



Increasing Colorectal Cancer Screening in Rural Communities: A Practical Guide







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About ACS NCCRT

Established by the American Cancer Society (ACS) and the Centers for Disease Control and Prevention (CDC) in 1997, the ACS National Colorectal Cancer Roundtable (ACS NCCRT), acts as a catalyst to stimulate work on key issues related to colorectal cancer (CRC). Now a national coalition of more than 230 member organizations, the roundtable is uniquely positioned to influence and support a shared vision to reduce CRC mortality and mortality disparities across the United States through coordinated leadership, strategic planning, and advocacy. Advancing health equity to address cancer disparities is a core component to the work that the ACS NCCRT does to ensure that no one is disadvantaged in their fight against cancer.

Promoting timely, quality CRC screening is a key initiative for the roundtable. For over a decade, ACS NCCRT members and partners have rallied around our shared goal to reach CRC screening rates of 80% and higher across the nation. To ensure the ACS NCCRT can have the greatest impact in response to nationally identified needs, we have prioritized five areas of focus intended to guide roundtable members and partners in reducing mortality and mortality disparities related to CRC, in addition to prevention and early detection efforts.

Acknowledgements

The ACS NCCRT would like to thank the **Rural Communities Advisory Committee** members who offered their time and expertise throughout the development of this guidebook and the identification of the case study organizations:

- Cara Brown, MSN, MBA, RN, Bristol Bay Area Health Corporation
- Susan Eason, MA, West Virginia University Cancer Institute
- LaToya Brave Heart, MPH, formerly with the Great Plains Tribal Leaders Health Board
- Tracie Lewis, MS, Colorectal Cancer Prevention Network, University of South Carolina
- Nikki Medalen, MS, RN, CPHQ, Quality Health Associations of North Dakota
- Michael Newcomer, MD, Western North Carolina Colorectal Cancer Screening Initiative
- Amanda Petrik, PhD, Kaiser Permanente Center for Health Research
- Tamara Robinson, Nebraska Cancer Coalition
- Elsa Staples, MPH, Colorado Cancer Screening Program

Thank you also to **Mary Carson Brown, Cathy Bledsoe, MPH**, and **Michele Ledbetter, MPH**, of <u>One Health Insights</u> for serving as the lead authors of the guidebook.

A special thank you to **Steven Itzkowitz, MD, FACP, FACG, AGAF**; ACS NCCRT chair, **Laura Makaroff, DO**, ACS chair; and **James A. Hotz, MD, MACP**, co-chair of the ACS NCCRT Community Health Center Strategic Priority Team, for their leadership and guidance.

We would also like to acknowledge ACS for providing support, funding, and staff expertise:

- Emily Bell, MPH Director, ACS NCCRT
- Kaitlin Sylvester, MPA Strategic Director, ACS NCCRT
- Aubree Thelen, MPH Program Manager, ACS NCCRT

Introduction

People living in rural communities face higher CRC incidence and mortality rates, increased prevalence of risk factors associated with CRC, and unique barriers to CRC screening when compared to nonrural residents. Common obstacles to screening can be exacerbated by the challenges that come with living in areas that are less densely populated and more geographically isolated. Overcoming these barriers requires creativity, resilience, and flexibility. To address this need, the ACS NCCRT sought to develop a guide to support key community partners in understanding and overcoming the unique challenges and common barriers to CRC screening faced in rural communities.



About This Guide

The ACS NCCRT convened a Rural Communities Advisory Committee made up of ACS NCCRT members and partners with experience providing CRC screening in rural areas to provide insight and direction. We selected five case study interviewees, including two federally qualified health centers (FQHCs), one critical access hospital, one health system, and a nonprofit CRC screening delivery organization who shared about their efforts to raise screening rates, which included their strategies, approaches to implementation, and the results they were able to achieve. These insights, paired with a robust literature review, informed five actions we think can help improve CRC screening in rural communities.



How to Use This Guide

The primary audience for this resource is health systems, including community health centers, primary care practices, and hospitals, as well as community-based organizations that are interested in increasing CRC screening rates in the rural communities they serve. The practical tips and strategies found in this guide can also be adapted by other organizations, such as health plans, state and local departments of health, and cancer coalitions.

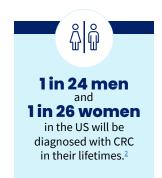
Our intention is that this guidebook will provide you with a foundation of evidence-based interventions and promising strategies that have been shown to increase CRC screening rates, an orientation to five recommended actions to select and apply strategies to meet the needs of your community, observations from those with many years of experience delivering CRC screening in rural areas, and other insights. The guide is designed to give you easy and direct access to the materials most relevant to your needs and specific challenges.



Colorectal Cancer and Rurality

Colorectal Cancer and Colorectal Cancer Screening

Combining colon and rectal cancers, in 2025 an estimated 154,270 new cases are expected to be diagnosed in the United States, and 52,900 deaths are expected.² Importantly, rising CRC incidence has rapidly shifted mortality patterns in adults younger than age 50; CRC is now the leading cause of cancer death in men and the second in women younger than age 50.³ Furthermore, the proportion of individuals in the US diagnosed with advanced-stage CRC increased from 52% in the mid-2000s to 60% in 2019.⁴





Learn more about CRC causes, risk factors, and prevention.

Many CRC cases and deaths can be avoided with regular CRC screening, which can prevent CRC by removing precancerous polyps or detect cancer early when treatment is more likely to be successful. An analysis of cancer deaths averted from prevention, screening, and treatment efforts between 1975 and 2000 estimates that during this time frame, CRC deaths were averted because of screening and removal of precancerous polyps or early detection in 79% of cases. 5 CRC screening can save lives, but screening remains underutilized.

In 2023, 62% of adults ages 45 and older were up to date with CRC screening concordant with the <u>ACS Guideline</u> for CRC Screening. About 56% and 11% of adults ages 45 and older were up to date with colonoscopy and stool-based testing, respectively.⁶

CRC Screening Guidelines

ACS and other major guidelines recommend that people who have no symptoms and are at average risk of CRC start regular screening at age 45. This can be done either with a stool-based test or structural exam (e.g., colonoscopy). People who are in good health and with a life expectancy of more than 10 years should continue regular CRC screening through age 75. For people ages 76 through 85, the decision to be screened should be based on a person's preferences, life expectancy, overall health, and prior screening history. People over 85 should no longer get CRC screening.



Learn about CRC screening and available test options.

The Impact of Rurality on CRC

CRC rates are higher in rural areas.

Based on data from the North American Association of Central Cancer Registries (NAACCR), CRC incidence rates are **16% higher** in rural areas compared to metropolitan (metro) areas (40.2 per 100,000 in rural counties compared to 34.8 per 100,000 in metro counties). Furthermore, **2 in 3 people** in rural areas are diagnosed at a late stage, which often requires treatment by an oncologist, care that rural residents may need to travel long distances to receive. Though age-adjusted mortality rates have decreased dramatically since 1970, the decrease in mortality rates is larger in metro areas compared to rural areas.

People living in rural areas may not have equal access to the benefits of CRC screening and prevention.

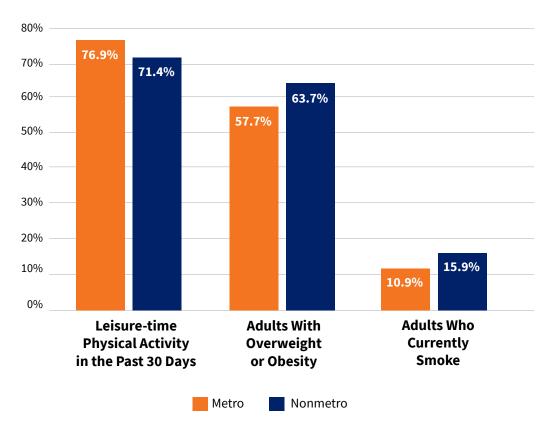
Despite the importance of CRC screening, people living in rural areas often experience significant disparities in access and utilization. According to a 2025 National Cancer Institute (NCI) cancer story map, ¹⁰ these disparities are driven by several factors, including:

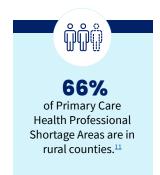
- Limited availability of physicians and cancer care specialists
- Lack of insurance or underinsurance
- Transportation barriers, including longer distances to travel to reach screening facilities
- Low health literacy and limited knowledge, attitudes, and beliefs about CRC and screening recommendations
- Social stigma associated with cancer and screening procedures
- Concerns about privacy in small or close-knit communities

Screening rates are **lower in rural counties** compared to metro counties (64.7% versus 66.6%, respectively). The differences in CRC screening between metro and rural counties are greater for men than for women. Screening in rural populations also lags by 3 to 5 percentage points for each age group, and individuals under age 55 are especially unlikely to be screened.¹

Knowledge, attitudes, and beliefs about health, cancer, and cancer screenings are also barriers that impact rural adults' likelihood to receive CRC screening. Residents of rural communities are more likely to report barriers to screening due to embarrassment and discomfort, fear of screening test results, lack of physician recommendation, and lack of knowledge about CRC screening and the benefits of screening. Additionally, people living in rural areas tend to engage in more high-risk health behaviors. Modifiable CRC risk factors like having obesity, physical inactivity, and using tobacco are more prevalent in rural areas compared to metro counties.

Prevalence of Modifiable Risk Factors (Metro versus Rural)⁷





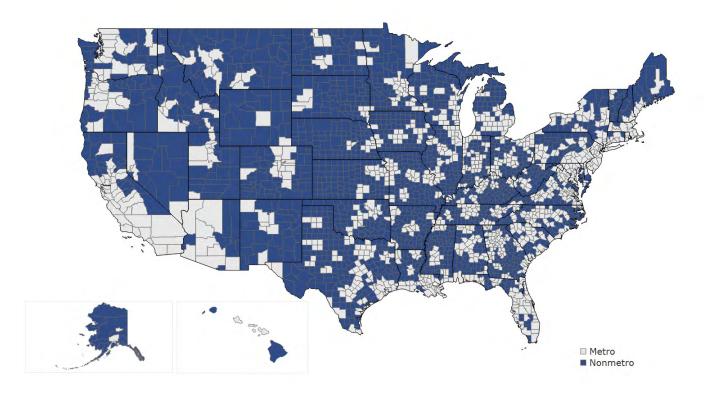
Defining Rurality

There is no single definition of rurality. State and federal agencies use different definitions of the term to determine things like eligibility for funding, data collection and analysis, and program administration. The terms nonmetropolitan (nonmetro) and rural are often used interchangeably, as are metropolitan (metro) and urban.

One common metric is the US Department of Agriculture's Rural-Urban Continuum Codes, which categorizes counties as either metro or nonmetro based on the size of their metro populations. Nonmetro counties are further divided based on their degree of urbanization and their distance from a metro area. Based on this classification, an **estimated 14% of the US population and approximately 62% of the counties are considered rural.** For the purposes of this guide, we'll be using the word in a general way, where:

- Rural describes communities of low population density, located largely outside of towns and cities, and
- Remote describes the most isolated and sparsely populated rural communities.

Metro and nonmetro counties, 2023 (USDA)



 $United \, States \, Department \, of \, Agriculture \, (USDA), \, Economic \, Research \, Service: \, 2023 \, Rural-Urban \, Continuum \, Codes. \, Continuum \, Codes.$

Increasing Colorectal Cancer Screening

Evidence-Based Interventions

The Community Preventive Services Taskforce (CPSTF) promotes evidence-based interventions as the "gold standard for what works to protect and improve population health."13 The CPSTF conducts comprehensive systematic reviews to make recommendations about potential interventions related to many health topics, including increasing CRC screening.

CPSTF-recommended interventions for increasing CRC screening include:

- Interventions Engaging Community Health Workers (CHW)
- **Multicomponent Interventions**
- **Patient Navigation Services**
- Client Reminders
- One-on-One Education
- **Reducing Structural Barriers**
- Small Media
- Provider Assessment and Feedback
- Provider Reminder and Recall Systems

Promising Practices

Rural communities have also found success in increasing CRC screening rates by implementing interventions and programs outside of the interventions specifically reviewed by the CPSTF. The Rural Communities Advisory Committee identified the following five promising practices, which are reflected in the five case studies found in this guidebook (see page 25):



Optimizing EHR data – Increase practice capacity or improve the use of electronic health records (EHRs) and other clinic data to track screening rates.



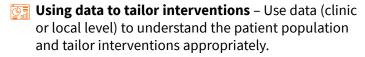
Tailoring communications – Tailor communication tools to be more relevant or accessible to rural patients.



Training primary care clinicians – Train primary care clinicians to perform colonoscopies.



Working with innovative partners – Form innovative partnerships to meet people where they are in the community (e.g., pharmacies, food banks) and expand services offered.





Five Recommended Actions to Improve CRC Screening Rates in Rural Communities

To make a lasting impact, it is important to understand the evidence-based interventions and promising strategies for increasing CRC screening, and to dig deeper into the needs of your own community.

We've identified **five recommended actions** that can help your organization identify critical barriers, assess resource availability, develop strategies to overcome challenges, and evaluate the results to build and sustain higher levels of CRC screening. Under each recommended action we've included commonly seen barriers, tips for overcoming known challenges, examples from the organizations we've interviewed, and links to helpful tools and resources.

Recommended Actions

- 1. Recognize Patient-Related Barriers
- 2. Assess Resources and Capacity
- 3. Overcome Organizational Challenges
- 4. Address Community Needs
- 5. Evaluate Efforts, and Share Successes





Recognize Patient-Related Barriers

Understanding common patient-related barriers to CRC screening can help you determine where you'll need to leverage resources and design interventions to address the specific needs of those in the community you serve. Consider the barriers that make it difficult for patients to access care, as well as barriers specific to CRC screening that may impact uptake. In this section, patient-related can refer to both established patients and potential patients who are members of the community you would like to reach.

Common Patient-Related Barriers

- Travel-related barriers (e.g., travel for screening, proximity to specialists)
- Awareness and knowledge of CRC, screening options, and the importance of screening
- Embarrassment about the screening process (preparation and procedure)
- Fear of the screening process or outcomes of screening

- Mistrust in the health care system
- Language barriers and health literacy
- Limited time (e.g., work and family commitments)
- Need for an escort to complete a colonoscopy
- Cost of screening and other financial concerns
- Lack of insurance coverage



Tips to identify barriers faced by those in your community

- Conduct patient or community surveys or focus groups
 - If you're a tax-exempt hospital or clinic like an FQHC or rural health clinic, reference your most recent community health needs assessment (CHNA) to help identify patient barriers to care. If your next CHNA is on the horizon, consider including community survey questions around barriers to screening or accessing preventive care.
- Review articles focused on increasing screening in your target population or secondary data sources like:
 - The Rural Health Information Hub's Tool for Finding Statistics and Data Related to Rural Health
 - ACS NCCRT's CRC Data Dashboard
 - Analyze your patient data to identify trends in utilization of services. For example, analyzing screening rates
 by patient ZIP code may help you to identify geographic areas that may face additional transportation
 challenges, or stratifying by patients' preferred language may help you to identify challenges associated with
 language barriers.



Tools to support identification of community barriers

- <u>Data Sources & Tools Relevant to Rural Health</u> (Rural Health Information Hub)
- Insurance Coverage for CRC Screening (ACS)



Case Study Spotlight: Colorectal Cancer Prevention Network at the University of South Carolina



The Colorectal Cancer Prevention Network continually assesses the demographics and barriers faced by South Carolinians to tailor their services to best meet their needs. After noticing a 637% increase in Spanish-speaking patient referrals, the organization expanded their navigation program to include three bilingual navigators to assist Spanish-speaking patients, and all written materials and videos are available in English and Spanish. Bilingual navigators visit the endoscopy center to provide translation services before and after the procedure, ensuring that patients understand the scope of the procedure and are able to communicate with clinicians.





Assess Resources and Capacity

By assessing your organization's current resources, you will better understand your strengths, limitations, and the assets available to you. This, coupled with knowing the needs of your patients, will help to increase the likelihood that your interventions are impactful and sustainable. After reflecting on any previous efforts, we recommend assessing the resources that are currently available to your organization, including staff skills and engagement, partnerships, and funding before determining where additional resources may be beneficial.

Reflecting and Analyzing Past Efforts

You can begin by reflecting on successes and lessons learned from previous efforts either to increase CRC screening in your community or to improve the health of your target population.

- Have you made efforts in the past to reach your target population? What lessons can be learned from those efforts?
- Has your organization received support to increase cancer screening rates before? What were the outcomes? How can you leverage the knowledge you gained to identify your next intervention?

Assess Staff Skills, Roles, and Engagement

Staff experience and buy-in are crucial to implementing and sustaining interventions to increase CRC screening. Organizations that have successfully increased CRC screening are often backed by a clinical or administrative staff champion and typically incorporate a team-based approach rather than relying on one person or position to lead the work. Consider the strengths of your staff. Do you have the following:

- A clinician who is trained or who potentially has the time and interest to get trained to perform colonoscopies?
 (Learn about primary care clinicians performing colonoscopies on page 24.)
- A nurse with previous experience conducting mailed fecal immunochemical test (FIT) campaigns?
- A passionate patient navigator or CHW with a personal connection to your target population?



We want our patients to be healthy and happy, and we want them to have better health outcomes ... Once [the staff] buy into the culture, they're willing to put in the work ... Having team buy-in, showing your work early and often, and making it a team approach is really important. Having that provider champion who influences everybody is really important.





Tips to assess staff skills and engagement

- Form an internal team and select a champion who is enthusiastic, dedicated, and supported by the
 organization's leaders to lead your efforts. This internal champion can have a medical or administrative
 background or a combination of the two.
- Foster a team-based approach to care, build staff buy-in by ensuring all staff understand the importance of CRC screening, standardize and reduce variation at each step of the screening delivery process, train and support the staff in understanding process changes, and continually review where adjustments need to be made in the process.
- If you do not have staff currently serving in a screening navigation role, consider whether navigators can be recruited and trained from among patients, social workers, CHWs, nurses, or case managers.

Consider Community Partnerships

Rural communities are often tight-knit with a strong sense of purpose, and they've likely had to be creative to accomplish more with fewer resources. Partners already established in the community of interest can be key in helping you gain trust, participation, and buy-in. Clinical partners in your community can help identify patients or community members who could be served by your organization. Consider the strengths of organizations in your community:

- What other community organizations could you potentially partner with to help catalyze your efforts?
- Are there clinical partnerships that can be leveraged to improve CRC screening rates?
- Which partnerships are already in place, and where do new partnerships need to be built?
- Define roles and expectations early. Be conscious of what you're asking of the community organizations you're working with, and make sure you provide them with the tools they need to participate.

Explore Funding

Funding can be beneficial to the success and sustainability of improvement efforts. Before applying for funding opportunities, ensure they will address the needs of your specific community and have an understanding of the organization's capacity for managing funds and the requirements of receiving funding.

When looking for funding to support your efforts to increase CRC screening rates among your target population, it may be available through:

- Local, state, or federal grants
- Cancer organizations like the <u>Prevent Cancer</u> <u>Foundation</u>, the <u>Colon Cancer Coalition</u>, <u>ACS</u>, and other organizations
- Your state or local health department
- Academic institutions and extension programs (agricultural and forestry extension activities at Land-grant Universities)
- Screening and diagnostic testing companies

Once you have assessed your organization's current resources, share your findings with your team and take steps toward securing funding, if needed.



[The staff] all got involved. They all had [CRC Awareness Month] T-shirts and were scheduling their colonoscopies. We had everybody from maintenance to housekeeping to our administration wearing these T-shirts on Wednesdays. We took pictures with all of the staff.

— Unity Medical Center





Tools for assessing resources

- Asset-based Community Development (NC Cooperative Extension)
- Asset Mapping Toolkit (ABCD Institute)
- The Model for Understanding Success in Quality (MUSIQ) (NHS Foundation Trust)
- Mapping Clinician Workflows
 (Rural Hospital Performance Improvement)
- <u>Creating Accurate EHR Reports</u> (AHRQ)

Resources for researching and securing funding to support your efforts

- Exploring Available Funding Opportunities (Rural Health Information Hub)
- ACS NCCRT Paying for Colorectal Cancer Screening Patient Navigation Toolkit & Interactive Website (ACS NCCRT)
- States That Receive Funding from CDC for Statewide CRC Screening Programs (CDC)
- Applying for Grants to Support Rural Health Projects (Rural Health Information Hub)

Case Study Spotlight: Mariposa Community Health Center – Santa Cruz County, Arizona



Mariposa Community Health Center partners internally and externally to meet the needs of Santa Cruz County residents inside and outside the clinic. In partnership with the University of Arizona Cancer Center, Mariposa celebrates National CRC Awareness Month by hosting a health fair focused on CRC. Mariposa also partners with their internal pharmacy department to identify and offer CRC screening to any patient ages 45 to 75 with a scheduled clinical pharmacy visit.







Overcome Organizational Challenges

Below, you'll find common organizational challenges to screening and potential solutions for overcoming them, as well as tools to support your work. Compare the resources and needs you've identified to brainstorm which solutions will be most effective. Many organizations choose to implement multi-component interventions (implementing two or more interventions) that increase demand for and access to CRC screening.

Common organizational challenges seen in rural communities:

- Limited staff knowledge, capacity, and engagement
- No/few clinicians available to provide colonoscopy services
- EHR challenges (e.g., limited integration with population health tools)
- Workflow challenges
- Lack of clinician recommendation
- Inadequate patient reminders and recall for follow-up
- Limited navigation to guide patients through the screening process

Support Staff Knowledge, Capacity, and Engagement

Many rural health care facilities struggle with recruiting and retaining staff, which

often creates staff shortages that impact the capacity of the remaining staff. In addition to staff shortages and limited staff capacity, staff knowledge of the importance of CRC screening and the availability of different screening options may also impact a clinic's ability to roll out interventions and engage staff in the process.



Tips to support staff knowledge, capacity, and engagement

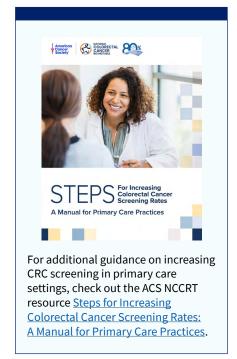


For a succinct primer on CRC screening for clinicians and staff, check out the ACS NCCRT resource The Dos and Don'ts of Colorectal Cancer Screening.

- Utilize surveys or focus groups to gauge staff knowledge, buy-in, and capacity to select and implement interventions that align with the needs of your organization.
- Map clinician workflows and review patient charts to identify areas for potential quality improvement and support in identifying organization-level barriers to screening.
- Bolster staff knowledge about CRC and the importance of CRC screening.
- Encourage staff to get screened, if eligible, and engage staff in CRC screening campaigns.
- Provide staff with training opportunities to increase CRC screening capacity.

Address EHR Limitations

Having reliable data, identifying and communicating with patients due for screening, tracking referrals, and pulling accurate and useful reports are some of the EHR-related challenges that organizations need to overcome to increase CRC screening rates.





Tips to address EHR limitations

- Tackle EHR issues first to effectively implement interventions.
- Clean up patient lists, manually updating patient screening status where necessary.
- Develop dashboards to identify and track screening rates.
- Incorporate population health tools into the EHRs.
- Overhaul ordering, referral, and patient reminder systems.



We've really worked with our clinical staff to identify EHR workflows to make sure that they were accurate. We identified, for example, Cologuard tests weren't even being entered into the EHRs. They were all paper orders, so they weren't even being captured in our metrics. Digging into those processes is crucial, and then trialing it, and having a team lead for that like a provider champion who owns it.

— Melissa Memorial Hospital

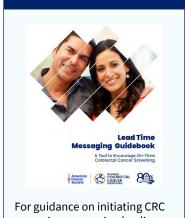


EHR limitations also impact the ease and ability of a facility to implement patient reminder and follow-up systems. Communicating with patients to ensure the completion of screening is also simpler for facilities after making charting and workflow improvements. Tracking initial and diagnostic screening completion allows for more consistent communication with patients, which in turn can give clinical and administrative staff members, patient navigators, and CHWs more opportunities to address patient barriers to screening.



Tips to leverage patient reminders and follow-up:

- After cleaning up patient records and improving workflows to ensure all necessary information is being captured in the EHRs, utilize patient reminders.
- Birthday cards mailed out on the patient's 45th birthday can be especially successful in reaching patients and spreading awareness of the importance of CRC screening.
- Mailed reminder letters, phone calls, and reminders used in tandem can also be very successful at encouraging patients to complete their CRC screening.
- Examine demographic data in the EHRs to look for trends among the unscreened. Use this information to target efforts to reach those patients, including mailing patient reminders and directly contacting nursing staff at each location.



For guidance on initiating CRC screening messaging leading up to age 45, check out the ACS NCCRT resource <u>Lead Time Messaging Guidebook</u>.



We have birthday cards [that say] 'Happy Birthday. Turning 45 means it is time to schedule your screening colonoscopy. Best wishes from UMC Colorectal Cancer Awareness Team.' These are very well known in our area. So, we'll even be out, I think we were at the parade walking, and somebody is yelling out, 'I got your birthday card!'

— Unity Medical Center

Navigate Patients Through the Screening Process

Navigators can support your organization in eliminating barriers to quality care, building trust, reducing disparities, and fostering health equity. They can assist with patient education, scheduling appointments, appointment reminders, transportation, cultural barriers, communicating between referring clinicians, coordinating follow-up care after procedures, and connecting patients with resources in the community. If you do not have staff currently serving in this role, consider whether navigators can be recruited and trained from among patients, social workers, community health workers, nurses, or case managers. Learn more about navigation and best practices to support your work from the <u>ACS National Navigation Roundtable</u>.



Recently, food insecurity is something that has been coming up with my navigators as they're navigating patients for colonoscopy ... So now we're partnering with local food banks [to assist] patients that we identify as needing food resources ... Really, it's knowing the patient who you're serving and what resources are available in that community that we can connect that patient to.

— Colorectal Cancer Prevention Network





Tools to support addressing organizational barriers to screening

- Evidence-Based Intervention Planning Guides (CDC)
 - Client Reminders
 - Reducing Structural Barriers
 - Provider Reminders
 - Provider Assessment and Feedback

- Patient Education Materials (ACS)
- ACS CancerRisk360TM Comprehensive Cancer Risk Assessment Tool (ACS)
- Implementation Resources (NCI)

Case Study Spotlight: Bristol Bay Area Health Corporation – Southwestern Alaska



To address staff shortages and limited staff capacity in the remote region, Bristol Bay Area Health Corporation trained two family practice physicians to perform colonoscopies, reducing the need for patients to travel to Anchorage to receive their screening. The health center also identified two staff members to certify in endoscopic reprocessing (the process of cleaning and disinfecting reusable endoscopes before patient use), improving the facility's ability to provide colonoscopies to their community and boosting their confidence and buy-in as to the importance of working to increase CRC screening.



Address Community Needs

Interventions used by your organization to address barriers to CRC screening will be more successful if you tailor them to meet the needs of your specific population. Though not all rural communities are the same, you will find several potential strategies that can be used to address commonly seen needs below. When focusing on interventions in your community, keep in mind that building trust and engaging with patients in culturally and linguistically appropriate ways will help set the foundation for success.

Transportation and Travel

Transportation and the distance needed to travel to access services are common barriers in rural communities. Rural communities experience a wide spectrum of challenges and solutions associated with accessing care. For example, some communities have access to on-demand transportation support through organizations like Uber Health, while in others, travel by bush plane is required for colonoscopy appointments.



Tips to address transportation and travel needs

- Leverage funding to pay for or provide patient travel and lodging to make it easier to access colonoscopy screening.
- Provide gas cards or seek wheelchair-accessible modes of transportation for those who need access.
- Partner with local nonprofits or faith-based organizations to help meet your community's transportation needs.

Time Commitment and Need for Escort

CRC screening, specifically colonoscopies, can pose a logistical challenge for patients. Scheduling the appointment, taking time off work, multiple days of preparation, driving to the facility, and undergoing the procedure are all time-consuming steps that can make colonoscopies unappealing and not feasible for many patients. In addition, an escort is required to ensure the patient's safety.



Yeah, that is probably one of our biggest barriers ... Having that second person who can sit for the procedure, [drive] home with them, stay with them after, once they get home for a little bit, that's the hardest one, the one we haven't been able to address.

Colorectal Cancer Prevention Network





Tips to address time and colonoscopy escort needs

- Acknowledge and anticipate the logistical challenges patients might face.
- Leverage patient navigators and CHWs to support patients in overcoming these needs.

Knowledge, Attitudes, and Beliefs

A patient's motivation to complete CRC screening may be impacted by a limited understanding of the need for CRC screening, the screening process, and screening options. To address challenges associated with knowledge, attitudes, and beliefs about CRC screening, provide patients with <u>screening options</u>.



If the patient said, I'm not doing the prep. I am not driving to Tucson, which is an hour and a half away, I'm not going to do it. Our medical provider said, let them choose if they want to get a Cologuard or a FIT kit ... If they develop a positive, then at that point, we're going to call them and we're going to follow up, and we're going to send them a referral to a gastroenterologist, and, most likely, they're going to go ahead and get that colonoscopy at that point anyways. And they did. We have the results from our data that show that they did get that secondary screening; they did go in for that colonoscopy follow-up.

— Mariposa Community Health Center

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Tips to address needs related to knowledge, attitudes, and beliefs

- Provide patients with a choice of CRC screening options.
- Support patients in selecting the test modality that they are most likely to complete.
- Educate patients on the importance of CRC screening and receiving a timely follow-up colonoscopy if a non-colonoscopy test is used and yields a positive or abnormal result.¹⁴
- Building trusting patient-clinician relationships and educating patients on the importance of CRC screening are also strategies used to reshape rural communities' beliefs toward screening.



For guidance on offering stool-based screening, check out the ACS NCCRT resource Clinician's Reference: Stool Based Tests for Colorectal Cancer Screening.

Trust

Trust in the clinician, facility, and larger health care system is another barrier that impacts a patient's desire to complete a CRC screening. Improving trust and patient-

clinician relationships in communities that may have historically faced disparities in health care access and treatment is imperative. Patient navigators and CHWs play a special role in helping to build trust with patients because they can offer individualized support that continues outside of the clinical setting.



Hire staff who live in and represent the community they serve; this provides the building blocks to develop trust and a strong rapport with patients. Finding the right person who lives in a specific community really, truly makes a huge difference.

Colorectal Cancer Prevention Network



Tips to build trust

- Engage patients with patient-centered care and shared decision-making.
- Engage community organizations and key community members to better understand barriers to screening.
- Present compelling CRC screening information through trusted channels.
- Leverage patient navigators and CHWs from within the community.

Health Literacy and Language Barriers

Offering educational and outreach materials in the languages spoken by your community members and at an appropriate reading level is essential. Ensure all forms, shared decision-making tools, educational and marketing materials, and screening instructions are available in the patient population's preferred language. Bilingual patient navigators and CHWs can also bridge the gap for patients with language or literacy barriers. Individuals receiving navigation from someone from their own community who knows their native language and is trained in health education helps to build trust between patients and their health care provider. ¹⁶



Tips to address health literacy and language needs:

- Offer educational and outreach materials in the languages spoken by your community members and at an appropriate reading level.
- Leverage bilingual patient navigators and CHWs.



For guidance on tailoring CRC screening messaging to reach your community, check out the ACS NCCRT resource <u>Tailoring Colorectal Cancer Screening Messaging: A Practical Coalition Guide.</u>



One of the main things that we do, just because we're near the border, is we make sure that we offer everything that we have in a language that is appropriate – primarily Spanish.

- Mariposa Community Health Center





Tools to support your work

- Lead Time Messaging Guidebook: A Tool to Encourage On-Time CRC Screening (ACS NCCRT)
- 2022 Guidebook for Black & African American People: Messages to Motivate for Colorectal Cancer Screening (ACS NCCRT)
- Hispanics/Latinos and Colorectal Cancer Companion Guide (ACS NCCRT)
- Strategies to address medical mistrust related to CRC
- Easy-to-read <u>Educational Materials for Your Patients</u> on a variety of topics, including screening, available in 14 languages (ACS)
- <u>CRC Videos</u>, including short videos in English and Spanish, describing screening options (ACS)
- Ideas for collaborating with faith-based organizations to reach members for CRC screening through the <u>Colorectal Cancer Screening in the AME Church Community</u> project (ACS)

Case Study Spotlight: Melissa Memorial Hospital - Holyoke, Colorado



After identifying transportation as a top community need, Melissa Memorial Hospital started a wheelchair-accessible van service to better support the community in accessing colonoscopy screening and other medical appointments. The van service can be initiated by hospital staff or patients and provides transportation from the patient's home to the facility for any type of medical appointment within five counties in northeastern Colorado and two counties in western Nebraska. Transportation for CRC screening often includes consultation with gastroenterology/specialty providers, pre-procedure testing, and the colonoscopy procedure.





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Evaluate Efforts, and Share Successes

Collecting information about how your intervention operates and its impact can help you demonstrate the success of your activities. A good evaluation can also help you monitor service delivery or implementation, assess patient or community needs, and identify ways to improve. Even informal evaluation allows you to better understand the effectiveness of your efforts. Goal setting and measuring progress toward those goals improves sustainability, enables you to apply lessons learned and incorporate feedback, and allows for more comprehensive sharing of results and outcomes.

Evaluate Efforts

Ask yourself, "How will the organization know if our efforts are successful?" Is success defined as getting the clinic's screening rate to a certain level? Then making sure your EHR reports are accurate will be key. Is success defined as patient satisfaction? If so, a patient survey with a few questions about satisfaction and ways to improve could go a long way.

Depending on the primary focus of your intervention, your organization might want to track the following metrics:

- Monthly CRC screening rate (12 month look-back)
- Stool-based test completion rate (ordered, completed, and abnormal)
 - Mailed versus handed out in office
- Screening colonoscopy completion rate (ordered and completed)
- Follow-up colonoscopy completion rate (ordered and completed)
- Patient satisfaction

We recommend tracking the rate at which patients complete a timely colonoscopy after positive or abnormal stool-based test results. While there is not a national standard for this metric, it is a <u>priority area for the ACS NCCRT</u> given the mounting evidence for the increased risk of CRC and advanced-stage disease due to delayed follow-up.¹⁴

Share Successes

Sharing your success, even the small wins, can help maintain engagement, boost morale, and build trust in the intervention among your staff and community members. Demonstrating the value of your efforts to stakeholders and funders can help facilitate an environment where learning and improvement are priorities.

The organizations we spoke with emphasized the impact that came from having an engaged staff. Celebrating your team's wins is a great way to acknowledge their hard work and dedication to increasing CRC screening in your community.



When we achieve the next milestone, I post that in the clinic, so [the clinic staff] sees that their work is paying off. It goes out to everyone, including in our weekly facility-wide newsletter.

— Unity Medical Center



When you reach significant goals, consider sharing your success more broadly. Each fall, the ACS NCCRT accepts nominations for the ACS NCCRT National Achievement Awards. Consider nominating your organization, organizations that you partner with, or individual champions for their success.



Tools to support evaluation efforts

- Evaluation Toolkit: How to Evaluate Activities to Increase CRC Screening and Awareness (ACS NCCRT)
- Rural Community Health Toolkit (Rural Health Information Hub)
 - Health Literacy Evaluation Toolkit
 - Social Determinants of Health Evaluation Toolkit
 - Transportation Evaluation Toolkit
- Colorectal Cancer Care Initiative (Fight Colorectal Cancer)
- CRC Screening Program Measures and Data Collection Guide (ScreeND)
- <u>Developing Evaluation Questions</u> (CDC)
- A Guide to Writing a Program Evaluation (National Rural Health Resource Center)
- Field Guide for Assessing Readiness to Implement Evidence-Based Cancer Screening Interventions (CDC)

Case Study Spotlight: Unity Medical Center - Grafton, North Dakota



Unity Medical Center in Grafton, North Dakota recognizes clinicians with the highest percentage of their patient load up to date on CRC screening with the coveted poop emoji trophy. They also publicly display their screening rate in the hospital cafeteria to promote patient awareness of CRC screening and celebrate their increasing screening rate. Increased staff and community engagement were also noted as successes resulting from these efforts.



Spotlight: Primary Care Clinicians Performing Colonoscopies

Colonoscopy screening is an essential component in preventing CRC, yet patients may experience wait times for colonoscopies and, especially in rural areas, may have to travel long distances to a facility that provides the procedures. Additionally, there are not enough gastroenterologists and general surgeons performing colonoscopies to screen every eligible person in the US.¹⁷ In addition to exploring other screening options (e.g., FIT and multitarget stool DNA [mt-sDNA]) when appropriate for the patient, there is growing support for training primary care clinicians to provide colonoscopies. This would help meet the demand for colonoscopies, and the American Academy of Family Physicians argues that it is a "natural extension" of primary care clinicians' scope of practice since patients often first bring gastrointestinal complaints to their primary care clinician, who is responsible for knowing when a referral for a colonoscopy is appropriate.18



Data show primary care clinicians provide high-quality colonoscopies

The quality indicators for colonoscopy screening, set by the American Society of Gastrointestinal Endoscopists (ASGE) and the American College of Gastroenterology (ACG), include adenoma detection rate, sessile serrated lesion detection rate, rate of using recommending screening and surveillance intervals, bowel preparation adequacy rate, and cecal intubation rate.¹⁹

Overall, colonoscopies performed by primary care physicians are within these standards, and primary care clinicians perform comparably with gastroenterologists and endoscopists. For example, the ASGE and the ACG state that 90% or more of all colonoscopies should reach the cecum. In a systematic literature review of studies, the overall cecal intubation rate in colonoscopies performed by primary care clinicians was 89.2% to 92.0%, compared to 86% to 92% for gastroenterology fellows and endoscopists. Similarly, the adenoma detection rate in colonoscopies provided by primary care physicians surpassed the standard set by the ASGE and the ACG. 16



Benefits of primary care clinicians providing colonoscopies

Building colonoscopies into primary care clinicians' scope of practice could potentially address many of the barriers to screening addressed in this guide, including reducing the distance required to travel for screening and lowering patient out-of-pocket costs. Patients may also feel more comfortable receiving screening from their regular, trusted physician and may experience more continuity of care.¹⁸

How to implement this in your clinic

Training primary care clinicians to provide colonoscopies may be one of the leading obstacles that clinics face. The ASGE suggests that clinicians who have not received training through conventional routes (i.e., gastroenterology fellowship, or surgery residency) receive "formal, hands-on training" through a "preceptorship, sabbatical, or education in a practice setting by a qualified endoscopic instructor" and perform at least 100 supervised colonoscopies. The Society of Teachers in Family Medicine and Procedural Training and a task force of Council of Academic Family Medicine member organizations agree with this training approach. These organizations have published support for colonoscopy training to be included during residency for family medicine physicians. 18

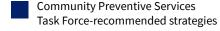
Case Studies

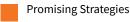
To support the development of this guide, we identified and interviewed five organizations providing CRC screening to their rural communities using evidence-based interventions or promising strategies. Selections were made based on diversity of strategies used, geographic location, and demographics of communities served. Nine interviewees across five organizations were asked questions about their rural community's barriers to screening and the details of their efforts, including who



was involved in planning and implementing interventions, what barriers their organization faced, and if and how they tailored their interventions to meet the needs of their community. Interviewees were also asked to share any lessons learned, their biggest successes, and what advice they would give to another organization looking to implement similar strategies to increase CRC screening in their own communities.

Organization	Location	Urban/Rural Classification	Туре	Strategies Highlighted
Bristol Bay Area Health Corporation	Dillingham, Alaska	Remote	FQHC	Client reminders Patient navigation Optimizing EHR data Tailoring communications Primary care clinician colonoscopists
Unity Medical Center	Grafton, North Dakota	Rural	Health System	 Client reminders Provider assessment and feedback Optimizing EHR data Using data to tailor interventions Primary care clinician colonoscopists
Melissa Memorial Hospital	Holyoke, Colorado	Rural	Critical Access Hospital	 Patient navigation Transportation support Optimizing EHR data Tailoring communications
Mariposa Community Health Center	Nogales, Arizona	Rural	FQHC	 Client reminders Engaging CHWs Transportation support Tailoring communications Working with innovative part
Colorectal Cancer Prevention Network at the University of South Carolina	Columbia, South Carolina	Rural and Urban	Nonprofit	Patient navigation Transportation support Tailoring communications Working with innovative partners





Notes:

- All case study sites applied the Community Preventive Taskforce (CPSTF) recommended strategy of implementing Multicomponent Interventions
- Transportation support falls within the CPSTF recommended strategy of reducing structural barriers
- Demographic and screening rate data found in the case studies are derived from the following sources unless otherwise noted: 2023 Health Center Data, Health Resources & Services Administration and American Community Survey 5-Year Estimates, 2023.

Bristol Bay Area Health Corporation

About the Organization

Setting: Remote | Organization type: FQHC | Location: Bristol Bay region, Alaska

- EHR: Cerner
- Population served:
 - o 22 clinic locations in Bristol Bay region
 - Service region: 35,000 square miles

- Number of active patients: 4,302
- Percentage of patients at or below 200% of the federal poverty level guidelines: 62%
- Percentage of patients uninsured: 18%

Strategies Highlighted

CPSTF-recommended strategies



Client reminders



Patient navigation



Optimizing EHR data



Tailoring communications



Primary care clinician colonoscopists

Promising strategies

Background

Bristol Bay Area Health Corporation (BBAHC) and their patient population face unique challenges due to their remote location in southwestern Alaska. Many patients living outside of Dillingham, the largest town in the region with a population just over 2,200, fly by bush plane to access services at BBAHC's main campus. Clinicians at BBAHC travel to 22 clinic locations in the Bristol Bay region to provide care to the service area's approximately 6,000, primarily Alaska Native residents. With Alaska Native people having the highest CRC incidence and mortality in the world, CRC screening is a priority for BBAHC.²

Geographic isolation creates challenges for patients when accessing care, as transportation by plane is often interrupted by bad weather, and prepping for colonoscopies is made even more difficult as patients may need to prep away from the comforts of home. Geographic isolation also exacerbates the barrier created by the need for an escort to accompany a patient to and from a colonoscopy screening. Additionally, multitarget stool DNA (mt-sDNA or Cologuard) testing is not a viable screening option for patients, as the limited road system precludes processing in a timely manner. The remote region also struggles with staff shortages and staff capacity.



Evidence-Based Interventions and Promising Practices

Improving EHR Utilization to Support Patient Reminders and Reporting

In October 2019, BBAHC made the transition to using a new EHR platform, in which previous health record information could not be migrated over to the new system. Due to these limitations, in May 2022, BBAHC staff undertook a manual review of patient charts to establish an accurate baseline screening rate and identify patients due for CRC screening. Improved EHR utilization and manual data entry into the new system allowed BBAHC staff to increase their use of patient reminders, including phone reminders, mailed reminders, and birthday cards to let patients know they were due for screening (see Appendix 1.1).



Simplifying CRC Screening for Remote Communities

Because a majority of patients living outside of Dillingham must arrive from their home by plane, in addition to providing patients with lodging at a nearby hotel, BBAHC provides those required to travel for colonoscopy screening with Colonoscopy Prep Care Packages to help them as patients prep away from home. Care packages were created with village patients in mind and include items that make prepping easier, like bottled water, apple juice, tea, mints, ginger chews, gum, soft wipes, a mug for hot liquids, and more.

Wherever possible, BBAHC works to address barriers to completing CRC screening. In addition to a mailed FIT program with patient navigation available to all eligible patients, BBAHC implemented a mailed FIT program for patients ages 40 to 45 following the Alaska Native Medical Center (ANMC) recommendation for all Alaska Native adults at average risk of CRC to initiate screening at age 40.²⁰ Two hundred FIT kits were mailed out as a part of this campaign, and 19 were completed. Of those 19, four were abnormal, with all four individuals receiving a follow-up colonoscopy within two months.

Primary Care Clinicians Performing Colonoscopy

BBAHC also has two family practice physicians who were trained on the job to perform colonoscopies, reducing the need for patients to travel to Anchorage to receive their screening. We spoke with one family medicine physician at BBAHC who spent 1½ years training alongside a senior physician in order to perform colonoscopies.

Additionally, BBAHC previously struggled to retain sterile processing technicians, an essential component of performing colonoscopies. Two staff members were certified in endoscopic reprocessing (the process of cleaning and disinfecting reusable endoscopes before patient use), improving the facility's ability to provide colonoscopies to their community, and boosting their confidence and buy-in as to the importance of working to increase CRC screening.



"I think most people probably don't train that way. But again, a lot of things happen in Dillingham, where it's not like the real world because we're so small ... Just because you're a family practice doctor does not mean you cannot learn to do it, right?"

Tailored Community Outreach and Messaging

BBAHC also prioritized the development and delivery of culturally appropriate educational and outreach materials to increase CRC awareness and promote screening. They've created materials specifically for their Alaska Native community available in both English and Yupik and utilized social media platforms to connect with and educate the community. They are currently using grant funding to create a colonoscopy prep patient education video in both languages. Participating in local events is also a part of their community outreach, and in 2025 BBAHC is helping to sponsor an event at the local Beaver Round-Up festival, where contestants will build an outhouse on wheels and race it against other outhouses down Main Street. Taking "Nolan the Colon" (a walk-through, inflatable colon) through the festival parade on a flatbed trailer towed by BBAHC staff is also a crowd favorite. Another successful outreach campaign involved partnering with two local coffee shops in the region to dispense coffee cup sleeves with special messaging to encourage patients to get screened (see Appendix 1.2).



In May 2022, prior to implementing targeted interventions, BBAHC's CRC screening rate was approximately 30%, and they were conducting just 30 endoscopies a year, including colonoscopies and esophagogastroduodenoscopies (EDGs). After efforts to improve EHR utilization, simplify CRC screening for patients, optimize physician schedules, and increase community awareness and engagement, BBAHC's CRC screening rate had reached 55% as of October 2024, and they were conducting around 200 colonoscopies and EGDs a year. Beyond increasing screening rates, some of the hospital's greatest successes include building trusting relationships with patients who go on to spread the word about getting screened for CRC with their family and friends. Other successes include increasing staff capacity and confidence and certifying two staff members to clean and disinfect reusable endoscopes before patient use. In 2023, BBAHC's work was recognized with a SCOPY award from the American College of Gastroenterology.



I think [getting certified] went a long way to making them feel as though they were really an integral part of the whole process. So that was really cool. And what's also neat is one [staff member] is Alaska Native. He's from our region, so it's like growing your own. It's really neat to be able to see some of these local people be such a big part of this team.





What advice would you give?

When asked what advice they would give to an organization also working to increase their CRC screening rates, interviewees' recommended utilizing patient navigation, identifying physician champions, training primary care physicians to perform colonoscopies, implementing a FIT program and system for reminding patients, and developing culturally appropriate materials.



"Patient navigation is huge. If we didn't have at least two of us dedicated to just outreach and calling patients and processing the referrals, I don't think we would be having as much success as we are having."

Interviewee Information

- Dr. Marlena Strandir, DO, Chief of Staff
- Cara Brown, MSN, MBA, RN, Population Health Nurse

Unity Medical Center

About the Organization

Setting: Rural | **Organization type:** Hospital/Health System | **Location:** Grafton, North Dakota

■ EHR: EPIC

■ **Population served:** 10,305 people across 1,281 square miles

■ Number of active patients: 5,027

■ Number of clinicians: 11

- Percentage of patients at or below 200% of the federal poverty level guidelines: 10%
- Percentage of patients 5+ speaking a language other than English at home: 9%

Strategies Highlighted



Client reminders



Provider assessment and feedback



Using data to tailor interventions



Optimizing EHR data



Primary care clinician colonoscopists

CPSTF-recommended strategies

Promising strategies

Evidence-Based Interventions and Promising Practices

Utilizing EHR Data to Enhance Efforts

To improve outreach efforts to reach those eligible for CRC screening, it was determined that having an accurate account of patients was an important first step. In partnership with QHA, Unity worked to clean up their active patient list. The goal was to improve utilization of EHR data to identify eligible patients and track CRC screenings to completion.

Once an initial report was created from the EHRs, nursing staff across the organization reviewed and updated charts to ensure accurate charting and documentation among patients who had been screened for CRC. Working with QHA, Unity staff were then able to pull reports based on patient demographics, which made it possible to see that many patients living in group homes and long-term care facilities were due for CRC screening. Unity used this information to target efforts to reach those patients, including mailing patient reminders and directly contacting nursing staff at each location.



We have this great electronic charting system that a lot of people just didn't know how to use. So that was a learning experience, for sure, a hurdle in teaching our own staff, and not just our own staff, but other facility staff as well.

Staff and Community Awareness and Education

To be successful, Unity developed strategies to promote screening and CRC awareness among their staff, patients, and community. Initially, building buy-in among staff was a top priority as they focused efforts to increase CRC screening rates. Surveys were used to ask staff about their CRC screening status, encouraging them to commit to getting screened. Across the organization, staff championed these efforts by wearing T-shirts to promote screening. They helped normalize discussions around screening by sharing about their own screening procedure or upcoming test, and over 80% of staff committed to getting screened within the next six months if they were not already up to date.

Clinicians were also recognized for increasing screening rates among patients. For those who reached the highest percentage of eligible patients screened, the highly coveted poop emoji trophy was presented to the clinical team (see Appendix 2.1). To share these accomplishments broadly, screening numbers were posted in the hospital cafeteria for staff and visitors to see.



Unity used weekly social media posts to promote screening among community members and partners. They also sent reminders to all patients due for a screening and birthday cards to patients turning 45 (see Appendix 2.2). For CRC Awareness Month in March, gift bags were offered to those who scheduled their screenings that month, and community events, including bringing in the Rollin' Colon (walk-through, inflatable colon), were used to help teach people about the signs and symptoms of CRC.

Primary Care Clinicians Providing Colonoscopy

Unity has three clinicians trained to perform colonoscopies, two of which are primary care physicians trained to perform colonoscopies in residency. Because of this, they have successfully increased CRC screening rates among their own patient population and supported other nearby facilities that have fewer clinicians available to perform colonoscopies and fewer available appointments.

If your facility was planning to train new providers to perform colonoscopies, we feel the best process would be to send them to an initial training session and use your current providers as mentors. Once you get settled into your facility as a new provider, you're kind of in a routine, and it's hard to pull someone away for a week or two to travel across the country for training. We feel like that would be the best process if you're training someone who did not get that in their schooling.



Unity increased CRC screening from 41% in October 2022 to 72% in October 2024. In addition to an increased screening rate, staff and community engagement were also successful as a result of their efforts. In 2024, Unity's work was recognized with an ACS NCCRT National Achievement Award.



When asked what advice they would give to an organization working to increase CRC screening rates, Unity interviewees recommended prioritizing staff engagement, setting regular goals, and monitoring progress toward them; sharing successes; staying up to date with patient outreach and follow-up to screening; and developing procedures to identify appropriate screening options and ordering systems.



Definitely develop a protocol for getting colonoscopies ordered, or if they don't want a colonoscopy, get a [stool-based test]. Make sure staff know the algorithm [for ordering screening]. Know those algorithms and get some standing orders. That saves a lot of time. It's something so easily ordered, and it takes the stress off the providers, too.

Interviewee Information

- Kari Novak, LPN, Clinic Manager
- Kristen Pastorek, RN, Surgery Manager, Assistant Director of Nursing

Melissa Memorial Hospital

About the Organization

Setting: Rural | **Organization type:** Critical Access Hospital | **Location:** Holyoke, Colorado

- EHR: Athena
- **Population served:** Phillips County population of 4,400 people
- Number of active patients: 4,024
- Number of clinicians: 5

- Percentage of Phillips County below the federal poverty level guidelines: 16%
- Percentage of patients uninsured: 8%
- Percentage of patients best served in a language other than English: 24%

Strategies Highlighted



Patient navigation



Transportation support



Optimizing EHR data



Tailoring communications

CPSTF-recommended strategies

Promising strategies

Background

Melissa Memorial Hospital (MMH) is a 15-bed critical access hospital located in Holyoke, a town of just over 2,200 residents in northeastern Colorado. As in other rural communities, MMH patients often face challenges due to the sometimes-long distances needed to travel to receive care and the lack of reliable transportation. Additionally, literacy and language barriers impact patients' general knowledge and awareness of CRC, the need for screening, and the types of screening options available to them. Internal challenges related to EHR limitations that impact the accuracy of reports and workflow integration are also challenges affecting efforts to increase CRC screening.

Evidence-Based Interventions and Promising Practices

Improvements to EHR Utilization

Melissa Memorial Hospital participates in the Colorado Cancer Screening Program (CCSP) from which they receive funding and technical assistance to implement evidence-based interventions to increase CRC screening. With the screening program's support, MMH conducted a chart review beginning in July 2023 to identify an accurate CRC screening rate. Efforts to improve EHR utilization were then focused on streamlining clinical workflows to ensure necessary patient information and metrics were being captured.



Our biggest challenge was figuring out how to capture all of the data in the EHR, making sure that the data were accurate and really tracking that data, embedding it.

Transportation Support

After conducting a community health needs assessment and identifying transportation as a top community need, MMH started a wheelchair-accessible van service in February 2023 to better support the community in accessing colonoscopies and other medical appointments. The van service can be initiated by hospital staff or patients and provides transportation from the patient's home to the facility for any type of medical appointment within five counties in northeastern Colorado and two counties in western Nebraska. Transportation for CRC screening often includes consultation with gastroenterology/specialty providers, pre-procedure testing, and the colonoscopy procedure. Patients and their escorts can also use the van service to access external facilities up to 200 miles away if services are unavailable at MMH. The van services were in such high demand that MMH has hired two additional drivers for the van to increase availability.

> We've had a huge increase in the number of patients who utilize the van. It's almost booked the whole day. We started off with only having our EMS team on site responsible for transporting the patients, and it grew so much that we had to hire two additional staff members to [operate] the van, because it is so busy. Which is a great problem.



Tailored Outreach to Spanish-Speaking Population

MMH convened a committee of Spanish-speaking community members to better understand the community's unique barriers to care, with health literacy identified as the primary barrier. With funding from the CCSP, MMH was able to hire a community health navigator and support them in getting certified as a medical interpreter. The navigator helps to get patients in the door and provides support to them through the completion of screening, collaborating with clinicians to provide translation services, and ensuring that patients understand the screening options and process. The community health navigator hosted a soccer tournament and cancer walk, which were successful in bringing together Spanish-speaking members of the community, where a cancer survivor was able to share his story as well as information about cancer screening (see Appendix 3.1). MMH has also developed educational materials and videos in Spanish, shared on their Facebook page and YouTube channel.

It's providing them with the service they can understand and having a system set up they trust. We have our phone set up so that if somebody is Spanish speaking, they go directly to a phone that is answered by one of our [Spanish-speaking] interpreters. When you provide a service like that, it shuts down the barriers. It breaks them down.



Results

In 2024, MMH provided 475 van transports to patients in northeast Colorado for a variety of medical appointments and procedures, including colonoscopies. Their CRC screening rates increased from 59% in 2022 to 69% in 2024, with 213 screenings completed, 40 positive screening test results, and one resulting cancer diagnosis. Among other successes, MMH has also seen an increase in the number of Hispanic/Latino patients receiving cancer screenings and has been able to further build trust with their Spanish-speaking community, in large part thanks to the efforts of community health navigators.

What advice would you give?

When asked what advice they would give to an organization working to increase their CRC screening rates, MMH interviewees recommended focusing on creating and investing in a culture of population health, prioritizing staff buy-in and engagement in the process, and bringing in a team champion early in the process who can help drive forward your efforts.



That's really the root of why we're doing this. We want our patients to be healthy and happy, and we want them to have better health outcomes. By developing a culture, and investing in that culture, I think the team will follow suit. Once they buy into the culture, they're willing to put in the work and understand the importance of developing these workflows. I also think having team buy-in [is important], so showing your work early and often, and making it a team approach is really important.

Interviewee Information

- Jayden Miracle, BS, HCA, MS HAS, Clinic Manager
- Mary Kay Knode, Care Coordinator

Mariposa Community Health Center

About the Organization

Setting: Rural | **Organization type:** FQHC | **Location:** Santa Cruz County, Arizona

- **EHR:** NextGen
- Population served:
 - 48,759 people
 - 1,238 square miles
- Number of active patients: 26,331

- Number of Clinicians: 29
- Percentage of patients at or below 200% of the federal poverty level guidelines: 85%
- Percentage of patients uninsured: 16%
- Percentage of patients best served in a language other than English: 46%

Strategies Highlighted



Client reminders



Engaging CHWs



Transportation support



Tailoring communications



Working with innovative partners

CPSTF-recommended strategies

Promising strategies

Background

Mariposa Community Health Center provides medical, dental, behavioral health, laboratory, and pharmacy services to Santa Cruz County residents near the US-Mexico border in southern Arizona. Additionally, the Community Health Services department conducts public health programming for the county, including health promotion, disease prevention, and community outreach. Like many rural communities, patients face geographic and structural barriers that limit access to care. Many community members do not own a vehicle, and the largest city in the county, Nogales, does not have public transportation. Even those with vehicles may need to drive over an hour to access specialty services, including gastroenterology. As a community in which most adult residents are still actively working and not yet retired, many patients also face challenges related to taking time off work to receive a colonoscopy. For many community members, lack of knowledge about and attitudes toward CRC screening makes patients more hesitant to screen.

Evidence-Based Interventions and Promising Practices

Partnering Clinical Pharmacy and Community Health Workers

Among other community health programs, Mariposa provides pharmacist-led diabetes mellitus (DM) care services to patients. Understanding that individuals with diabetes face a 47% increased risk for CRC, Pharmacy and Community Health Services at Mariposa collaborated to identify and screen patients eligible for CRC screening.²¹ When the program began in October 2022, the target population for this intervention was patients with type 2 diabetes, but it was expanded shortly after the project launched to include any patient ages 45 to 75 with a scheduled clinical pharmacy visit. After an initial assessment with the pharmacist, CRC screening stool-based test kits are ordered or sent home with the patients and Mariposa CHWs follow up with patients to assist in completing screening. CHWs call patients to reiterate instructions and ensure they understand the screening process, often following up many times until screening is completed.

Addressing Community Needs

Because a large portion of Mariposa's patient population is Spanish-speaking, cultural sensitivity and health literacy are top priorities for the community health center. Educational and outreach materials, including things like shared decisionmaking tools, instructions for colonoscopy prep, and social media posts, are provided in both English and Spanish, and CHWs are trained in CLAS standards (National Standards for Culturally and Linguistically Appropriate Services) to ensure they are providing culturally and linguistically appropriate services. In addition to having six satellite clinics located across the county, Mariposa also works to address geographic barriers by transporting patients living up to 60 miles away to their appointments and picking up completed screening kits from patients unable to drop them off for testing.

Because we're near the border, we make sure that we offer everything that we have in a language that is appropriate. Cultural sensitivity, making sure that the CHWs are all trained in the appropriate services, is something that our current interim CEO and leadership team is [prioritizing] across the board, for all services, including our providers.

In addition to working to address geographic and language barriers for patients, Mariposa's Community Health Services department also works toward increasing community knowledge and awareness of CRC and the need for CRC screening. In partnership with the University of Arizona Cancer Center, Mariposa celebrated National CRC Awareness Month in March 2023 by hosting a health fair focused on CRC. An inflatable colon was brought to campus that allowed community members to learn about polyps and cancer prevention. Staff also developed a marketing campaign focused on destigmatizing CRC and encouraging screening.



Results

Since October 2022, 232 CRC screening assessments have been completed by clinical pharmacists, with 115 of those patients receiving at-home screening kits. Of the 232 patients who participated in a screening assessment, 71 patients completed screening (61%) with eight receiving positive test results (11%). Improvements to electronic ordering within the EHR allowed Mariposa to dramatically increase their use of mt-sDNA testing, from 40 tests completed between October 2022 and September 2023 to 471 completed between October 2023 and September 2024.

After implementation, Mariposa's screening rate increased from 20% in October 2022 to 26% in August 2024. Mariposa also saw success in engaging health center staff and community members through outreach events like flu shot clinics and health fairs.

Mariposa's innovative partnership with pharmacists was featured in a Katie Couric Media article in December 2022.



So vividly I can remember one of our maintenance guys showing somebody [at the event] how to use one of the kits. So that was to me, like, OK, they're getting it. You know, people get it. So that was pretty neat.





What advice would you give?

When asked what advice they would give to an organization also working to increase their CRC screening rates, Mariposa interviewees recommended emphasizing shared decision-making, prioritizing patient follow-up, and taking the time to understand the needs and resources of both your community and your own organization.



Definitely having [a CHW] was great because she was persistent in contacting those patients if they had questions on how to follow up with the kit. ... I don't speak Spanish, but I understand it. I do have someone who shows them how to use it in Spanish, but we did go over several things during those 20 minutes, and the patient may have forgotten how to use it.

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Interviewee Information

- Jeanna Szablicki, Pharm.D., CDCES, BC-ADM, Director of Clinical Pharmacy Services
- Patty Molina, MPH, Senior Director of Community Health Services

Case Study

Colorectal Cancer Prevention Network (CCPN) at the University of South Carolina

About the Organization

Setting: Rural/Urban Combination | Organization type: FQHC | Location: Santa Cruz County, Arizona

- Population served:
 - o 42/46 counties in South Carolina
- Partnering organizations:
 - Types of partnering organizations: FQHCs, free medical clinics, and hospital-based primary care clinics
 - Number of referring clinics: 136
 - Number of partnering organizations:
 - Endoscopy centers/hospital-based endoscopy departments: 12
 - Gastroenterologists: 102

- CCPN
 - Percentage of patients at or below 200% of the federal poverty level guidelines: 100%
 - Percentage of patients uninsured: 100%
 - Percentage of patients best served in a language other than English: 15%
- South Carolina
 - Percentage uninsured: 10%
 - Up-to-date CRC screening, 45 years and older, 2020: 67% (BRFSS, 2020)

Strategies Highlighted



Patient navigation



Transportation support



Tailoring communications



Working with innovative partners

CPSTF-recommended strategies

Promising strategies

Background

The Colorectal Cancer Prevention Network (CCPN) is part of the University of South Carolina's College of Arts and Sciences. Initially funded in 2005 by the National Institutes of Health (NIH) to increase awareness of CRC, the CCPN has grown into a screening program for uninsured and medically underserved South Carolinians. The network receives referrals from partnering clinics across the state to offer clinical and community education, CRC screening services, patient navigation, and follow-up colonoscopies at no cost to participants.





Evidence-Based Interventions and Promising Practices

Reducing Out-of-pocket Costs for CRC Screening

Through statewide partnerships with gastroenterology, anesthesiology, and pathology, the CCPN is able to provide CRC screening, including colonoscopy, at no cost to referred patients. In addition to screening services, CCPN patients also receive free patient navigation and colonoscopy screening following a positive or abnormal stool-based test.

Patient Navigation

A primary component of the CCPN's programming revolves around the 24/7 support that their 13 regionally located patient navigators offer patients. Once referred to the CCPN, navigators ensure patient eligibility and guide patients to screening with a stool-based test (FIT or mt-sDNA) or colonoscopy based upon risk assessment. In addition to supporting patients through screening and follow-up, navigators help to address fears and other barriers to screening like language and transportation. Navigators act as a liaison between the patient and their medical home, allowing them to play an important role in building a patient's trust in the medical system. The CCPN employs bilingual navigators to support the state's growing Hispanic/Latino population. Patient navigators work to reduce the need to travel by scheduling appointments with endoscopy centers close to where participants live. Where necessary, customizable gas cards and Uber Health are used to help address transportation barriers. The CCPN also partners with other local organizations, like churches, food banks, and community assistance organizations to help patients overcome barriers.

Tailoring to Meet Community Needs

The CCPN has seen a 637% increase in Spanish-speaking patient referrals. To address that need, three bilingual navigators are available to assist Spanish-speaking patients, and all written materials and videos are available in English and Spanish. Bilingual navigators visit the endoscopy center to provide translation services before and after the procedure, ensuring that patients understand the scope of the procedure and are able to communicate with clinicians.

[At] one of our partnering hospital systems, the gastroenterologist who is donating his services speaks Spanish. He communicates directly with the patients, and he's so thankful to be able to give back to his community.

We currently have a patient who has one more [CRC] treatment left, and he's kept in touch with his navigator, thanking her for encouraging him to get screened. And because of her encouragement, he did get screened, and his cancer was found early, and he's going to have a great quality of life.



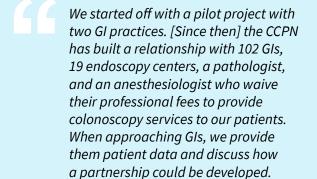
Results

Between July 2023 and June 2024, the CCPN screened 1,085 individuals (334 colonoscopies, 744 FIT kits, seven mt-sDNA). Seventy-four percent of FIT kits were returned, with 11% (80) receiving positive results. Sixty-one percent (49) of follow-up colonoscopies after a positive stool test result were completed.

In addition to the quantifiable success of **screening more than 1,000 patients in a year**, the CCPN is proud of the experience that they are able to offer patients with the quality of their patient navigation program. Many patients maintain relationships with navigators beyond completion of screening, reaching out to ask questions and share life updates.

What advice would you give?

When asked what advice they would give to an organization also working to increase their CRC screening rates, the CCPN interviewee recommended prioritizing relationships with partners and between navigators and community members, starting small and staying consistent to accomplish big change, and sharing progress milestones and successes.



Asking for one or two colonoscopy

to evaluate the partnership and

discuss expandability.

appointments a month with a review at

six months allows both organizations

I think what keeps us successful is us sharing about the positive impact our program is making in people's lives and always looking for ways to improve our program through additional partnership. We have been able to maintain and increase our state funding through relationship development and open communication highlighting the progress of the program and the health care return on investment cost savings. Keeping all relationships (legislators, health care partners, state health department, foundations, etc.) abreast of our program's accomplishments and goals has been key to our success.

Interviewee Information

■ Tracie Lewis, MS, Operations Director

Relevant Links:

- A statewide program providing colorectal cancer screening to the uninsured of South Carolina
- ACS NCCRT Colonoscopy Needs Calculator
- ACS NCCRT Paying for Colorectal Cancer Screening Patient Navigation Toolkit & Interactive Website

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