Strategic Roadmap
for Accelerating the Uptake of United States Preventive Services Task Force (USPSTF) Colorectal Cancer Screening Guidelines for Implementation by Preventive Medicine Specialists

Final Version – December 2022

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1. INTRODUCTION

Background

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths in the United States (President’s Cancer Panel, 2022). In 2021, approximately 52,980 people in the United States (US) were estimated to have died from CRC (Davidson, et al., 2021). While CRC is most frequently diagnosed among adults between the ages of 65-74 years of age, incidences of CRC in adults under the age of 50 are on the rise (American Cancer Society, 2021). It is estimated that 10.5% of new CRC cases occur in persons younger than 50 years of age (Davidson, et al., 2021). The 2022 report from the President’s Cancer Panel, “Closing Gaps in Cancer Screening: Connecting People, Communities, and Systems to Improve Equity and Access,” projects that by 2030, CRC will become the leading cause of cancer-related death among 20-49-year-olds in the US (President’s Cancer Panel, 2022). Although prior guidelines recommended that CRC screening should begin at the age of 50, in May of 2021 the United States Preventive Services Task Force (USPSTF) issued revised guidelines that:

- lower the recommended initial screening age to 45-49 years;
- recommend CRC screening options;
- stress the importance of follow-up colonoscopy to achieving the screening benefit; and
- encourage the development of systems of care to ensure adults receive high-quality care across the continuum of screening and treatment, with special attention to Black communities. (Davidson, et al., 2021).

These recommendations were informed by the work previously completed by the American Cancer Society (ACS), which generated the database leading to the ACS’s recommendation in 2018 to lower the screening age to 45 years.

**USPSTF Recommendation Summary**

In the current recommendation (USPSTF, May 2021), while continuing to recommend colorectal cancer screening in adults aged 50 to 75 years (A recommendation), the USPSTF now recommends offering screening beginning at 45 years of age (B recommendation). As it did in 2016, the USPSTF continues to recommend that clinicians selectively offer screening for colorectal cancer in adults aged 76 to 85 years. (C recommendation). The USPSTF guidelines continue to conclude that screening within this population should be an individual decision and should be discontinued after age 85 years. These recommendations apply to adults 45 years and older who do not have signs or symptoms of colorectal cancer and who are at average risk for colorectal cancer.

To read the Full Recommendations Statement visit: https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening
**Strategic Roadmap Overview**

In November 2021, Exact Sciences awarded the American College of Preventive Medicine (ACPM) a grant to develop a strategic roadmap to accelerate the implementation of the revised USPSTF’s CRC screening and treatment guidelines. This roadmap outlines strategies and key initiatives to leverage ACPM, its members, grantees, and the broader community of preventive medicine specialists and similarly focused healthcare professionals to implement these new guidelines more consistently and effectively, particularly among communities that have been historically marginalized.

The development of the roadmap was informed by a series of convenings with subject matter experts and key stakeholders, representing more than 20 healthcare systems, associations, community-based organizations, universities, and public health professionals, which took place in July and September 2022.

Throughout this document population and demographic groups are referred to as follows:

- **“Historically marginalized”** populations or communities refers to a wide range of population foci including Black, Brown, Asian, and Indigenous people; individuals with disabilities; and individuals whose access to healthcare and resources is adversely impacted by geography (e.g., rural communities, or underserved urban neighborhoods), socio-economic status, or lack of education.

- **“Newly eligible demographic group”** refers to the 45-49-year-old group that is now eligible to receive CRC screenings based on the new USPSTF guideline recommendations.

- **“Priority” or “populations” or “prioritized populations”** refers to both above groups, as the 45-49-year-old group and communities that have been historically marginalized are the most important populations to address with this roadmap.

- **ACPM “professional segments”** refers to the sectors across the healthcare delivery continuum in which ACPM member Preventive Medicine physicians work or have influence, including individual practicing physicians; healthcare delivery systems; community-based clinical settings; public health departments and organizations; national policy- and advocacy-focused organizations; insurance providers; and academia and medical education.

An acknowledgement of convening participants is included in the [appendix](#).

### 2. **SITUATION & “CURRENT STATE” CONTEXT**

According to the National Cancer Institute’s Cancer Trends Report, in 2019, 67.1% of age-eligible adults (aged 50-75) were screened for colorectal cancer in the United States (National Cancer Institute, April 2022). This data predates the COVID-19 pandemic, which significantly impacted screening rates across all populations. The screening rate is even lower among populations that have been historically marginalized, rural communities, and persons with disabilities. The percentage of eligible adults screened is also lower among populations with lower incomes and less education (National Cancer Institute, April 2022).
The following “current state” themes were identified by subject matter experts and stakeholders who participated in pre-convening interviews and in the convenings. This is the context to which the strategic roadmap responds and is intended to address, where possible. It is important to note that some of these situations are beyond the scope of work of this strategic roadmap.

1. **Lack of Awareness of New Guidelines**: A critical barrier to implementing the revised USPSTF CRC screening guidelines is the general lack of awareness of the new guidelines and related recommendations by both patients and providers. Market research studies conducted by the National Colorectal Cancer Roundtable (NCCRT) among communities of Black and Brown people and among adults aged 45-49 indicate that healthcare provider nonreferral is one of the predominant factors impacting screening rates in this population. Additionally, interventions to address low health literacy within groups that are disproportionately impacted by CRC must also be considered.

2. **Need for Greater Emphasis on Addressing the Barrier of Structural Racism**: Structural racism in healthcare systems, policy, insurance coverage, and provider-level biases continues to present barriers to increasing rates of CRC screening and follow-up, including a general lack of socially and culturally fluent and accountable care which understands the outsized risks and disproportionate impact on communities that have been historically marginalized. This is further apparent in the ongoing challenges related to universal access to care and equitable coverage for that care. As work progresses to increase the uptake of the USPSTF CRC guidelines, emphasis must be placed on initiatives that seek to remove barriers related to structural racism and social determinants of health.

3. **Continued Challenges in Access to Care**: Despite inroads being made, access to care remains a challenge, due to a variety of reasons including transportation, cost of care/lack of coverage, time requirements, family commitments, and other social needs impacting health, particularly among communities that have been historically marginalized.

4. **Distrust of Healthcare Systems**: While many healthcare systems and institutions are engaged in some level of health equity work, few have acknowledged or addressed the role they have played in contributing to health inequalities in their communities. Healthcare systems in general have failed to demonstrate accountability for equitable health outcomes and have historically even profited from policies that actively drove health and racial inequity (Manchanda, Thevarajah, & Marple., 2022). Among members of communities that have been historically marginalized, this has led to an ongoing broken trust in healthcare systems and medical authorities, often tending to place more trust in members of their own communities and social networks (White & Itzkowitz, 2020; Ho, et al., 2021; Cole, et al., 2017). This underscores the need to engage community-based
organizations, social structures, and advocates (e.g., community health workers [CHW], faith, and community leaders) that are representative of priority populations.

5. **Inconsistent Use of Audience Specific Messaging:** Another critical barrier to achieving desired goals related to CRC screening rates is the lack of consistent, aligned, audience-specific messaging that addresses concerns and barriers to both initial screening and adherence to follow-up. To be most effective, not only should messaging be culturally sensitive, appropriate, and audience-specific, but it should be intentionally distributed via channels that primary audiences use and are most likely to trust, particularly via channels and champions that are representative of their own communities.

6. **Over-Reliance on Primary Care Provider Workforce in Clinical Settings:** Primary care providers are already overburdened and stretched thin when it comes to what can be feasibly accomplished during a scheduled clinical visit. In addition, issues of workforce capacity and availability to perform colonoscopies and other follow-up procedures have been exacerbated by patient backlogs and workforce attrition due to COVID-19. This, combined with the increased number of adults eligible for CRC screening due to the lowered recommended screening age, further adds to workforce strain. While it is critical to engage physicians and others in healthcare to accelerate the implementation of the revised USPSTF guidelines, already overburdened healthcare teams cannot be the only ones that build and maintain systems of outreach and engagement. Effectively increasing CRC screening rates for all eligible adults across all communities will require participation from a variety of domains, beyond the clinical setting, including alternative healthcare delivery settings (e.g., urgent care centers, pharmacies, retail healthcare), insurance providers, employers, public health departments, and other community-based organizations, to either disseminate information to the general public about the need for CRC screenings and available options, as well as, where appropriate, provide access to take-home screening kits.

7. **Existing Evidence-Based Interventions & Best Practices:** There are a variety of evidence-based interventions, existing tools and resources, and recommendations that can be better leveraged to accelerate uptake of USPSTF guidelines and to increase screening rates overall. For example, NCCRT provides a plethora of tools, resources, research, and messaging aids to support the case for CRC screening. Evidence-based interventions to support patient outreach, follow-up, and community engagement also exist but are not universally used. Best practice models for increasing screening rates and follow-up and reducing mortality rates also exist but need to be aggregated and elevated to achieve scale and affect population-level improvements in screening and related outcomes. For example, findings from the 2018 article published in Gastroenterology, *Effects of Organized Colorectal Cancer Screening on Cancer Incidence and Mortality in a Large Community-Based Population*, highlighted how using a fecal immunochemical test (FIT) dramatically increased early CRC diagnosis and reduced cancer deaths.

8. **Insights to Glean from Other Preventive Initiatives & Screenings:** In addition to the above reference to evidence-based interventions and best practices related to CRC screening, there are also lessons that can be learned and applied from other preventive initiatives, including campaigns and activities to accelerate COVID-19 vaccinations and other cancer screening models (e.g., process for mammogram screening that alleviates the strain on primary care). These models can not only provide ways to increase engagement with patients and communities through proven methods, but they can also help to reduce the burden on physicians by deploying non-
clinical, community-based assets.

9. **Inconsistent and Insufficient Infrastructures in Healthcare Systems**: While evidence-based interventions, tools, models, and best practices exist to support a more effective system for ensuring initial CRC screening and follow-ups are prioritized, these systems (e.g., optimized electronic health records/electronic medical records (EHR/EMR) technology, system-wide policies and mandates, incentives, community linkages, shared decision-making models) are not consistently or sufficiently integrated into operating practices across all healthcare systems and clinical settings. Examples that demonstrate how intentional approaches for universal screening outreach can be successful in overcoming barriers to implementing evidence-based practices in healthcare settings exist in both the Kaiser Permanente system (which covers approximately 1 in 30 people in the United States) and the US Department of Veterans Affairs system (which has reached approximately 80% of its eligible population screened). As cited by a convening participant, the key condition for success in both systems is that the insurer/provider group coordinates central outreach, rather than functioning only as a “funder” and leaving the specific operational activities to multiple local or private practice groups.

10. **Lack of Coordination Among Key Institutional Players**: While there are currently strong organizational players disseminating messaging and engaging in advocacy to advance CRC screening that have achieved important wins in the last two years (e.g., increased insurance coverage, reduction in screening age), there also continues to be inconsistent and uncoordinated engagement, messaging, and marketing by national professional, public health, and advocacy organizations.

11. **Leveraging Recent Wins to Expand Coverage**: Significant policy and insurance coverage wins in recent years have removed some financial barriers associated with patient access to CRC screening and follow-up, including requirements for private insurers and Medicare to cover CRC screening (including a variety of options) and follow-up colonoscopies; the recent proposal from the Centers for Medicare and Medicaid Services (CMS) to address the cost sharing issue for follow-up colonoscopies covered by Medicare; and other policy wins. There is still a lack of consensus among private insurance, Medicare, and Medicaid with regards to what can be coded a screening test versus a diagnostic test, resulting in inconsistencies in what aspects of the screening continuum are covered with no cost to patients. Additionally, while states are authorized to cover colorectal screening under their Medicaid programs, Medicaid coverage for colorectal cancer screening varies by state. The screening age range for CRC bridges two major insurance streams that historically do not communicate well: plans covering individuals under 65 (commercial insurance, Affordable Care Act (ACA) exchange plans or Medicaid) and Medicare covering adults 65+. A strategy may be needed for transitioning patients from employer-based or private plans to Medicare with minimal frustration and gaps in care.

12. **Lack of Coordinated Plan to Reach People who are Un/Underinsured**: According to the 2020 National Health Interview Survey, conducted by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Center for Health Statistics, 31.6 million people of all ages were uninsured at the time of the interview. Of those interviewed, 10.6% of people between the ages of 45 and 64 were uninsured (Cha & Cohen, 2022). Providing screening services to people without insurance, or those who lack a primary care provider, is a challenge for which a coordinated strategy is currently lacking.
13. **Dissemination of Baseline and Benchmarking Data**: To effectively measure progress in increasing screening of adults in the 45-49 age range and among communities that have been historically marginalized, baseline data segmented by age and by demographics will need to be systematically collected, synthesized, and disseminated to provide an accurate current state picture. Currently, both the ACS and the CDC are resources for national CRC screening data, which is presented annually at NCCRT meetings. Participatory research in communities of Black and Brown people will be especially critical in clinical trials to ensure that these priority populations are properly and effectively engaged.

3. **STRATEGIC ROADMAP: OVERARCHING OBJECTIVES & STRATEGIES**

**Overarching Goal**
This strategic roadmap provides recommendations for more effective and equitable implementation of the USPSTF CRC screening guidelines by Preventive Medicine physicians across multiple domains in which these specialists work and have influence (e.g., clinical settings, healthcare systems, community-based organizations, public health, insurance, policy, and academia). The roadmap takes into account the current CRC landscape – one in which policy changes have removed screening barriers, while the COVID-19 pandemic has created new ones – and incorporates a focus on serving populations that have been historically marginalized, to achieve the NCCRT goal to ensure that colorectal cancer screening rates reach or exceed 80% in communities and organizations across the nation.

**Objectives Related to the USPSTF Guideline Recommendations**

1. **Raise awareness and implementation rates of CRC screening among adults aged 45-49, with the goal of 80% of eligible adults in all communities screened.**

   Lowering the recommended initial screening age to 45-49 introduces a new demographic segment into the population of adults eligible for screening. While this group of adults may be aware of CRC screening as a recommended procedure when they reach 50 years, the idea of screening at 45 years will be new to them, necessitating awareness building and education - for both patients and providers. The 45–49-year-old adult is also, generally, at a different stage of life than their older counterparts, and their needs, interests, preferences, attention, and availability may differ.

2. **Increase awareness and utilization of screening options - in addition to colonoscopy - among all adults aged 45-75, across all population groups, particularly among populations that have been historically marginalized.**

   Offering the usage of at-home/take-home screening options for average risk adults - particularly among adults aged 45-49, and within communities for which access to PCP and/or clinical settings is challenging - is an important factor in raising overall screening rates as well as reducing the burden on healthcare facility-based interventions by physician/healthcare providers. Research trials and best practice models have shown that increasing awareness of and access to a wider range of screening options leads to improved screening rates and increases in early detection.
Awareness and education are needed across the entire healthcare continuum to ensure that:

- Patients are informed and can advocate for their options
- Physicians and other healthcare providers are aware of and can recommend options that are most appropriate and convenient for patients
- Healthcare systems have protocols in place that allow for screening options to be offered that align with what is covered by insurance carriers of their patients
- A shared decision-making model is in place and used effectively to support patients with selecting the right screening option for them
- Healthcare systems have protocols in place to follow-up on at-home testing to ensure patients are returning tests, following-up positive stool tests with colonoscopy, and receiving complete/comprehensive care

3. **Increase rates of adherence to follow-up colonoscopy and treatment within a standardized time frame following initial positive screening result to achieve the full benefit of screening and early detection.**

According to a study published in Gastroenterology in January 2019 (Doubeni, et al., 2019) CRC-related deaths occur when patients do not receive adequate screening, do not engage in appropriate and timely follow-up when a positive result is received, or the initial screening test fails. While CRC advances slowly, patients receiving a positive result on a stool-based test should complete a follow-up colonoscopy and other recommended treatment within six months. Although some state-funded cancer services\(^1\) require that diagnostic colonoscopies are completed within a specific window of time following an abnormal stool-based test, there is currently no national standard for this follow-up timeframe. The CDC’s National Breast and Cervical Cancer Early Detection Program requires diagnostic follow-up for an abnormal breast or cervical cancer screening test within 60 days. Recent studies conclude that among patients with a positive fecal immunochemical test (FIT), waiting longer than six (6) months to complete a follow-up colonoscopy was increasingly associated with a higher risk of any CRC and advanced-stage disease (Corley, et al. 2017). The National Committee for Quality Assurance and other groups involved in developing a diagnostic follow-up performance measure may have some insights on timeframes being considered. Adherence to follow-up varies widely, with current data suggesting follow-up adherence can be anywhere between 20-80%. There are myriad factors that may contribute to lack of follow-up including: lack of patient awareness of urgency, lack of access to appropriate clinical settings and resources, barriers due to cost, inability to take time off to complete follow-up diagnostic testing, ineffective outreach and follow-up systems implemented by healthcare delivery systems that allow patients to “fall through the cracks,” patient fear of stigmatization, and many others.

4. **Encourage the development of systems of care to ensure adults receive high-quality care across the continuum of screening and treatment, with special attention to populations that have been historically marginalized.**

The persistent challenges in coordinating care among physicians and other healthcare providers across the continuum of care, both within and beyond clinical settings, has led to the currently

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\(^1\) For example, state-funded cancer services program in New York requires contractors to ensure diagnostic colonoscopies are completed within 90 days of an abnormal stool-based test.
fragmented approach to providing patients with holistic and integrated support. This lack of coordination within referral management and community linkage systems leads to various problems including, but not limited to, operational inefficiency, broken referral loops, missing medical information, and delayed or missed treatment opportunities. These problems directly affect the quality-of-care patients receive and negatively impact health outcomes. More effective, efficient, and timely treatment depends on shifting this fragmented paradigm to a system of care that follows a patient from the initial screening recommendation through every subsequent step in the CRC screening and treatment process supported by coordinated “high touch” hand-offs, accurate documentation and referral tracking, timely follow-ups, and appropriate data sharing across the continuum of care. Improving screening rates among all priority populations will require the development of holistic systems of care across the continuum from policy makers to community-based organizations to frontline clinical care workers, and everything in between.

Overarching Strategies
Preventive Medicine physicians are uniquely qualified to serve as force multipliers across professional sectors, amplifying existing messaging, raising awareness of the importance of CRC screening and follow-up care, and advocating for community-based and at-home colon cancer screening tests to increase overall screening rates. The following overarching strategies emerged during the convening discussions as relevant and foundational for advancing towards desired outcomes related to all guideline recommendations and across all professional segments. In the following sections, these strategies are further broken down into action steps distributed across the healthcare sectors represented in ACPM’s Preventive Medicine physician membership.

1. **Utilizing Actionable Data & Metrics:**
   a. Establish and disseminate baseline data and goal metrics for each prioritized population segment, at the local and practice setting, to track progress towards desired outcomes.
   b. Develop a national standard for optimal timing for follow-up procedures and treatment when a patient receives an abnormal result in a preliminary screening.

2. **Disseminating Aligned Messaging & Communications:**
   a. Develop and/or leverage existing priority population-specific messaging about CRC screenings and the urgent need to complete screenings according to recommended guidelines or earlier/more frequently depending on existing risk factors.
   b. Identify, coordinate, and activate primary audience-specific channels of communication to ensure consistent, relevant, and timely messaging is delivered to all eligible adults across population groups, regardless of whether they are coming into a clinical setting for care.
   c. Advocate for the use of mainstream marketing and advertising messaging campaign(s) to generate high visibility among the public, leveraging high profile public figures and/or events to raise awareness.

3. **Mobilizing Communities & Coordinate Cross-Sector Engagement to Establish Systems of Care:**
   a. Design and implement an aligned, coordinated, and consistent systems approach across all healthcare delivery domains.
   b. Emphasize both top-down, national-level coordination across professional associations, national organization, federal, state, and local agencies, etc., as well as grassroots community-level engagement and coordination.
4. **Leveraging Existing Tools, Resources, Evidence-Based Interventions (EBIs) & Best Practice Models:**
   a. Leverage relevant and applicable lessons learned from COVID-19 vaccination campaigns and programs and apply strategies and tactics for dissemination of information, public awareness campaigns, patient outreach, and delivery of services that were effective in increasing vaccination rates, particularly among populations that have been historically marginalized. Consideration will need to be given to how to effectively leverage these strategies in the absence of the robust federal funding that was released to support the nation’s response to the COVID-19 pandemic.
   b. Aggregate and disseminate evidence-based interventions, best practice models, and promising practices to improve patient outreach, provider education, and systems improvements.
   c. Integrate principles and best practices, for example utilizing a team-based approach to care that actively engages patients as full participants in their own healthcare journey and decision-making, while encouraging and supporting healthcare professionals to operate to the full extent of their education, certification, and licensure.

5. **Leveraging Technology & Healthcare Trends:** Leverage EHR/EMR platforms, mobile health technology, telehealth, retail health, etc. to reach and engage prioritized populations more effectively. EHR/EMR platforms can be used to directly initiate screening, by sending auto-generated electronic notifications to screening-eligible people; tracking screening completion; and, where needed, tracking follow-up to ensure completion of recommended follow-up for positive tests.

6. **Engaging Employers and Employer Purchasing Coalitions:** The newly eligible adult population (45–49-year-olds) includes many working age adults within employers’ spheres of influence and connection. Preventive Medicine physicians practicing occupational medicine can engage the employer private sector, which is the largest source of health insurance benefits in the U.S. to support efforts to reach eligible adults who may not see clinical services unless they are experiencing an acute health issue. Additionally, employers, employer groups, and employer purchasing coalitions, such as the National Business Group on Health, and the National Alliance of Employer Healthcare Purchasing Coalitions, can be engaged in standardizing benefit coverage and language (in partnership with insurers), to ensure consistency with Medicare and Medicaid programs.

7. **Prioritizing Preventive Measures & CRC Screening Actions:**
   a. Align and expand insurance policies and coverage to reduce barriers to access.
   b. Improve reimbursement rates and policies to incentivize primary care providers (PCPs) and healthcare delivery systems to prioritize prevention and screening, leverage community-based resources, and optimize team-based and community-engaged care.
   c. Establish policies and quality measures to incentivize healthcare delivery systems to prioritize prevention and screening.

**4. STRATEGIC ROADMAP: ACTION STEPS BY PROFESSIONAL SEGMENTS**

This “Strategic Roadmap for Accelerating the Uptake of the USPSTF Guidelines for CRC Screening” is meant
to be used by Preventive Medicine physicians, represented in the American College of Preventive Medicine’s membership by the following professional segments. These segments are based on sectors of the healthcare delivery continuum in which Preventive Medicine physicians work or have influence.

- Individual Practicing Preventive Medicine Physicians
- Healthcare Delivery Systems & Clinical Settings
- Community-Based Clinical Settings
- Public Health Departments & Organizations
- National Policy- & Advocacy-Focused Organizations
- Insurance Providers
- Academia & Medical Education

The following sections of the roadmap outline specific action steps Preventive Medicine physicians in each professional segment can take to accelerate the uptake of the USPSTF Guidelines for CRC Screening in their domain of influence. Each section begins with a description of the “ideal state” or ideal outcomes the roadmap seeks to advance related to the professional segment. The “ideal state” descriptions are not meant to reflect current conditions, but rather meant to present a vision of desired outcomes. While we recognize that one or more of the action steps in a given professional segment could be relevant to other professional segments, each action step was placed, in general, in the section in which a stakeholders involved in the roadmap development indicated would yield the best return on investment in the short-term and were most feasible for Preventive Medicine physicians to implement to produce the greatest impact.

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Individual Practicing Preventive Medicine Physicians

Who: Individual Preventive Medicine physicians working in a variety of healthcare settings.

“Ideal State” Outcomes Description: Preventive Medicine physicians across varied care settings are aware of and actively engaged in implementing the USPSTF CRC screening guideline recommendations, in ways that leverage evidence-based interventions and best practices in culturally appropriate ways. Practicing Preventive Medicine physicians have the systems, structures, and support (e.g., staff, technology, policies, incentives) in place to mitigate burnout, increase career satisfaction, and allow them to address both immediate concerns and preventive health measures such as CRC screening. The use of at-home screening options, telehealth, and other technologies has reduced the burden on physicians to conduct colonoscopies, better balancing workload between screening and diagnostic colonoscopies. Additionally, in the ideal state, adequate funding exists to pay for the use of nonclinical facilitators such as Patient Navigators (PNs) and CHWs to support patient education, outreach, screening, and follow-up.

Action Steps for Healthcare Providers

1. Familiarize yourself with the updated USPSTF Guidelines for Colorectal Cancer Screening and the implications of these guidelines on your practice and patients.

2. Incorporate conversations about CRC risk, symptoms, screening recommendations, and options into annual and acute visits with eligible and pre-eligible patients.

3. Identify patients with risk factors (including social determinants of health-related factors) using social needs and SDOH screening tools and leveraging community-wide asset maps to identify available resources or assets that can be used to more accurately know neighborhood level social and structural needs and devise ways to meet those needs through collaborative anchor models and partnership networks to prioritize high-risk eligible and pre-eligible patients for CRC screening education and awareness.

4. Engage your team to create holistic, patient-centered, team-based plans across the continuum of care during annual physical exams, the CRC screening and follow-up process.

5. Develop and utilize a workflow process and decision tree to outline clear steps for patients regarding what to do in response to a positive result.

6. Engage practice setting and system leadership in discussions to develop system-wide protocols, processes, and structure, as well as community-wide engagement to support increased attention and coordination around implementing CRC screening with the newly eligible populations and populations that have been underserved or historically marginalized (e.g., integrating CRC module with updated guidelines into EHR/EMR records, utilizing clinical decision support tools such as alerts in EHR/EMR systems to remind providers when CRC screening is due, systems for utilizing patient navigators (PNs) and CHWs in outreach and follow-up, performance-based payment strategies related to the NCCRT goal of 80% of eligible populations screened, partnership with community-
### Action Steps for Healthcare Providers

*Based anchors including local health departments and other health systems to drive community-wide awareness and change.*

7. Update EHR/EMR with patient reminders for initial screenings and follow-up activities, and where patients have access to their own EHR/EMR records, provide prompts to patients to encourage them to call their doctor’s office and request CRC screening information.

### Healthcare Systems & Clinical Settings

**Who:** Preventive Medicine physicians in leadership roles within large hospitals and healthcare systems, who are positioned to drive change at the healthcare system level.

**“Ideal State” Outcomes Description:** Healthcare delivery systems and practice settings are using evidence-based interventions, best practices, shared decision-making models, and culturally aware approaches to create holistic, patient-centered systems of care that extend from the clinical setting out to communities. They are intentionally applying organized universal outreach to all eligible populations, regularly contacting all eligible adults, not just those who come into a clinical setting for care. Healthcare delivery systems and practice settings are leveraging resources such as CHWs, PNs, and community-based assets to build trust, increase awareness, and reduce language barriers. They have integrated policies, data-informed practices, and incentives to support the prioritization of preventive measures such as healthy lifestyle and regular screenings, according to guidelines and risk factors. Systems are frequently and systematically evaluating whether CRC screening rates are improving (or maintained above 80%) in their entire population - and by sub-population - and are using the results to improve practice and outcomes.

### Action Steps for Hospitals & Healthcare Systems

1. Promote system and provider awareness of new guidelines, available resources, evidence-based interventions, culturally sensitive messaging and outreach, and evidence-based recommendations for conducting follow-up (e.g., within 6 months of a positive test result).

2. Establish system-wide policy, practices, workflows, and aligned incentives that support providers in prioritizing CRC screening conversations with eligible and high-risk patients and adherence to follow-up care (e.g., quality measures, performance metrics, screening, and follow-up criteria, shared decision-making models to support team-based patient interventions, clinical decision supports such as CRC screening reminders in EHR/EMR systems).

3. Develop the infrastructure, systems, technology, data systems, and incentives (including EHR/EMR platforms) to ensure streamlined, seamless process for providing the full continuum of CRC care (from prevention, to screening, to follow-up care, and ongoing patient outreach), incorporating clinical care and community linkages, where relevant.
### Action Steps for Hospitals & Healthcare Systems

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<td>4.</td>
<td>Develop and implement a periodic program quality evaluation of CRC screening efforts to ensure that the entire population served and subpopulations (particularly those at highest risk and/or underserved) are indeed meeting screening rate goals if not decreased CRC incidence rates and death.</td>
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<tr>
<td>5.</td>
<td>Build and/or leverage relationships with community-based organizations and clinical settings, retail health, telehealth, and other healthcare and mobile technologies to increase reach into communities, particularly among 45–49-year-olds and populations that have been historically marginalized.</td>
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<td>6.</td>
<td>Increase utilization of PNs and CHWs in healthcare and community setting(s) to support patient awareness, education, and outreach for initial screening and follow-up. (NOTE: advocacy to support increased funding for these positions is included in the section related to National Policy &amp; Advocacy-Focused Organizations.)</td>
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<td>7.</td>
<td>Partner with community-based organizations and public health organizations to utilize existing data or establish a baseline for current screening rates among adults aged 45-49 years, by priority population segments and track progress against goal metrics.</td>
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### Community-Based Clinical Settings

**Who:** Preventive Medicine physicians working in community based-clinical settings such as Federally Qualified Health Centers (FQHC).

**“Ideal State” Outcomes Description:** Community-based clinical settings are partnering effectively with healthcare systems, public health departments, and other community linkages to promote the importance of CRC screening and follow-up, particularly to members of communities that have been historically marginalized. Community-based clinical settings have the funding and the human capital resources to provide effective outreach, engagement, and delivery of services to patients and members of the community who are historically marginalized. Community-based clinical settings, healthcare systems, and public health departments are effectively and efficiently sharing patient referral data to ensure those who need follow-up care are receiving that care in a timely manner. Data is being shared and tracked across the healthcare continuum to effectively benchmark and measure progress against goals related to community-wide CRC screening rates.

### Action Steps for Community-Based Clinical Settings

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<tr>
<td>1.</td>
<td>Leverage existing tools, resources, and messaging to build awareness of CRC screening and screening options among members of priority populations including the newly eligible 45-49 age-group and populations that have been historically marginalized.</td>
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Action Steps for Community-Based Clinical Settings

2. Identify and partner with healthcare systems, public health departments, retail health centers, community-based organizations (CBOs), and community services to disseminate CRC screening messaging, ensure that take-home kits are accessible and/or deliverable to patients, and support initial screening and follow-up.

3. Recruit and train trusted members of the community (particularly those representing populations that have been historically marginalized) to serve as community-based PNs and CHWs to support patient outreach, education, and engagement, and to understand and address barriers.

4. Build engagement strategies and relationships with organizations, communities, and social structures that represent populations that have been historically marginalized.

5. Capitalize on data modernization efforts and funding to ensure that the technical infrastructure exists to support data interoperability between public health and healthcare systems (including EHR/EMRs) and to ensure data collection is more reflective of community demographics.

Governmental Public Health Departments & Organizations

Who: Preventive Medicine physicians in leadership roles within public health departments and organizations.

“Ideal State” Outcomes Description: State and local health departments are partnering effectively with healthcare systems and community-based practices to promote the importance of CRC screening and follow-up and provide or facilitate access, particularly to members of communities that have been historically marginalized. Governmental public health departments are engaged in providing community members with access to either information about CRC screening options and access to screening and are adequately funded to provide these services to uninsured and underinsured individuals who need them. Healthcare systems, community-based clinical settings and public health departments are effectively and efficiently sharing data to benchmark and measure progress against goals related to community-wide CRC screening rates.

Action Steps for Governmental Public Health Departments & Organizations

1. Leverage existing tools, resources, and messaging to build awareness of CRC screening and screening options among members of priority populations including the newly eligible 45-49 age-group, populations that have been historically marginalized, and those who may not have access to clinical care.

2. Disseminate best practices for governmental public health department/agency engagement in CRC screening in their respective jurisdictions.
### Action Steps for Governmental Public Health Departments & Organizations

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<td>3.</td>
<td>Replicate success strategies (when financially feasible) used for COVID-19 vaccination, flu shots, regular immunizations, and other screenings and preventive measures to support increased awareness of CRC screening guidelines.</td>
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<td>4.</td>
<td>Leverage successes with the Flu-FIT/Flu-FOBT model(^2) to increase community awareness of CRC screening importance and options.</td>
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<td>5.</td>
<td>Leverage relationships with community-based organizations, CHWs, PNs, and community social structures to disseminate information about the importance of CRC screenings, support patient outreach and engagement, and follow-up care (particularly for individuals without primary care providers and/or access to clinical care).</td>
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<td>6.</td>
<td>Align and coordinate across local and regional partners to educate decision makers about the urgency to do more to advance CRC screening.</td>
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<td>7.</td>
<td>Capitalize on data modernization efforts and funding to ensure that the technical infrastructure exists to support data interoperability between public health and healthcare systems (including EHR/EMRs) and to ensure data collection is more reflective of community demographics.</td>
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### National Policy & Advocacy-Focused Organizations

**Who:** Preventive Medicine physicians working in or engaging with national organizations and professional associations that have influence on policy and are engaged in advocacy and educational initiatives in support of CRC initiatives.

**“Ideal State” Outcomes Description:** Momentum and coordination among professional organizations and advocacy groups continues to increase the drive towards the shared goal of 80% of eligible populations screened. Professional associations and national organizations in healthcare, governmental public health, and policy/advocacy are aligned and coordinated in disseminating audience-appropriate messaging, tools, resources, and data that builds awareness and implementation of the USPSTF CRC guideline recommendations.

### Action Steps for National Policy & Advocacy-Focused Organizations

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<tr>
<td>1.</td>
<td>Continue to advocate for consistent and adequate coverage of CRC screening and follow-up care across all types of insurance plans, including coverage for non-physician healthcare providers (e.g.,</td>
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\(^2\) Designed to increase colorectal cancer screening (CRC) among adults, this intervention allows healthcare providers to promote screening to patients at the time of their annual flu vaccine, offering a fecal occult blood test (FOBT) or take home fecal immunochemical (FIT) kit, instructions, and a return envelope.
### Action Steps for National Policy & Advocacy-Focused Organizations

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<td>nurse practitioners, physician assistants, PNs, and CHWs) who may be involved in performing screening colonoscopies or tests, patient outreach and education, or follow-up services.</td>
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<tr>
<td>2.</td>
<td>Implement the resolution developed and introduced by the ACPM and passed by the AMA House of Delegates to support/advance CRC screening and awareness.</td>
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<td>3.</td>
<td>Determine and align around messaging that educates the 45-49-year old age group about the full range of screening options and modalities available to them, as well as considerations to guide their decision-making regarding which option best meets their individual needs and/or situation. Given workforce attrition, capacity, and the need to prioritize colonoscopies for at-risk populations, non-invasive, at-home screening may be an additional option for individuals in this population segment who are not at high-risk for CRC.</td>
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<td>4.</td>
<td>Identify and disseminate best practice models and evidence-based interventions for effectively reaching and engaging prioritized populations and establishing policies and procedures that support higher rates of screening and follow-up.</td>
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<td>5.</td>
<td>Support efforts of direct-to-consumer marketing about the importance of CRC screening and follow through and the availability of options.</td>
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<td>6.</td>
<td>Advocate for new quality measures that require follow-up rates to be tracked and reported (NCQA, Uniformed Data Services, FQHC).</td>
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<td>7.</td>
<td>Petition NCQA to recommend new measures that encourage, inform, support CRC screening, screening options and follow-up.</td>
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<td>8.</td>
<td>Advocate for the restoration of the CDC Comprehensive Cancer Control funding, which has been recently reduced.</td>
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<td>9.</td>
<td>Leverage policy wins (e.g., CMS, State policies) for preventive services, including wins related to practice and system transformation; available funding and support for primary care wrap around services.</td>
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<td>10.</td>
<td>Support coalition-based approaches to providing patients who are un/underinsured with access to emergency Medicaid for coverage of screening, testing, and/or treatment.</td>
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<td>11.</td>
<td>Advocate for the inclusion of quality measures and Medicaid adult core set measures related to CRC screening into EHR/EMR platforms, to provide physicians, clinicians, and healthcare systems with baseline and benchmark data against which they can track progress with patient outreach and engagement.</td>
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Insurance Providers

Who: Preventive Medicine physicians who work in the healthcare insurance sector or can influence outcomes in this area.

“Ideal State” Outcomes Description: All private insurers, Medicare, and Medicaid providers are required to cover the colorectal cancer screening at no cost to patients, including the removal of polyps during a colonoscopy, and pathological examination after the removal of a polyp. Ideally, CRC screening from end-to-end, whether direct-to-patient (as in FIT or stool testing) or provider-delivered, should be treated as a comprehensive "episode of care" with definitions and reimbursement. State Medicaid programs are required to cover costs for the full colorectal cancer screening continuum, including non-invasive screening tests, as well as colonoscopy as a follow-up to positive or inconclusive test results. Reimbursement rates are such that primary care providers and health systems are incentivized and funded to prioritize prevention in addition to necessary treatment, and better utilize PNs, CHWs and other community linkages. Mandates are in place to support provision of care to people who are un/underinsured.

Action Steps for Insurance Providers

1. Update policy coverage to align with requirements related to CRC screening guidelines and promote these changes to policy holders.

2. Update model language (in English and other languages) for use by PCPs, healthcare systems, and PNs in communicating to patients.

3. Continue to improve coverage so that patients have no out-of-pocket expense associated with screening, follow-up colonoscopy or diagnostic procedures.

4. Develop quality measure requirements to improve screening frequency at the provider level and assess action taken based on screening.

5. Incentivize insurance market offerings such as employee benefits and information systems to provide policy holders with more options for screening and follow-up if indicated that fit their environment.

6. Encourage and incentivize tracking follow-up colonoscopies and clinical diagnostics.

7. Encourage and incentivize patient follow-up.

8. Apply performance-based reimbursement strategies to CRC screening.

9. Increase/incorporate reimbursement directed to an all-in model of care that supports the use of non-physicians to augment physician care, including nurse practitioners, physician assistants, PNs and CHWs.
**Academia & Medical Education**

**Who:** Preventive Medicine faculty and educators in undergraduate, graduate, and continuing medical education settings and research institutes.

**“Ideal State” Outcomes Description:** Preventive Medicine physicians across practice settings are receiving adequate education and training to understand and prioritize clinical preventive measures, screening options, and evidence-based strategies for overcoming barriers to completing initial CRC screening and adhering to necessary follow-up. Providers are trained in culturally sensitive and appropriate methods for patient outreach and education and are well aware of data, tools, resources, and models that are available to them to support improved screening rates across priorities populations.

**Action Steps for Academia & Medical Education**

1. Increase opportunities for medical education and training related to the importance and delivery of CRC screening, the CRC continuum of care (screening, diagnosing, and treatment), for which providers need to take responsibility, effective strategies for patient engagement, and preventive measures.

2. Provide additional training and resources to support non-GI physicians who are currently able to provide colonoscopies (e.g., primary care providers, general surgeons), as well as training to expand the pool of eligible healthcare providers who can conduct screening colonoscopies.

3. Partnering across the healthcare and public health sectors to establish baseline and track CRC screening metrics. Such metrics would include rates of CRC screening, adherence to follow-up diagnostic testing within the entire 45-49 age group as well as segmented by gender, race, ethnicity, socio-economic status, insurance status, level of education, and location (e.g., urban vs. rural).

4. Conduct community-specific and participatory research to understand patient preferences, real and perceived barriers, and best practices for overcoming barriers. Ensure community-based organizations have a “seat at the table” via research advisory committees to inform academic, community-engaged research.

5. Partner with/engage community-based organizations to ensure research parity among groups in the community and those that can translate the data.

6. Develop and test best practice models and evidence-based approaches that demonstrate real-world outcomes.
Conclusion

The overarching goals and strategies presented in this roadmap, combined with specific action steps according to professional segments, provide guidelines for accelerating the uptake of the USPSTF guidelines for CRC screening across the Preventive Medicine specialty and within ACPM’s membership. Ultimately, this roadmap seeks to leverage Preventive Medicine physicians positioned across the healthcare continuum to serve as force multipliers in reaching the overall goal of 80% of eligible populations screened in every community across the country. Working together across the continuum, we can ensure that initial testing/screening and follow-up care is convenient and easily accessible by members of prioritized communities and age ranges through culturally appropriate/sensitive and lifestyle-aligned options and that financial, social, environmental barriers to accessing care have been significantly reduced to increase overall screening rates across all prioritized communities and age groups.
5. APPENDIX

Acknowledgments

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- **Kate Shreve, MPH**, Director of Programs and Grants
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- **Heather Dacus, DO, MPH**, Director of the Bureau of Chronic Disease Control, New York State Department of Health
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- **Andrea Dwyer, BS**, Advisor, Research and Patient Education Team, Fight CRC
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- **Steven Itzkowitz, MD, FACP, FACG, AGAF**, Steering Committee Chair, National Colorectal Cancer Roundtable
- **Marcie Klein, BA**, Vice President of Prevention, Colorectal Cancer Alliance
- **Dorothy Lane, MD, MPH, FACPM**, Associate Dean for Continuing Medical Education, The State University of New York
- **Cheryl Modica, PhD, MPH, BSN**, Director, Quality Center, The National Association on Chronic Disease Directors
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Resources
The following does not represent a comprehensive database of resources, but rather reflects reference materials and existing resources mentioned by participants in the strategic roadmap development process.

General Resources Related to USPSTF Guidelines & Cancer Screening
- USPSTF Final Recommendation Statement - Colorectal Cancer: Screening (May 2021)
- President's Cancer Panel: Closing Gaps in Cancer Screening (February 2022)
- President’s Cancer Panel Report: Colorectal Cancer Companion Brief (February 2022)
- NCCRT Learning Center (NCCRT Resources)
- Fight Colorectal Cancer Research Resources
- Fight Colorectal Cancer Resource Library

Resources for Primary Care Providers & Clinical Settings
- USPSTF Recommendations App for Web and Mobile Devices
- NCCN Guidelines for Patients: Colorectal Cancer Screening – 2021 (NCCRT Resource, 2021)
- Steps For Increasing Colorectal Cancer Screening Rates: A Manual for Primary Care Practices (NCCRT Resource, 2022)
- Meeting Summary – Primary Care Strategy Meeting: Catalyzing Primary Care to Increase Colorectal Cancer Screening (NCCRT Resource, 2022)
- EvidenceNOW Model for Practice Change (AHRQ)

Shared Decision-Making Models
- Agency for Healthcare & Research & Quality (AHRQ) Shared Decision-Making Model

Community Engagement Resources
- Strategies for Cancer Prevention and Control from the CDC Community Task Force
- ASSIST Model for integrated communications strategies
- Citywide Colon Cancer Control Coalition (C5)

Policy Resources
- ACPM AMA House of Delegates resolution
- American Cancer Society national and state organizations

Insurance Provider & Employer Resources
- Medicaid plans
- Centers for Medicare & Medicaid Services
- Federal and State-based Exchanges
- America's Health Insurance Plans
- 80% In Every Community Employer Challenge Guide (NCCRT Resources)
How Can Employers Save More Lives from Colorectal Cancer? (NCCR Resource)

Academia & Medical Education
- Community Advisory Boards
- Institutional Review Boards
- Curriculum Review Boards

References


Anderson, J. C., & Samadder, J. N. (2018). To Screen or Not to Screen Adults 45-49 Years of Age: That is the Question. The American journal of gastroenterology, 113(12), 1750–1753. https://doi.org/10.1038/s41395-018-0402-3


