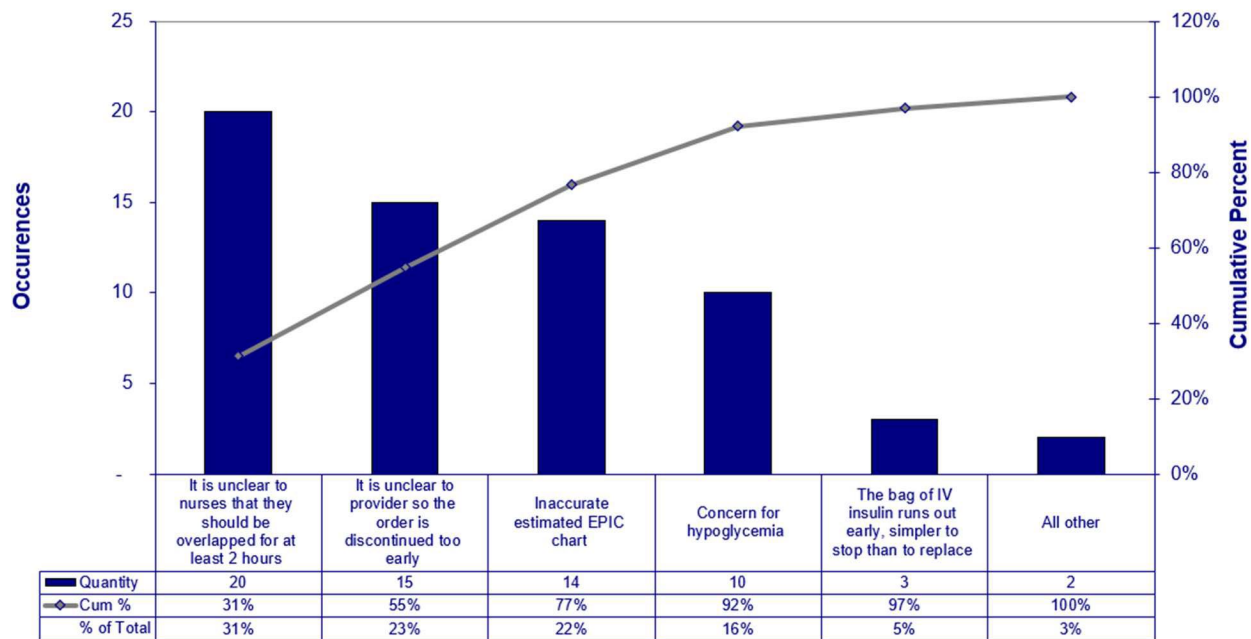


Supplemental Material:

Supplemental Figure 1.



Nurse Survey Root Cause Analysis Pareto Chart

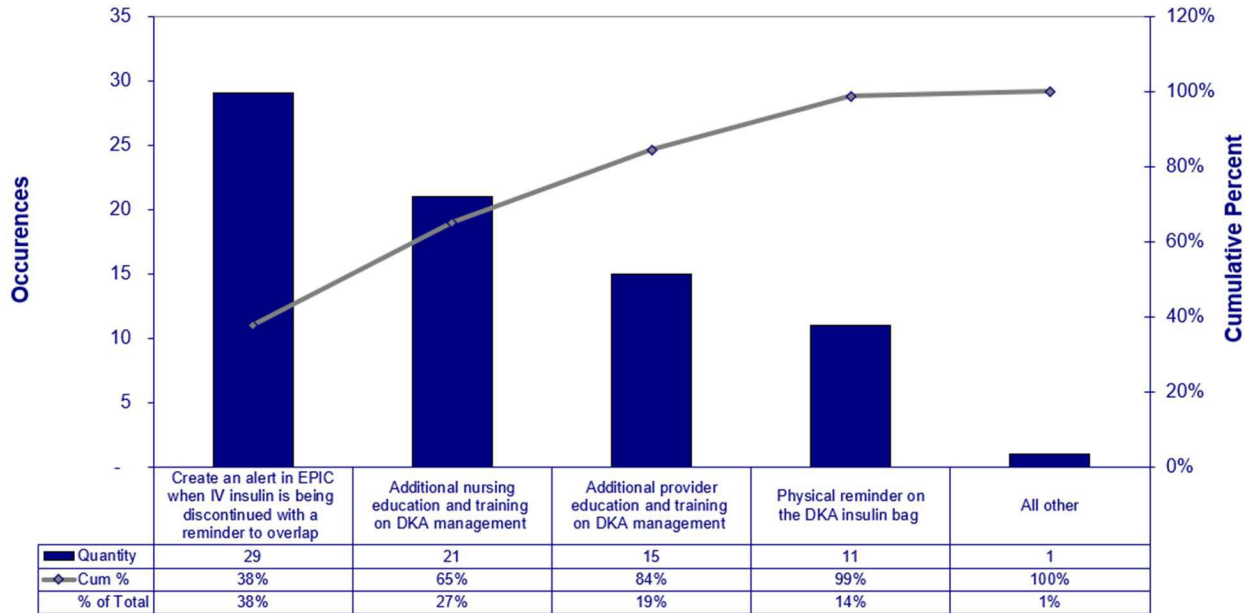
Abbreviations:

CUM: Cumulative

IV: intravenous

Legend: Pareto Chart showing the frequency of 45 hospital nurses' answers to an online survey asking: "From your experience, why is the intravenous and subcutaneous insulin overlap sometimes <2 hours during the treatment of DKA?". Respondents could choose multiple responses.

Supplemental Figure 2.



Nurse Survey Recommended Intervention Pareto Chart

Abbreviations:

CUM: Cumulative

IV: Intravenous

DKA: Diabetic Ketoacidosis

Legend: Pareto chart showing the frequently of 45 hospital nurses' responses to an online survey asking: "In your opinion, what would be the best intervention to decrease the rates of IV and SQ insulin overlap <2 hours?". Respondents could choose multiple responses.

Dextrose Containing Fluids:

In the BPA (see figure 1) "Step 2" referred to an initial observation that there was inconsistency

in the timing of discontinuing dextrose-containing fluids used in the treatment of DKA. This variation occasionally resulted in episodes of hyperglycemia if dextrose-containing fluids were continued for an extended period after IV insulin was stopped, or potential risk of hypoglycemia if fluids were stopped prematurely while IV insulin administration persisted. Although the intervention incorporated this reminder, over time it was observed that the occurrence of what was defined as errors often had a valid clinical rationale (such as fluid restriction in specific clinical scenarios like end stage renal disease or heart failure). As a result, measurement of dextrose-containing fluid errors was not continued into the post-intervention phase, though in general the recommendation to discontinue dextrose containing fluids after stopping IV insulin is valid.