Health PEI
One Island Health System

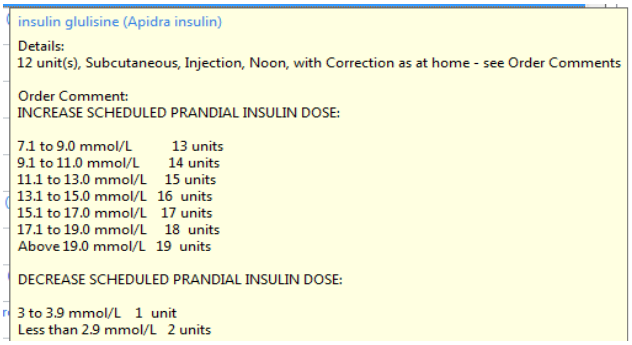
Safer Practice Notice

Topic: Misinterpretation of Insulin Correction Dose

Situation:

A transcription error in the entry of insulin correction orders in CIS resulted in a patient being administered incorrect doses of meal time insulin.

- The diabetic education center (DEC) provided the home insulin dose correction scale to the patient with total calculated doses (mealtime + correction dose) on the sheet.
- The totaled insulin values were erroneously entered as the correction doses on the patient's BPMH upon admission to acute care. The correction doses were converted to inpatient orders during the Med Rec process.
- The orders were interpreted as either sliding scale or correction doses depending on the nursing staff administering the insulin at meal time and were not clarified until 6 days into the patient's admission.



insulin glulisine (Apidra insulin)

Details:
12 unit(s), Subcutaneous, Injection, Noon, with Correction as at home - see Order Comments

Order Comment:
INCREASE SCHEDULED PRANDIAL INSULIN DOSE:

7.1 to 9.0 mmol/L 13 units
9.1 to 11.0 mmol/L 14 units
11.1 to 13.0 mmol/L 15 units
13.1 to 15.0 mmol/L 16 units
15.1 to 17.0 mmol/L 17 units
17.1 to 19.0 mmol/L 18 units
Above 19.0 mmol/L 19 units

DECREASE SCHEDULED PRANDIAL INSULIN DOSE:

3 to 3.9 mmol/L 1 unit
Less than 2.9 mmol/L 2 units

Background:

- A phased in approach to insulin correction dosing was introduced into acute care settings from 2013-2017.
- There were several years where insulin orders in CIS could be entered as sliding scales or correction doses.
- In February 2017 all acute care settings went "live" with insulin correction dosing and staff education sessions were provided. Insulin sliding scale templates were removed from CIS at this time.

Assessment:

- There was a recognized challenge of incorporating patient specific correction doses intended for home use into the CIS upon acute care admission.
- There was failure to recognize potentially ambiguous insulin orders where the orders did not align with typical correction dose orders in CIS.
- The orders were not clarified/corrected through the Med Rec process or during pharmacy verification.
- There was failure in having a consistent and correct interpretation of the insulin order at meal time administration.

Recommendation:

- DEC has updated the templates used for home insulin correction dosing to align with acute care correction dose templates in CIS.
- Promote review of order comments by prescribers when completing Med Rec and by pharmacists during order verification.
- Continuing to promote use of standardized correction dose PowerPlans.
- Explore the option of therapeutic interchange to standardized correction doses on admission to acute care.
- Gain insight into the frequency of entering customized insulin orders into CIS.
- Continuing staff education on correction dose adjustment.
- Proposal of a working group to review the CIS insulin correction dose templates.
- Reporting of this incident to ISMP Canada

For more information please contact:

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