or glucose recheck within 90 minutes of original glucose measurement for the time period between 2 hours before Anesthesia Start to 2 hours after Anesthesia End.

Inclusions:

- All patients with glucose level less than 60 mg/dL between
 - GLU 02a: Anesthesia Start and Anesthesia End
 - GLU 02b: 2 hours before Anesthesia Start to 2 hours after Anesthesia End
- Patients with **and** without diagnosis of diabetes

Exclusions:

- ASA 5 and 6 cases.
- Glucose measurements < 60 mg/dL within 90 minutes before Anesthesia End for GLU 02a.
- Obstetric Non-Operative Procedures- CPT 01958, 01960, 01967
- Obstetric Non-Operative Procedure Rooms (Rooms tagged as OB-GYN – Labor and Delivery)
- Obstetric Non-Operative Procedures with procedure text: “Labor Epidural”

Success:

- Administration of dextrose containing solution within 90 minutes (IV)
- Recheck of glucose level within 90 minutes

Threshold: 90%.

Responsible Provider:

The provider signed in at the first glucose recheck or first administration of dextrose. If neither occurred, then the responsible provider is the one signed in 90 minutes after the low glucose measurement.

Risk Adjustment (for outcome measures):

Not applicable.

References:

Akhtar S, Barash PG, Inzucchi SE. Scientific principles and clinical implications of perioperative glucose regulation and control. *Anesth Analg* 2010; 110:478–97

Schwenk ES, Mraovic B, Maxwell RP, et al. Root causes of intraoperative hypoglycemia: a case series. *Journal of Clinical Anesthesia*. 2012 Dec; 24 (8): 625-630