Problem:
Baseline data determined that patients’ blood sugars (CBG’s) were being checked around 6 a.m. and nurses were administering sliding scale insulin at 6:30 a.m. Breakfast trays were being delivered about 75 minutes later.

Evidence:
The pharmacokinetics of regular insulin and best practices noted that the sliding scale insulin should be given within 15 minutes of when the patient eats breakfast.

Strategy:
The Greenbelt Team utilized Lean/Six Sigma tools for a Kaizen Event focused on diabetic patients on a general medical unit, having low blood sugars.

Practice Change:
Based on the data and brainstorming, recommendations for change were made:
- The day shift measured blood sugars and administered insulin.
- The night staff assumed responsibility for wound care which had been part of the day staff’s responsibilities.
- One CA delivers the meal trays, allowing others to prepare the patients for their meals.
- Nurses are notified to administer insulin within the 15 minute window.
- Supper trays moved from 4:30 pm to 6:30 pm.
- Pharmacy changed the time of insulin administration.

Evaluation:
With enthusiasm, the members of the Lean/Six Sigma Kaizen team set about implementing these recommended changes. This required making sure that everyone involved knew the new processes. It was a great success with overwhelming staff participation.

Results:
Insulin administration to meal time went from 81 minutes to 9 minutes with implementation of the new processes.

Recommendations:
The specific times for CBG measurement, insulin administration, and breakfast tray delivery will be monitored on an ongoing basis.

Lessons Learned:
Utilizing the Lean/Six Sigma methodology and tools for implementing Inpatient Diabetes EBP guideline was very successful.
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