Diabetes and Hyperglycemia Management   [989]

TARGET BLOOD GLUCOSE: Pre-meal = 100-140 mg/dL and Random = Less than 180 mg/dL

Providers: If patient has active insulin / non-insulin ANTIHYPERGLYCEMIC orders, please consider discontinuing.

General

Discontinue Insulin Infusion

[X] Discontinue Insulin infusion	Routine, Once For 1 Occurrences If on an insulin infusion, discontinue infusion in 2 hour(s) after first basal (long-acting) insulin dose

Finger Stick Blood Glucose (FSBG) Monitoring (MUST choose one) (Single Response) (Selection Required)

( ) Bedside glucose - for patients on diets	Routine, 4 times daily 0-30 minutes before meals and at bedtime 0-30 mins before meals and at bedtime (if on diet). Give correction insulin BEFORE MEALS ONLY, if needed.
( ) Bedside glucose - for patients on continuous enteral feeds, TPN or NPO	Routine, Every 4 hours Give correction insulin EVERY 4 HOURS, if needed.

Hypoglycemia Management

Hypoglycemia Management (Single Response) (Selection Required)

(X) Adult Hypoglycemia Standing Orders (Selection Required)

[X] HYPOglycemia management - Monitor patient for signs and symptoms of HYPOglycemia and follow standing orders	Routine, Per unit protocol HYPOglycemia is defined as glucose less than 70 mg/dL If INITIAL bedside glucose is LESS than 40 mg/dL: Send serum glucose level STAT. If Patient is with altered mental status or has clinical signs or symptoms of HYPOglycemia, initiate treatment immediately. If patient has IV access, give 50% Dextrose, 25 gm, 50 mL intravenous push, ONCE. If patient does NOT have IV access, give Glucagon 1 mg intramuscularly ONCE. Notify provider of hypoglycemia and treatment given. Do not give further insulin or any oral HYPOglycemia agent until ordered by a prescriber. Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg per dL. If INITIAL bedside glucose is between 41-69 mg/dL: If patient is able to swallow and is NOT NPO, may give 4 oz (120 mL) of juice If patient is NPO or unable to swallow and has IV access, give 50% Dextrose, 12.5 gm, 25 mL intravenous push ONCE If patient is NPO or unable to swallow and does NOT have IV access, give Glucagon 1 mg intramuscular ONCE. Notify provider of hypoglycemia and treatment given. Do not give further insulin or any oral HYPOglycemia agent until ordered by a prescriber. Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg per dL. If SECOND bedside glucose is LESS than 70 mg/dL: If second bedside glucose is LESS than 70 mg/dL, send serum glucose level STAT. If patient is with altered mental status or has clinical signs or symptoms of HYPOglycemia, initiate treatment immediately. If patient has IV access, give 50% Dextrose, 25 gm, 50 mL intravenous push, ONCE If patient does NOT have IV access, give Glucagon 1 mg intramuscular ONCE Notify provider of hypoglycemia and treatment given. Do not give further insulin or any oral HYPOglycemia agent until ordered by a prescriber. Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg per dL. If SECOND bedside glucose is between 70-100 mg/dL: Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg per dL. If THIRD bedside glucose is LESS than 70 mg/dL, initiate continuous IV Therapy for the patient not responding to other interventions 10% dextrose Infusion, 500 mL, Initiate at 40 mL per hour for bedside glucose LESS than 70 mg per dL after treatment with two doses of 50% dextrose IV push or two doses of glucagon intramuscularly. Bedside glucose every hour while on 10% dextrose infusion. Titrate by 10 mL per hour to keep glucose between 100 and 140 mg per dL. Notify ordering provider when 10% dextrose infusion is started, if glucose is LESS than 70 mg per dL while on 10% dextrose, AND when 10% dextrose rate is increased GREATER than 100 mL per hour. If THIRD bedside glucose is between 70-100 mg/dL: Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg per dL. CLICK REFERENCE LINKS TO OPEN ALGORITHM AND ORDERS:

[X] dextrose 50% intravenous syringe	12.5 g, intravenous, every 20 min PRN, low blood sugar, If blood glucose is between 41-69 mg/dL Give ½ cup juice if patient is able or 50% dextrose 12.5 g (25 mL) IV push ONCE. Contact the provider and recheck blood glucose in 20 minutes. DO NOT give further insulin until ordered by a provider
[X] dextrose 50% intravenous syringe	25 g, intravenous, every 20 min PRN, low blood sugar, If blood glucose is 40 mg/dL or LESS Give 50% dextrose 25 g (50 mL) IV push ONCE, contact the provider and recheck in 20 minutes. DO NOT give further insulin until ordered by a provider
[X] glucagon injection	1 mg, intramuscular, every 15 min PRN, low blood sugar, if patient NPO, unable to swallow safely with no IV access. If glucose remains LESS than 70 mg/dL, after 2 doses of D50 or Glucagon, send serum glucose level STAT. Initiate treatment immediately after lab drawn. Do NOT delay treatment waiting for lab result. Recheck blood sugar every 20 min until greater than 100 mg/dL. Notify Provider.
[X] dextrose 10 % infusion	40 mL/hr, intravenous, continuous PRN, other, For bedside glucose LESS than 70 mg/dL Notify Provider, consider transfer to ICU. Check Glucose every hour while on D10 infusion. Titrate infusion by 10 mL per hour to keep glucose between 100 and 140 mg/dL. Notify provider when ANY/ALL of the following occur: -Dextrose 10% infusion is started -If glucose is less than 70 mg/dL while on dextrose 10% infusion -When dextrose 10% infusion rate is increased to greater than 100 mL/hr

Subcutaneous Insulin Dosing (choose all that apply)

Basal Insulin

	Breakfast	Lunch	Dinner	Bedtime
BASAL INSULIN (Order Below)	Insulin Human NPH* Insulin glargine (Lantus®) Insulin Human NPH/REG30/70 *		 Insulin Human NPH/REG70/30 *	Insulin Human NPH* Insulin glargine (Lantus®)
	*If NPO give half dose of scheduled NPH or NPH/REG. DO NOT HOLD glargine without a prescriber order			

[ ] Custom Insulin glargine (Lantus)	
[ ] insulin glargine (LANTUS) injection	subcutaneous, daily DO NOT HOLD glargine without a prescriber order. If glucose is less than 80mg/dL, call prescriber for possible dose change.
[ ] insulin glargine (LANTUS) injection	subcutaneous, nightly DO NOT HOLD glargine without a prescriber order. If glucose is less than 80mg/dL, call prescriber for possible dose change.
[ ] insulin glargine (LANTUS) injection	subcutaneous, 2 times daily DO NOT HOLD glargine without a prescriber order. If glucose is less than 80mg/dL, call prescriber for possible dose change.
[ ] Weight Based Insulin glargine (Lantus)	
[ ] For insulin SENSITIVE patients (0.1 units/kg/day)	0.1 Units/kg/day, subcutaneous
[ ] For AVERAGE patients (0.2 units/kg/day)	0.2 Units/kg/day, subcutaneous
[ ] For insulin RESISTANT patients (0.3 units/kg/day)	0.3 Units/kg/day, subcutaneous
[ ] Insulin NPH (NovoLIN-N, HumuLIN-N)	
[ ] insulin NPH (HumuLIN-N)	subcutaneous, 2 times daily If NPO give half dose of scheduled NPH or NPH/REG
[ ] insulin NPH (HumuLIN-N)	subcutaneous, daily with breakfast If NPO give half dose of scheduled NPH or NPH/REG

[ ]	insulin NPH (HumuLIN-N)	subcutaneous, nightly If NPO give half dose of scheduled NPH or NPH/REG	

[ ] Insulin 70/30 NPH and Regular Human (HumuLIN 70/30)

[ ]	insulin 70/30 NPH and regular human (HumuLIN 70/30)	subcutaneous, 2 times daily with meals If NPO give half dose of scheduled NPH/REG
[ ]	insulin 70/30 NPH and regular human (HumuLIN 70/30)	subcutaneous, daily with breakfast If NPO give half dose of scheduled NPH/REG
[ ]	insulin 70/30 NPH and regular human (HumuLIN 70/30)	subcutaneous, daily with dinner If NPO give half dose of scheduled NPH/REG

Mealtime Insulin (Single Response)

	Breakfast	Lunch	Dinner	Bedtime
	Insulin lispro (Admelog®)	Insulin lispro (Admelog®)	Insulin lispro (Admelog®)	
MEALTIME INSULIN **(Order Below)**	If NPO or pre-meal glucose is less than 80 mg/dL, hold the dose of mealtime insulin. If pre-meal glucose is 80 – 100 mg/dL, give ½ dose of mealtime insulin. May be given up to 10 minutes before meal or immediately after meal if oral intake is uncertain. <u>If corrective insulin dose is needed, add to mealtime insulin dose.</u>			

( ) Custom Mealtime Insulin lispro (AdmeLOG)

[ ]	Three times daily with meals - insulin lispro (AdmeLOG)	subcutaneous, 3 times daily with meals If NPO or pre-meal glucose is less than 80 mg/dL, hold the dose of mealtime insulin. If pre-meal glucose is 80 - 100 mg/dL, give ½ dose of mealtime insulin. May be given up to 10 minutes before meal or immediately after meal if oral intake is uncertain. If corrective insulin dose is needed, add to mealtime insulin dose. 1 unit for every ___ gm of CHOs and 1 unit for every ____ mg/dL of glucose GREATER than ___ mg/dL
[ ]	Before Breakfast - insulin lispro (AdmeLOG)	subcutaneous, daily with breakfast If NPO or pre-meal glucose is less than 80 mg/dL, hold the dose of mealtime insulin. If pre-meal glucose is 80 - 100 mg/dL, give ½ dose of mealtime insulin. May be given up to 10 minutes before meal or immediately after meal if oral intake is uncertain. If corrective insulin dose is needed, add to mealtime insulin dose.
[ ]	Before Lunch - insulin lispro (AdmeLOG)	subcutaneous, daily before lunch If NPO or pre-meal glucose is less than 80 mg/dL, hold the dose of mealtime insulin. If pre-meal glucose is 80 - 100 mg/dL, give ½ dose of mealtime insulin. May be given up to 10 minutes before meal or immediately after meal if oral intake is uncertain. If corrective insulin dose is needed, add to mealtime insulin dose.
[ ]	Before Dinner - insulin lispro (AdmeLOG)	subcutaneous, daily before dinner If NPO or pre-meal glucose is less than 80 mg/dL, hold the dose of mealtime insulin. If pre-meal glucose is 80 - 100 mg/dL, give ½ dose of mealtime insulin. May be given up to 10 minutes before meal or immediately after meal if oral intake is uncertain. If corrective insulin dose is needed, add to mealtime insulin dose.
[ ]	With Snacks - insulin lispro (AdmeLOG) injection	subcutaneous, with snacks, high blood sugar If NPO or pre-meal glucose is less than 80 mg/dL, hold the dose of mealtime insulin. If pre-meal glucose is 80 - 100 mg/dL, give ½ dose of mealtime insulin. May be given up to 10 minutes before meal or immediately after meal if oral intake is uncertain. If corrective insulin dose is needed, add to mealtime insulin dose.

( ) Weight Based Insulin Lispro (AdmeLOG) (Single Response)

( )	For insulin SENSITIVE patients (0.1 units/kg/day)	0.1 Units/kg/day, subcutaneous, 3 times daily with meals
( )	For AVERAGE patients (0.2 units/kg/day)	0.2 Units/kg/day, subcutaneous, 3 times daily with meals
( )	For insulin RESISTANT patients (0.3 units/kg/day)	0.3 Units/kg/day, subcutaneous, 3 times daily with meals

Tube Feed or TPN

TUBE FEED
OR TPN GUIDE

	Insulin	Route	Dose	Frequency
TUBE FEED OR TPN GUIDE **(Order Below)**	Insulin Human NPH	subcutaneous		Every 8 hours
	Start 10% Dextrose IV during any interruption in TPN or tube feeds at the previous TPN or tube feed rate up to a maximum rate of 40mL/hour. HOLD next insulin dose and notify prescriber for further orders			

[ ] For patients on Tube Feeds or TPN - Insulin NPH and   **"And" Linked Panel**
     Dextrose 10%

[ ]	insulin NPH (HumuLIN-N) injection	subcutaneous, every 8 hours scheduled Start 10% Dextrose IV during any interruption in TPN or tube feeds at the previous TPN or tube feed rate up to a maximum rate of 40 mL/hour. HOLD next insulin dose and notify prescriber for further orders
[ ]	dextrose 10 % infusion	40 mL/hr, intravenous, continuous PRN, other, for interruption in TPN or tube feeds Start D10W at the previous TPN or tube feed rate up to a maximum rate of 40 mL/hr. HOLD next insulin dose and notify prescriber for further orders.

Corrective Insulin

	Insulin lispro (HumaLOG®,AdmeLOG®) Low Dose		Insulin lispro (HumaLOG®,AdmeLOG®) Medium Dose		Insulin lispro (HumaLOG®, AdmeLOG®) High Dose	
	Glucose (mg/dL)	Units	Glucose (mg/dL)	Units	Glucose (mg/dL)	Units
CORRECTIVE INSULIN **(Order Below)**	70-140	0	70-140	0	70-140	0
	141-220	1	141-180	1	141-180	2
	221-260	2	181-220	2	181-220	4
	261-280	3	221-240	3	221-240	5
	281-300	4	241-260	4	241-260	7
	Greater than 300	5 **Call MD**	261-280	5	261-280	9
			281-300	6	281-300	10
			Greater than 300	7 **Call MD**	Greater than 300	12 **Call MD**

[ ] Insulin Lispro (HUMALOG, ADMELOG) Corrective
     Insulin (Single Response)

( )	Patient UNABLE to tolerate LISPRO	Routine, Once
( )	Low Dose Corrective Scale 0-5 units	0-12 Units, subcutaneous 41 - 69 mg/dL blood glucose: give 25 mL of dextrose 50% OR 4 ounce juice 0 - 40 mg/dL blood glucose: give 50 mL of dextrose 50% If patient is NPO, on tube feeds, or on TPN, change frequency to every 4 hours Corrective Scale: LOW dose correction scale

( )	Medium Dose Corrective Scale 0-7 units	0-12 Units, subcutaneous 41 - 69 mg/dL blood glucose: give 25 mL of dextrose 50% OR 4 ounce juice 0 - 40 mg/dL blood glucose:　give 50 mL of dextrose 50% If patient is NPO, on tube feeds, or on TPN, change frequency to every 4 hours Corrective Scale: MEDIUM dose correction scale
( )	High Dose Corrective Scale 0-12 units	0-12 Units, subcutaneous 41 - 69 mg/dL blood glucose: give 25 mL of dextrose 50% OR 4 ounce juice 0 - 40 mg/dL blood glucose:　give 50 mL of dextrose 50% If patient is NPO, on tube feeds, or on TPN, change frequency to every 4 hours Corrective Scale: HIGH dose correction scale
( )	Custom Corrective Scale	subcutaneous Define custom scale here ***

Labs

Laboratory

[ ]	Hemoglobin A1c	Once
[ ]	Lipid panel	Once

Consults

Consults HMH

[ ]	Consult Diabetes/Endocrinology	Reason for Consult? Diabetes and Hyperglycemia Please call Inpatient Diabetes/Hyperglycemia Management Service 713-441-0006
[ ]	Consult Diabetes Educator	Reason for Consult:
[ ]	Consult Nutrition Services	Reason For Consult? Purpose/Topic:
[ ]	Ambulatory referral to HM Weight Management - Diabetes Education	Internal Referral Select type of services needed and number of hours requested: Initial Comprehensive Diabetes Ed - up to 10 hrs and all 9 ADA core topics Indicate any special needs requiring Individual or Customized Education: For Diabetes related Medical Nutrition Therapy (MNT), please select type needed: Nutrition Consultation (IBT or MNT per RD discretion) I hereby certify that I am managing this patient's Diabetes condition and that the above prescribed training is a necessary part of managment. Yes Let me know if the patient declines service or is unable to be contacted? Yes File referral to ordering clinic?

Consults HMTW

[ ]	Consult Nutrition Services	Reason For Consult? Purpose/Topic:

[ ]	Ambulatory referral to HM Weight Management - Diabetes Education	Internal Referral Select type of services needed and number of hours requested: Initial Comprehensive Diabetes Ed - up to 10 hrs and all 9 ADA core topics Indicate any special needs requiring Individual or Customized Education: For Diabetes related Medical Nutrition Therapy (MNT), please select type needed: Nutrition Consultation (IBT or MNT per RD discretion) I hereby certify that I am managing this patient's Diabetes condition and that the above prescribed training is a necessary part of managment. Yes Let me know if the patient declines service or is unable to be contacted? Yes File referral to ordering clinic?

Consults - NOT HMH or HMTW

[ ]	Consult Diabetes Educator	Reason for Consult:
[ ]	Consult Nutrition Services	Reason For Consult? Purpose/Topic:
[ ]	Ambulatory referral to HM Weight Management - Diabetes Education	Internal Referral Select type of services needed and number of hours requested: Initial Comprehensive Diabetes Ed - up to 10 hrs and all 9 ADA core topics Indicate any special needs requiring Individual or Customized Education: For Diabetes related Medical Nutrition Therapy (MNT), please select type needed: Nutrition Consultation (IBT or MNT per RD discretion) I hereby certify that I am managing this patient's Diabetes condition and that the above prescribed training is a necessary part of managment. Yes Let me know if the patient declines service or is unable to be contacted? Yes File referral to ordering clinic?