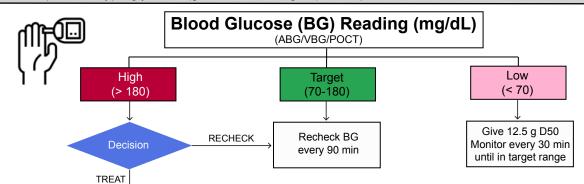# Perioperative Hyperglycemia Management Algorithm

QI Project Patient Inclusion Criteria:
Intraoperative hyperglycemia (glucose > 180 mg/dL) for all patients between Anesthesia Start and Stop

Blood Glucose (BG) Reading (mg/dL)
(ABG/VBG/POCT)

High (> 180)

Target (70-180)

Low (< 70)

Decision

RECHECK → Recheck BG every 90 min

Give 12.5 g D50
Monitor every 30 min
until in target range

TREAT

Bolus of IV Insulin (Regular)

BG (mg/dL)	Home Insulin Usage Daily Insulin Use (unit/day)			Insulin Naive BMI (kg/m2)		
	≤ 50	51-90	> 90	< 25	25-30	> 30
180-200	1 unit	2 units	3 units	1 unit	2 units	3 units
201-250	2 units	4 units	6 units	2 units	3 units	4 units
251-300	3 units	6 units	9 units	3 units	4 units	5 units
> 300	Start Infusion of IV insulin per table Consider DKA as a differential diagnosis					

Infusion of IV Insulin (Regular)

BG (mg/dL)	unit/h
200-239	2
240-299	3
300-359	4
≥ 360	5

Consideration for insulin infusion:
- surgical length > 4 hours
- complex surgery
- critical illness
- metabolic instability / poor control

Recheck BG after 60 minutes. Adjust dosing based on response to insulin administration.

Suggested starting doses.

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