NORTH CAROLINA
Advisory Committee
on Cancer Coordination and Control

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# Colon Cancer Screening Position Statement

Colon cancer is the second leading cause of cancer death in North Carolina and the United States. The disease affects both men and women and people of all races/ethnicities. Deaths are higher among men and African Americans. Overall screening rates in NC are lower than optimal. Rates are even lower among those without health insurance and with lower incomes. Screening can prevent colon cancer by finding and removing polyps before they become cancerous. Increasing colon cancer screening in NC will lower the number of cancer deaths and new cases.

Several expert groups, including the United States Preventative Services Task Force (USPSTF), the American Cancer Society (ACS), and the Multi-Society Task Force (MSTF), have issued guidelines regarding colorectal cancer screening. The USPSTF updated its recommendations for colorectal cancer screening in 2021. While the USPSTF recommendations are based on a systematic review of the literature, the ACS guidelines, also updated in 2021, are produced by an expert panel. Key similarities and differences between the USPSTF, ACS, MSTF recommendations are highlighted in Tables 1 and 2 below.

All of the groups recommend periodic colon cancer screening for all normal risk and asymptomatic people starting by age 45 years, and older. Individuals at higher risk due to family or personal medical history should consider periodic screening beginning at an earlier age or more frequently. The USPSTF recommends screening for colorectal cancer in adults ages 76 to 85 be performed selectively, taking into account patients' overall health and prior screening history. Similarly, the ACS and MSTF recommends screening to begin at age 45 for average risk individuals and individualized based on past screening history for individuals ages 76 - 85. The USPSTF, ACS and MSTF all do not recommend screening past 85 years of age. Key similarities and differences between USPSTF, ACS, MSTF screening recommendation by age are highlighted in Table 1 below.

**Table 1: Summary of Screening Recommendations based on Age**

| | USPSTF | ACS | MSTF |
|---|---|---|---|
| Adults aged 45 | Recommends screening for adults | Start of regular screening for average risk individuals | Start of regular screening for average risk individuals |
| Adults aged 46-75 | Recommends regular screening | Recommends regular screening for individuals in good health and with a life expectancy of more than 10 year. | Recommends regular screening |
| Adults aged 76-85 | Screening should be performed selectively, taking into account patients' overall health and prior screening history | The decision should be based on personal preferences, life expectancy, overall health and screening history | The decision to start or continue screening should be individualized based on prior screening history |
| Adults aged 85 and above | Screening not recommended | Screening not recommended | Screening not recommended |

Multiple screening strategies are available to choose from with different advantages and limitations. Each group has slightly different recommendations regarding the various strategies. To date, there are no head-to-head study data demonstrating that any of the strategies provide a greater net benefit. Colonoscopy remains the most utilized screening strategy in the U.S. and accounts for much of the decrease in colorectal cancer incidence and mortality over the last 10 years. However, studies suggest offering more than one option to patients, such as a colonoscopy or stool-based testing, will yield higher screening uptake. Key similarities and differences between USPSTF, ACS, MSTF screening recommendations by modality are highlighted in Table 2 below.

**Table 2: Summary of Recommended Screening Options by Modality**

| **Screening modality** | **USPSTF[a,b]** | **ACS** | **MSTF [f]** |
|---|---|---|---|
| Stool-based tests by either guaiac fecal occult blood testing (gFOBT) or fecal immunochemical testing (FIT) or | Annual for gFOBT or FIT | Annual for gFOBT or FIT | Annual FIT is considered a first-tier test of choice when multiple options are presented and should be offered to patients declining colonoscopy |
| Colonoscopy[c] | Every 10 years | Every 10 years | First tier, every 10 years |
| Multi-targeted stool DNA testing (FIT – DNA)[d] | Every 1 to 3 years | Every 3 years | Second tier every 3 years |
| Flexible Sigmoidoscopy | Every 5 years | Every 5 years | Second tier every 5-10 years |
| Flexible Sigmoidoscopy with FIT[c] (FSIG) | Every 10 years for flexible sigmoidoscopy with annual FIT | Every 5 years | Second tier, every 10 years for flexible sigmoidoscopy with annual FIT |
| Double Contrast Barium Enema (DCBE) | USPSTF recommendations do not comment on this method | ACS recommendations do not comment on this method | Not recommended |
| CT Colonography[e] | Every 5 years | Every 5 years | Second tier every 5 years |
| Capsule colonoscopy | Not included, insufficient evidence | ACS recommendations do not comment on this method | Third tier, every 5 years |
| Double Contrast Barium Enema (DCBE) | USPSTF recommendations do not comment on this method | ACS recommendations do not comment on this method | Not recommended |

USPSTF Abbreviations: FIT, fecal immunochemical test; FIT-DNA, multi-targeted stool DNA test; gFOBT, guaiac-based fecal occult blood test; RCT, randomized clinical trial.

**A** Although a serology test to detect methylated *SEPT9* DNA was included in the systematic evidence review, this screening method currently has limited evidence evaluating its use (a single published test characteristic study met inclusion criteria, which found it had a sensitivity to detect colorectal cancer of <50%).

**B** Applies to people with negative findings (including hyperplastic polyps) and is not intended for people in surveillance programs. Evidence of efficacy is not informative of screening frequency, with the exception of gFOBT and flexible sigmoidoscopy alone.

**C** Strategy yields comparable life-years gained (i.e., the life-years gained with the noncolonoscopy strategies were within 90% of those gained with the colonoscopy strategy) and an efficient balance of benefits and harms in CISNET modeling.

**D** Suggested by manufacturer.

**E** Strategy yields comparable life-years gained (i.e., the life-years gained with the noncolonoscopy strategies were within 90% of those gained with the colonoscopy strategy) and an efficient balance of benefits and harms in CISNET modeling when lifetime number of colonoscopies is used as the proxy measure for the burden of screening, but not if lifetime number of cathartic bowel preparations is used as the proxy measure.

**F** U.S. Multi-Society Task Force of Colorectal Cancer representing the American College of Gastroenterology, the American Gastroenterological Association, American Society for Gastrointestinal Endoscopy.

Individuals should discuss the options with their health care provider and choose the screening test that is best for them. To be effective, however, screening must be followed by appropriate follow-up of positive test results and treatment for those diagnosed with colon cancer. Treatment following early detection by screening lowers deaths from colon cancer.

The NC Advisory Committee on Cancer Coordination and Control (NC ACCCC) recommends that individuals discuss colon cancer screening with their health care provider by age 45. Individuals should discuss at an age younger than age 45 if there is a personal or family history that increases risk of colon cancer. The public and health care providers should follow current expert group guidelines for colon cancer screening, with preference given to screening options supported by the strongest clinical research. Further, the NC ACCCC recommends community, provider, policy, and other efforts to increase colon cancer screening in North Carolina. Efforts to increase screening should promote and support informed patient choice of a screening test. Efforts to increase screening should also reach all segments of the population and must be accompanied by efforts to assure follow-up and treatment, particularly among those with lowered access to care because of financial or insurance issues, race or ethnicity, or disability status.

The NC ACCCC recommends that scientific evidence related to colon cancer screening be re-examined in five years (2027). If, however, compelling evidence regarding screening becomes available before the scheduled review, the NC ACCCC recommends immediate review of the current position statement.

Note: NC ACCCC recommends that any person at average risk of receiving a negative test result after any colorectal screening wait for the next recommended interval for screening in the absence of any new symptoms. If there is any change in family history or gastrointestinal symptoms, please discuss with your provider prior to the next recommended screening.

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Approved by NC ACCCC Date: 11/18/2022.