

Experts question value of heart tests sold as potential life-savers

By Wes Venteicher

Medical experts say healthy adults should avoid several tests marketed by Life Line, HealthFair
Life Line, HealthFair criticized for selling questionable heart tests directly to consumers

In churches, community centers and businesses around Chicago, two national companies are setting up portable equipment and inviting people to buy cardiovascular tests that they say can help prevent strokes and heart attacks.

Life Line Screening, based in Ohio, advertises the heart and artery tests as a way to "do something about any health issues before it's too late." Florida-based HealthFair touts one test's ability to prevent a stroke's "devastating, irreversible effects to your quality of living."

But major medical associations recommend that healthy people avoid several of the screenings, saying the potential harms from invasive follow-up procedures and overtreatment outweigh the benefit of spotting abnormalities before symptoms appear.

"People may be more likely to run into problems having the screening test done than if the test had not been done," said Dr. Steven Weinberger, CEO of the American College of Physicians.

Heart patients in high-stress jobs, like new Bulls coach, becoming common

Even for people who are at risk of heart disease and stroke, tests are not always a good idea, according to the U.S. Preventive Services Task Force, a national panel independent of the government that assesses the value of screening for people who have no symptoms.

According to doctors, the best treatment often remains the same whether or not abnormalities are present: exercise, healthy eating and not smoking.

One test marketed by the companies, an electrocardiogram, or EKG, uses electrodes to identify irregularities in how the heart beats and how blood flows through it that can signify heart disease. Other

tests use an ultrasound to scan the arteries for enlargements that could rupture and plaque buildup that can precede strokes.

The medical associations say that, in general, people should undergo testing through their physicians. The companies' tactic of marketing the tests directly to consumers has drawn increased scrutiny from some doctors.

"What concerned us was that these were being presented as if they clearly had a benefit for people, when that had not been shown," said Weinberger, who co-authored a paper on the ethics of such direct marketing in 2012.

Dr. Andrew Manganaro, Life Line Screening's chief medical officer, said the screenings can provide important warning signs for at-risk patients. Often a fatal rupture of the aorta or a stroke is the first sign of disease, he said.

"This is a rampant, epidemic disease in our country," Manganaro said. "If we could snap our fingers and be rid of it, that would be wonderful. The best we can do is find it at an early stage."

To minimize potential harm, HealthFair works with physicians to coordinate care after people are tested, according to CEO Terry Diaz. "We're actually helping patients and physicians because we're providing another piece of information that they didn't otherwise know," he said.

Heart disease and stroke are the No. 1 and No. 5 causes of death in the United States, and both are hard to predict, according to the American Heart Association.

The two companies sell packages of four to more than a dozen tests at costs ranging from about \$100 to \$300 per package. Insurers typically don't pay for the tests unless a doctor orders them as part of a diagnosis.

Life Line performs the tests with lightweight equipment and a laptop at churches, fraternal organizations, senior centers, fitness centers and other places people gather. HealthFair, which does the tests inside a mobile RV, parks the vehicle in parking lots at places like grocery stores and pharmacies.

On June 8, a HealthFair van was parked outside a Walgreens in Skokie. Martin Kenig, 55, said he first scheduled tests two years ago after HealthFair mailed him marketing materials. A family history of heart disease, combined with the unexpected death from a heart attack of a 52-year-old friend, persuaded him to get the tests, he said.

"Ever since I had a child eight years ago, I want to be around for her," said Kenig, of Vernon Hills.

He said his doctor neither recommended nor discouraged the tests. The results showed possible signs of "stiff heart syndrome," in which proteins build up in the heart, but his doctor didn't recommend any follow-ups. HealthFair encourages Kenig in mailings to get tested each year, he said, but he skipped last year.

Kenig said he had been unaware that medical societies didn't recommend many of the tests in healthy adults, adding that he would talk more with his doctor before undergoing more testing.

The U.S. Preventive Services Task Force reviews clinical studies to determine how effective tests are for people without symptoms, then produces specific recommendations for groups of people depending on risk factors such as age, blood pressure, diabetes and smoking.

The only screening test offered by the two companies that the task force recommends is an abdominal aortic aneurysm ultrasound — but only for men age 65 to 75 who have smoked, said its chairman, Dr. Albert Siu.

A review of four randomized, controlled trials found that the test was associated with fewer aortic ruptures and deaths 10 to 15 years after testing among men age 65 and older, though it had no effect on mortality more than 15 years after the test, according to the task force. Smoking is associated with increased risk of abdominal aortic aneurysm, increasing the importance of screening, the task force states.

The task force makes no recommendation for men younger than 65. For men 65 to 75 who have never smoked, the task force recommends selective screening. Women who have never smoked should avoid the aortic screening, and evidence is insufficient to assess its value for 65- to 75-year-old women who have smoked, the task force says.

Everyone without symptoms should avoid a carotid artery ultrasound, and people without symptoms or risk factors should avoid electrocardiography, according to the task force.

Siu stressed that all the tests can be valuable when ordered by a doctor as part of a diagnosis. In general, he said, the task force counsels doctors to order tests only when they know what they will do with the result.

"It's about not subjecting patients to tests where it would not change your management," he said. "Not just doing tests for the sake of doing the test."

In papers on electrocardiography and carotid artery blockage, the task force discusses some of the dangers of follow-up procedures. Neither screening company performs the follow-ups.

Abnormal results from an electrocardiogram can lead a doctor to perform a procedure called coronary angiography, which involves inserting a thin hollow tube into an artery, guiding it to the heart and injecting dye into the blood to see how it moves through the organ. The procedure is associated with a 1.7 percent chance of serious adverse events, including death, heart attack and stroke, according to clinical guidelines published by the American College of Physicians.

Abnormal results from a carotid artery ultrasound can lead to a procedure to remove plaque from the arteries, called a carotid endarterectomy. Depending on where in the country a person gets the procedure, the risk of having a stroke or dying within 30 days ranges from about 2.4 percent to about 6 percent, according to guidelines published by the task force.

While the risk of harm from the follow-up procedures is small, those dangers still outweigh the benefits of general screening for the two tests, according to the task force.

The guidelines also note that both tests have high rates of false positives, or test results that identify abnormalities where none in fact exists, increasing the risks.

The Centers for Disease Control and Prevention estimates that about 6 percent of U.S. adults had coronary heart disease in 2010. A half-percent to 1 percent of the general population has blocked carotid arteries, according to the task force.

Both Life Line and HealthFair quiz consumers in consultations and in online forms about risk factors before recommending tests. For people who have none of the risk factors, the companies don't recommend screening but allow visitors to their websites to order the tests anyway.

In one brochure, Life Line recommends the tests for "anyone over age 50 who wants to be proactive about his or her health," and recommends on its website that people get screened annually. HealthFair, in its frequently asked questions section, states that the recommended frequency of tests is based on risk factors and past screening results but adds that "yearly health screenings will also complement your regular physicals." HealthFair recommends screening for people over 50 who have risk factors.

Even when the only advisable treatment is exercising or quitting smoking, images of patients' arteries can be a powerful incentive to get them to take better care of themselves, Manganaro said.

"I always told people to throw their cigarettes away, but they never did," he said. "But then you show them an image of their carotid artery and they'd very often throw their pack of Pall Malls in the trash as they walked out."

The companies sometimes partner with hospitals to promote the screenings. Public Citizen, a Washington, D.C.-based nonprofit founded by Ralph Nader, sent letters in February to several Illinois hospitals that Life Line partners with requesting that the hospitals end the relationships.

In Chicago, Advocate Illinois Masonic Medical Center currently works with Life Line but plans to end the relationship after a contract expires at the end of the month, said spokesman Vincent Pierri.

"Clinical leaders at Advocate Health Care continually evaluate the value of programs to determine whether they best serve our patients or should be reconsidered," he said in an emailed statement.

Ingalls Memorial Hospital, in Harvey, plans to continue its relationship with Life Line. "As an organization, we're firm believers in early detection and preventive screening," spokeswoman Susan Fine said. "We do them as minimally invasively and as safely as possible."

Last year, Public Citizen sent similar letters to hospitals that partnered with HealthFair, including Loyola University Medical Center. Loyola no longer partners with the company, according to the hospital. Officials declined to say when the hospital ended the relationship or why.

Manganaro argues that the task force's recommendations, and those from other major medical associations that recommend against the screening, are out of date.

"Things change as more information becomes available," he said. "And we're at the pointy end of the spear here in that we're providing the very information that helps to inform the discussion."

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