



Five Tests Worth Paying For

**Health Insurance Usually Won't Cover Them,
But These Tests May Very Well Save Your Life**

Five promising screening tests could save your life. But if you want one, you'll probably have to pay for it yourself.

In most cases, the tests -- aimed at finding early-stage ovarian cancer, heart disease, lung cancer and aneurysms -- aren't covered by insurance if you are otherwise healthy and at average risk. But the reason the tests aren't covered or even recommended by most doctors has more to do with the complexities of national health policy than what may be best for you as an individual.

Screening tests are expensive, and the government and health insurers need lots of cost-benefit studies proving a particular test will save enough lives to justify the cost.

Other tests simply don't have political support -- breast-cancer groups have raised awareness of mammograms, but when is the last time your doctor mentioned nuclear magnetic-resonance blood tests? Finally, no screening test is perfect, and a false positive can lead to additional testing and invasive procedures that can do more harm than good. But while false positives are one reason doctors don't recommend these tests for everybody, you, as an individual, may decide that it is worth the risk.

In the end, the decision involves a calculated risk. Patients who don't get tested are gambling they will be among the majority who stays healthy. Those who do pay for screening may get peace of mind, but they also accept the risk of unnecessary and possibly dangerous procedures. Here are five screening tests you may want to ask for -- and pay for -- yourself. The tests range from in cost from \$60 to \$500. Some should be done annually; with others the frequency depends on the results.

Transvaginal ultrasound

Cost: about \$250

Does it hurt? It is painless, though not exactly comfortable. This test, which is performed annually, uses a wandlike device, inserted into the vagina, to view the ovaries.

Right now, there is no approved screening test for detecting ovarian cancer, which kills 14,300 women a year. It is the deadliest female cancer because it often doesn't produce symptoms until it has reached an advanced stage, when five-year survival is as low as 31%. Early detection boosts five-year survival to 95%.

The best study supporting transvaginal ultrasound comes out of the University of Kentucky, where researchers have screened about 23,000 women over the age of 50 or women over 25 with a family history of the disease.

So far, the screening has picked up about 300 ovarian tumors. Only 29 of those turned out to be cancer, but 76% were caught in the early stage, says Jack van Nagell, director of gynecologic oncology at the University of Kentucky Medical Center. Typically only 25% of ovarian cancers are caught early.

And the five-year survival rate among women in the Kentucky study is 88% -- compared with the national overall ovarian cancer survival rate of 53%.

While all that sounds convincing, skeptics note that nine out of 10 women in the study underwent surgery to remove tumors that weren't cancer. Indeed, women who get the test should know that benign ovarian cysts commonly occur in women of all ages.

"The downside of doing sonos on everybody is the increased cost and increase in additional procedures and surgery that may not be necessary," says Carolyn D. Runowicz, vice chairman of obstetrics and gynecology at St. Luke's-Roosevelt Hospital Center in New York.

Ovarian cancer risk is highest among women in their 70s, and higher among women with a family history of ovarian, breast or colon cancer. Women who have never had children are more likely to develop ovarian cancer than those who have. Tubal ligation and oral contraceptives appear to reduce risk, while fertility drugs and hormone therapy can increase risk.

Expanded cholesterol testing

Cost: \$75-\$175

Does it hurt? It is a blood test -- your basic poke with a needle. The results break down both the good and bad cholesterol into subclasses that can give a better indication of heart-disease risk. Depending on the results, the tests may need to be repeated regularly.

Half the people who have heart attacks have normal cholesterol under traditional testing. Part of the problem is that the typical cholesterol test doesn't directly measure your LDL, or bad cholesterol. It just measures HDL (good cholesterol) and triglycerides, and then uses a formula to come up with an LDL score. But the formula can be unreliable, especially if your triglyceride count is high.

Expanded tests not only provide a direct measurement of LDL, but they also look at the size, type and sometimes number of LDL and HDL particles. A person with a low LDL score could actually have a lot of small LDL particles, putting him or her at higher risk for heart disease. And a person with very high HDL, thought to offer dramatic protection against heart disease, might not be getting as much protection as he thinks, because he can have too much of the wrong kind of HDL.

Insurance plans often will pay for the test if a person has known heart problems or other risk factors such as diabetes. But they usually won't pay for the tests in healthy people -- even though it is estimated that 40 million otherwise healthy people have hidden heart disease. Studies show the expanded tests could have detected 95% of heart-attack patients early.

The best-known expanded test is from Berkeley HeartLab, the Burlingame, Calif., firm that licensed the test from University of California at Berkeley, where it was developed. Another test made by Atherotech of Birmingham, Ala., is known as the VAP test (for vertical auto profile), and uses a high-speed centrifuge process to study particle size. A third test, known as the NMR Lipoprofile (for nuclear magnetic resonance), uses soundwaves to measure the number of particles. It is made by LipoScience of Raleigh, N.C.

"You find things you don't find on a regular lipid profile," says Carlos Ayers, head of vascular medicine and preventive cardiology at University of Virginia Medical Center who uses the VAP test. "If you really want to know absolutely whether you have any abnormal lipids or you might have some other findings, the only way to be sure is to get an expanded lipid profile."

The Berkeley test has been used and studied longer. But the Berkeley test costs about \$175, compared with \$140 for the NMR and \$75 to \$85 for the VAP.

EBT heart scan

Cost: About \$500

Does it hurt? A painless, lying-down-type test. You spend 10 minutes in a doughnut-shaped machine, while electron-beam tomography looks for calcium buildup that can signal heart disease. Follow-up scans may be necessary if there is a positive result.

More preventive cardiologists are using the test because current risk-assessment methods miss as many as 75% of patients who go on to develop heart problems. As a result, for 150,000 people a year, the first symptom of heart disease is death.

The biggest-ever study of the scans, published last month in the journal *Circulation*, found that the tests are useful in predicting heart problems in intermediate-risk patients -- those without symptoms but with

at least one traditional risk factor.

Says Harvey Hecht, director of preventive cardiology at Beth Israel Medical Center in New York, EBT "tells you, 'These are your arteries. This is how much plaque you have.' "

Patients with high calcium scores may be prescribed medication or urged to make diet and lifestyle changes. In the case of heavy buildup, a follow-up stress test may be ordered to determine whether there is a blockage that needs to be treated. A positive stress test often leads to an angiogram, which is a riskier and more invasive procedure that uses a catheter and dye is inserted into the artery for a better look.

The test remains controversial. The presence of calcium buildup doesn't always increase your heart-attack risk -- it could be that the deposits found by the scan are stable and harmless, and follow-up tests were unnecessary. At the same time, a person who has a clear scan could actually have undetected and unstable plaque poised to cause a blockage.

"It shouldn't be something you just go out and get, but really you should do it in consultation with a physician," says New York cardiologist Nieca Goldberg. "For some people it would be a false security blanket."

The Society for Atherosclerosis Imaging says the scans are best suited for men over 45 and women over 55 with no risk factors, or 10 years earlier if you have a risk factor like family history or smoking.

Spiral CT Scan

Cost: \$200 to \$450

Does it hurt? No. You glide feet-first into a scanner, stopping at the neck (a few patients might feel a little claustrophobic). This annual test can find lung cancer when it is as small as a grain of rice, compared with conventional X-rays, which often don't spot cancer until it is as big as an orange.

The overall five-year survival rate for lung cancer is just 15%, and studies generally show that survival rates are longer with earlier detection.

Still, not enough is known about whether patients are simply learning about their fatal cancer earlier, or actually living longer. Thus, a debate is raging about whether early detection by spiral CT will make a difference.

While a major national study hopes to answer the question, the early evidence of the scan is promising. Right now, just 15% of lung cancers are found early. But in scanning studies, 80% of the cancers are caught in the early stages.

The biggest problem with the tests is false positives. A Mayo Clinic study found abnormalities on 51% of scans, but only 1% of the study group had cancer. That means half the patients had unnecessary and risky lung biopsies.

"Screening for lung cancer is not a benign and simple test," says Reginald Munden, section chief of thoracic imaging at the University of Texas M.D. Anderson Cancer Center in Houston. "If somebody wants to be screened, I'm not saying we should stop them, it's their money. But people need to know what they're getting into."

The Cornell group, with far more scanning experience, has pushed its false-positive rate down to 15%. It has also learned that the highest risk for a false positive is on the first scan -- after that, doctors can compare results. Anyone with a positive scan should get a second or even third opinion before undergoing surgery. Patients can even request their scans be sent for review to Cornell, Mayo or Moffitt Cancer Center in Tampa, Fla. -- the centers with the most experience reading lung scans.

"To us, CT screening on a yearly basis does save lives," says Claudia I. Henschke, chief of chest imaging at Weill Cornell Medical Center, who has led the CT scanning research. "The only question that still needs some further follow-up is how many it saves."

The scans are suggested for smokers and former smokers 50 and over who have smoked at least 10 "pack years" -- that's a pack a day for 10 years or two packs a day for five years.

Aneurysm scan**Cost:** \$60-\$200

Does it hurt? You will just feel a little pressure: a five- to 10-minute ultrasound with a hand-held scanner against the abdomen. The test can spot bulges in the artery wall long before they become life-threatening, and if results are positive, you may be rechecked regularly.

Aneurysm disease is surprisingly common -- it's estimated 7% of men over 60 have it. But few people have even heard of it or realize they might be at risk for abdominal aortic aneurysm, which kills an estimated 30,000 people annually.

Aneurysms caught early can be fixed with surgery. The surgery can be risky, and may require a lengthy recovery, but it nonetheless boosts survival to 96% to 99%. If an aneurysm ruptures, the chance of dying is 80% to 90%.

"We think it's a tremendously useful screening test if you screen the right group of patients," says K. Craig Kent, chief of vascular surgery at New York Presbyterian/Columbia and Cornell.

During a recent quarterly screening in Baton Rouge, La., the nonprofit Aneurysm Outreach (<http://www.alink.org/>) found 20 abnormalities in 238 people. "The average person has never heard of an aneurysm or if they have, they think it only occurs in the head," says founder Sheila Arrington, whose father died at 58 from aneurysm.

The best candidates for screening are men above 60 and women above 60 who have a cardiovascular risk factor, such as diabetes, smoking or obesity. Everyone over 50 who has a family history of aneurysm should be screened. A quick screen ultrasound is ideal and costs just \$60. But some centers may offer only a lengthier ultrasound that examines the entire abdomen and can cost \$200.

• **E-mail me** at healthjournal@wsj.com.

Updated June 24, 2003