Computerized Prompting and Feedback of Diabetes Care: A Review of the Literature

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Abstract

Background:

The objective of this study was to assess published literature on computerized prompting and feedback of diabetes care as well as to identify opportunities to strengthen diabetes care processes.

Methods:

Medline (1970–2008), Cumulative Index to Nursing and Allied Health Literature (1982–2008), and Cochrane Central Register of Controlled Trials (4th quarter 2008) were searched, and reference lists from included articles were reviewed to identify additional studies. Patient sample, clinician sample, setting, duration of the trial, intervention description, control description, and results were abstracted from each study.

Results:

Fifteen trials were included in this review. The following elements were observed in the interventions: general prompt for a particular patient to be seen for diabetes-related follow-up (5 studies), specific prompt reminding clinicians of particular tests or procedures related to diabetes (13 studies), feedback to clinicians in addition to prompting (5 studies), and patient reminders in addition to clinician prompts (5 studies). Twelve of the 15 studies (80%) measured a significant process or outcome from the intervention.

Conclusions:

The majority of trials identified at least one process or outcome that was significantly better in the intervention group than in the control group; however, the success of the information interventions varied greatly. Providing and receiving appropriate care is the first step toward better outcomes in chronic disease management.

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Abbreviations: (HbA1c) hemoglobin A1c

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