

St. Luke's-Roosevelt Hospital Hyperglycemia Work Sheet:

Weight: _____ Kg Height: _____ cm
 Initial FS: _____ Time: _____
 Date: _____ Initial BG: _____

please stamp patient name plate

Initiating an Insulin Infusion:

- Insulin Infusion Mix:** 100 Units Reg. insulin / 100 ml NS.
- Priming:** Flush 50 cc of infusion through all IV tubing.
- Target Blood Glucose (BG): 100-150 mg/dL**
- Bolus & Initial Insulin Infusion Rate:**
 - Bolus **4** units Reg. Insulin for BG > 250 mg/dL
 - For patients ≤ 70 Kg, start @ **0.5** units/hr then follow **tier (1)**
 - For patients > **70** Kg, start @ **1** units/hr then follow **tier (2)**
- Maintenance IV FLUIDS:** Should contain **dextrose** infused at a constant rate if patient is **NPO** and **BG is less than 250 mg/dL.**
 - D5 NS at 100 ml/hour.
 - D5 1/2NS at 100 ml /hour.
 - D10 NS at 40 ml / hour (for patients with fluid restriction or renal failure).
 - Additive: KCL _____ meq/liter (generally 20 meq/L)
- BG Monitoring: FS q 1 hr**
 - Follow patient tier and change infusion rate according to the table.
 - If no **decrease** in BG ranges for 3 consecutive measures **move up a tier** within the same range.
 - If FS at goal for 3 consecutive readings, change FS to q 2 hrs x 3, if no change FS q 4 hrs.
 - Change back to frequent monitoring FS q1 hr for:** Significant change in clinical condition, Initiation or cessation of corticosteroids or vasopressors, Initiation or cessation of hemodialysis, Initiation, cessation or change in nutritional support.

| BG Range | Tier 1 | Tier 2 | Tier 3 | Tier 4 | Tier 5 |
|----------|------------------------------|--------|--------|--------|--------|
| Mg/dL | Units/hr | | | | |
| < 60 | Hypoglycemia Protocol | | | | |
| 61-99 | Stop Infusion Drip | | | | |
| 100-150 | 0.5 | 1 | 2 | 3 | 4 |
| 151-200 | 1 | 2 | 3 | 5 | 6.5 |
| 201-240 | 1.5 | 3 | 4.5 | 7 | 8 |
| 241-280 | 2 | 4 | 6 | 9 | 10.5 |
| 281-300 | 2.5 | 5 | 7.5 | 11 | 13 |
| 301-320 | 3 | 6 | 9 | 13 | 15.5 |
| 321-360 | 3.5 | 7 | 10.5 | 15 | 18 |
| > 360 | 4 | 8 | 12 | 17 | 20.5 |

| Time FS | FS | Infusion Rate | New Rate | Signature |
|----------|----|---------------|----------|-----------|
| 12:00 AM | | | | |
| 1:00 AM | | | | |
| 2:00 AM | | | | |
| 3:00 AM | | | | |
| 4:00 AM | | | | |
| 5:00 AM | | | | |
| 6:00 AM | | | | |
| 7:00 AM | | | | |
| 8:00 AM | | | | |
| 9:00 AM | | | | |
| 10:00 AM | | | | |
| 11:00 AM | | | | |
| 12:00 PM | | | | |
| 1:00 PM | | | | |
| 2:00 PM | | | | |
| 3:00 PM | | | | |
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| 10:00 PM | | | | |
| 11:00 PM | | | | |

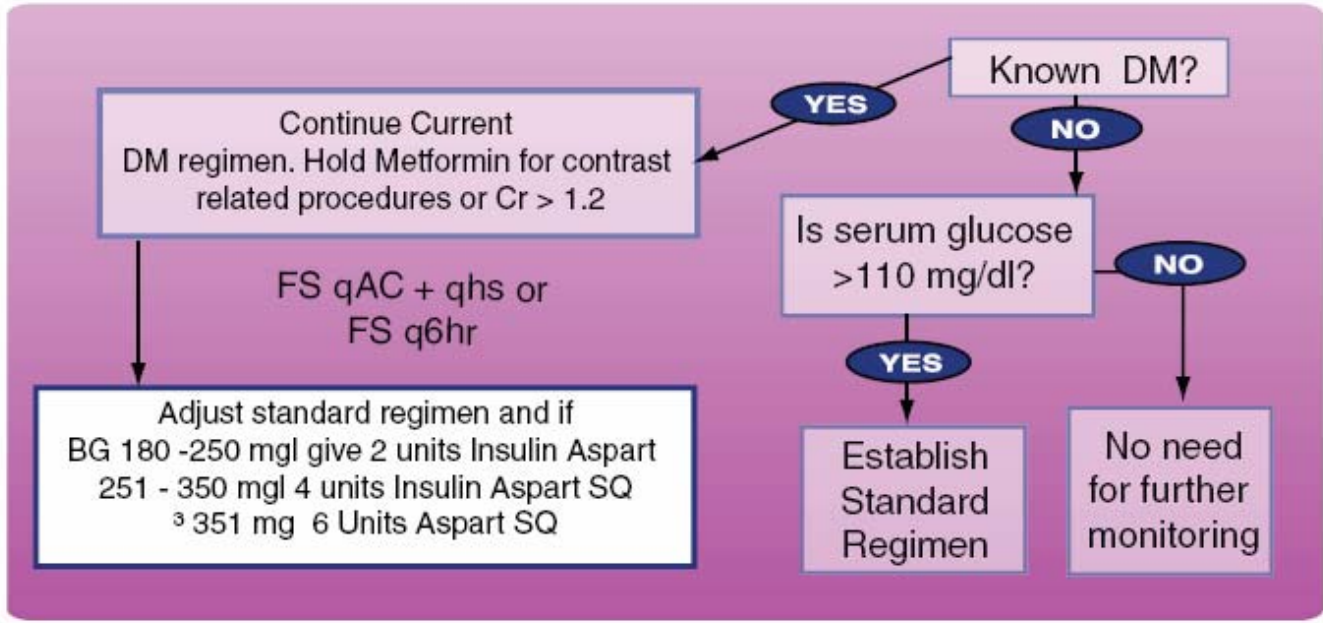
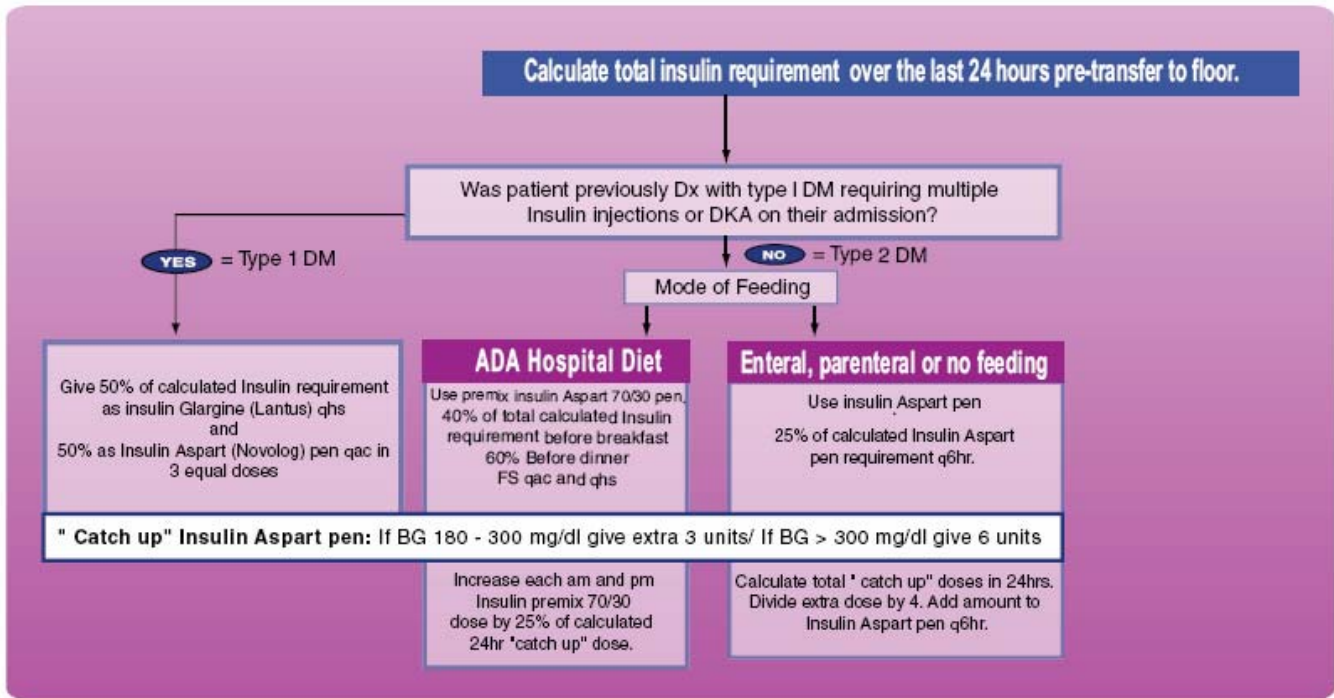
Hypoglycemia Protocol: BG \leq 60

SAM PROTOCOL

- STOP INSULIN INFUSION
 - Assess Patient, Is patient Conscious and Cooperative?
 - Management:
 - Yes: give patient 4 oz of Orange Juice
 - No: give 1 amp (25 g) D50 IV
 - Recheck FS in 20 mins
 - If still low repeat SAM.
 - When **BG \geq 100**, Resume management per tier1
- For patients in DKA or HONKC please refer to the appropriate management protocol.
 - For patients leaving the ICU for a procedure(s):
 - Call MD if Patient will go off the floor.
 - Turn insulin infusion off, check fingerstick on return back to the unit and resume infusion.

RN Signature: _____

CONVERSION FROM THE DRIP TO INSULIN



Types of INSULIN & Onset of Action

| <u>Insulin</u> | <u>Onset</u> | <u>Peak</u> | <u>Duration</u> |
|---|--------------|-------------|-----------------|
| Rapid Acting /Aspart (Novolog) | 5-15 min | 30-90 min | 5 hours |
| Short Acting / Regular U 100 (Novolin R) | 30-60 min | 2-3 hours | 5 -8 hours |
| Long Acting / Glargine (Lantus) | 2-4 hours | No peak | 20-24 hours |
| Premixed / 70% NPA 30% Aspart (Novolog Mix) | 5-15 min | Dual | 10-16 hours |