Title of Intervention: Automated voice messaging systems as an addition to outpatient diabetes care

Intervention Strategies: Individual Education

Purpose of the Intervention: To identify diabetes-related health problems that need to be followed up by a medical professional

Population: General diabetes population, most of whom were economically-disadvantaged

Setting: Home-based

Partners: None mentioned

Intervention Description:
- Individual Education: Participants received weekly automated voice messaging (AVM) calls for one month. The AVM protocol included requests for information and optional educational messages regarding diabetes care. Some of the health promotion messages addressed diabetic eye care, foot care, cardiovascular health and management of sick days. The AVM system gathered individual information about the following topics: 1) diabetic symptoms that may be predictive of poor glucose control and adverse health outcomes, 2) problems with glucose monitoring and foot care and 3) adherence to diet and medication schedules. A nurse health educator reviewed the output and, if serious health problems were identified, followed up with the participant. Transcripts of follow-up calls were given to the collaborating physician through a tele-fax immediately after contacting each participant. All of these participants were referred to their primary care physicians.

Theory: Not mentioned

Resources Required:
- Staff/Volunteers: Diabetes nurse educator
- Training: AVM system output for the diabetes nurse educator
- Technology: AVM system, tele-fax
- Space: Not mentioned
- Budget: Not mentioned
- Intervention: Not mentioned
- Evaluation: Data from AVM system

Evaluation:
- Design: Cohort
- Methods and Measures:
    - Participants' ability to respond to AVM calls represented use of the system.
    - Data from AVM was compared to reported self-care problems and detected health problems.

Outcomes:
- Short Term Impact: A significant percentage of participants reported adverse health and self-care problems and opted to listen to automated preventive care messaging.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: An effectively designed AVM calling system may decrease the costs of diabetes care by allowing medical centers to contact large numbers of patients for monitoring and preventative care with less investment of staff time.

Citation(s):
Piette, J. D. and C. A. Mah (1997). "The feasibility of automated voice messaging as an adjunct to diabetes outpatient care." Diabetes Care 20(1): 15-21.

Piette, J. D. (1997). "Moving diabetes management from clinic to community: development of a prototype based on automated voice messaging." Diabetes Educ 23(6): 672-80.