Promoting Preventive Care: Changing Reimbursement Is Not Enough

A persisting frustration for those interested in preventing disease is the failure to deliver preventive services to those in need of them.[1-5] In this issue of the Journal, Lurie and colleagues report data from the Rand Health Insurance Experiment that document, yet again, that physicians fall short of recommended standards for preventive care.[6] The study also examines the extent to which cost-sharing by patients inhibits preventive care.

In particular, Lurie, *et al,* document that enrollees in the Rand Health Insurance Experiment between 1974 and 1982 received far fewer preventive services than were recommended by the Canadian Task Force on the Periodic Health Examination, the American Cancer Society, the American College of Physicians, and the American Academy of Pediatrics.[7-10] Among young children, only about 45 per cent received timely DPT (diphtheria, pertussis tetanus) and polio immunizations, and 7 per cent received no well care at all in their first 18 months of life. During the three-year experimental period, only 4 per cent of adults received tetanus immunization, only 2 per cent of women aged 45–65 received mammography, and only 57–66 per cent of women had a Pap smear. Furthermore, cost-sharing did appear to reduce the use of preventive services, although the differences between cost-sharing and "free care" groups were relatively small. For example, more children (60 per cent) on the "free care" plan received one or more immunizations or well care visits than those on the cost-sharing plans (49 per cent).

The authors conclude that, irrespective of amount of patient payment, preventive services are underused. Their results and conclusions are consistent with several other recent reports documenting major deficiencies in clinical prevention.[1-5] It is less clear that their data can be used for definitive policy statements about the impact of cost-sharing on preventive services. It is commonly assumed that physicians' decisions are the most important determinant of medical services, especially those of an elective nature such as immunization and mammography. However, the physicians in the Health Insurance Experiment were not informed of the degree of cost-sharing required of their patients. It seems reasonable to assume that if physicians knew that their patients had to bear the costs of expensive preventive services, they might have ordered them even less frequently. For these reasons, we believe that the report by Lurie and colleagues probably understates the impact of cost-sharing on the use of physician-ordered preventive services.

Put another way, the study published here suggests that ensuring adequate reimbursement coverage for preventive care services may be a necessary, but not sufficient, step to their more widespread application.

Why is there such a large discrepancy between ideal standards and actual performance of preventive care? Some of the barriers to preventive care center around the patient, others around the physician, and still others derive from the health care delivery system itself.

Patients may be reluctant to seek or accept preventive care services or advice. In some cases—for example, cessation of cigarette smoking or dietary modification—difficult and complex behavioral changes must be negotiated. Patients may not share the physician's disease-oriented definition of preventive care; they may not cooperate with preventive care activities requiring voluntary cooperation with periodic check-ups. Patients may have fears, anxieties and other concerns about cancer screening tests, their results, and/or their potential complications (e.g., mammography). Patient discomfort may be a very important barrier to routine performance of sigmoidoscopy. Finally, cultural or other demographic characteristics may color expectations about health care in general and attitudes towards preventive care in particular. The finding by Lurie and her colleagues that 7 per cent of the infants studied received no preventive care at all during the first 18 months of life suggests that some consumers may not be aware of the potential benefits of immunizations and other preventive care measures.

Physicians, too, may lack knowledge about the potential benefits of preventive care or about existing preventive care standards, and may lack motivation to comply with them. We suspect that such ignorance may have deterred the use of mammography in the Lurie study, as well as the fact that mammography was still diffusing into the community and reducing its radiation exposure during the study period (1974 to 1982). Physicians may also be uncomfortable with methods of counseling and educating patients about prevention and with techniques for motivating behavioral change.[11] The lack of consensus among experts regarding indications for various screening services may engender confusion and/or disregard.[12-14] Physicians may disagree with preventive care activities recommended by experts or believe that patients are not interested in them. For example, the public health benefit derived from giving a 50 year old man his sixth (lifetime) tetanus immunization (a preventive service measured in this report) is insignificant when compared to the benefits from encouraging smoking cessation, detecting hypertension, or screening for hypercholesterolemia (none of which were studied by Lurie and colleagues).

Physicians may greatly overestimate how much preventive care they provide; in our setting, physicians and nurse practitioners overestimated their own performance of cancer screening tests by two- to ten-fold.[5] Physicians also frequently cite lack of time and forgetfulness as reasons for not performing the preventive care services with which they do agree.[15] Perhaps the most important reason is that physicians in practice focus upon the specific acute or chronic problems that have prompted the patient's visit, rather than upon issues of health maintenance. It is often not convenient, practical, or economically feasible to schedule extra time for preventive care. This is particularly true because physicians are poorly paid for preventive care counseling and can often bill for screening examinations only when a laboratory test is performed simultaneously. However, economic factors do not explain the low performance of sigmoidoscopic examinations, which are relatively well compensated.[16]

Finally, barriers within the health care system hinder preventive care. Systemic problems include exclusion of screening tests from many insurance payment schemes, unavailability of services, lack of cues to action, restrictions on time, staff and space required for screening, and lack of population-tested educational materials and instructions.[17] Access to preventive services is often restricted in the very

segments of the population who could benefit the most.[18] Financial barriers are often cited as inhibiting preventive care, especially for relatively expensive services (e.g., mammography) not covered by third party payers. However, the data from Lurie, *et al,* suggest that only small improvements can be expected from eliminating patient charges. Furthermore, physicians in countries such as the United Kingdom, which have essentially no charges for preventive services, deliver them at a much lower rate than in the United States.[19]

In seeking to overcome such barriers, what has been tried? Physician educational programs, audit with feedback approaches, and sophisticated reminder systems have shown promising results.[20–22] Within the office setting, physicians have been exhorted to make use of non-preventive visits to provide preventive care.[23] Relocating health education, screening and other activities from the physician's office to schools, work-sites, community settings, and other sites has been tried. Involving nurses, dietitians, health educators, and psychologists has been useful, particularly in cigarette smoking cessation and dietary modification.

What remains to be done? An important first step would be to examine carefully the cost-effectiveness of various preventive measures for subgroups at risk. Armed with this information, physicians could tailor individual screening strategies for their patients, depending on their age, risk factors, and previous test results.[24,25] This information would also be helpful in convincing clinicians of the centrality of prevention. Existing and new patient education and behavior modification techniques should be thoroughly evaluated and their costs and efficacy described. Finally, there must be an effort to reduce the cost of providing selected preventive services. For example, a novel program in the San Francisco Bay Area has been developed to provide low-cost ($40) mammography screening in a mobile van; it has facilitated the screening of over 8,000 women since 1984.[26] In an era of medical cost-containment, the cost implications of full compliance with published screening recommendations are sobering. Performing sigmoidoscopic examinations (at $100 each) every five years on all 85,462,335 Americans over the age of 50 would generate an estimated annual bill of $1,709,246,700 alone, even using the conservative estimate that no complications would occur.

Ultimately, the success of preventive care depends upon its ability to decrease morbidity and mortality. The recent dramatic improvements in hypertension control and in reducing death from stroke provide encouraging evidence that great changes can occur in a short period of time.[27] Improved performance of preventive care could result from better attention both to what we practice and what we preach.

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