NewYork-Presbyterian
The University Hospital of Columbia and Cornell

GLYCEMIC MANAGEMENT POCKET CARD
ADULT INPATIENT *2022*: WEILL CORNELL CAMPUS

This pocket card was developed by the Inpatient Glycemic Management Team at Weill Cornell to promote safe and effective glycemic management. This serves as a general guide and is not meant to replace clinical judgment. Doses may be adjusted on an individual patient basis.

Guidelines for NYP Inpatient Glycemic Goals

Blood glucose (BG) goals should be individualized to the patient. Consider less restrictive goals for patients at risk of hypoglycemia (e.g., elderly, renal and hepatic impairment)

Location	BG Goals (mg/dL)
Non-ICU	
• Pre-meal	100-140 if *clinically stable* or 140-180 if *clinically unstable*
• Other times	140-180 for most patients
ICU	100-140 or 140-180

BG ASSESSMENT AND INSULIN SUBCUTANEOUS DOSE ADJUSTMENTS

Dose Adjustment Guidelines

- **Adjust basal insulin glargine: Consider** when 2 or more fasting blood glucoses (FBG) not at goal (GOAL BG 100-180 mg/dL)
- **Adjust bolus insulin lispro: Consider** when 2 or more pre-lunch, pre-dinner or bedtime BGs not at goal (GOAL BG 100-180 mg/dL)
- For **continuous** enteral tube feedings: **Consider** adjusting both basal (glargine) and bolus (regular) insulin by same amount (%)

BG (mg/dL)	Dose adjustment
<50	Decrease by 50%*
50-69	Decrease by 20%*
70-99	Decrease by 10%*
100-180	**No changes**
181-250	Increase by 10%**
>250	Increase by 20%**

*Determine root causes of hypoglycemia
**Caution with patients with renal/hepatic impairment, elderly or Type 1 DM: use smaller dose increases

DISCHARGE PLANNING

Transition Guide For Patients From Inpatient to Outpatient Regimen

A1c < 8%	A1c 8-10%	A1c > 10%
Re-start outpatient regimen (evaluate any new health conditions or medications that may prevent use of certain agents or require dose adjustments)	Re-start outpatient regimen. If new to basal insulin, consider glargine once daily at 50% of hospital dose	D/C on basal/bolus insulin therapy at same hospital dose. *Alternative*: Re-start outpatient regimen, consider glargine once daily at 80% of hospital dose

Basal insulin: U100 & U300 glargine, U100 detemir, U100 & U200 degludec
Bolus insulin: aspart, lispro, glulisine **Human and analog insulin mixtures**: 70/30, 75/25, & 50/50

REFERENCES:

-American Diabetes Association. 16. Diabetes Care in the Hospital: *Standards of Medical Care in Diabetes – 2022*. American Diabetes Association. Diabetes Care 2022 Jan; 45 (Supplement 1): S244-S253.
-Umpierrez, G.E., et al., *Hospital discharge algorithm based on admission HbA1c for the management of patients with type 2 diabetes*. Diabetes Care, 2014. 37(11): p. 2934-9.

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DIABETES MEDICATION ADJUSTMENT GUIDELINES PRIOR TO PROCEDURE AND SURGERY		
Medications	**Day Before Procedure/Surgery**	**Day of Procedure/Surgery**
Oral sulfonylureas: glyburide (Micronase®), glipizide (Glucotrol®), glimepiride (Amaryl®)	Take morning and/or lunch doses only, skip evening dose	None
Sodium-Glucose Co-Transporter 2 Inhibitors (SGLT-2): canagliflozin (Invokana®), dapagliflozin (Farxiga®), empagliflozin (Jardiance®), ertugliflozin (Steglatro®)	Stop taking any medications including combinations containing SGLT-2s 3-5 days before surgery or procedure	None
All other oral agents	Take usual dose(s)	None
GLP-1 Receptor Agonists (GLP-1 RA): *Injectable:* dulaglutide (Trulicity®), exenatide (Byetta®, Bydureon®), liraglutide (Victoza®), lixisenatide (Adlyxin®), semaglutide (Ozempic®) *Oral*: semaglutide (Rybelsus®) **GIP+GLP-1 RA:** tirzepatide (Mounjaro®)	Take usual dose(s)	None
Rapid/Short acting insulins: *Injectable*: Regular (Humulin®R, Novolin®R), lispro (Admelog®, Humalog®), lispro-aabc (Lyumjev®), aspart (Novolog®, Fiasp®), glulisine (Apidra®) *Inhaled*: Insulin human (Afrezza®)	Before meals: Take usual dose No bedtime dose	None
Insulin NPH: Humulin® N, Novolin® N	Morning dose: Take usual dose Dinner/bedtime dose: Type 1 DM: Reduce dose by 20% Type 2 DM: Reduce dose by 30%	Type 1 DM: Reduce AM dose by 30% Type 2 DM: Reduce AM dose by 50%
Long-acting basal insulin: U100 glargine (Basaglar®, Lantus®, Semglee®), U100 detemir (Levemir®), U100 glargine/lixisenatide (Soliqua®) **Longer-acting basal insulin:** U300 glargine (Toujeo®), U100 & U200 degludec (Tresiba®), U100 degludec/liraglutide (Xultophy®)	**Long-acting basal:** Morning dose: Take 100% Dinner/bedtime dose: reduce by 20% **Longer-acting basal:** Reduce AM *and/or* PM dose by 20%	Type 1 DM: Reduce AM dose by 20% Type 2 DM: Reduce AM dose by 50%
Insulin Mixtures: Humulin®70/30, Novolin®70/30, Novolog® Mix 70/30, Humalog® Mix 75/25, Humalog® Mix 50/50	Morning dose: Take 100% Type 1 DM: Reduce dinner dose by 20% Type 2 DM: Reduce dinner dose by 30%	Type 1 DM: Reduce AM dose by 50% Type 2 DM: Do not take AM dose
Insulin Pumps	Ask patient to contact their diabetes care team for orders. **Endocrine consult mandatory for all inpatients.**	

Ordering Insulin & Blood Glucose Meter Supplies in Epic	
Diabetes Supplies	**Best Practices**
INSULIN PENS: Order two separate RXs: Insulin Pen(s) & Pen Needles	4mm or 5mm pen needles are recommended for all patients 1 box of pens for <50 units/day, 2 boxes for >50 units/day
INSULIN VIALS: Order two separate RXs: Insulin Vial(s) & Syringes	6mm needles are recommended for insulin syringes
BLOOD GLUCOSE METERS: Order separate RXs for BG Meter, Test Strips and Lancets	Reusable lancing device comes with BG meter; can order extra lancing device when needed.