



Purpose and Scope

Researchers at RTI International modeled scenarios to assess whether fecal occult blood test or colonoscopy under fixed budget conditions provides the most benefit.

The study was published as a Web First in *Health Affairs*, July 29, 2010.

Key Findings

- While colonoscopies are the most accurate method for the early detection of colorectal cancers, screening with fecal occult blood tests results in more efficient use of limited budgets.
- A screening program using Hemoccult II, a type of fecal occult blood test, with 60 percent compliance for repeat screening would experience more total life years gained than using a colonoscopy with 100 percent compliance. Compliance could be as low as 40 percent for programs using Hemoccult SENSA, a fecal occult blood test with higher sensitivity for polyp and cancer.

Report Sponsor

The study was funded by a grant from the Centers for Disease Control and Prevention.

About RTI International

RTI International is an independent nonprofit research organization based in Research Triangle Park, North Carolina, that provides research and technical solutions to governments and businesses worldwide in the areas of health and pharmaceuticals, education and training, surveys and statistics, advanced technology, international development, economic and social policy, energy and the environment, and laboratory and chemistry services. For more information, visit www.rti.org.

RTI International is a trade name of Research Triangle Institute.

Research & Policy Brief



Study: Fecal Blood Test More Cost-Efficient Than Colonoscopy at Detecting Colorectal Cancers

What the Study Found

Results of a new study show that while colonoscopies are the most accurate method for the early detection of colorectal cancers, screening with fecal occult blood tests results in more efficient use of limited budgets.

RTI International researchers modeled scenarios to assess whether fecal occult blood test or colonoscopy under fixed budget conditions provides the most benefit. The researchers found that, when compared with colonoscopy, under most scenarios high-sensitivity fecal occult blood tests would result in more individuals getting screened with more life years gained.

The study was conducted to help several state and federally funded colorectal cancer screening programs in the United States choose a screening test that provides the most efficient use of the funding available.

According to the authors, high-sensitivity fecal tests are preferred in most other countries that screen for colorectal cancer.

The researchers found that a screening program using Hemoccult II, a type of fecal occult blood test, with 60 percent compliance for repeat screening would experience more total life years gained than would a program using a colonoscopy with 100 percent compliance. Compliance could be as low as 40 percent for programs using Hemoccult SENSA, a fecal occult blood test with higher sensitivity for polyp and cancer.

However, the researchers suggest that colonoscopy screening may be the optimal choice in some circumstances. For instance, they recommend that colonoscopy would be preferable if it is anticipated that there will be very low compliance with diagnostic follow-up screening recommendations or when repeated annual testing is not feasible.

According to the American Cancer Society, colorectal cancer is the second leading cause of cancer-related mortality in the United States, and the majority of deaths from this disease are preventable with early detection.