

Cancer Screening

A Challenge in Today's Changing Practice of Medicine

CANCER SCREENING examinations are recommended by many organizations, but frequently they are not performed.¹ Ongoing National Cancer Institute-funded research indicated the willingness of primary care practices to be involved in a project that would increase their ability to provide early cancer detection services.²

In 1990, the National Cancer Institute, through its competitive process, awarded grants for intervention studies to increase screening rates in physicians' practices. The 5 studies are known as Prescribe for Health. These major studies asked whether interventions by intermediary organizations improve the adoption, maintenance, and quality of early cancer-detection activities in primary care practices. The results of 4 of these studies are published in this issue.

Across the 4 studies, intervention research occurred in a total of 201 practice settings. The intermediary organizations varied. They included a regional network of physicians in federally supported community health centers³; a health maintenance organization serving low- to moderate-income African Americans and, to a lesser extent, Hispanic populations⁴; and nonacademic primary practice offices.^{5,6} Systems to promote screening ranged from traditional chart reminders to incorporating new technology through use of a patient-initiated, touch-sensitive computer system.⁶

*See also pages 317, 320, 329,
338, and 346*

The research projects highlight the challenges faced when preventive health and cancer screening are incorporated into clinical practice. The researchers reinforce awareness that the environment in which medicine is practiced has a significant impact on the success of cancer screening. Certain factors were identified that determine the success of a cancer screening program. They include stability of the medical staff, stages of readiness for change by the physicians, and the relationship between the number of health maintenance visits and incorporation of routine screening activities. These factors are of increased importance in today's constantly changing medical practice environment.

The variety of settings reflects the complexity of medical practice today. Many changes in practices are beyond the control of the providers, frequently are not predicted, and at times are not expected. Factors such as provider stability and practice organization affect the ability

to institute, incorporate, and institutionalize a screening program, as demonstrated by Dietrich et al.³ Providers have a major impact on what services are offered, and staff stability affects reliability of the activities. After patients are screened, physicians must be able to follow up and refer those patients who need it, as a part of providing quality medical care.

Staff must be considered an essential part of any cancer screening office system that is implemented.³ The researchers emphasize the detrimental impact on office policies and procedures when key physician and staff changes occur. Having a committed and trained staff helps to assure that patients receive preventive health and cancer screening services.

Most research on cancer screening services for low-income and minority patients has been conducted in public-sector, hospital, or academic medical practices. With the ongoing changes in health care financing and the increasing numbers of patients enrolled in managed care programs, Manfredi et al⁴ point out that more low-income patients are using private medical care. They cite instability in the health care system and in physicians' offices, as well as uncertainty about health insurance, as having an impact on screening rates. Many unanswered questions remain. Effective interventions in these practices will require new approaches and adjustments on the part of practitioners, office staffs, patients, and health care finance systems.

Preisser et al⁵ found a wide range of commitment and interest, on the part of physicians and their office staffs, in setting up a smoking cessation program. They explain variations by using the transtheoretical model of change, a conceptual framework for understanding individual behavior change.⁷ This model is based on observations that individuals considering or undergoing behavioral change pass through a predictable sequence of changes: precontemplation, contemplation, preparation, and action. The relationship of screening to the physician's stage of contemplation of changing his or her practice behavior regarding preventive services may explain why screening recommendations have not been incorporated routinely. The association between successful screening, age, and sex of the physician, as well as the patient, is noteworthy. These findings point to opportunities for additional research to identify methods for increasing physicians' readiness for change.

Results showing that the age of the patient can affect the rate of screening, especially for cervical and breast cancer, are important.⁵ The largest cohort of the population in US history is moving into the middle

years. This population, male and female, will be entering into the recommended age groups for most routine cancer screening. The health care system's ability to incorporate screening will be essential to detect cancer at its earliest stages.

Technology has become an integral part of the lives of all Americans; new uses, more advanced systems, and new programs appear regularly. More children in their schools and retired persons through their leisure activities are becoming computer literate. With the exception of preparing office bills, medical practices have been slower adapting new technology. Computers have unlimited capability to personalize information, develop preventive health plans, and provide screening services. The study by Williams et al⁶ illustrates how technology can complement human interaction and enhance medical care. Medicine must stay abreast of advances, through medical and health professional schools, hospitals, and continuing medical education programs.

In summary, these projects contribute to medicine's knowledge of the challenges created within the changing medical practice environment. Through randomized, controlled trials, the Prescribe for Health projects demonstrate that interventions, in a variety of primary care practices, can increase some cancer screening rates. Many variables affect the success of primary care office interventions. Knowing that early detection helps reduce cancer morbidity and mortality rates, family physicians and other primary care providers should

establish procedures to increase cancer screening in their practices.

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REFERENCES

1. US Dept of Health and Human Services, Public Health Service. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: US Dept of Health and Human Services; 1991:530-531.
2. McPhee SJ, Bird JA, Fordham D, Rodnick JE, Osborn EH. Promoting cancer prevention activities by primary care physicians. *JAMA*. 1991;266:538-544.
3. Dietrich AJ, Tobin JN, Sox CH, et al. Cancer early-detection services in community health centers for the underserved: a randomized controlled trial. *Arch Fam Med*. 1998;7:320-327.
4. Manfredi C, Czaja R, Freels S, Trubitt M, Warnecke R, Lacey L. Prescribe for Health: improving cancer screening in physician practices serving low-income and minority populations. *Arch Fam Med*. 1998;7:329-337.
5. Preisser JS, Cohen SJ, Wofford JL, et al. Physician and patient predictors of health maintenance visits. *Arch Fam Med*. 1998;7:346-351.
6. Williams R, Boles M, Johnson RE. A patient-initiated system for prevention: a randomized trial in community-based primary care practices. *Arch Fam Med*. 1998;7:338-345.
7. Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. *J Consult Clin Psychol*. 1983;51:390-395.

Clinical Pearl

Basal Cell Cancer Associated With Other Cancers

Patients, particularly those younger than 60 years, who have had a basal cell carcinoma are more susceptible to additional basal cell carcinomas and malignant melanoma, as well as to several other cancers (cancers of the lip, salivary glands, larynx, lung, breast, and kidney and non-Hodgkin disease). (*Ann Intern Med*. 1996;125:815-821.)