

Title of Intervention: Improving Diabetes Management in the Primary Care Setting

Intervention Strategies: Provider Education

Purpose of the Intervention: To improve provider response to high glucose levels

Population: Primary population: health care providers; secondary population: individuals with Type 2 diabetes

Setting: Grady Medical Clinic; worksite-based

Partners: None mentioned

Intervention Description:

- **Provider Education:** For the three years of the intervention, all medical residents and faculty members were given an annual orientation and lectures about management of Type 2 diabetes, emphasizing early health care provider action. Each year all residents were given pocket cards that restated treatment goals and therapeutic thresholds as well as letters that provided feedback about the completeness of their visit notes. Providers were assigned to either a control group or one of three interventions: hard copy computerized reminders that provided patient-specific recommendations for management, individual face-to-face feedback on performance or both. The computerized reminders were placed on the top of medical charts at the beginning of the visit. The reminders included a flowsheet showing sequential laboratory values to assist in decision-making, weight, blood pressure, medications and recommendations for treatment. The recommendations for treatment were individualized and took into account each patient's medications and recent clinical measurements. Feedback sessions took about 5 minutes and were scheduled every two weeks. A specialist gave feedback to the resident based on report cards that showed individual provider actions or outcomes of the patients seen by that provider. Emphasis was placed on achieving American Diabetes Association goals and on acting when values were abnormal during visits. The sessions were designed to be interactive and were scripted to elicit responses from the residents.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Research assistant
- **Training:** Not mentioned
- **Technology:** Computer algorithm program for individualized recommendations
- **Space:** Rooms to conduct measurements, rooms to carry out face-to-face interviews with providers
- **Budget:** Not mentioned
- **Intervention:** Lab tests, screening equipment, computerized printed reminders
- **Evaluation:** Statistical software

Evaluation:

- **Design:** Randomized controlled trial
- **Methods and Measures:** Report cards used to assess provider behavior were based on blood pressure, hemoglobin A₁C, lipids and capillary glucose measurements taken at each visit.

Outcomes:

- **Short Term Impact:** Not measured
- **Long Term Impact:**
 - During the intervention, all intervention groups showed significant improvement of A₁C compared to the control group.
 - Systolic blood pressure improved significantly with both the feedback + reminders and feedback-only groups.
 - LDL cholesterol improved significantly with all of the intervention groups, with the change being the greatest in the feedback + reminders group.
 - Performance feedback was associated with reductions in glucose and blood pressure levels.

Maintenance: Not mentioned

Lessons Learned: Partnering generalists with diabetes specialists may be important to improve diabetes management in other primary care settings.

Citation(s):

Phillips LS, Ziemer DC, Doyle JP, et al. An endocrinologist-supported intervention aimed at providers improves diabetes management in a primary care site. *Diabetes Care*. Oct 2005;28(10):2352-2360.