

BRIEF ANALYSIS

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Is Preventive Medical Care Cost-Effective?

Many medical professionals advise that Americans undergo an entire battery of preventive tests and exams. For example, the American Medical Association recommends:

- Physicals every one to five years for people ages 30 to 50 and every one to two years thereafter,
- Regular cholesterol tests,
- Colon exams every year for people over age 40,
- Screenings for cervical cancer every one to three years for women over age 30.

All of this testing is designed to catch health problems before they have a chance to manifest as harmful diseases. And according to conventional wisdom, preventive medical care reduces costs and prolongs

lives. The HMO industry, for example, routinely claims big savings for providing free preventive care. High-deductible health insurance policies combined with Medical Savings Accounts (MSAs), on the other hand, are often criticized on prevention grounds — that people would delay preventive care until it was too late.

But the facts are much less clear. Studies show that in many cases preventive medical care not only does not save money, it also may do little to prolong life.

The role of prevention. A distinction must be made between “prevention,” broadly understood, and the more narrowly defined area of “preventive medical care.” Anything that can prevent a disease can be labeled prevention. Eating a proper diet, getting adequate exercise, losing excess weight, abstaining from smoking, drinking only in moderation and practicing proper sani-

tation are all examples of prevention. The medical literature has conclusively demonstrated that many individuals can avoid disease and premature death by choosing healthful eating and living habits.

In addition, public health efforts to provide clean drinking water and improve sanitation have been shown to prevent disease and promote longevity. In fact, according to some health experts, most of the increases in life expectancy over time have resulted not from

advances in medicine but from improvements in public health.

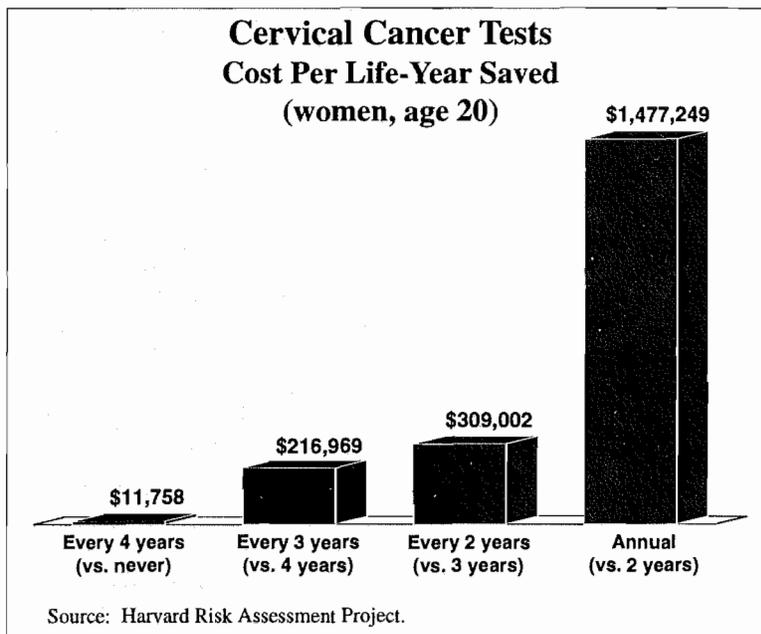
The role of preventive care. Preventive medical care, on the other hand, is a much more narrowly defined concept. It includes regular exams and screening tests designed to catch a disease or a health problem before it has a chance to spread.

But study after study has shown that preventive medicine *adds* to overall health care costs. The reason

is fairly straightforward: Testing everyone costs a great deal of money, and the diseases being screened for are fairly rare. At best, the tests benefit only a few. And the savings generated by early detection of these few instances of disease are far outweighed by the costs of testing large numbers of people.

The OTA study. The Office of Technology Assessment (OTA) studied the cost-effectiveness of adding coverage for several preventive measures — including flu and pneumonia vaccines and screening tests for cervical and colon cancer — to the federal Medicare insurance program for the elderly. *None of the preventive measures was found to cut costs.*

A separate study by the OTA found that only three kinds of preventive care save money: prenatal care for poor women, tests in newborns for certain congenital disorders and most childhood immunizations.



The Rand study. A study by the Rand Corporation — as part of its multiyear Health Insurance Experiment involving thousands of people — found that preventive care had little effect on the health status of individuals.

As part of the study, Rand randomly assigned participants to different kinds of insurance plans and required some participants to have a physical exam at the beginning of the experiment. It found after three years that the health status of those who had had the exam was essentially the same as those who had not. Further, those who had sought regular preventive care were only slightly better off than those who had not. “Thus, it appears that adding a small amount of preventive care has no appreciable effect,” the study concluded.

The Russell study. Economist Louise B. Russell examined three popular screening tests — for cervical and prostate cancer and high blood cholesterol — and found serious drawbacks with each. The results are summarized below.

Case study: Cervical cancer. Early detection of cervical cancer in women is possible through the use of a test called the Pap smear. The test involves taking cell samples from various parts of a woman’s cervix and studying them under a microscope for abnormalities that might indicate cancer so as to catch and treat it at an early stage.

Regular screening is recommended because early detection can lead to lifesaving cancer treatment and because the test results are often inaccurate. For example, studies show that some 20 percent of cervical cancers are likely to be missed by a single screening test. However, as the figure shows, more frequent testing can be very expensive. It also can create “false positives” — incorrect indications that cancer is present — which typically lead to additional tests and, in some cases, unnecessary treatment. Over a lifetime, a woman is more likely to have a false positive than she is to get cervical cancer. These problems are typically not explained in the public health literature, Russell noted.

Case study: Prostate cancer. A newly developed blood test called prostate-specific antigen (PSA) can help in the early detection of prostate cancer, a leading killer of men. However, roughly 30 percent of prostate cancers pose no health threat whatsoever because the men who have them die of something else.

Moreover, treatment may not prolong life. A report by the U.S. Preventive Services Task Force (an expert panel convened by the Department of Health and Human Services) notes that “the major randomized controlled trial comparing treatment of prostate cancer with no treatment found that radical prostatectomy [removal of the prostate] was no better than a placebo in altering five-year survival.”

Case study: High cholesterol. It is conventional wisdom that detecting and treating high cholesterol prolongs life. After all, high levels of cholesterol have been linked with heart disease, another leading killer. Regular screening for the problem is a recommended part of any regimen of preventive care, with treatment — either in the form of a special diet or drugs — recommended for high levels of LDL cholesterol.

But not everyone with high cholesterol will suffer heart disease and the drugs used to treat the condition can have such side effects as gastrointestinal problems, a higher risk of gallstones and itching of the skin. More to the point, studies show that reducing cholesterol can reduce the incidence of heart disease, but they do not show that it prolongs life.

Medical Savings Accounts and preventive care. Medical Savings Accounts (MSAs) permit people to purchase catastrophic rather than low-deductible health insurance and to place the premium savings in tax-free accounts to pay for routine medical and preventive care. These accounts are often criticized as discouraging preventive care, since critics contend that some people would keep the money rather than spend it on preventive care.

However, MSAs would likely encourage rather than discourage the *proper* use of preventive care, because people would have money to pay for care when they and their doctors decided that it was appropriate.

Of course, the fact that preventive care is not always cost-effective does not mean that it is wasteful. Diagnostic tests that show freedom from disease may relieve patients’ anxiety and reassure them of good health. Thus, for the most part, preventive care is like a consumer good that creates benefits in return for a cost. It is not like an investment good that promises a positive rate of economic return.

This Brief Analysis was adapted from an article in the June 1995 issue of Consumers’ Research magazine.