

## Problem

Insulin is rarely prescribed as an absolute dose for a pediatric patient; factors and ratios that require a calculation are necessary. Existing EHR tools for insulin orders, dose calculation and MAR documentation were inadequate for safe insulin medication processes. The previous process used terminology and regimens that were not pediatric specific or updated with the current standard of care.

## Solution

- Through collaboration with Nursing, Pharmacy, & Provider Informatics, solutions were designed to safeguard the insulin medication process.
- Insulin Order
  - Required fields instead of using order comments
  - Order mimics home dosing regimen
- Insulin Dose Calculation
  - Displays order details
  - Calculates insulin dose
  - Facilitates independent double check of a high risk medication
- MAR Documentation
  - Displays calculated dose

## Insulin Order

insulin lispro (HumaLOG) (insulin lispro (HumaLOG) - inpatient dosing regimen)	
Details	Additional Info
Requested start date and time	02/27/2018 11:26 CST
Pharmacy order priority	Routine
Route of administration	Subcutaneous
Drug Form	Injection
Frequency	Unscheduled
Freetext dose	see order comments for correction dosing and carb ratio
PRN	Yes
PRN reason	Diabetes Treatment
Before or After Meals	Before Meals
Dosing Guidelines (not visible to pharmacy)	Carb dosing & correction <b>Type of insulin calculation</b>
Breakfast (1 unit / __ grams of carbs)	15
Mid-morning snack (1 unit / __ grams of carbs)	15
Lunch (1 unit / __ grams of carbs)	15 <b>Carb ratios to be used for meals</b>
Mid-afternoon snack (1 unit / __ grams of carbs)	15
Dinner (1 unit / __ grams of carbs)	15
Bedtime snack (1 unit / __ grams of carbs)	15
eMAR note:	Right Click and Select 'Order Info' for Insulin Dose Details
Constant indicator	No
Stop type	Physician Stop
Next dose date and time	02/27/2018 11:26 CST
ISF Correction	q 4hrs PRN
Insulin Correction Threshold (mg/dL)	200
Target Blood sugar (mg/dL)	220 <b>Information for correction dosing</b>
Insulin Sensitivity factor	200
Pharmacy order type	1
<b>Comment</b>	
5 years of age and older *Use Insulin Regimen Calculation form to calculate individual doses* **If pen, prime with two units**	

## Insulin Dose Calculation

## MAR Documentation