

Title of Intervention: The CADRE Study Group

Intervention Strategies: Provider Education

Purpose of the Intervention: To improve resident physicians' confidence and skills in providing effective dietary counseling for patients with high blood cholesterol

Population: Primary population: Internal medicine residents actively involved in a continuity care clinic; Secondary population: patients at the continuity care clinics aged 18 to 75 with high cholesterol

Setting: Continuity care clinics of internal medicine at seven community and university medical centers in four states: West Virginia, North Carolina, Georgia and Pennsylvania; health care facility-based

Partners: Community medical centers, university community medical centers, internal medicine residency programs

Intervention Description: Four groups were created: an Education group, a Prompt group, an Education and Prompt group and a Control group.

- **Provider Education:** Two 1-hour educational sessions focused on teaching appropriate behavior modification counseling skills, providing a time-efficient approach to counseling and supplying the necessary counseling tools. The education component focused on counseling skills, the use of behavior modification techniques, diet knowledge and specially prepared patient education materials. Counseling was focused on pathophysiology, epidemiology and National Cholesterol Education Program practice guidelines. Education component materials included a "contract" that could be signed by the patient and provider and saved in the chart, an easy dietary assessment tool that contained matching dietary advice, a wallet card for the patient to track changes in diet and blood cholesterol levels, a recipe book designed for regional, low-fat cooking and a series of pamphlets on specific issues related to diet and cholesterol that could be selected to meet individual patient's needs. In the prompt component, counseling was encouraged by listing blood cholesterol levels in patient charts.

Theory: Social Cognitive Theory, Transtheoretical Model

Resources Required:

- Staff/Volunteers: Educators
- Training: Not mentioned
- Technology: Not mentioned
- Space: Not mentioned
- Budget: Physician education component approximately \$7 per resident
- Intervention: Materials for fingersticks, physician educational materials
- Evaluation: Questionnaires, interviewers

Evaluation:

- Design: Randomized controlled trial
- Methods and Measures:
 - Resident physicians' knowledge, attitudes and self-reported behaviors were assessed.
 - Residents' behaviors were assessed by exit interviews with patients.
 - Patients' knowledge, attitudes, behaviors and finger stick blood cholesterol levels were measured.

Outcomes:

- **Short Term Impact:** The educational program improved providers' confidence in providing dietary counseling. The prompting intervention significantly increased the frequency of provider counseling. The prompting intervention also increased the likelihood that patients would try to change their diets. When both interventions were combined, most outcomes were better,
- **Long Term Impact:** Cholesterol levels decreased only marginally and were no different among groups at 10-month follow-up.

Maintenance: Not mentioned

Lessons Learned: Not mentioned

Citation(s):

Evans, A. T., L. Q. Rogers, et al. (1996). "Teaching dietary counseling skills to residents: patient and physician outcomes. The CADRE Study Group." *Am J Prev Med* 12(4): 259-65.