10.19.2016

Insulin Protocol Informational

MORNING CMO REPORT

FROM THE DESK OF: Anthony P. Weiss, MD, Chief Medical Officer, Associate Dean for Clinical Affairs, Upstate University Hospital



Insulin Protocol to Start at Community Campus

Applies to All Physicians

Diabetes is a commonly encountered diagnosis in inpatient populations, affecting about 25 to 35% of hospitalized patients at any time, and often poses many therapeutic challenges. Though diabetes may not be the main reason prompting hospitalization, inadequate attention to or improper management of diabetes can result in hyperglycemia and /or hypoglycemia, and both can adversely affect morbidity, mortality, and patients' length of stay.

To improve patient safety and streamline inpatient diabetes management, EPIC-based subcutaneous insulin order-sets were successfully implemented at Upstate's downtown campus. Experience over the past year with shows a reduced incidence of hypoglycemia.

In order to ensure the uniform delivery of care at both Upstate campuses, these order-sets will be available at the Community campus as well for use with a target start date of December, 1st 2016.

These order-sets presently apply to patients who are eating meals and need insulin therapy with a plan to expand the scope of the order-sets to include other clinical scenarios, such as patients who are NPO or on enteral feeding/TPN, transition from IV to SC insulin, etc.

The order-sets are based on basal-bolus insulin dosing.

The salient features of the order sets are as follows:

- 1. One basal (Glargine) and one bolus (Lispro) insulin
- 2. Patient will get finger-stick glucose checks before meals.

3. Provider caring for patient will have option to select either pre-determined insulin dosing scales (low dose, medium dose or high dose) or customize the scale if needed. Each scale will have 3 columns: NPO, \leq 50%, and >50% to account for the meal consumption. 4. Nurse will assess the meal consumption soon after the patient finishes his/her meal.

Based on the assessment, the nurse will categorize it as NPO, \leq 50%, or >50% meal consumed and will administer insulin per scale within 30 min of the meal consumption.

This order-set addresses the variable degrees of meal consumption often encountered in hospitalized patients resulting hyper or hypoglycemia.

When the patient is ready for discharge, EPIC can also provide valuable help in providing appropriate discharge instructions and diabetes related supply prescriptions to patients.

ALERT-Highest priority emergency communication; warrants immediate action or attention by the recipient.

HIGH ADVISORY-High priority does not warrant immediate action but recipients should be aware.

ADVISORY-Provides very important information for a specific incident or situation that does not require immediate action.

UPDATES TO ALERTS AND ADVISORIES-Provides updated information regarding an incident or situation; unlikely to require immediate action.

INFORMATIONAL MESSAGE-Provides timely information, important for review or serves as a reminder for an action that should be taken.

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Please see the attached Power point presentation detailing the steps how to order the order set in EPIC.

Many thanks to Dr. Prashant Nadkarni for providing this educational blurb and for his leadership of a multidisciplinary team in this effort to provide better patient care and improve patient safety.

Important Message from Dr. Nadkarni Regarding Insulin Stacking

Applies to All Physicians

Insulin Stacking Informational

Recent analysis of hypoglycemic incidents in hospitalized patients revealed insulin stacking as important contributory factor in causing hypoglycemia. Insulin stacking results from additive action of active insulin from prior insulin dose (also called as insulin on board) to the new insulin dose. This can happen with both rapid acting insulins and long acting insulins. Hence it is important to take into consideration the dose and type of insulin patient has received prior to ordering insulin to patient. As a rule of thumb, rapid active insulin (such as Lispro) dose should not be repeated within 3 hours of the last dose of similar insulin unless indicated after careful consideration of insulin on board.

Paging System Failures

Applies to All Physicians

Paging Informational We have become aware of some members of the medical staff not receiving messages via the paging system. While this is unfortunately a situation where "you don't know what you don't know", if you do become aware of a potential dropped page, please let us know. We are treating this as the important safety concern that it is and would like all such events routed through our Safety Event reporting system. Information on how to submit such an event is attached. For assistance, please call Julie Briggs, Patient Safety Officer, at 315-464-6170.

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Outstanding Physician Comments

Applies to All Physicians

Each week we receive written comments from our patients regarding the care we provide within the Hospital. Below are this week's comments from grateful patients receiving care on the units and clinics at Upstate:

 7A – Dr. Pletka was great! I liked his bedside manner and he explained everything to me Dr. Harley and anesthesiologist trusted them 100% at all times

9G – Dr. Krishnamurthy did a great job!

Breast Care Center Dr. Albert made special arrangements for me to come in for my procedure at my convenience.

Dr. Albert was excellent and professional in every manner regarding my surgery.

Dr. Albert was very comforting during visit.

Adult Medicine— It is hard to find the right words to describe Dr. Cleary – "Doctor Extraordinaire," "one in a million" come to mind. I am 81 and in good health because of her!

University Center for Vision Care – Dr. Alpert was very caring about my eye sight, test and medicine I was taking.

UHCC - Neurology – Dr. Bradshaw and all the staff were very patient with me.

ENT – Dr. Khakoo is very professional and very caring. I am very grateful to him. He appeared at all of my follow up visits even when I didn't expect to see him.

University Geriatricians – Dr. Berg – incredibly compassionate and caring.

Upstate Urology – Dr. Makhuli has always been very careful.

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HIGH ADVISORY-High priority does not warrant immediate action but recipients should be aware.

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UPDATES TO ALERTS AND ADVISORIES-Provides updated information regarding an incident or situation; unlikely to require immediate action. INFORMATIONAL MESSAGE-Provides timely information, important for review or serves as a reminder for an action that should be taken.

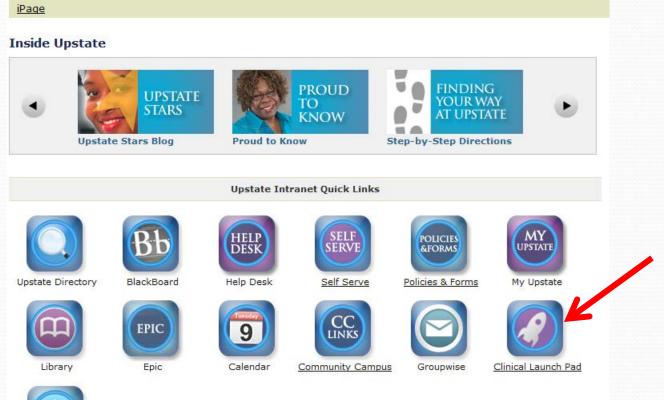
Comments Informational



Entering an Occurrence

Knowing changes everything.*

Access the Occurrence Reporting System by logging onto Upstate's iPage





Finding Your Way

Occurrence Reporting **UHC Safety Intelligence**

Clinical Launch Pad





PACS

Lexi-comp

IMT Project

Requests

UpToDate



Chartmaxx

Micromedex

MyAccounts





Policies & Forms



AM I ON

Occurrence Reporting

RHIO

EPIC Training







Approved Internet

Sites







I-Stop

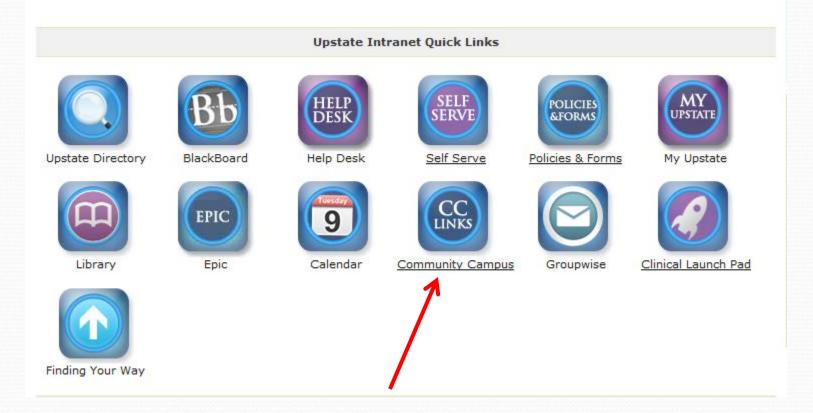




You can also access Event Reporting via your desktop (Downtown Only)

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	GroupWise	Wealth Scien	iPages	Kronos	Microsoft Access	Microsoft Excel
	Microsoft PowerPoint	Microsoft Word	Professional Patient E	SI Events	Sunrise 4.5 SP6 Client	UpToDate
			/	/		
18 Object(s)						Novell.

Access Event Reporting via iPage (Community Campus)



Access Event Reporting via iPage (Community Campus)



The Report

•You will need information about the patient including name, medical record number

- Location of the event
- Date of the event; approximate time

 Use the scroll down functions on the questions to assist with answering

 Do the best you can, answers can be adjusted later by Risk Management staff

They can be entered anonymously



Knowing changes everything.*

Welcome to the UHC Safety Intelligence powered by Datix Front Line Reporter Form.

- A 🖈 indicates a mandatory field.
- Click the 🙆 icon for help with a particular field.
- Click the 🗾 button to view and select from the list of available options for that field.
- Click the 🙀 button to remove values from a field.

If you have any questions or require assistance with completing this form please contact your on-site administrator.

Start	
★ Who was affected by the event?	-
Event Basics	
★ Event Type	
★ Event Category	•
* Event Subcategory	
★ Event discovery date	
★ Event discovery time Use the military time format.	
* Event occurrence date (MM/dd/yyyy)	
Event occurrence time (hh:mm) Use the military time format.	
Was the event related to a handover/handoff?	
Was health information technology (HIT) implicated in this event?	

Event Location Use this section to detail where the event took place

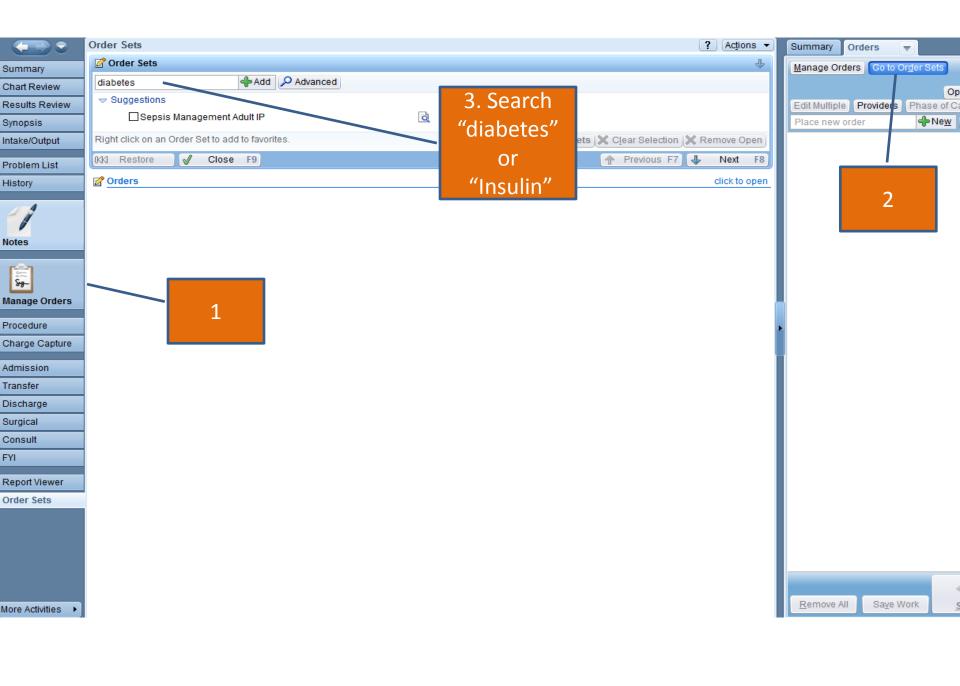
★ Campus	•
* Site Name	
★ Location / Service Name	
Other involved site	
Other involved location/service	
Clinical Service	

Event Detail

 ★ Describe the event in your own words When completing this field, please keep the following in mind: + DO NOT enter the names of individuals in this field. Instead, use terms like "Patient", "Receptionist", "Nurse", etc. + Avoid entering your own personal opinions - stick to the facts. + Make sure the information is relevant, being as brief as possible. 	ABC	
Harm Score		
★ Extent of harm	•	
* Harm score 🔞		
Was any intervention attempted to prevent, reverse, or halt the progression of harm?		
Nature of injury		

Inpatient Diabetes Management EPIC based Subcutaneous insulin order-sets Nuts and Bolts

Prashant Nadkarni, MD, FACE. Staff Endocrinologist. Joslin Clinic-SUNY Upstate Medical University

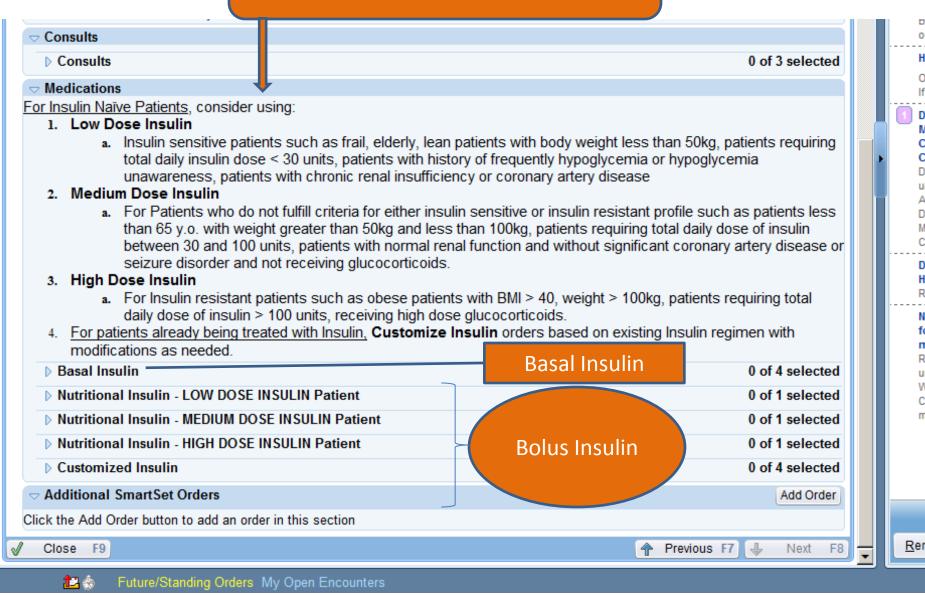


Order Sets				? Actions -	Summary Orders
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	Order Sets		? Actions	Summary Orders 🔻
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Review			Clear All Orders	
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sis	Multiple Versions of User Order Sets		Do Not Show This Again	Place new order
Output	You can now save multiple versions of user of	order sets. Click the Manage My Version link below to begin.	Learn More	Orders from Order Sets
m List		ent (Meal Consumption Based) Endocrinology IP Man	age My Version▼ Add Order	Adult Subcutaneous Insulin Management (Meal Consumption Based)
/	Guidelines for Transition of IV Insulin			Endocrinology IP
4		aneous insulin if the patient is clinically stable accor insulin if indicated. Patients with Type I Diabet		POCT Glucose, Docked A(HS (UH) Routine, 4 TIMES DAILY BEFORE BEDTIME First occurrence Today occurrence on Tue 11/8 at 1100
	✓ Nursing			Hemoglobin A1c
	✓ Notify Physician			ONCE First occurrence Today at If not available in the last 30 days
je Orders dure e Capture	Routine, CONTINU Whom To Notify: I Call physician for Interventions Discontinue All Other Anti-Hyperglycer	blood sugars less than 70 mg/dl and more than 401 mg/dl mic Agents	1 of 1 selected	Diet Age: Adult; Diet: Modifie Modifier: Consistent Carbohydrate; Consistent Carbohydrate: Adult-Modera DIET EFFECTIVE NOW starting To until Tue 11/8 for 30 days Age: Adult
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ctivities 🔸	▶ Consults		0 of 3 selected	Terriove All Save Work

Suggested insulin dosing information for insulin naïve patients



Medications

For Insulin Naïve Patients, consider using:

- 1. Low Dose Insulin
 - a. Insulin sensitive patients such as frail, elderly, lean patients with body weight less than 50kg, patients requiring total daily insulin dose < 30 units, patients with history of frequently hypoglycemia or hypoglycemia unawareness, patients with chronic renal insufficiency or coronary artery disease</p>

2. Medium Dose Insulin

a. For Patients who do not fulfill criteria for either insulin sensitive or insulin resistant profile such as patients less than 65 y.o. with weight greater than 50kg and less than 100kg, patients requiring total daily dose of insulin between 30 and 100 units, patients with normal renal function and without significant coronary artery disease or seizure disorder and not receiving glucocorticoids.

Basal dosing

3. High Dose Insulin

- a. For Insulin resistant patients such as obese patients with BMI > 40, weight > 100kg, patients requiring total daily dose of insulin > 100 units, receiving high dose glucocorticoids.
- For patients already being treated with Insulin, Customize Insulin orders based on existing Insulin regimen with modifications as needed.

🗢 Basal Insulin

(suggested glargine dose calculations for insulin Naïve patients:For low dose insulin patients:0.15 units /kg BWFor medium dose insulin patients:0.2 units /kg BWFor high dose insulin patients:0.3 units/kg BW

Note: if LANTUS Insulin is ordered remember to select LISPRO Insulin if needed.

C For LOW DOSE INSULIN patients: insulin glargine (LANTUS) injection 0.15 units/kg 0.15 Units/kg, Subcutaneous, Nightly, for 30 days	suggestions & Available options
C For MEDIUM DOSE INSULIN patients: insulin glargine (LANTUS) injection 0.2 units/kg 0.2 Units/kg, Subcutaneous, Nightly, for 30 days	Available options
C For HIGH DOSE INSULIN patients: insulin glargine (LANTUS) injection 0.3 units/kg 0.3 Units/kg, Subcutaneous, Nightly, for 30 days	
C CUSTOMIZED DOSE: insulin glargine (LANTUS) injection Subcutaneous, Nightly, for 30 days	
Nutritional Insulin - LOW DOSE INSULIN Patient	0 of 1 selected
Nutritional Insulin - MEDIUM DOSE INSULIN Patient	0 of 1 selected
Nutritional Insulin - HIGH DOSE INSULIN Patient	0 of 1 selected
Customized Insulin	0 of 4 selected



(suggested glargine dose calculations for insulin Naïve patients:For low dose insulin patients:0.15 units /kg BWFor medium dose insulin patients:0.2 units /kg BWFor high dose insulin patients:0.3 units/kg BW

EPIC will calculate weight based Basal dose depending on selection

Note: if LANTUS Insulin is ordered remember to select LISPRO Insulin if needed.

Note: Il Exit 100 linsuit is ordered remember to select Elor No linsuit il needed.	selection
C For LOW DOSE INSULIN patients: insulin glargine (LANTUS) injection 0.15 units/kg 0.15 Units/kg, Subcutaneous, Nightly, for 30 days	
Insulin glargine (LANTUS) injection 17 Units	+
17 Units (rounded from 16.7 Units = 0.2 Units/kg × 83.5 kg), Subcutaneous, Nightly, First Dose To If patient blood glucose is < 70 mg/dL Follow the hypoglycemia procedure CM H-09. If patient bl provider	
C For HIGH DOSE INSULIN patients: insulin glargine (LANTUS) injection 0.3 units/kg 0.3 Units/kg, Subcutaneous, Nightly, for 30 days	
CUSTOMIZED DOSE: insulin glargine (LANTUS) injection Subcutaneous, Nightly, for 30 days	
Nutritional Insulin - LOW DOSE INSULIN Patient	0 of 1 selected
Nutritional Insulin - MEDIUM DOSE INSULIN Patient	0 of 1 selected
Nutritional Insulin - HIGH DOSE INSULIN Patient	0 of 1 selected
Customized Insulin	0 of 4 selected

(suggested glargine dose calculations for insulin Naïve patients:For low dose insulin patients:0.15 units /kg BWFor medium dose insulin patients:0.2 units /kg BWFor high dose insulin patients:0.3 units/kg BW

Note: if LANTUS Insulin is ordered remember to select LISPRO Insulin if needed.

C For MEDIUM DO	INSULIN patients: insulin glargine (LANTUS) injection 0.15 units/kg 0.15 Units/kg, Subcutaneous, Nightly, for 30 days OSE INSULIN patients: insulin glargine (LANTUS) injection 0.2 units/kg 0.2 Units/kg, Subcutaneous, Nightly, for 30 days INSULIN patients: insulin glargine (LANTUS) injection 0.3 units/kg 0.3 Units/kg, Subcutaneous, Nightly, for 30 days	Basal insulin dose also can be customized if needed.
insulin glargine	(LANTUS) injection Subcutaneous, Nightly, First Dose Today at 2200, For 30 days If patient blood glucose is < 70 mg/dL Follow the hypoglycemia procedure CM H- provider	-09. If patient blood glucose is >400 mg/dL notify the
Nutritional Insul	in - LOW DOSE INSULIN Patient	0 of 1 selected
Nutritional Insul	in - MEDIUM DOSE INSULIN Patient	0 of 1 selected
Nutritional Insul	in - HIGH DOSE INSULIN Patient	0 of 1 selected
Customized Insu	ılin	0 of 4 selected
→ Additional SmartS	Set Orders	Add Order

2. Medium	Dose Insuli	n		-			
insulin glargine (LANTUS) inje	ction				✓	Accept 🗙 Cancel
Reference Links:	1. Lexi-Comp						
Report:	Lab Test Resu	Ilts					
	Component	Time Elapsed	Value	Range	Status	Comments	
	Glucose	8 hours (10/09/16 0350)	113 (H)	65 - 110 mg/dl	Final result		
		1 day (10/08/16 0202)	158 (H)	-	Final result		
		1 day (10/07/16 2026)	170 (H)	65 - 110 mg/dl	Final result		
Dose:	•	Q 🤑					
Route:	Subcutaneo 🔎	Subcutaneous					N N
Frequency:	Nightly	Nightly QAM	BID		Custor	mizable dosing	
	For: 30	ODoses OHours 💿	Davs		Custo	Ŭ	
	Starting: 10/9/2					option	
	First						
	Dose:	Include Now As	Scheduled				
	First Dose: To	day 2200 Last Dose: Mo	n 11/7 2200	Number of a	doses: 30	Show Additi	ional Options
	Scheduled Tin	nes: Hide Schedule Adjust S	chedule				
	10/9/16 2200						
	Based on syst	em settings, only one day of s	cheduled ti	mes is shown.			
Admin, Inst.:	If patient blood	glucose is < 70 mg/dL Follo	w the hypod	lvcemia procedure	e CM H-09. If pa	atient blood alucose is >400)
Comments (F6)						•••••	
(300 char max.)							
Priority:	Routine 🛛 🖇						
Additional Orde	er Details						
🕕 <u>N</u> ext Required							Accept 🗙 Cancel
Nutritional	Insulin - HIGH	DOSE INSULIN Patient				0 ot	f 1 selected
Customized	Insulin					0 of	f 4 selected



provider	-	-		-	
Nutritional Insulin - LOW DOS	E INSULIN Pa	atient			0 of 1 selected
Nutritional Insulin - MEDIUM D	OSE INSULI	Patient			0 of 1 selected
Nutritional Insulin - HIGH DOS	E INSULIN P	atient			0 of 1 selected
Customized Insulin					0 of 4 selected
					Add Order
Click the Add Order button to add an o	rder in this se	ction			

w Nutritional Insulin - LOW DOSE INSULIN Patient									
LOW DOS	LOW DOSE INSULIN Patient Scale								
Blood	NPO	Eats <= 50%	Eats > 50%						
Glucose		meal	meal						
(mg/dl)									
< 70	Hypoglycemia	Hypoglycemia	Hypoglycemia						
	Protocol	Protocol	Protocol						
71 - 90 0 0		0	2	Low dose					
91 - 130	0	1	3	Scale will be					
131 - 150	0	1	3	displayed for					
151 - 200 0		2	4	review .					
201-250 1		3	5	Select if					
251 - 300 2		3	5	appropriate.					
301 - 350 2		4	6						
351 - 400 3		4	7						
> 401	4 and notify								

For

or LOW DOSE INSULIN patients: insulin lispro (HUMALOG) injection

1-8 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

Nutritional Insulin - MEDIUM DOSE INSULIN Patient

Nutritional Insulin - HIGH DOSE INSULIN Patient

Customized Insulin

Insulin glargine (LANTUS) injection

0

Subcutaneous, Nightly, First Dose Today at 2200, For 30 days If patient blood glucose is < 70 mg/dL Follow the hypoglycemia procedure CM H-09. If patient blood glucose is >400 mg/dL provider

Nutritional Insulin - LOW DOSE INSULIN Patient

Version Nutritional Insulin - MEDIUM DOSE INSULIN Patient

MEDIUM DOSE INSULIN Patient Scale						
Blood	NPO	Eats <= 50%	Eats > 50%			
Glucose		meal	meal			
(mg/dl)						
< 70	Hypoglycemia	Hypoglycemia	Hypoglycemia			
	Protocol	Protocol	Protocol			
71 - 90	0	0	3			
91 - 130	0	2	4			
131 - 150	0	3	5			
151 - 200	0	4	6			
201-250	2	5	8			
251 - 300	4	6	10			
301 - 350	6	8	12			
351 - 400	8	10	14			
> 401	10 and notify	12 and notify	16 and notify			



0 of 1

C For MEDIUM DOSE INSULIN patients: insulin lispro (HUMALOG) injection

1-16 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

Nutritional Insulin - HIGH DOSE INSULIN Patient	0 of 1
Customized Insulin	0 of 4

provider

- Nutritional Insulin LOW DOSE INSULIN Patient
- Nutritional Insulin MEDIUM DOSE INSULIN Patient
- Nutritional Insulin HIGH DOSE INSULIN Patient

HIGH DOSE INSULIN Patient Scale						
Blood	NPO	Eats <= 50%	Eats > 50%			
Glucose		meal	meal			
(mg/dl)						
< 70	Hypoglycemia	Hypoglycemia	Hypoglycemia			
	Protocol	Protocol	Protocol			
71 - 90	0	2	6			
91 - 130	0	4	8			
131 - 150	0	5	10			
151 - 200	2	6	12			
201- 250	4	8	14			
251 - 300	6	10	16			
301 - 350	8	12	18			
351 - 400	10	14	20			
> 401	12 and notify	16 and notify	22 and notify			



C For HIGH DOSE INSULIN patients: insulin lispro (HUMALOG) injection

1-22 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

Customized Insulin

Nutritional Insulin - LOW DOSE INSULIN Patient

- Nutritional Insulin MEDIUM DOSE INSULIN Patient
- Nutritional Insulin HIGH DOSE INSULIN Patient

Customized Insulin

Customizable Bolus dosing option

Customized Insulin: insulin lispro (HUMALOG) injection

1-22 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

Customized Insulin: insulin lispro (HUMALOG) injection

1-22 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

Customized Insulin: insulin lispro (HUMALOG) injection

1-22 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

Customized Insulin: insulin lispro (HUMALOG) injection

1-22 Units, Subcutaneous, Three Times Daily-With Meals, for 30 days

insulin lispro (H	UMALOG) injection CUSTOMIZABLE patients 1-22 units 1-22 Units	✓ Accept X Canc
32%	o Details 5 ose of 3-66 Units (1-22 Units Three Times Daily-With Meals) exceeds recommended maximum of ason/Comment: Override Reason	f 50.1 Units (0.6 Units/kg) , over by
Reference Links: Report:	1. Lexi-Comp Lab Test Results Component Time Elapsed Value Range Status Commen	sto
	Component Time Elapsed Value Range Status Comment Glucose 8 hours (10/09/16 0350) 113 (H) 65 - 110 mg/dl Final result 1 day (10/08/16 0202) 158 (H) 65 - 110 mg/dl Final result 1 day (10/07/16 2026) 170 (H) 65 - 110 mg/dl Final result 1	
Route: Frequency:	Subcutaneo Subcutaneous Three Times Daily-With TID AC QAM AC Daily before lunch Daily before dinner Night	ly
Admin. Inst.:	For: 30 Obses Obses Days Starting: 10/9/2016 Today Tomorrow First Include Now As Scheduled Dose: Include Now As Scheduled First Dose: Today 1300 Last Dose: Tue 11/8 0800 Number of doses: 90 Scheduled Times: Hide Schedule Adjust Schedule 10/9/16 1300, 1800 Based on system settings, only one day of scheduled times is shown. If patient blood glucose is < 70 mg/dL	Customizable Bolus dosing options
(300 char max Questions:	6): <u>Click to add text</u> (.) <u>Prompt</u> 1. NPO Yes No	
	2. <70 GIVE (UNITS OR OTHER) FOR NPO	
	 4. 91 - 130 GIVE (UNITS) FOR NPO 5. 131 - 150 GIVE (UNITS) FOR NPO 	Fill in the desired dose
	6. 151 - 200 GIVE (UNITS) FOR NPO 🤑	

•

Customize the scale by filling in the doses for 3 columns.

IS:

	Prompt	<u>Answer</u>		
1.	NPO	Yes No		
2.	<70 GIVE (UNITS OR OTHER) FOR NPO	Hypoglycemia protocol		
3.	71 - 90 GIVE (UNITS) FOR NPO			
4.	91 - 130 GIVE (UNITS) FOR NPO			
5.	131 - 150 GIVE (UNITS) FOR NPO		For	
6.	151 - 200 GIVE (UNITS) FOR NPO Ų		NPO	
7.	201 - 250 GIVE (UNITS) FOR NPO 🔑			
8.	251 - 300 GIVE (UNITS) FOR NPO 🔑			
9.	301 - 350 GIVE (UNITS) FOR NPO 🔑			
10.	351 - 400 GIVE (UNITS) FOR NPO 🔑			
11.	>401 GIVE (UNITS OR OTHER) FOR NPO 🔑			
12.				
13.	EATS <= 50% MEAL	Yes No		
14.	<70 GIVE (UNITS OR OTHER) FOR EATS <= 50% MEAL	Hypoglycemia protocol		
15.	71 - 90 GIVE (UNITS) FOR EATS <= 50% MEAL ⊍		_	
16.	91 - 130 GIVE (UNITS) FOR EATS <= 50% MEAL Ų		For	
17.	131 - 150 GIVE (UNITS) FOR EATS <= 50% MEAL ⊍		Eats	
18.	151 - 200 GIVE (UNITS) FOR EATS <= 50% MEAL 🤑		<=50%	
19.	201 - 250 GIVE (UNITS) FOR EATS <= 50% MEAL 🔑			
20.	251 - 300 GIVE (UNITS) FOR EATS <= 50% MEAL 🤑		Meal	
21.	301 - 350 GIVE (UNITS) FOR EATS <= 50% MEAL ⊍			
22.	351 - 400 GIVE (UNITS) FOR EATS <= 50% MEAL 🤑			
23.	>401 GIVE (UNITS OR OTHER) FOR EATS <= 50% MEAL 🔑			
24.				_
25.	EATS > 50% MEAL	Yes No	E	
26.	<70 GIVE (UNITS OR OTHER) FOR EATS > 50% MEAL	Hypoglycemia protocol	For	
27.	71 - 90 GIVE (UNITS) FOR EATS > 50% MEAL 🥹		Eats	
28.	91 - 130 GIVE (UNITS) FOR EATS > 50% MEAL 🥹		> 50%	
29.	131 - 150 GIVE (UNITS) FOR EATS > 50% MEAL ⊍			
30.	151 - 200 GIVE (UNITS) FOR EATS > 50% MEAL 🤑		meal	

Beware of Insulin stacking !

 Recent analysis of hypoglycemic incidences in hospitalized patients revealed insulin stacking as important contributory factor in causing hypoglycemia. Insulin stacking results from additive action of active insulin from prior insulin dose (also called as insulin on board) to the new insulin dose. This can happen with both rapid acting insulins and long acting insulins. Hence it is important to take into consideration the dose and type of insulin patient has received prior to ordering insulin to patient. As a rule of thumb, rapid active insulin (such as Lispro) dose should not be repeated within 3 hours of the last dose of similar insulin unless indicated after careful consideration of insulin on board.

Discharge related to Diabetes .

HOW TO PROVIDE PATIENTS DISCHARGE INSTRUCTIONS WITH **INSULIN ALGORITHMS**.



Manage Orders

Procedure

Charge Capture

Admission

Transfer

Discharge

Surgical

Consult

FYI

Report Viewer

Order Sets

CBC and Differential

DAILY, First occurrence on Sat 10/8/16 at 0300, Last occurrence on Sun 11/6/16 at 0

Magnesium

DAILY, First occurrence on Sat 10/8/16 at 0300, Last occurrence on Sun 11/6/16 at 0

Nursing

I/O Intake and Output

Routine, EVERY SHIFT, First occurrence on Fri 10/7/16 at 2021, For 30 days

OOB ADLIB

Routine, CONTINUOUS, Starting Fri 10/7/16 at 2021, Until Sun 11/6/16, For 30 days

Vital Signs

EVERY 4 HOURS, First occurrence on Sat 10/8/16 at 0000, For 30 days

ED Adult Admit Short Set

Diet

Diet Age: Adult; Diet: Regular

DIET EFFECTIVE NOW, Starting Fri 10/7/16 at 1628, Until Sun 11/6/16, For 30 days Age: Adult

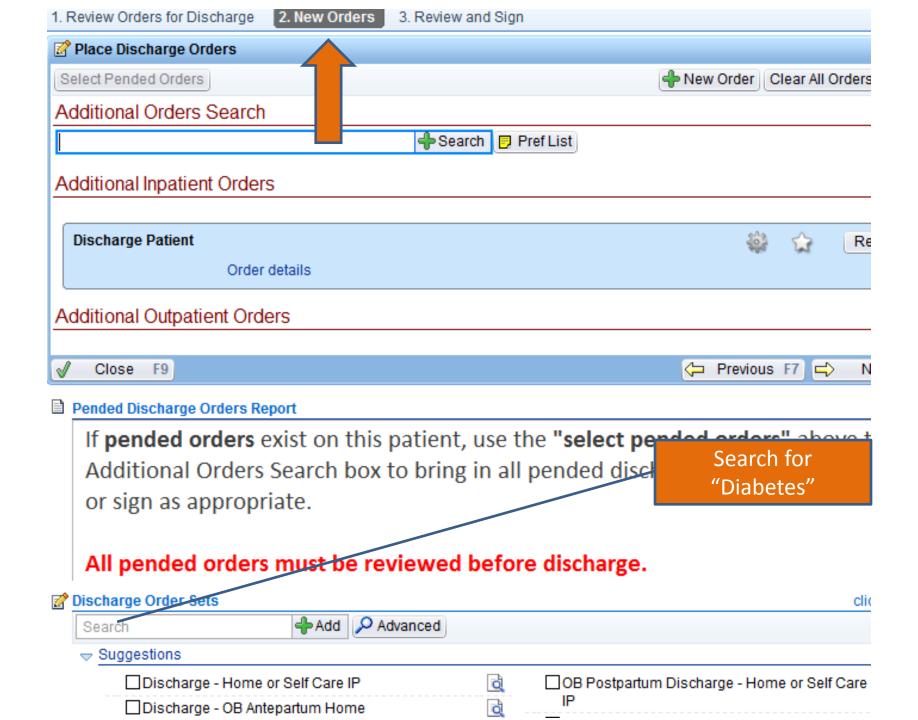
Diet: Regular

Nursing

1	Discharge Orders Checklist		discarded) in order reconciliation prior to dis Orders section when ready to review the per
Notes	Cosign Orders 🖌		2
	Discharge Orders 🗧 🚽		All pended orders mu
88-	Discharge Documentation		Unresulted Labs
Manage Orders	Discharge Summa 🖌		Unresulted Labs
-	Insulin Sliding Scale 🖌		Start
Procedure	H & P Notes Services		10/09/16 0350 Hepatic Function Panel ONCE, R
Charge Capture	Follow-Up S		10/08/16 0851 ACTH Level STAT, STAT
Admission	Audit Trail 🖌 🖌		10/08/16 0300 CBC and Differential DAILY, R
Transfer	After Visit Summary		10/08/16 0300 Basic Metabolic Panel DAILY, R
Discharge	Patient Instructions S Preview AVS		10/08/16 0300 ▷ Magnesium DAILY, R
Surgical			10/07/16 2039 T4, free ONCE, R
Consult	Charges Charge Capture		10/07/16 2028 Thyroid peroxidase antibody ONCE, R
FYI			10/07/16 2027 ACTH Level STAT, STAT
Report Viewer			10/07/16 2026 Thyroid stimulating immunoglobulin ONCE,
Order Sets		1	Allergies/Contraindications

Allergies/Contraindications

1

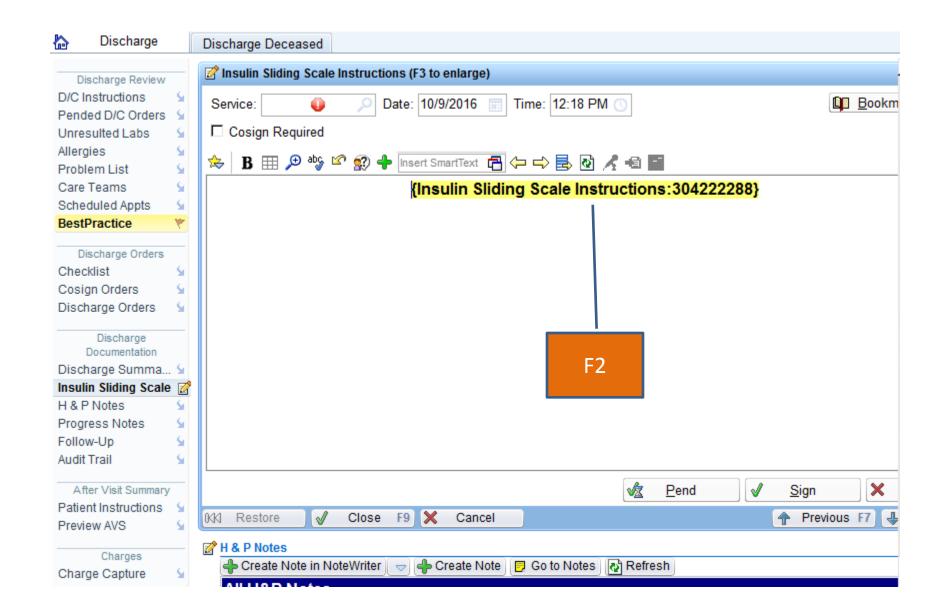


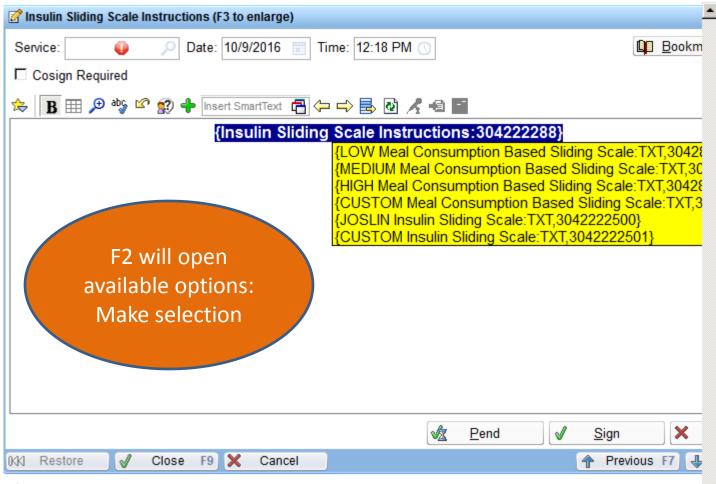
Pended Discharge Orders Report

If **pended orders** exist on this patient, use the **"select pended orders"** above the Additional Orders Search box to bring in all pended discharge orders, then remove or sign as appropriate.

All pended orders must be reviewed before discharge.

📝 Discharge Order Sets		click	to open
diabetes 🕂 Add 🔎 Advanced			
Discharge - Home or Self Care IP Discharge - OB Antepartum Home	0 0 0	 OB Postpartum Discharge - Home or Self Care IP Research Dengue Vaccine Study Discharge Orders 	
Discharge - Transplant Home or Self Care			
Generic Discharge Surgery IP	đ	Sepsis Management Adult IP	đ
Right click on an Order Set to add to favorites.		✓ Open Order Sets X Clear Selection X Remov	e Open
BestPractice Advisories		click	to open





📝 H & P Notes

Service: 🕛 🔎 Da	te: 10/9/2016 📰 Time: 12:18 PM 🕚
Cosign Required	
😞 🖪 🌐 🕫 🕸 🖗 🖗	Insert SmartText 📳 ۻ 🛋 🛃 🔊 🦧 🕫 🌄
	MEDIUM Dose Insulin Patient Scale
	MEDION DOSC INSUM
Blood Glucose (mg/dL)	Eats Breakfast, Lunch & Dinner (not with snacks)
	 Have 15 grams of carbohydrates such as: 4 ounces of juice, 8 ounces of
	glucose tablets
. 70	Wait 15 minutes, check blood glucose again
< 70	 If blood glucose is still less than 70, have an additional 15 grams of carb
71 - 90	 If blood glucose is still less than 70, have an additional 15 grams of carb
71 - 90 91 - 130	 If blood glucose is still less than 70, have an additional 15 grams of carbonal for 2-3 hours have a small snack
71 - 90 91 - 130 131 - 150	 If blood glucose is still less than 70, have an additional 15 grams of carbonal for 2-3 hours have a small snack 3 units
71 - 90 91 - 130 131 - 150 151 - 200	 If blood glucose is still less than 70, have an additional 15 grams of carbon lif you won't be having a meal for 2-3 hours have a small snack 3 units 4 units 5 units 6 units
71 - 90 91 - 130 131 - 150 151 - 200 201- 250	 If blood glucose is still less than 70, have an additional 15 grams of carbon lf you won't be having a meal for 2-3 hours have a small snack 3 units 4 units 5 units 6 units 8 units
71 - 90 91 - 130 131 - 150 151 - 200	 If blood glucose is still less than 70, have an additional 15 grams of carbon lif you won't be having a meal for 2-3 hours have a small snack 3 units 4 units 5 units 6 units
71 - 90 91 - 130 131 - 150 151 - 200 201- 250	 If blood glucose is still less than 70, have an additional 15 grams of carbon lf you won't be having a meal for 2-3 hours have a small snack 3 units 4 units 5 units 6 units 8 units

Insulin Sliding Scale Instructions	; (F3 to enlarge)
	e: 10/9/2016 Time: 12:21 PM ()
Cosign Required	
😓 🖪 🌐 🕫 崎 🖉 💠	nsert SmartText 📳 귿 🛋 🛃 🐼 🦧 🕫 🔜
	CUSTOM Dose Insulin Patient Scale
Blood Glucose (mg/dl)	Eats Breakfast, Lunch & Dinner (not with snacks)
< 70	 Have 15 grams of carbohydrates such as: 4 ounces of juice, 8 ounces of glucose tablets Wait 15 minutes, check blood glucose again If blood glucose is still less than 70, have an additional 15 grams of carbo
	 If you won't be having a meal for 2-3 hours have a small snack
71 - 90	*** units
91 - 130	*** units
131 - 150	*** units
151 - 200	*** units
201- 250	*** units
	vir de se de la companya de la comp
🕅 Restore 🖌 🖌 Close F	9 🗙 Cancel 🛉 Previous F7 🚽
📝 H & P Notes	
🚽 Create Note in NoteWriter 📃 🤜	🚽 🚽 Create Note 📃 Go to Notes 🖓 Refresh

Service: 🛛 🕕	🔎 Date:	10/9/2016	Time: 12:22	2 PM 🕓		🕒 <u>B</u> ook
Cosign Required						
🗧 🖪 🌐 🔎 🕹	🖍 🐒 🕂 Ins	ert SmartText		🙋 🥕 🖘 🔝		
nsulin Slidir						
Glucose Range (mg/dl)	Breakfast	Lunch	Supper	Day Snack	Night Snack	Correction High Glucose
***	***					
	I			I		
				🛛 🔬 🗄	end 🗸	<u>S</u> ign 🗙

HOW TO USE DISCHARGE ORDERSETS FOR DIABETES SUPPLIES :

Diabetes Related Discharge :

1.For diabetes			
related			
discharge			
supplies, search	Record Select		
	<u>S</u> earch: diabetes		
"Diabetes"		Record Name	
Order details	% Type Display Name Adult Diabetes Discharge Prescriptions Adult Diabetes Discharge Prescriptions	DIABETES DISCHARGE PRES	30400009509
	Pediatric Diabetes Discharge Prescriptions	DIABETES DISCHARGE PRES	30400009510
Additional Outpatent Orders	72 Hour Fast IP Endocrinology	ENDOCRINOLOGY IP 72 HOU	30400009084
Additional Output Chi Orders	Adult Subcutaneous Insulin Management (Meal Consum		
	Insulin Pump IP Endocrinology	ENDOCRINOLOGY IP INSULIN	
✓ Close F9	Mixed Meal Test for AP-1 IP Endocrinology	ENDOCRINOLOGY IP MIXED	30400009557
Pended Discharge Orders Report			
If pended crders exist or			
Additional Drders Search		_	
or sign as appropriate.			
0 1 1	2.Select "Adult Diabet	es	
All pended orders must	Discharge Prescription	IS″	
Discharge Order Sets diabetes			
Discharge - Home or Self Car			
Discharge - OB Antepartum H	6 records total, all records loaded.		
Discharge - Transplant Home		Accept	Cancel
Generic Discharge Surgery IP			
	Sepsis Management Adult IP	à l	
Right click on an Order Set to add to favori	tes. 🖉 Open Order Sets 🗶 Clear Selection 🗶 Re	emove Open	
BestPractice Advisories		click to open	
This patient has ischemic stroke an discharge order. Please select the	nd atrial fib/flutter diagnosis. They do not yet have an anticoagulation therap appropriate option below:	y .	

Pended Discharge Orders Report

If **pended orders** exist on this patient, use the "**select pended orders**" above the Additional Orders Search box to bring in all pended discharge orders, then remove or sign as appropriate.

All pended orders must be reviewed before discharge.

📝 Discharge Order Sets		click	to open
Search Advanced	/		
Adult Diabetes Discharge Prescriptions	đ	Adult Subcutaneous Insulin Management (Meal Consumption Based) Endocrinology IP	Q
Discharge - Home or Self Care IP	đ	OB Postpartum Discharge - Home or Self Care	Q
Discharge - OB Antepartum Home	đ	IP	
Discharge - Transplant Home or Self Care		Research Dengue Vaccine Study Discharge Orders	Q
Generic Discharge Surgery IP	đ	Sepsis Management Adult IP	đ
Right click on an Order Set to add to favorites.		✓ Open Order Sets X Clear Selection X Remove	e Open
BestPractice Advisories		click	to open

insulin lispro (HUMALOG) 100 UNIT/ML injection is not on a preferred formulary for the patient's insurance plan. Below are alternatives that might be more affordable. Review their clinical appropriateness.

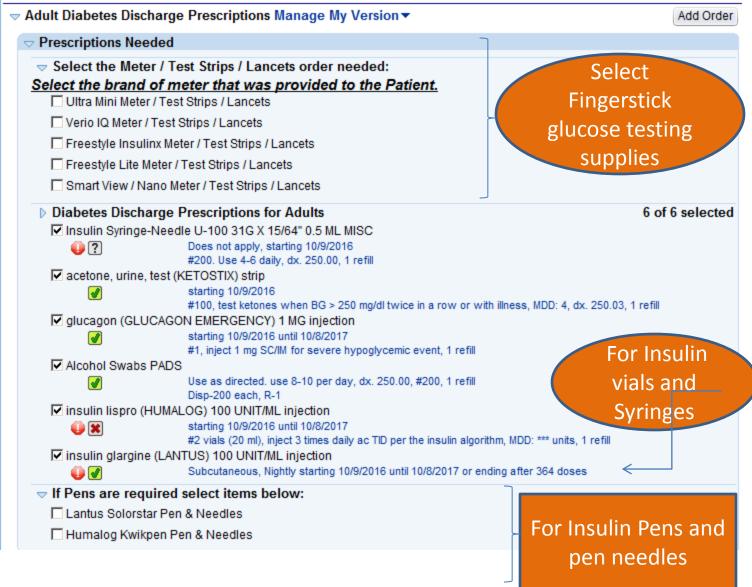
These alternatives are medications that are in the same pharmaceutical subclass as the ordered medication and are on formulary for the patient's insurance plan.

insulin lispro (HUMALOG) 100 UNIT/ML injection			Pharmacy Coverage Sum		
Coverage for current selected plan: MCD	OVR 21 (CMX)				
Plan Formulary MCD OVR 21 Not on Formulary (CMX)	Copay N/A	Covera N/A	age		
Iternative	Source	Formulary	Сорау	Coverage	
NOVOLIN N 100 UNIT/ML SC SUSP	Insulin	Preferred Level 1			
NOVOLIN R 100 UNIT/ML IJ SOLN	Insulin	Preferred Level 1			
HUMULIN 70/30 (70-30) 100 UNIT/ML SC	Insulin	Preferred Level 1			
HUMULIN N 100 UNIT/ML SC SUSP	Insulin	Preferred Level 1			
HUMULIN R 100 UNIT/ML IJ SOLN	Insulin	Preferred Level 1			
HUMALOG 100 UNIT/ML SC SOLN	Insulin	Preferred Level 1			
HUMULIN R U-500 (CONCENTRATED) 5	Insulin	Preferred Level 1			
HUMALOG MIX 75/25 (75-25) 100 UNIT/	Insulin	Preferred Level 1	Select		
LANTUS 100 UNIT/ML SC SOLN	Insulin	Preferred Level 1	Select		
NOVOLOG 100 UNIT/ML SC SOLN	Insulin	Preferred Level 1	appropriate		
NOVOLOG MIX 70/30 (70-30) 100 UNIT/	Insulin	Preferred Level 1			
LEVEMIR 100 UNIT/ML SC SOLN	Insulin	Preferred Level 1	insulin		
HUMALOG MIX 50/50 (50-50) 100 UNIT/	Insulin	Preferred Level 1			
APIDRA 100 UNIT/ML IJ SOLN	Insulin	Preferred Level 1			
NOVOLIN R RELION 100 UNIT/ML IJ SO	Insulin	Preferred Level 1			
NOVOLIN N RELION 100 UNIT/ML SC S	Insulin	Preferred Level 1			
NOVOLIN 70/30 RELION (70-30) 100 UNI		Preferred Level 1			
LANTUS SOLOSTAR 100 UNIT/ML SC S		Preferred Level 1			
HUMALOG MIX 50/50 KWIKPEN (50-50)		Preferred Level 1			
HUMALOG MIX 75/25 KWIKPEN (75-25)		Preferred Level 1			
HUMULIN N KWIKPEN 100 UNIT/ML SC	Insulin	Preferred Level 1			
HUMALOG 100 UNIT/ML SC SOCT	Insulin	Preferred Level 1			

Load More

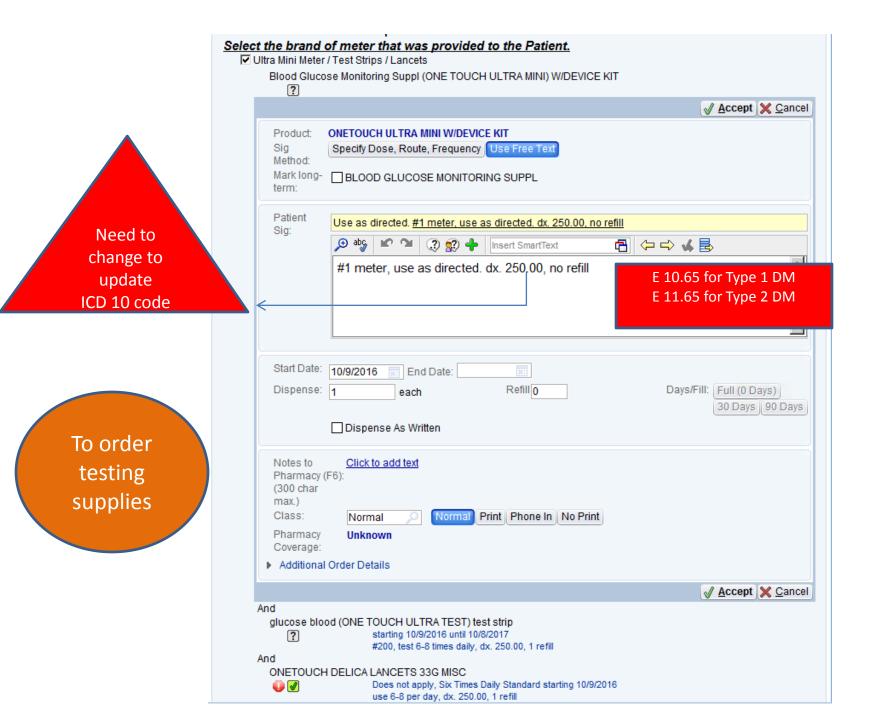
Cancel

Order Sets



6		<u>√ A</u> ccept 🗙 <u>C</u>
Product: Sig	INSULIN GLARGINE 100 UNIT/ML SC SOPN	
Method:	Specify Dose, Route, Frequency Use Free Text	
Mark long- term:		
Patient Sig:	# 5 pens, inject *** units SC q *** , 1 refill	
oly.	🔎 💩 😰 🐿 🔇 🕵 💠 🛛 Insert SmartText	🔁 🗢 🛶 🛃
	# 5 pens, inject *** units SC q *** , 1 refill	
Start Date:	10/9/2016 End Date: 10/8/2017	
Dispense:		Days/Fill: Full (364 Days
		30 Days 90
	Dispense As Written	
Notes to	Click to add text	
Pharmacy (300 char	(F6):	
max.)		
Class: Pharmacv	Normal Orint Phone In No Print	
Coverage:		
Additional	Order Details	
		🚽 Accept 🔀 🤇

To order Insulin Pens with pen Needles



Questions/Comments : Contact: For Community Campus : Lori Gordon ,RN,CDE or CDE on call

> Prashant Nadkarni, MD nadkarnp@upstate.edu