Screening for colorectal cancer should begin at age 45 for people with an average risk, according to an updated clinical guideline from the American Cancer Society (ACS). The recommendation lowers the age for the initial screening test by 5 years, which ACS officials acknowledged is in response to recent evidence that colorectal cancer (CRC) is occurring more often in younger people. Based on microsimulation modeling that showed a favorable risk:benefit ratio for screening at age 45, the recommendation comes with the "expectation that screening will perform similarly in adults ages 45 to 49 as it does in adults for whom screening is currently recommended."

"When we began this guideline update, we were initially focused on whether screening should begin earlier in racial subgroups with higher colorectal cancer incidence ....," said Richard C. Wender, MD, ACS cancer control officer. "But as we saw data pointing to a persistent trend of increasing colorectal cancer incidence in younger adults -- including American Cancer Society research that indicated this effect would carry forward with increasing age -- we decided to reevaluate the age to initiate screening in all U.S. adults."

The recommendation appears online in CA: A Cancer Journal for Clinicians.

The younger starting age is a "qualified recommendation," because of limited data on the risks and benefits of screening in people ages 45 to 49, as most studies of colorectal cancer screening were limited to patients ages ≥ 50. The updated guideline retains the "strong recommendation" in support of regular screening for people ≥50.

Specific recommendations of the guideline include:

- Screening with either a high-sensitivity stool-based test or visual inspection (colonoscopy, CT colonography, or sigmoidoscopy)
- Continued regular screening to age 75 for average-risk individuals who have a life expectancy ≥10 years
- Individualized screening decisions for people ages 76 through 85
- Discourage screening in individuals age >85

The ACS recommends annual screening with a fecal immunochemical test or a high-sensitivity guaiac-based fecal occult blood test or every 3 years with a multitarget stool DNA test. The guideline supports visual examination by colonoscopy once every 10 years or by CT colonography or flexible sigmoidoscopy every 5 years.
screening at age 50 in an update published in 2016. As part of the review process, the USPSTF took into account three computer simulations that considered different starting ages and screening intervals. Two of the three models showed a "modest" benefit with colonoscopy every 15 years starting at age 45, whereas the third did not.

The ACS commissioned a new modeling study that incorporated more recent studies of colorectal cancer screening. The results showed a consistent benefit with screening strategies that started at age 45.

"One of the most significant and disturbing developments in CRC is the marked increase in CRC incidence -- particularly rectal cancer -- among younger individuals," concluded Robert A. Smith, PhD, vice president of cancer screening, cancer control department at ACS, and guideline co-authors. "While the causes of this increase are not understood, it has been observed in all adult age groups below the age group that has historically been offered and is contributing significantly to the burden of suffering imposed by premature CRC mortality.

"Incorporating this epidemiological shift into contemporary modeling of CRC screening demonstrated that the benefit-burden balance is improved by lowering the age to initiate CRC screening to 45 years. Lowering the starting age is expected to benefit not only the segments of the population who suffer disproportionately from CRC -- blacks, Alaska Natives, and American Indians -- but also those individuals otherwise considered to be at average risk."

The ACS action is consistent with what many clinicians see in clinical practice, as well as recent studies that influenced the action, said Daniel Labow, MD, chief of surgical oncology for Mount Sinai Health System in New York City.

"It's clear that screening is working; the incidence and mortality from colorectal cancer have gone down in people over 50," Labow told MedPage Today. "We're getting [cancers] when they're polyps, before they even become cancer, or we're getting cancers earlier and decreasing the mortality. With that, we've noted that the incidence is going up in younger people, even younger than 45. I think that lowering the screening age to 45 will pick up lesions earlier and hopefully mimic -- and certain projections agree -- what has been accomplished in people over 50."

One or more co-authors disclosed relationships with Spectrum, Celgene, Optum Rx, Seattle Genetics, Gilead Sciences, Bayer, Karyopharm, AstraZeneca, BeiGene, Genentech, Biogen-Idec, Roche, Millennium/Takeda, AbbVie, Acerta, Infinity Pharmaceuticals, Onyx Pharmaceuticals, Pharmacyclics, Clinical Care Options, Educational Concepts, PRIME Oncology, Research to Practice, and Merck.

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