Study to determine which stool test is best for colorectal cancer detection

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Navkiran Shokar, M.D., M.P.H., M.A., of Texas Tech University Health Sciences Center El Paso (TTUHSC El Paso) is part of a study to assess the accuracy of fecal immunochemical tests. Credit: Tommie Morelos / TTUHSC El Paso

No one wants a colonoscopy. But there's no getting around the lifesaving

procedure—the gold standard for colon cancer detection.

With the development of the FIT test, or fecal immunochemical test, many breathed a sigh of relief. The noninvasive tool promises to accurately detect blood in the stool, often an early sign of cancer, allowing patients to skip the colonoscopy if test results are negative. What's more, the sample can be collected in the privacy of one's own home with no dietary or medical restrictions.

But just how accurate are these new FIT tests?

That's what faculty at Texas Tech University Health Sciences Center El Paso (TTUHSC El Paso) and a team of scientists from across the U.S. hope to find out. The research consortium, led by Barcey Levy, M.D., Ph.D., at the University of Iowa, was recently awarded $4.5 million over five years as part of the Cancer MoonshotSM funded by the National Cancer Institute, National Institutes of Health. TTUHSC El Paso will receive about $1 million of the award, with Navkiran Shokar, M.D., M.P.H., M.A., leading the local effort. The University of North Carolina at Chapel Hill is also a member of the team and is led by Seth Crocket, M.D., M.P.H.

"There are 16 FIT tests currently on the U.S. market," says Dr. Shokar. "But there are no data on which of these is the best—or worst—for detecting colorectal cancer."

She adds, "That could be a problem for patients who think they are all clear after getting false negative results. This is also why it is recommended to repeat the test every year."

With the funds, Dr. Shokar will recruit men and women between the ages of 50 and 85 who are already scheduled for a colonoscopy. Participants will be given four different FITs for use. After collection,

each sample will be mailed to the University of Iowa for analysis.

Each participant will subsequently complete a colonoscopy to definitively diagnose any colorectal cancer or polyps. The results will then be compared to the individual's four FIT test results.

"Our number one goal is to identify which FIT test is the most accurate," Shokar explains. "But we are also hoping to build awareness about these newer, more convenient FIT tests and get more people screened for colorectal cancer."

In the U.S. alone, some 42% of eligible individuals are not up-to-date with their colorectal cancer screening. While discomfort and embarrassment are one screening deterrent, medical costs are another.

A colonoscopy can cost anywhere between $1,000 and $6,000, depending on the location of the procedure. A FIT test, however, can cost as little as $25, according to Dr. Shokar. The American Cancer Society and the National Colorectal Cancer Roundtable have challenged the U.S. to have 80 percent of adults ages 50 and older screened for colon cancer.

Shokar says, "The only way to reach this goal is to offer less invasive and less expensive tests for those who do not want to undergo a colonoscopy. FITs need to become mainstream for colorectal cancer screening in the U.S."

She adds that most other countries with screening programs already use fecal diagnostic testing as the primary tool to detect colorectal cancer.

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