

**Title of Intervention:** Tailored interventions to enhance smoking cessation

**Intervention Strategies:** Provider Education, Individual Education, Supportive Relationships

**Purpose of the Intervention:** To encourage African Americans to stop smoking

**Population:** African American patients aged 18 years and older

**Setting:** Lincoln Community Health Center (LCHC) in Durham, North Carolina

**Partners:** None mentioned

**Intervention Description:** Three interventions were used: 1) provider intervention, 2) provider intervention and tailored print communications and 3) provider intervention with tailored print communications and telephone counseling.

- **Provider Education:** The Medical Record (TMR), a comprehensive computer system with a computerized health maintenance tracking system developed at Duke University Medical Center, was adapted to meet the needs of the LCHC. Working with providers at the LCHC, a tailored, computerized prompting system that generated printed prompts attached to the patient's chart was developed. The prompt form contained patient demographics, an area for providers to record their provider identification numbers and clinic name and age- and sex-specific prompts for tests or procedures (e.g., mammograms, Pap test). In addition, there are cues to prompt clinicians to provide patients with stage-based behavioral messages. Providers were trained and asked to follow the Ask-Advise-Assist-Arrange Follow up model developed by the National Cancer Institute to promote smoking cessation. All counselors were trained using a standardized protocol that included a week of small group discussion about addiction and smoking behavior, issues related to quitting and special concerns specific to the population. Counselors listened to the project manager conduct calls, after which they practiced among themselves and then called senior project staff who rated the callers' performances and provided feedback. The counselors also were provided a notebook of articles and other materials to read. Regular meetings of the counselors were held every two weeks initially and then monthly to review counseling strategies and provide feedback. Call monitoring was done regularly by project staff to assure that the counseling was conducted as intended.
- **Individual Education:** Tailored print communications (TPCs) were sent to patients around the time of their birthdays. The first was an oversized, tailored birthday card with a picture of the clinic staff on the cover; the second version was a personalized Healthy Birthday newsletter. Both TPCs were written at the 5th grade reading level. In addition, the messages were written with the realities of the clients' lives in mind. For example, the section on transportation barriers to a follow up doctor's appointment included information about buses and bus routes. Messages about life stresses reflected the fact that a majority of the clients were low income or indigent. Religious and familial themes also were included. In addition, the art was especially tailored for African Americans, using graphics designed by a local African American artist. The graphics were tailored for gender so that men and women received different images. The TPCs were pretested extensively with the target population. Data from the baseline surveys were combined with information from TMR and a library of specific messages designed to respond to different variables and provide specific recommendations to help participants think about their smoking and quit smoking. The categories of tailoring variables from which the messages were derived included but were not limited to barriers to quitting smoking, previous attempts to quit, addiction status, pros and cons of smoking, smoking characteristics (which were addressed individually), and several patient characteristics, such as race, gender, and age. The tailoring variables resulted in over seven billion possible combinations of messages for any given smoker. This number was based on the fact they wrote special messages for each of 18 possible barriers (given three response options) and 18 facilitators (given three response options), as well as five stages of change, four levels of readiness to quit, and two levels of addiction.
- **Supportive Relationships:** A structured counseling protocol for smokers was developed. The protocol was paper-based and provided different messages depending on such factors as a person's reasons for quitting or not quitting, whether he/she was addicted and previous quit attempts. Men received only one call per year. Women could receive two calls if they were due for breast cancer or cervical cancer

screening and were also smokers. The female counselor identified the smoker's current smoking status and attempted to motivate stage-based movement towards quitting. The counselor also was expected to identify and attempt to overcome individual barriers to quitting smoking and to reinforce reasons for quitting. The average call length was about six minutes.

**Theory:** Transtheoretical model, PRECEDE-PROCEED

**Resources Required:**

- Staff/Volunteers: Health care providers, counselors
- Training: Not mentioned
- Technology: Computer, printer
- Space: Room for training sessions, counseling phone calls, education sessions
- Budget: Not mentioned
- Intervention: Training materials, computerized health maintenance tracking and prompt system, counseling protocol, tailored birthday cards
- Evaluation: Telephones

**Evaluation:**

- Design: Prospective randomized controlled trial
- Methods and Measures: Quit rate data was collected through telephone interviews.

**Outcomes:**

- Short Term Impact: Not measured
- Long Term Impact: Those who received the provider prompting intervention and tailored print communication were more likely to quit at follow up than those who were in the provider prompting intervention group alone or those who received all three levels of the intervention (which remained true, even after controlling for various demographic and psychosocial variables).

**Maintenance:** Not mentioned

**Lessons Learned:** Not mentioned

**Citation(s):**

Lipkus, I. M., P. R. Lyna, et al. (1999). "Using tailored interventions to enhance smoking cessation among African-Americans at a community health center." *Nicotine Tob Res* 1(1): 77-85.