

IMPACT OF FLAGGING DIETARY TRAYS AND TIMELY APPETITE ASSESSMENT ON OPTIMAL GLUCOSE CONTROL

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Purpose

The purpose of this project was to determine the effect of flagging diabetic trays for RN delivery, timely appetite assessment, and appropriate dosing of insulin on optimal glucose control.

Background

Studies have shown that understanding principles of physiologic insulin replacement is the key to improving diabetic care. In hospitalized patients administration of hypoglycemic agents, is complicated by unpredictable eating patterns because of anorexia, nausea or fasting for diagnostic tests. In patients with variable intakes, insulin should be administered based on the portion of the meal eaten (prandial dosing). For these reasons having the diabetic trays flagged and delivered by nurses might result in a more timely appetite assessment and administering the appropriate dose of insulin.

Method

Twenty consecutive charts of diabetic patients admitted during June 1st and 22nd were audited for 48 hours beginning 24 hours after admission to a D2 bed Intermediate Intensive Care Unit at Stanford Hospital. Abstracted data included, age, sex, diagnosis, new onset or chronic diabetes, number of glucose tests done, number of times appetite assessment was documented, incidence of hypoglycemia with blood sugar <70mg/dl, incidence of hyperglycemia with blood sugar >180mg/dl, incidence of blood sugars 70-180mg/dl, number of times percent of meal eaten was documented, and number of times a diabetic care plan and education were documented. The small test of change was implemented between July 14th and August 4th. In-service instructions and a step by step algorithm were given to the staff. Dietary office collaborated to leave diabetic trays to be left on the cart for RN delivery. After implementation, the same data were abstracted from an additional twenty consecutive charts of diabetic patients admitted during July 14th and August 4th.

Results

Of the 20 patients in the pre-implementation data, there were 11 males and 9 females. Eight were chronic diabetics and 12 patients had new onset diabetes. 127 glucose tests were done with an average of 6.35 tests per patient. Of the 20 patients in post-implementation data, there were 10 males and 10 females. Ten were chronic diabetics and 10 patients had new onset diabetes. 160 glucose tests were done with an average of 8 tests per patient. The results for both the pre and post implementation and the differences were as follows:

	Pre	Post	Difference
Incidence of hypoglycemia <70mg/dl	4.2%	3.8%	0.4%
Incidence of hyperglycemia >180mg/dl	40.2%	39%	1.2%
BG between 70-180 mg/dL	56%	58%	2%
Appetite assessment documented	19.2%	51.6%	32.4%
Percent meal eaten documented	31%	53.3%	22.3%
DM care plan/education documented	2.1%	10.4%	8.3%

Conclusions

There were no significant changes on blood glucose levels. However, there were improvements in documentation of appetite assessment, percent meal eaten, and care plan and education. Overall changing the process supports the vital role of nursing assessment and critical thinking surrounding treatment and intervention of diabetes management.

Key Words: Flagging Diabetic Tray

References

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