Using a Mentoring Approach to Implement an Inpatient Glycemic Control Program in U.S. Hospitals

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Abstract

The Arnernberg Center for Health Sciences at Eisenhower Medical Center recruited an interdisciplinary faculty of seven diabetes experts who helped plan the performance improvement initiative and worked directly with the sites as faculty mentors. The faculty included two inpatient endocrinologists, two hospitalists with expertise in inpatient glycemic control, and three advanced practice diabetes specialty nurses (APDN) with expertise in implementing inpatient glycemic control programs.

Methods

The The Problem

• Hyperglycemia in hospitalized patients with or without diabetes has been linked to adverse outcomes including infections, prolonged hospital length of stay, and increased mortality, costs and risk of postoperative complications.

• Despite recommendations and evidence supporting the benefits of inpatient glycemic control for enhancing patient safety and improving patient outcomes, the management of inpatient hyperglycemia remains poor and the use of sliding scale insulin is pervasive.

• Improving inpatient glycemic control requires many years to implement required infrastructure, reeducate and coordinate medical, nursing, dietary and pharmacy staff, and needs support from risk management and hospital administration.

• This poster describes a two year effort assisting ten hospitals to implement a glycemic control program through the use of an external mentoring program.

Results

Thirteen applications were reviewed based on their organization demographics, medical center, ACR, and facility. Each site participated in conferences in April 2012. Common implementation challenges included diabetes educators, inpatient formulary, and resistance to change. Each site submitted data on their hospital formulary to prevent look alike-sound alike insulin errors. One site reduced the number of insulin products on their hospital formulary to prevent look alike-sound alike insulin errors and worked with their pharmacist’s division to implement a tool that automated the insulin administration of the patient. One developed a perinatal insulin order set. In addition, one institution created a tool that embedded timely data for nutritionists and endocrinologists in their electronic medical record. This tool was used to facilitate the transition of patients from one hospital to another.

Results cont.

Table 1: Location of Selected Institutions

Table 1: Demographics of the Selected Institutions

Table 2: Performance Improvement Projects

Table 3: Revising Hospitals' Accomplishments

Table 4: Revising Hospitals' Accomplishments

Results cont.

Conclusions

• Changing the culture of inpatient glucose management is a complex institutional challenge.

• Our initiative of expert mentors who performed site visits, analysis of institutional challenges and guided goal setting allowed hospitals to be successful in overcoming inertia and barriers to change.

• Every institution was successful in implementing improved practices whether it was order sets, data collection and reporting or organization of their teams.

• These changes to their institution will continue to promote their goals as well as provide the resources for the future.

Limitations

• Only a limited number of hospitals applied to participate in the initiative and those hospitals self-selected commitment to the project.

• Project’s short time frame for evaluating clinical and economic outcomes.

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