

CT colonography shown to be comparable to standard colonoscopy

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Computerized tomographic (CT) colonography (CTC), also known as virtual colonoscopy, is comparable to standard colonoscopy in its ability to accurately detect cancer and precancerous polyps in people ages 65 and older, according to a paper published online today in *Radiology*.

This is consistent with results of the ACRIN National [CT colonography Trial](#), published in the [New England Journal of Medicine](#) in 2008, which demonstrated CT colonography can serve as a primary colorectal cancer screening option for adults ages 50 and older, but did not specifically break out data for participants ages 65 and older included in the overall analysis. The Centers for Medicare and Medicaid Services has deferred coverage for CT colonography primarily citing a lack of data on the exam's performance in Medicare-eligible recipients ages 65 and older.

"Our goal in carrying out this secondary analysis was to determine if the accuracy of CT colonography to detect polyps of clinical concern in patients 65 and older is comparable to the test's accuracy for the 50 and over population studied in the 2008 ACRIN trial. We found no significant difference in the screening exam's performance between the two age groups," said C. Daniel Johnson, MD, of the Mayo Clinic in Scottsdale, AZ and principal investigator of the National CT Colonography Trial and the paper's primary author. "CT colonography is a perfectly viable [colorectal cancer screening](#) tool for the traditional Medicare age population. Wider availability made possible by [Medicare coverage](#) of CT colonography would attract more seniors to be screened for colorectal cancer - which is so successfully treated when detected

early. Making CT colonography more available to seniors ultimately could save lives," summarizes Johnson.

The National CT Colonography Trial recruited 2,600 study participants ages 50 and over from 15 US medical centers to compare the accuracy of state-of-the-art CT colonography to the gold standard of conventional [colonoscopy](#). Ninety percent of the polyps 1 centimeter or larger - the polyps most likely to become cancerous - were detected by CT colonography. Polyps as small as one-half centimeter were also detected by CT colonography with a high degree of accuracy.

In the secondary analysis of the 65 and over cohort, data were available for 477 study participants. The percentage of participants with large polyps was significantly greater among the older participant group (3.7% for aged 65); however, even if intermediate-sized polyps of 6mm or larger were targeted for removal with standard colonoscopy, the colonoscopy referral rate would not exceed 12.6 percent.

ACRIN Chair Mitchell J. Schnall, MD, PhD, Matthew J. Wilson Professor of Research Radiology at the University of Pennsylvania, comments, "These results demonstrate the wealth of data that are collected in ACRIN clinical trials that can be used to explore important [cancer screening](#) and other research questions. For example, ACRIN has undertaken another study leveraging the National CT Colonography Trial data investigating the prevalence and type of incidental findings reported as part of a CT colonography examination to better understand their impact and to develop guidelines for the reporting and management incidental findings."

CT colonography employs virtual reality technology to produce a three-dimensional visualization that permits a thorough and minimally invasive evaluation of the entire colon and rectum. The ACRIN trial is the largest multi-center study to compare the accuracy of state-of-the-art CT

colonography to the gold standard of conventional colonoscopy in patients 50 and older. Colorectal cancer is the third most frequently diagnosed cancer and second leading cause of cancer death in men and women in the United States. Yet, despite the known benefits of screening, studies indicate that millions of Americans age 50 and older are not being screened for the disease.

Provided by American College of Radiology

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