CANCER PREVENTION AND SCREENING: COMMUNITY SERVICE OR GOOD ECONOMIC SENSE?

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Health promotion and disease prevention have long been bandied about as the most rational ways to decrease future health care costs. However, health care providers have been hard put to supply the cost-benefit and cost-effectiveness data that health care purchasers and third-party payers have demanded. How far have we come in implementing cost-effective cancer prevention and screening programs? Can a hospital-based or freestanding cancer program provide such services at a reasonable cost? Can they make a profit? Or, are cancer care providers still absorbing significant cost overruns for the sake of providing a needed community service?

Recently, physician group practices and hospital-based and freestanding cancer centers have been publicized for their success in reducing patients' out-of-pocket costs for cancer prevention and screening services. For instance, Charlotte (NC) Radiology, P.A., provides screening mammography for $29, and Baptist Medical Center Princeton, Birmingham, AL, provides cancer screening, including a mammogram for women who meet American Cancer Society guidelines, for $48.

Although a rising number of programs have been able to reduce patient costs, are prevention services finally contributing to institution's bottom-lines, or do they continue to be a drain on resources? The cancer screening program at Baptist Medical Center Princeton now sees more than 1,000 patients per year, "but we still have not made a profit," says Pat Reymann, director of the hospital's cancer center. "We do expect, in the long-run, for the program to almost break even, due to increased physician referrals. If we increased the price to $85 we could make a profit," Reymann explains, "but that is not the purpose of the program. We knew it would be a loss leader, but believed the community needed a long-term approach to cancer screening instead of sporadic health fairs, screening days, etc. And we didn't want to eliminate people in lower economic groups."

United Hospital Center, Moline, IL, sponsored its second colorectal screening promotion in late 1987, filling 20,000 requests for test kits. A comparison of costs versus resultant referrals showed that "we just about broke even," says Loralyn Anderson, Director of Oncology. However, she says, "the publicity is worth it; the institution is currently planning a third screening program."

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Even at prices ranging from $40 to $60 for screening mammography, Myron Moskowitz, M.D., Professor of Radiology at the University of Cincinnati, believes that "cost is still a major barrier to stimulating women to participate in mammography screening programs." Furthermore, he estimates that "unless a facility can perform 20 to 30 mammograms per day, it is impossible to keep patient fees within that range."

The Malone Cancer Institute, Baptist Medical Center, Jacksonville, FL, provides a cancer detection and screening program at a cost of $100 per patient. As needed, patients are referred for mammography, flexible sigmoidoscopy, etc., at no extra cost. The program is new; to date only 400 patients have been seen and, according to Joan Huckabee, Administrative Director, the institute "is examining the service, not only in terms of benefit to the patients, but from a financial perspective." At this time, she notes, "we are looking for grant money so that high-risk patients can receive the service free of charge."

The mammography screening program started by the University of California, San Francisco, in 1985 is "making a marginal profit," says Edward A. Sickles, M.D., Department of Radiology. The service charges $50 for a screening mammography and sees an average of 35 patients per day. But Sickles points out that "not all low-cost mammography systems have worked. The primary goal should be to provide a good service at a low cost." A goal that he says requires the services of a board-certified radiologist who has substantial experience in breast imaging. "The secondary goal should be to make a small profit."

Moskowitz points out that "screening programs must be rational and reasonable, but they can't afford to be losing money either." However, he questions the effect of an institution's cost accounting practices on the bottom-line. "I know the expenses of our screening mammography program and the profits. At worst, we are breaking even, but I'm being told that the program is losing money. I'm also being told that our mobile mammography service is making money, even though the costs are higher and, on average, the fees are lower. The bottom line is largely dependent on cost accounting."

Strang Clinic recently sold the building that housed its routine cancer screening program to Beth Israel Hospital and now

concentrates on screening for patients at high risk, according to Daniel Miller, M.D., Director of Preventive Medicine. "Patients still come in for routine screening, but that is not what we are emphasizing in our promotion efforts. We believe there is little justification for the type of routine screening that physicians are performing in their offices and in outpatient clinics. We wanted to do something unique, and that was to focus on high-risk segments of the population with a familial history of cancer." Miller says that the change in focus 18 months ago has resulted in "a yield of precancerous findings that are three times higher than when the clinic only performed routine screening services."

Richard Love, M.D., Director of the University of Wisconsin Cancer Prevention Clinic, Madison, and Secretary/Treasurer of the American Society for Preventive Oncology, believes there is a place for specialized cancer prevention care, such as screening for high-risk patients and families, but that "it's not the answer to increasing cancer prevention and screening for the population at large."

Love believes the only way to make cancer prevention and screening services widely accessible is in the "context of primary care delivery centers. We must focus on facilitating primary care physicians, in helping them to define their own prevention goals, in skills development, and in making changes in their practices to address those goals. And, clearly, public education is important." However, he also contends that primary care physicians currently provide little in the way of cancer prevention education and counseling. "I don't mean that as an adverse reflection on physicians," he says, "it's a lack of understanding of the systems, barriers, and technology transfer."

Third-Party Payment

Currently, 16 states have mandated third-party coverage of mammography screening, and similar legislation is pending in an additional 22 states. Have providers and the public finally succeeded in convincing insurers of the importance and cost-effectiveness of cancer screening programs?

One of the dangers of legislation mandating that insurers provide coverage for mammography screening is the cost of the service at the time the legislation is enacted, Moskowitz points out. "If screening fees up to $100 are allowed, then that is what the costs will be," he warns.

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Moskowitz believes that "most third-party payers are convinced that screening mammography is cost-effective." But he believes the reason many third-party payers still do not provide such a benefit is because of the uncertainty of being able to recoup their net costs in the future. "If they provide the coverage to a company, they have no assurance they will still be the carrier for that company when the net benefits of the program begin to accrue."

Reymann of Baptist in Birmingham says they are "finding a few insurance companies that recognize the benefits of [Baptist's cancer screening] program and will pay for it, as well as a local HMO." She also thinks the program has helped to change self-insured companies' attitude toward prevention and screening programs. "They are beginning to request us to put together a package and price for selected screening activities for their employees." In fact, such an "industrial health program could dovetail nicely with our CanScreen program," Reymann says.

Cost-Effectiveness Studies

There has been an increasing amount of work done on the cost-effectiveness of cancer screening by economists like David Eddyy, especially for disease of the breast, colon and rectum. But Moskowitz warns that "cost-effectiveness models are only cost-effectiveness models, and any one can use them for any thing they want to justify." For instance, when he used a cost-effectiveness model created by Eddy for breast cancer screening, he came up with a much higher cost per death averted figure for clinical examination alone compared to mammography alone ($1,066,000 vs. $787,000) using the same model, but different assumptions. "Cost-benefit and cost-effectiveness analyses depend on the viewpoint of the beholder," he contends.

In fact, Moskowitz, who has done extensive work in cost-effectiveness analysis, says he's sorry he got involved in the entire cost-effectiveness movement. "I don't believe it's the role of the physician. We've been bullied down that road. Our job is to prove the effectiveness of a test or a treatment and, if it is effective, to make it available to the public."

A case in point, he says, is mammography. "There is no other test proven as effective and, on an individual unit basis, it is cheaper than any other test." On the other hand, technologies such as magnetic resonance imaging (MRI) "have never been studied for their effectiveness. I don't understand why we have such difficulty with supporting screening and prevention programs. Not every detected case will be a killer, but not to provide proven, effective screening services is antithetical to my way of thinking."

Summary

Cancer prevention and screening programs are much more widespread and accessible than at any time in the past. For instance, about one-third of the cancer programs profiled in *Community Cancer Programs In The United States: 1988–1989* mention the presence of cancer prevention/screening programs or educational activities. Seventy-five of the institutions state that they have ongoing programs; 16 have developed a breast health/screening center, 6 have a prevention and screening center. No doubt, if the 308 institutions profiled had been specifically asked to describe their involvement in cancer prevention, the numbers would be much higher. However, it is apparent that few programs have garnered the necessary volume of patients to manage more than a "break even" bottom-line. Furthermore, few third-party payers have yet to recognize the future cost benefits of underwriting cancer prevention services. Hopefully, as more data are accrued, cost-effectiveness models are enhanced, and the demand for preventive services increases, that attitude will change. ■

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