Louisiana State University Health Care Services Division
Interim LSU Public Hospital

PHYSICIAN ORDERS
INPATIENT SUBCUTANEOUS INSULIN

Allergies:_____

Diagnosis: _____

1. **Discontinue all previous orders for insulin and/or D50 W.**
2. **Check capillary blood glucose: (Check all that apply.)**
   - ❑ Before meals and at bedtime
   - ❑ Every 6 hours
   - ❑ Other:_____

SUBCUTANEOUS INSULIN ORDERS

3. **Scheduled** **Check desired therapy** Glucose Goal: Premeal = 80-130 mg/dL Bedtime = 90-150 mg/dL

	Breakfast	Lunch	Dinner	Bedtime
Pre-Prandial Insulin Orders ❑ Novolog ❑ Regular	Give _____ units	Give _____ units	Give _____ units	
Basal Insulin Orders ❑ NPH ❑ Lantus*	Give _____ units			Give _____ units

* Lantus usually given once daily, but may be divided based on patient circumstance.

4. **INSULIN CORRECTION REGIMEN** (in addition to scheduled)
   This regimen alone should not be used more than 2 days as the only method of glucose control.
   - ❑ Use before meals
   - ❑ Use at every measurement
   - ❑ Other:_____

Start the following correct insulin dose: ❑ Regular ❑ Novolog

Blood Glucose	❑ **Low** For patients requiring less than 40 units of insulin/day, thin, or elderly.	❑ **Medium** For patients requiring 40 to 80 units of insulin/day.	❑ **High** For patients requiring more than 80 units of insulin/day, on steroids, or infected.	❑ **Patient Specific** (For Endocrine or Attending Staff MD Use Only)
151-200	1 unit	1 unit	2 units	____ units
201-250	2 units	3 units	4 units	____ units
251-300	3 units	5 units	7 units	____ units
301-350	4 units	7 units	10 units	____ units
351-400	5 units	8 units	12 units	____ units
Greater than 400	Call MD	Call MD	Call MD	Call MD

5. **One time dose: _____ units subcutaneous <u>now</u> ❑ Lantus ❑ NPH ❑ Regular ❑ Novolog**
6. **Hypoglycemic Treatment for Blood Glucose less than 60 mg/dL**
   a. If patient can take po, give 15 grams of fast acting carbohydrate (4 oz fruit juice/non-diet soda, or 8oz non-fat milk)
   b. If patient cannot take po, give 25 gm (50 ml) of 50% Dextrose as IV push. May repeat D50W IV push once if patient remains unresponsive after the first dose.
   c. Check finger capillary glucose in 15 minutes and repeat above if blood glucose less than 60 mg/dL and call MD.

Nurse's Signature:_____Date:_____Time: _____

Physician's Stamp

Doctor's Printed Name: _____

Signature:_____I.D. #:_____

Beeper:_____Date:_____Time: _____

Range Orders or Abbreviated Drug Names Will Not Be Accepted

SUGGESTED HOSPITALIZATION GUIDELINES

Type 1, NPO for greater than 24 hrs	If ICU patient, start insulin drip and IV of 10% Dextrose or basal insulin
Type 2 on insulin NPO greater than 24 hrs	If ICU patient, start insulin drip and IV of 10% Dextrose or basal insulin
Type 1, eating or Type 2 on insulin eating	Resume usual regimen. (If glucose low, consider starting at 50% or 75% of usual dose)
Type 1 or 2 initiating insulin therapy	0.25 – 0.5 units insulin/kg= total insulin dosage NPH: 67%NPH, 33% prandial or NPH alone divided as 67% am and 33% pm Lantus: 50%Lantus, 50% prandial (prandial divided between meals TID)
Type 1 or 2 on tube feedings	Start with NPH BID or Glargine; insulin correction prn
Type 1 or 2 on TPN	For first 24 hours, hang separate insulin drip. Evaluate 24 hours insulin needs, add 75% of daily needs to subsequent bags.

Types of Diabetes	Principles of Treatment	Patient NPO	Patient Eating
Type I	Basal/bolus regimens are most physiologic, and are easily adapted and modified in the hospitalized patient: ◊ **Basal:** given as NPH every am and /or bedtime **or** Lantus once daily. **Must provide basal insulin at all times.** ◊ **Prandial:** given only when patient is eating. Give standing dose of meal time insulin when blood glucose is in normal range. Add correction if blood glucose is greater than 150.	Give usual dose of basal insulin - **Do not hold.** If NPO greater than 24 hours may need to reduce basal insulin – depending on blood glucose. If on NPH twice daily, ◊ Can give 80% of total NPH dose as a single dose of Glargine **or** ◊ 50% am NPH dose and full bedtime NPH dose Monitor blood glucose every 4 **or** 6 hours and use correction regimen if needed.	Give usual pre-hospitalization insulin dose and supplement with correction as necessary.
Type 2 Insulin Treated	Similar to Type 1, though patients are less prone to ketosis.	Same as Type 1 NPO	Same as Type 1 eating
Type 2 Diet or Oral Agent Treated	The efficacy of oral hypoglycemic agents depends on endogenous insulin secretion: ◊ **Sulfonylureas** – increase insulin secretion in a glucose-independent manner ◊ **Metformin** – sensitizes the liver to insulin action ◊ **Thiazolidinediones (TZDs)** – sensitize fat and muscle to insulin action	**Hold sulfonylureas.** Can continue metformin and TZDs as insulin sensitizers do not cause hypoglycemia. Can use correction every 4 **or** 6 hours if needed.	May continue oral agents, <u>unless impending contrast study</u>. Also: ◊ **Hold** metformin if CrCl is less than 60 (serum creatine greater than 1.4 in women, greater than 1.5 in men) ◊ **Hold** TZDs if liver dysfunction, edema or CHF ◊ **Reduce** sulfonylurea for renal or hepatic dysfunction

Commonly Used Insulin Preparations and Action Times

Type	Onset (hours)	Peak (hours)	Duration (hours)
Rapid Acting (Novolog)	¼	1	3 – 4
Regular (Novolin R)	½ - 1	2 - 4	6 – 8
NPH (Novolin N)	1½ - 2	5 – 8	12 – 18
Glargine (Lantus)	1- 2	None	24