NewYork-Presbyterian
The University Hospital of Columbia and Cornell

GLYCEMIC MANAGEMENT POCKET CARD
ADULT INPATIENT *2020*: 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.

NYP Glycemic Goals Guidelines

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*** adjust <u>both</u> basal (glargine or NPH) and bolus (lispro) 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 medical conditions that may prevent use of certain agents or require dose adjustments)	Re-start outpatient regimen and consider glargine once daily at 50% of hospital dose	D/C on basal/bolus 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 **Pre-Mix insulin analogs**: 70/30, 75/25, & 50/50

<u>CONTACT NYP/WC</u>: Endocrine Fellow Pager 10777, Diabetes NP: 347-803-6326

REFERENCES:

-American Diabetes Association. 15. Diabetes Care in the Hospital: *Standards of Medical Care in Diabetes – 2020.* American Diabetes Association. Diabetes Care 2020 Jan; 43 (Supplement 1): S193-S202.
-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.

Order # 97564 Last updated 1/07/20

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 only morning and/or lunch doses	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
Non-insulin injectables: GLP-1s: dulaglutide (Trulicity®), exenatide (Byetta®, Bydureon®), liraglutide (Victoza®), lixisenatide (Adlyxin®), semaglutide (Ozempic®)	Take usual dose(s)	None
Rapid/Short acting insulins: Regular (Humulin®R, Novolin®R), lispro (Admelog®, Humalog®),aspart (Novolog®, Fiasp®), glulisine (Apidra®)	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 dose by 30% Type 2 DM: Reduce dose by 50%
Long-acting basal insulin: U100 glargine (Basaglar®, Lantus®), 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 dose by 20% Type 2 DM: Reduce dose by 50%
Pre-Mixed Insulin: 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 dose by 50% Type 2 DM: Do not take
Insulin Pumps	Ask patient to contact PCP/endocrinologist for orders, otherwise reduce all basal rates by 20% for outpatients. **Endocrine consult mandatory for all inpatients**	

Ordering Insulin & Diabetes Supplies in EHR	
Drug Name	**Instructions**
BOLUS: Admelog SoloSTAR pen®, NovoLog Flexpen®, Humalog KwikPen®	Take (range, up to) _____ units before meals
BASAL: Basaglar Kwikpen®, Lantus U100 or Toujeo U300 Solostar Pen® or Levemir U100 or Tresiba U100 or U200 FlexTouch Pen® **PREMIX:** NovoLog Mix 70/30 Flexpen® or Humalog Mix 75/25 KwikPen® **NPH:** Humulin N Kwik Pen®	Take ___ units at ___ AM/PM **OR** Take _____ units at _____ AM *and* Take _____ units at _____ PM
BD Nano 4mm or DUO (safety) pen needles	Dispense #100 (or #200) use as directed
BD Veo Ultrafine 6 mm 1/2 ml insulin syringe (Holds up to 50 units)	Dispense #100 (or #200) use as directed
BD Veo Ultrafine 6 mm 1 ml insulin syringe (Holds up to 100 units)	Dispense #100 (or #200) use as directed
BLOOD GLUCOSE METERS: Accu-Chek Guide, Ascensia Contour Next EZ or Next ONE, Abbott FreeStyle Freedom LITE, Abbott Precision NEO, OneTouch Verio Flex	Dispense: 1 meter, use as directed
BLOOD GLUCOSE METER TEST STRIPS AND LANCETS: Accu-Chek Guide, Ascensia Contour Next EZ or Next ONE, Abbott FreeStyle Freedom LITE, Abbott Precision NEO, OneTouch Verio Flex	Test BG ___ x/day