

Advancing Health Systems



Colorectal Cancer Screening within American Indian & Alaska Native Communities

*An American Indian Cancer Foundation Toolkit Designed for
Providers and Clinic Teams*

Authors

Anne Walaszek, MPH, Program Manager

White Earth Ojibwe

American Indian Cancer Foundation

Michelle Adelman, MPH, Senior Quality Improvement Coordinator

American Indian Cancer Foundation

Lois Brown, RN, PHN, CDE, Nurse Educator

Leech Lake Band of Ojibwe

American Indian Cancer Foundation

Sambridhi Shrestha, MPH, Program Coordinator

American Indian Cancer Foundation

Editors

Breannon Babbel, PhD, MPP, MPH, Senior Public Health Program Manager

National Indian Health Board

Courtney Wheeler, MPH, Public Health Project Coordinator

National Indian Health Board

ACKNOWLEDGEMENTS

This report is a collaborative effort between the American Indian Cancer Foundation (AICAF) and the National Indian Health Board (NIHB).



AICAF would like to recognize the participation of Indian Health Service (IHS) and tribal and urban health clinics that took part in the Clinical Cancer Screening Network program. A special thank you is extended to the tribal health directors, CEOs, clinic directors, providers and clinic staff who contributed their time to support this important work in reducing the impact of cancer in American Indian and Alaska Native communities.

Funding for this program was provided by the U.S. Centers for Disease Control and Prevention, Division of Cancer Prevention and Control (CDC DCPC) through the IHS Contract: #HHS1236201000006C. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC.

TABLE OF CONTENTS

INTRODUCTION	3
Toolkit goal	4
HOW TO USE THIS TOOLKIT	4
FOCUS AREA 1: DEVELOPING A COLORECTAL CANCER SCREENING INITIATIVE	5
Identify a core clinic team	6
Checklist for increased colorectal cancer screening	7
Develop an action plan	8
FOCUS AREA 2: TOOLS TO SUPPORT INTERVENTION STRATEGIES	8
Strategy 1: Education and support	8
Strategy 2: Clinic policy and procedures	11
Strategy 3: Reminder Systems	15
Strategy 4: Measuring progress	16
APPENDICES	18
Appendix A: Tools for Developing a Colorectal Cancer Initiative	18
Appendix B: Culturally Tailored Tools for Intervention Strategies	19

INTRODUCTION

The American Indian Cancer Foundation (AICAF) is a national nonprofit organization that was established to address the tremendous cancer inequities faced by American Indian and Alaska Native (AI/AN) communities. AICAF's mission is to eliminate the cancer burdens on AI/AN families through education, prevention, early detection, treatment and survivor support. It is with hard work, policy change, authentic community partnerships and the wisdom of our ancestors that we strive to eliminate inequities in hope of improving health outcomes in Indian Country.

Colorectal cancer is the second leading cause of cancer death among AI/ANs. In recognition that colorectal cancer incidence is higher in the Alaskan, Northern and Southern Plains regions compared to non-Hispanic Whites, AICAF identifies screening as a critical strategy to improve health outcomes in tribal & urban communities across the nation. AICAF has created the “*Advancing Health Systems: Colorectal Cancer Screening within American Indian and Alaska Native Communities*” to assist AI/AN health systems develop and implement system changes that will increase colorectal cancer screening rates.

BACKGROUND

American Indian Colorectal Cancer Burden

Screening is the most effective way to prevent colorectal cancer. It is important because it helps detect cancer in the early stages; there are usually no symptoms of colorectal cancer until it is too late. Screening saves lives by finding and removing small, noncancerous clumps called “polyps” before they turn into cancer. If caught early, colorectal cancer has a 90% survival rate.

In 2018, the American Cancer Society (ACS) updated its recommendation to begin regular screening for colorectal cancer at age 45 (previously 50), and continue through age 75.¹ This change was made based on data that showed the increased rates of colorectal cancer in younger populations. The U.S. Preventive Services Task Force (USPSTF) has not revised its guidelines to reflect the updated ACS recommendations and still recommends colorectal cancer screening for adults aged 50 to 75.²

In most regions across the United States, colorectal cancer incidence and mortality rates are increasing or remain stagnant for AI/ANs, while decreasing for non-Hispanic Whites.³ Native people are diagnosed at younger ages, on average, and are more likely to be diagnosed at later stages of disease. Screening is under-utilized, even though there are several testing options including colonoscopies, FOBTs and FITs, among others. Despite the number of testing choices, colorectal cancer screening rates remain remarkably low among AI/ANs, ranging from 34% to 47%,⁴ which is below the Department of Health and Human Services' Healthy People 2020 goal of 70.5%.

¹ American Cancer Society. Colorectal Cancer Screening Guidelines. American Cancer Society.

<https://www.cancer.org/health-care-professionals/american-cancer-society-prevention-early-detection-guidelines/colorectal-cancer-screening-guidelines.html>.

²U.S. Preventive Services Task Force

<https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/colorectal-cancer-screening>

³ Perdue, D. G., Haverkamp, D., Perkins, C., Daley, C. M., & Provost, E. (2014). Geographic variation in colorectal cancer incidence and mortality, age of onset, and stage at diagnosis among American Indian and Alaska Native people, 1990-2009. *American journal of public health*, 104 Suppl 3(Suppl 3), S404-14.

⁴ Indian Health Service Clinical Reporting System. 2014. National dashboard (IHS/Tribal) — final. 2014.

http://www.ihs.gov/crs/includes/themes/newihstheme/display_objects/documents/gpra/2015/2014EndofYearDashboard.pdf

To address this disparity, AICAF uses culturally-specific programs, research and evaluations to help transform the health of AI/ANs and reduce high rates of preventable cancers.

Toolkit goal

The development of this toolkit was built on evidence-based interventions and lessons learned during the Clinical Cancer Screening Network (CCSN) pilot program led by AICAF.

The goal of the CCSN was to provide colorectal cancer screening tools for clinic teams working in AI/AN health systems that will lead to:

1. Increased colorectal cancer awareness with **education and support** strategies
2. Increased number of screening tools developed to support **clinic policy and procedures**
3. Strengthened **reminder systems** that support effective tracking and follow-up
4. Identified communication and data systems that **measure progress**

These goals have shaped the development of a technical assistance framework that will provide culturally tailored and web-based resources to clinic teams within AI/AN health systems.

AUDIENCE

The “*Advancing Health Systems: Colorectal Cancer Screening within American Indian and Alaska Native Communities*” toolkit is intended to serve providers, clinic teams and public health professionals to implement strategies to increase colorectal cancer screening rates within their health system. This includes but is not limited to: providers, nurses, administration and billing, community health representatives, pharmacists, laboratory, public health professionals, tribal health and traditional healers.

HOW TO USE THIS TOOLKIT

The toolkit is a training guide for AI/AN health systems to initiate change to improve clinic-based cancer screening practices and screening rates. This resource will emphasize evidence-based interventions from “The Community Guide”⁵ and the “How to Increase Colorectal Cancer Screening Rates in Practice: A primary care clinician’s evidence based toolkit and guide,”⁶ both supported by the CDC.

The toolkit is broken down by the following focus areas, with each area further divided by corresponding strategies and steps:

1. Developing a colorectal cancer screening initiative
 - Strategy 1. Leadership support
 - Strategy 2. Identify a core clinic team
 - Strategy 3. Checklist for colorectal cancer screening
 - Strategy 4. Develop goals to improve current colorectal cancer screening practices

⁵ <https://www.thecommunityguide.org/>

⁶ Sarfaty, M. (2008). How to increase colorectal cancer screening rates in practice: A primary care clinician’s evidence based toolbox and guide. Peterson K, Wender R, editors. National Colorectal Cancer Roundtable 2008. <http://www.cancer.org/acs/groups/content/documents/document/acspc-024588.pdf>

2. Tools to support intervention strategies
 - Strategy 1. Education and support
 - Strategy 2. Clinic policy and procedures
 - Strategy 3. Reminder systems
 - Strategy 4. Measuring progress

Within the focus areas, **tools** (located within the Appendices) and links to **additional resources** are listed as potential support mechanisms to advance progress in colorectal cancer screening.

FOCUS AREA 1: DEVELOPING A COLORECTAL CANCER SCREENING INITIATIVE

Strategy 1: Leadership Support

Leadership engagement within a health system is the first step in pursuing any new initiative. Securing leadership support initiates clinic staff involvement, which will guide roles and responsibilities to effectively implement a cancer screening initiative. Leadership buy-in also underlines the institutional importance and value of dedicating efforts to such an initiative.

Steps to achieve leadership support

Step 1. Bring the facts

- a. Cancer burden in your region: share a snapshot of how cancer is impacting AI/ANs in your area compared to the general population
 - i. [AICAF cancer burden booklet](#) provides regional data
 - ii. Your local and/or state health department
 - iii. American Cancer Society
- b. Current screening rates:
 - i. Identifying the screening rates within your community helps compare your baseline/current rate to the local, state, regional and/or national screening rates
- c. Efficiency across systems increases productivity
- d. Prioritizing preventative care lowers health care costs

Leadership engagement may differ across systems. The type, amount or strength of engagement will determine the level of readiness to support the development of a core clinic team to lead a colorectal cancer initiative.

Building momentum across leadership groups will provide opportunities for buy-in across the health system. The Institute for Healthcare Improvement (IHI) highlights the leadership role as the key change agent to provide systems improvement in a health care system. Per IHI, “leadership is a critical component for any organization seeking to drive improvements in health care quality and patient safety.”⁷ The IHI goal states that “leader attention on quality improvement efforts is a critical component of our foundational work in building the improvement capability of health care organizations.”⁷

- Chief Executive Officer and/or Clinical Directors are system leaders who guide change efforts
- Clinic Managers and/or Director of Nursing may be middle managers who seek to apply principles of highly effective leadership to their work with frontline teams
- Physician leaders or those who seek to better understand how to engage physician leaders in quality improvement efforts

⁷ <http://www.ihi.org/Topics/Leadership/Pages/default.aspx>

Strategy 2: Identify a core clinic team

To successfully champion an initiative, in addition to existing demands within a clinic setting, a core clinic team must be identified to ensure a colorectal cancer screening initiative can be appropriately and effectively embedded into practice.

Creating a clinic team that represents the health system is critical to reflect a representative approach to implement a new clinic process. Figure 1 illustrates the necessary interdepartmental engagement that should be established to effectively collaborate on a shared clinic measure, such as colorectal cancer screening. Since each clinic is unique, the clinic team composition will look different and each position will have unique responsibilities to reflect those differences. The clinic team will look different based on your clinic gaps.

Establish a “champion” from the clinic team as the main point of contact. The champion is typically responsible for the communication, coordination and evaluation of progress in team-led activities. Clinic champions have been in roles of clinic leadership, quality improvement managers and/or health care providers. In some scenarios, the champion role will be identified through delegation from leadership or self-appointed in a volunteer-basis.



Figure 1 Overview of core clinic team (App A_1)

Additional resources available:

Template for identifying a core clinic team (App A_1)

Strategy 3: Checklist for increased colorectal cancer screening

As an acknowledgement of how each health system and community is unique, the “Checklist for Increased Colorectal Cancer Screening” ([App A_2](#)) provides a comprehensive approach to address screening based on level of readiness and current challenges and successes. This assessment is adapted from the “How to Increase Colorectal Cancer Screening Rates in Practice: A primary care clinician’s evidence based toolkit and guide,”⁶ to allow ease of identification of clinic and patient needs within the health system in the context of evidence-based colorectal cancer screening practices.

The colorectal cancer screening checklist template can be utilized to identify current colorectal cancer screening practices within a health system, which are evidence-based. The checklist includes: 1) provider recommendation; 2) clinic policy and procedures; 3) reminder systems; and 4) measuring progress. The checklist is also used to measure readiness and determine appropriate strategies that are ready to implement in a clinic setting.

The checklist is a great tool to identify baseline rates, data collection processes and tracking systems to achieve an efficient clinic flow. Oftentimes, clinic systems are not at capacity to identify baseline rates and/or have a tracking system in place to fully determine the level of readiness to pursue quality improvement strategies. Through assessing the needs to support data tracking guides, clinic teams may prioritize strategies and set realistic goals.

Strategy 4: Develop goals to improve current colorectal cancer screening practices

After reviewing the checklist, the core clinic team will identify key goals (short & long-term) aligned with the improvement of colorectal cancer screening practices. These goals are tied to the listed evidence-based interventions that guide the culturally tailored strategies designed for AI/AN health systems. As part of this process, it is important to identify existing strategies and build upon them, rather than starting from scratch. Existing programs and strategies can provide a baseline and require fewer resources.

In determining goals, the appropriate strategies listed in the menu can easily be identified based on the level of readiness of the health system. Techniques to reach a realistic, actionable plan can be done through the following:

- **Practice facilitation:** Through this approach, the goal is to “support improvement in primary care practices that focus to build system capacity for ongoing improvement.”⁸
 - **Clinic team-led:** The core clinic team can identify a champion to coordinate efforts and provide practice facilitation activities that can be team-led.
 - **External consultants:** Another option is to bring in an external consultant that specializes in quality improvement to lead practice facilitation with clinic systems. For example, when partnering with AICAF, they offer technical assistance to support clinic and community health systems.
- **Process mapping:** This approach identifies possible leverage areas to implement strategies that may strengthen existing and/or embed new processes that lead to improved, efficient screening practices. Process mapping reflects the current clinic workflow to identify potential screening gaps and opportunities for clinic teams to strengthen current practices and/or identify areas where improvements to the system can be easily implemented.

⁸ Knox L, Taylor EF, Geonnotti K, et al. (2011). Developing and running a primary care practice facilitation program: a how-to guide

(Prepared by Mathematica Policy Research under Contract No. HHS2902009000191 TO5.) Rockville, MD: Agency for Healthcare Research and Quality. AHRQ Publication No. 12-0011. <https://www.pcmh.ahrq.gov/page/practice-facilitation>

- Action Plan: Upon determining the goal, action plans can be utilized to identify and choose evidence-based strategies to designate programs and processes to address the problem. Identify a tracking system and implement the action plan. The components of an action plan can be detailed for staff through flowcharts and checklists. (App A_3a, App A_3b)

The Community Preventive Services Task Force findings to support cancer screening interventions, shown in Figure 2, provide a framework to help guide process mapping for clinic teams.



Figure 2 Analytic Framework for Clinic-Directed Interventions; Adapted from: Effectiveness of interventions to increase screening for breast, cervical and colorectal cancers, Am J Prev Med 2012; 43(1):97-118

Additional resources available:

- [Practice Facilitation Trainer’s Guide: Practice facilitation as a resource for practice improvement](#) provided by the Agency for Healthcare Research and Quality⁹

Upon determining the goal, identify and choose evidence-based strategies to designate programs and processes to address the problem. Identify a tracking system and implement the action plan. Components of an action plan can be detailed for the staff through flowcharts and checklists.

FOCUS AREA 2: TOOLS TO SUPPORT INTERVENTION STRATEGIES

Strategy 1: Education and support

A common theme shared across AI/AN health systems when addressing cancer rates and promoting screening initiatives is the importance of building awareness and providing educational resources. AICAF has developed culturally tailored strategies directed at the following audiences: provider and clinic staff, patients, and outreach and navigation staff (Figure 3).

⁹ <https://www.ahrq.gov/professionals/prevention-chronic-care/improve/system/pfhandbook/mod1trainers.html>



Provider & Clinic Staff



Patients



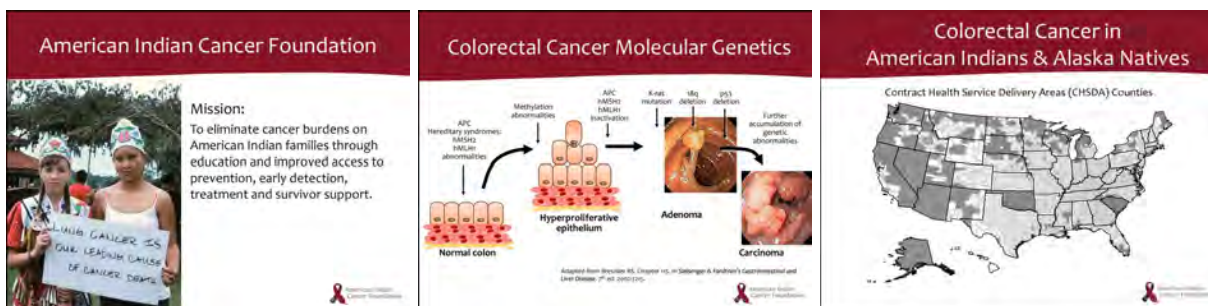
Outreach & Navigation Staff

Figure 3: Target Audiences for Education and Support

Provider and clinic staff

Provide updates on current colorectal cancer screening practices and guidelines to increase provider and clinic staff knowledge of colorectal cancer screening.

Tool: Continuing education training presentation: Training objectives are to highlight colorectal cancer in AI/ANs on 1) Epidemiology; 2) Risk Factors; 3) Screening Options; 4) Barriers to Screening; and 5) Possible Solutions. (App B_1a)



The CDC has a similar, mainstream health system continuing education track that details the importance to optimize quality care when screening for colorectal cancer.

Additional resources available:

- Online resource: [Screening for Colorectal Cancer: Optimizing Quality \(CME\)](#)¹⁰

In combination with the update on colorectal cancer screening practices, provider and clinic teams should have access to the latest USPSTF recommendations on colorectal cancer screening, which can be made available during the training and/or through health system electronic health records.

Tool: One-page colorectal cancer screening recommendations—Adults aged 50 to 75 years old USPSTF (USPSTF, 2016). (App B_1b)

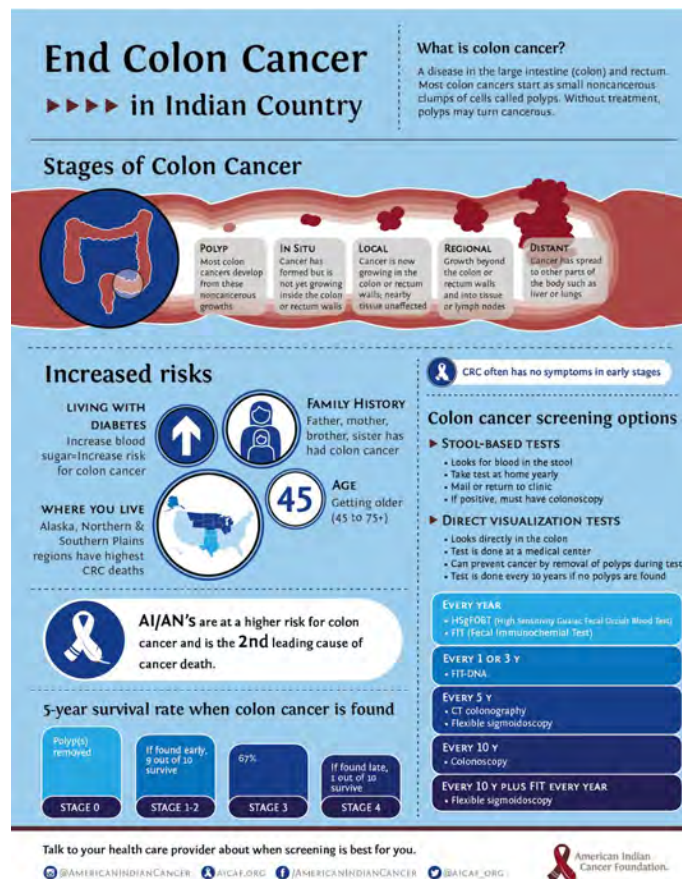
<p>Stool-based Tests</p> <ul style="list-style-type: none"> ▶ Looks for blood in the stool ▶ Take test at home by smearing a stool sample on a card ▶ Test is mailed or returned directly to clinic/laboratory ▶ If positive results, follow up requires a colonoscopy 	<p>Direct Visualization Tests</p> <ul style="list-style-type: none"> ▶ Looks directly in the colon ▶ Can prevent cancer by removal of polyps during test ▶ Test is done every 10 years if no polyps are found ▶ Test is done at a hospital or clinic
---	---

Patients

Identify the importance of colorectal cancer prevention through available screening options, educational materials and resources that lead to colorectal cancer awareness, informed decision-making and a completed colorectal cancer screening.

10 <https://www.cdc.gov/cancer/colorectal/quality/index.htm>

Tool: Patient resource—highlights AI/AN colorectal cancer burden data, risk factors and strategies to prevent colorectal cancer in an easy-to-understand message. The resource is visually appealing and tailored to an AI/AN audience. The resource is also formatted for large signage (poster, table top or retractable sign) (**App B_2_a**)



The colorectal cancer infographic is based on a clinic team identifying an opportunity to provide education in an unexpected, but ideal space: the bathroom stall door. The intent of the infographic is to deliver facts that are also visually appealing and tailored to an AI/AN audience. To achieve this, the use of AI/AN imagery, through design and photos, reinforces provider recommendation of colorectal cancer screening, an evidence-based intervention, to effectively reach the intended audience.

Outreach and navigation staff

Outreach and navigation are capacity-building strategies within community health systems in which embedding colorectal cancer awareness and education across multiple systems can support patients to complete screening.

The practice of linking clinic to community health is an evidence-based intervention that elevated the toolkit's use to effectively address screening across health systems. Improving the systems process within clinic settings strengthens the screening practices across clinic teams, as well as its overall health system. It must be recognized that the impact of evidence-based interventions implemented are restricted to the one system (clinic system) and limits the long-term effectiveness of colorectal cancer prevention and education if not addressed across multiple systems (community health; businesses).

Additional resources available:

- **Colorectal cancer 101 education designed for community health workers (CHWs) in partnership with Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC) [Tribal Colorectal Health Program](#) to maximize colorectal cancer screening education across systems (e.g. tribal health, clinic, Indian Health Service, referral sites)¹¹**
- **One-on-one and group education materials from AASTEC disseminated to CHWs trained to enable implementation of culturally tailored colorectal cancer resources [with interactive games](#)¹¹**

¹¹<http://www.aastec.net/services-programs/tchp/>

Strategy 2: Clinic policy and procedures

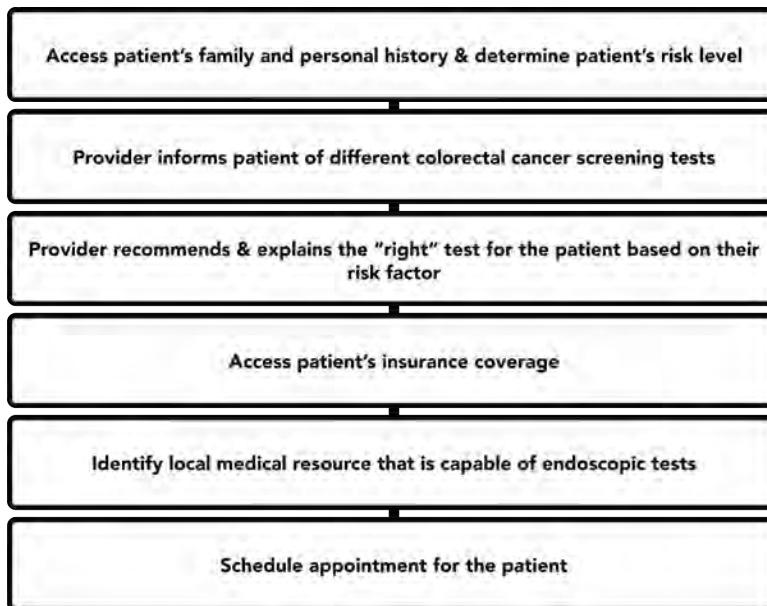
Increasing screening rates requires identifying areas of opportunities to strengthen clinic practices when a patient is recommended for colorectal cancer screening. Clinic processes such as policy implementation, patient experience, cue-to-action education and shared decision-making tools help advance clinic practices to increase screening rates.

Step 1: Clinic policy

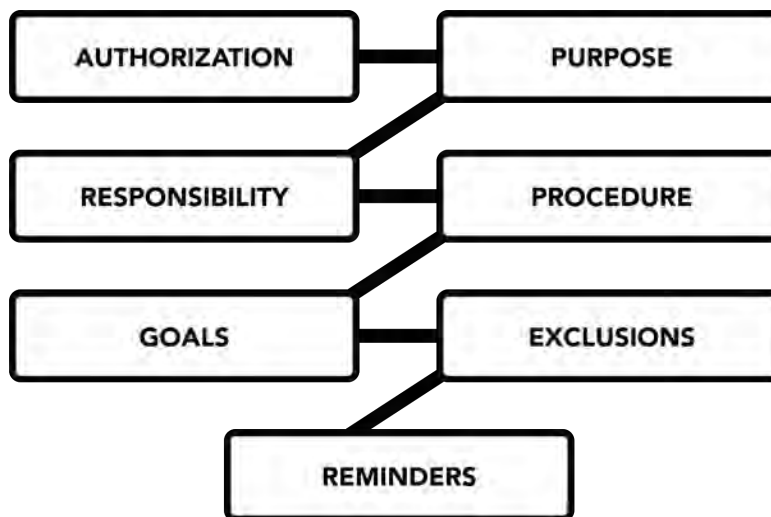
Developing and implementing an effective clinic colorectal cancer screening policy ensures there is a system process in place that identifies eligible patients, determines an appropriate procedure to recommend screening and ensures medical resources to cover the screening, which can increase the likelihood of completed screenings.

The “How to Increase Colorectal Cancer Screening Rates in Practice. A primary care clinician’s evidence based toolkit and guide,”⁶ outlines key components for executing a policy in Table 1.

Table 1 Clinical guidance to acknowledge risks factors and referral sites within AI/AN health systems



Tool: Clinic policy template—outlines key components to detail within health systems to enforce a universal colorectal cancer screening process. (App B_3)

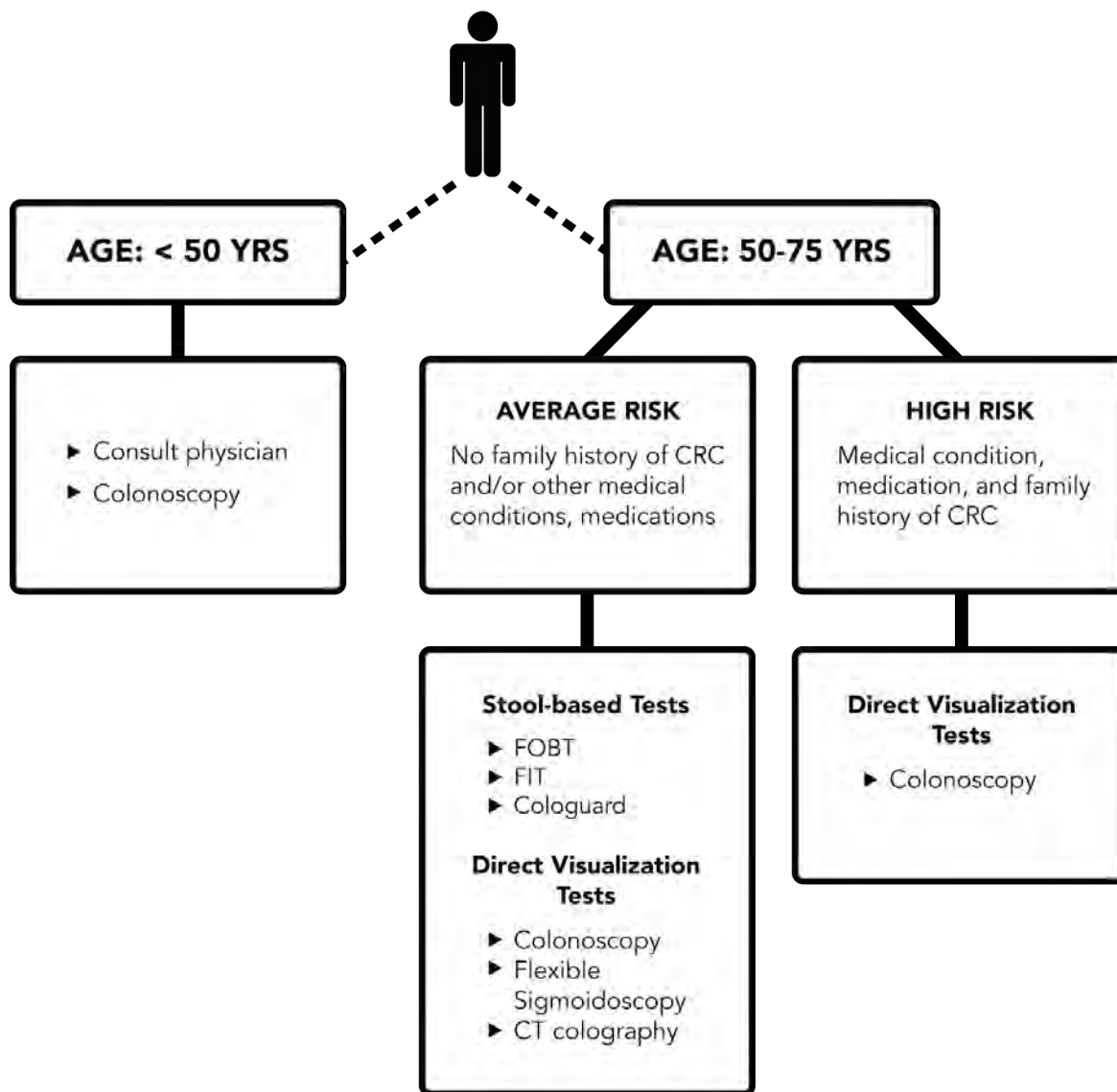


Step 2: Patient flow

A tracking system must be established in which all staff are aware of how to track patient tests and how to appropriately follow-up. It is strongly recommended to have a detailed tracking and follow-up procedure in the clinic policy for colorectal cancer screening.

Tool: Process map template—serves as an example to support an effective colorectal cancer screening tracking process across health system. (App B_4a)

Choosing the Right Test

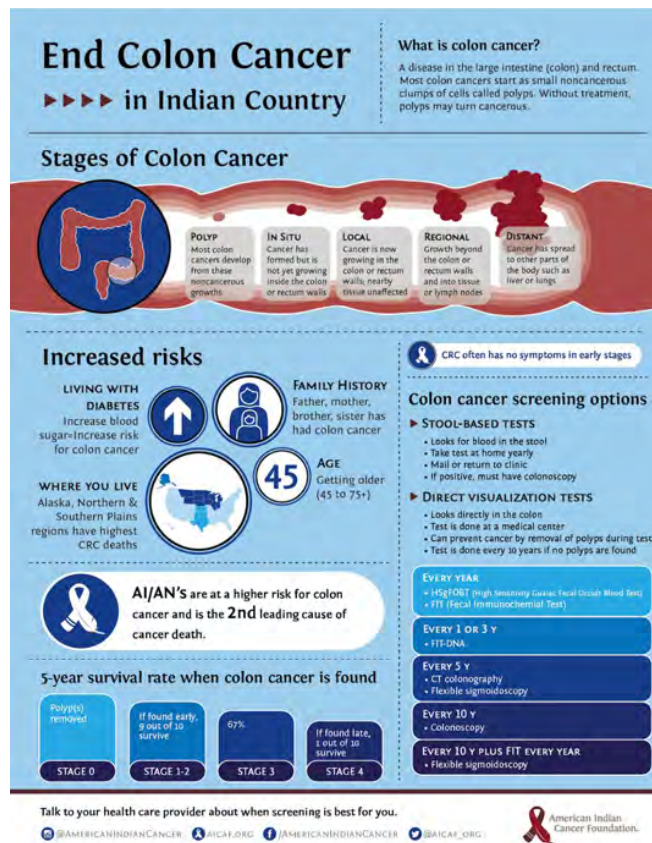


Tool: Tracking tests template—provides patient status of colorectal cancer screening completion to guide tracking and support follow-up. (App B_4b)

Step 3: Cue-to-Action with colorectal cancer education

Beyond the use of patient charts, providers and their clinic teams can utilize cue-to-action education resources within their clinic processes to promote screening. Cue-to-action is an intervention that has been shown through research that a specific prompt can result in a specific response.

Tool: Patient brochure and/or infographic—prompts clinic staff and patients to discuss importance of colorectal cancer screening. (App B_2a and App B_2b)



Step 4: Shared decision-making strategies

A provider-patient conversation is critical to determine what type of screening test is best for each person. In determining the best test and the appropriate discussion to have with a patient, a provider tool guiding the decision-making process can help support that process. Tools assessing patient readiness to pursue testing are part of the decision-making process.

Additional resources available:

- [American Cancer Society – Provider tool to determine patient readiness to screen](#)¹²
- [American Cancer Society – Provider tool to determine best test for patient](#)¹³

Important considerations within clinic policy and procedures:

1. Identify roles across the clinic team to establish a protocol for scheduling appointments to enhance the colorectal cancer screening process.
2. Establish a protocol (e.g. standing orders) for primary care providers to discuss colorectal cancer screening results with patients in-person.

Strategy 3: Reminder Systems

An effective strategy that reinforces the completion of colorectal cancer screening is an established reminder system. Clinic systems can implement reminder systems in multi-faceted strategies such as maximizing the use of the electronic medical records or leveraging existing resources to embed follow-up reminders. For example:

- *Electronic medical record (EMR) support*

Increased screening can be elevated through the use of reminder and tracking systems. The use of electronic medical records (EMRs) has been a major systems change to most American Indian and Alaska Native health systems. The EMR system allows a range of options for prompts to be activated to serve as a reminder and tracking tools.

¹²<https://www.cancer.org/content/dam/cancer-org/cancer-control/en/reports/decision-stage-flow-chart-for-colorectal-cancer-screening.pdf>

¹³<https://www.cancer.org/content/dam/cancer-org/cancer-control/en/reports/colorectal-cancer-screening-decision-stage-questionnaire.pdf>

Development of a flagging system in charts can help identify patients due for colorectal cancer screening. Examples have been simply a post-it note, sticker, or note in the paper chart or the activation of an EMR flag within the electronic chart.

Tool: Chart stickers—serves as a support tool for clinic staff as a prompt and/or flag on face sheets during patient visits. (App B_5)

Never screened for CRC

*****For patients 50-75*****

Is colon cancer screening needed?
 Yes No

Personal history? Family history?
 Yes No Yes No

Referral date: / /

Results
 Negative Positive

Details:

Follow-up
 Referral
 Screening in _____ year(s)

- *Program reminders through existing resources*

As the reminder systems' goal is to establish an efficient, improved follow-up care process, introducing a new strategy on top of an already busy clinic setting may be difficult to implement. Thus, it is ideal to activate reminder systems through current practices as opposed to developing a new strategy.

Existing programs and/or resources are ideal systems to leverage. Through the identification of clinic process flow, opportunities can be leveraged to provide colorectal cancer screening reminders to their patients.

Tool: Process flow map example— a process map of colorectal cancer options serves to support an effective colorectal cancer screening tracking process across health systems. Because there are multiple screening options for colorectal cancer, it is important to work with patients to determine which test is the best choice for them. **(App B_4a)**

For example, a clinic can maximize the role of the lab staff within their system as a reminder system as well as cue-to-action education.

In terms of promoting colorectal cancer screening options, such as stool testing, identifying processes where annual testing is already in place would be key.

A national program, the FLU/FIT program, embeds an opportunity to expand upon an established system for flu vaccinations.

Through lessons learned, it is advised to ensure that the fecal immunochemical test (FIT) has been fully implemented within a health system for a full year prior to pursuing the FLU/FIT program.

Additional resources available:

- FLU/FIT Program [implementation guide by the American Cancer Society](#)¹⁴ and [Tribal FLU/FIT materials from AASTEC](#).¹¹

¹⁴<https://www.cancer.org/content/dam/cancer-org/cancer-control/en/reports/american-cancer-society-flufobt-program-implementation-guide-for-primary-care-practices.pdf>

Strategy 4: Measuring progress

A key strategy to ensuring the success of improving colorectal cancer screening practices is to identify communication and data systems that measure practice progress.

Multiple communication strategies can support health systems to build capacity across colorectal cancer screening practices. Those strategies include:

- *Provider feedback and building peer support*

Create a platform for clinic teams to acknowledge the health system practices that work well, need improvement and/or are an opportunity to leverage resources. This type of engagement can be done through a facilitated discussion, training opportunities (in-person or via web) and/or embedding a standing agenda item in all staff meetings to report back on progress.

Tool: Meeting report template—supports documentation of clinic team progress by monitoring strategies proposed and/or implemented that have impacted colorectal cancer screening within health system. **(App B_6)**

- *Data and measurement*

Identify a baseline of colorectal cancer screening to allow benchmarks to be analyzed throughout a time period when implementing a diverse set of strategies to improve screening efforts.

Tool: Screening algorithm guide—details the ICD-9 codes to pull colorectal cancer screening rates to identify baseline and progress. (App B_7)

ICD-9	DIAGNOSIS
V16.0	Family history of colon cancer
V10.05-V10.06	History of Colon Cancer
V12.72	History of Colon polyps
153.0-153.9	Malignant neoplasm of the colon
150-154.8	Malignant neoplasm of the rectum
197.4-197.5	Secondary malignant neoplasm
211.2-211.4	Benign neoplasm of the other digestive systems
230.3-230.6	Carcinoma in situ of digestive organs
235.2	Neoplasm of uncertain behaviors
556-556.9	Ulcerative colitis
558.9	Other unspecified noninfectious colitis
569.0	Anal & rectal polyps

A final component of this strategy involves working with key stakeholders and health systems to measure and evaluate overall progress.

Tool: Measure Your Progress worksheet: (App B_8)

APPENDICES

Appendix A: Developing a Colorectal Cancer Initiative

1. Identify a core clinic team template
2. Checklist to increase colorectal cancer screening
3. Action plan for clinic teams
 - a. Example of action plan with short and long term goals tied to strategies
 - b. Action plan template

Appendix B: Culturally Tailored Tools for Intervention Strategies

Education and support:

1. Provider and clinic staff
 - a. Continuing education training on colorectal cancer best practices.
 - b. Colorectal cancer screening recommendations.
2. Patients
 - c. Resource (electronic version)

Clinic policy and procedures:

3. Clinic policy
 - Template for clinic policy outlining system processes.
4. Patient flow
 - a. Template for process map on screening tracking tracking tests and follow-up
 - b. Template for tracking tests and follow-up

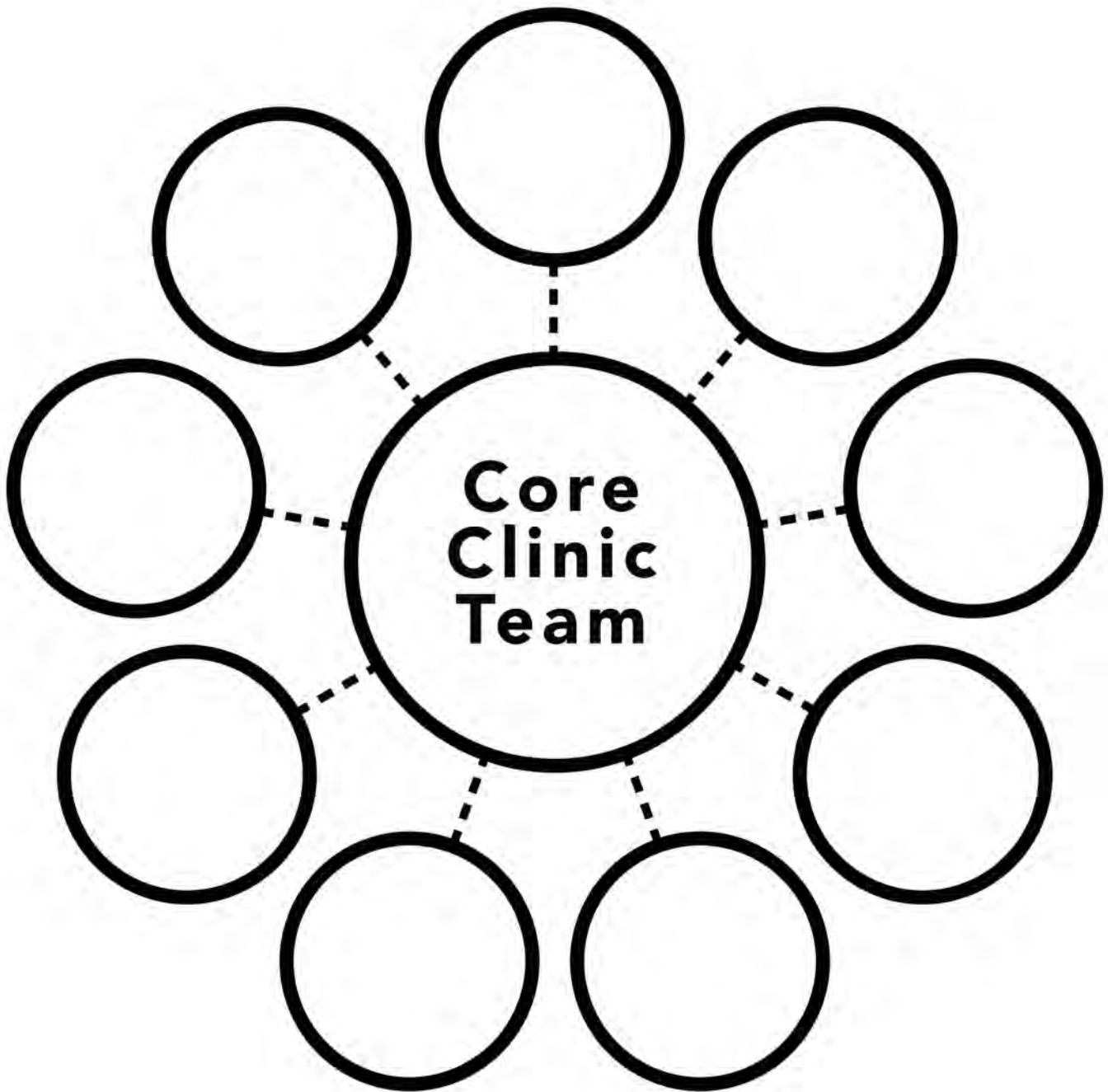
Reminder systems:

5. Electronic medical record support
 - Chart stickers to flag paper charts

Measuring progress:

6. Building peer support
 - Template to track clinic team progress through meeting reports
7. Data and measurement
 - Example of a screening algorithm to capture screening rates
8. Evaluation
 - Worksheet to measure progress







Checklist for Increased Colorectal Cancer Screening

	In Place	In Progress	Not in Place	Status Details	Staff Responsible
1. Provider Recommendation					
For colorectal cancer (CRC) screening					
For complete diagnostic evaluation when screen is positive					
2. Clinic Policy					
<i>Policy components include:</i>					
• Assess patient's family history to determine individual risk level					
• Identify local medical resources (endoscopy capacity)					
• Assess patient's insurance coverage					
• Consider patient preference for CRC options					
• Engage staff & implement policy					
CRC screening algorithm posted in clinic identifying eligibility, risk, screening options, next steps and/or recommendations based on screening outcomes					
Stool blood test flow sheet posted, and excludes in-office tests					
3. Reminder Systems					
<i>Options for clinicians include:</i>					
• Chart prompts					
• Audits & feedback					
• Ticklers & logs for initial/repeat screening					
• Staff assigned responsibilities & patient flow to enhance CRC screening process					
<i>Options for patients include:</i>					
• Patient education on CRC screening benefits & options (posters, brochures, videos, navigator)					
• Cues to action (posters, brochures)					
• Reminder mailing (postcards or letters) for initial and repeat screening					
• Reminder calls for initial and repeat screening					
4. Measure Practice Progress					
• Stage-based communication to increase patient motivation for screening					
• Opportunities for shared decisions, informed decisions, decision aids					
• Staff involvement in the patient flow in addressing CRC screening					

Clinical Cancer Screening Network: <ENTER CLINIC SYSTEM NAME>

OVERALL LONG-TERM GOALS:

- Decreased cancer mortality and morbidity among American Indians
- Increased CRC screening rates within the American Indian community
- Develop effective clinical system practices to support CRC screening processes to result in significant increases in GPRA measures

OVERALL SHORT-TERM GOALS:

- Reduced patient barriers within clinical system to support completion of CRC screening
- Increased community knowledge and awareness of colon cancer and the benefits of screening within the American Indian community
- Enhanced clinical systems to ensure efficient data measurement and tracking


FOCUS AREA	INTERVENTION STRATEGIES	POTENTIAL TOOLS TO DEVELOP	IMPACT
Education & Support	A. Provider/clinician Support 1. Update on screening practices & guidelines 2. Shared decision making i. CRC screening options ii. Education overview	1. Update on CRC practices A. CE training at clinic 2. Develop education materials A. Outline screening options B. CRC flipchart for room and provider to use	<ul style="list-style-type: none"> • Increased provider knowledge on CRC • Update on CRC screening recommendations & available options
	A. Patient Education 1. CRC prevention 2. Available screening options	1. Develop education materials A. Information/announcements on clinic TVs B. Community testimonials	<ul style="list-style-type: none"> • Increase CRC awareness • Informed decision • Increased completed CRC screening
Clinic Processes	A. Clinic Policy	1. Identify screening algorithm A. Process Mapping	<ul style="list-style-type: none"> • Increased completed CRC screening
	A. Reminder System	1. Tracking system for abnormal tests A. Flag screening on chart (EHR tool; sticker; note)	<ul style="list-style-type: none"> • Increased completed CRC screening • Increased supportive tools for providers/clinicians for CRC reminders

Clinical Cancer Screening Network: <ENTER CLINIC SYSTEM NAME >

OVERALL LONG-TERM GOALS:

OVERALL SHORT-TERM GOALS:

FOCUS AREA	INTERVENTION STRATEGIES	POTENTIAL TOOLS TO DEVELOP	IMPACT

 American Indian Cancer Foundation.

Clinical Cancer Screening Network

A Clinical Systems Innovation Program at the American Indian Cancer Foundation

American Indian Cancer Foundation




Mission:
To eliminate cancer burdens on American Indian families through education and improved access to prevention, early detection, treatment and survivor support.

 American Indian Cancer Foundation.


AICAF Priorities

- Raise awareness of the tremendous cancer burdens and inequities for American Indians in regards to cancer.
- Educate on the benefits of early detection and opportunities to improve clinical systems for cancer outcomes (lung, colon, breast, cervical).
- Increase community mobilization for healthier lifestyles (cancer prevention) based on cultural/tribal teachings.
- Develop strategic partnerships for AICAF development.

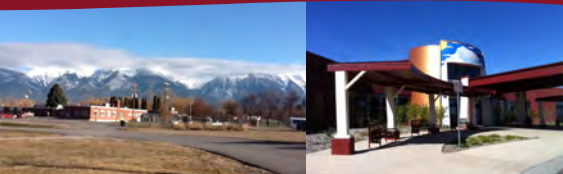
 American Indian Cancer Foundation.

AICAF Approaches

- Bring Attention to American Indian Cancer Burdens and Solutions
- Advance Capacity through Training, Technical Assistance and Resources
- Increase Availability of Reliable & Relevant American Indian Data and Solutions


 American Indian Cancer Foundation.


Clinical Cancer Screening Network



Colorectal Cancer: Prevention and Screening

- Clinical system support
- IHS, Tribal and Urban clinics in the Northern Plains

 American Indian Cancer Foundation.

 American Indian Cancer Foundation.

Colorectal Cancer Screening Practices

David G Perdue MD MSPH
(Chickasaw)
Gastroenterologist

Colorectal Cancer Screening Recommendations: Adults aged 50 to 75 years old
United States Preventative Services Task Force (USPSTF, 2016)

Stool-based tests

- Looks for blood in the stool
- Take test at home by smearing a stool sample on a card
- Test is mailed or returned directly to clinic/laboratory
- If positive results, follow up requires a colonoscopy

Screening method	Frequency ^b	Evidence of efficacy	Other considerations
HSgFOBT (High Sensitivity Guaiac Fecal Occult Blood Test)	Every year	High-sensitivity versions (eg, Hemoccult SENSAs) have superior test performance characteristics than older tests (eg, Hemoccult II)	Does not require bowel preparation, anesthesia, or transportation to and from the screening examination (test is performed at home)
FIT^c (Fecal Immunochemical Test)	Every year	Test characteristic studies: <ul style="list-style-type: none"> • Improved accuracy compared with gFOBT • Can be done with a single specimen 	Does not require bowel preparation, anesthesia, or transportation to and from the screening examination (test is performed at home)
FIT-DNA	Every 1 or 3 y ^d	Test characteristic studies: <ul style="list-style-type: none"> • Specificity is lower than for FIT, resulting in more false-positive results, more diagnostic colonoscopies, and more associated adverse events per screening test • Improved sensitivity compared with FIT per single screening test 	There is insufficient evidence about appropriate longitudinal follow-up of abnormal findings after a negative diagnostic colonoscopy; may potentially lead to overly intensive surveillance due to provider and patient concerns over the genetic component of the test

Colorectal Cancer Screening Recommendations: Adults aged 50 to 75 years old United States Preventative Services Task Force (USPSTF, 2016)

Direct visualization tests

- Looks directly in the colon
- Can prevent cancer by removal of polyps during test
- Test is done every 10 years if no polyps are found
- Test is done at a hospital or clinic

Screening method	Frequency ^b	Evidence of efficacy	Other considerations
Colonoscopy ^c	Every 10 y	Prospective cohort study with mortality end point	Requires less frequent screening. Screening and diagnostic followup of positive results can be performed during the same examination.
CT colonography ^e	Every 5 y	Test characteristic studies	There is insufficient evidence about the potential harms of associated extracolonic findings, which are common
Flexible sigmoidoscopy	Every 5 y	RCTs with mortality end points: Modeling suggests it provides less benefit than when combined with FIT or compared with other strategies	Test availability has declined in the United States
Flexible sigmoidoscopy with FIT ^c	Flexible sigmoidoscopy every 10 y plus FIT every year	RCT with mortality end point (subgroup analysis)	Test availability has declined in the United States Potentially attractive option for patients who want endoscopic screening but want to limit exposure to colonoscopy

Abbreviations: FIT=fecal immunochemical test; FIT-DNA=multitargeted stool DNA test; gFOBT=guaiaac-based fecal occult blood test; RCT=randomized clinical trial.

^a Although a serology test to detect methylated SEPT9 DNA was included in the systematic evidence review, this screening method currently has limited evidence evaluating its use (a single published test characteristic study met inclusion criteria, which found it had a sensitivity to detect colorectal cancer of <50%).¹ It is therefore not included in this table.

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

^c Strategy yields comparable life-years gained (ie, the life-years gained with the noncolonoscopy strategies were within 90% of those gained with the colonoscopy strategy) and an efficient balance of benefits and harms in CISNET modeling.²

^d Suggested by manufacturer.

^e Strategy yields comparable life-years gained (ie, the life-years gained with the noncolonoscopy strategies were within 90% of those gained with the colonoscopy strategy) and an efficient balance of benefits and harms in CISNET modeling when lifetime number of colonoscopies is used as the proxy measure for the burden of screening, but not if lifetime number of cathartic bowel preparations is used as the proxy measure.²

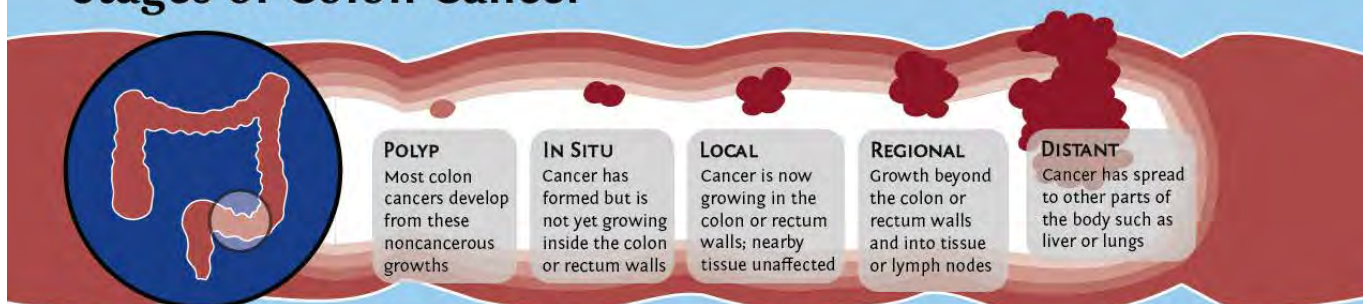
End Colon Cancer

▶▶▶▶ in Indian Country

What is colon cancer?

A disease in the large intestine (colon) and rectum. Most colon cancers start as small noncancerous clumps of cells called polyps. Without treatment, polyps may turn cancerous.

Stages of Colon Cancer



Increased risks

LIVING WITH DIABETES
Increase blood sugar=Increase risk for colon cancer



FAMILY HISTORY
Father, mother, brother, sister has had colon cancer

WHERE YOU LIVE
Alaska, Northern & Southern Plains regions have highest CRC deaths



45

AGE
Getting older (45 to 75+)



CRC often has no symptoms in early stages

Colon cancer screening options

▶ STOOL-BASED TESTS

- Looks for blood in the stool
- Take test at home yearly
- Mail or return to clinic
- If positive, must have colonoscopy

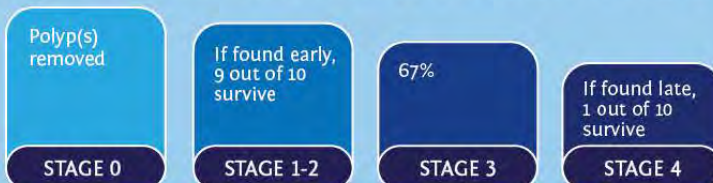
▶ DIRECT VISUALIZATION TESTS

- Looks directly in the colon
- Test is done at a medical center
- Can prevent cancer by removal of polyps during test
- Test is done every 10 years if no polyps are found



AI/AN's are at a higher risk for colon cancer and is the **2nd** leading cause of cancer death.

5-year survival rate when colon cancer is found



EVERY YEAR

- HSgFOBT (High Sensitivity Guaiac Fecal Occult Blood Test)
- FIT (Fecal Immunochemical Test)

EVERY 1 OR 3 Y

- FIT-DNA

EVERY 5 Y

- CT colonography
- Flexible sigmoidoscopy

EVERY 10 Y

- Colonoscopy

EVERY 10 Y PLUS FIT EVERY YEAR

- Flexible sigmoidoscopy

Talk to your health care provider about when screening is best for you.



Colorectal Cancer Screening Policy

Effective date:

Last reviewed:

Function:

I. Authorization:

(Could be signed by Medical Director or committee)

II. Purpose:

Colorectal cancer often starts as a small growth called a polyp. Most polyps are benign (not cancerous) but some can become cancerous. Evidence has shown that men and women age 45 and above, if screened regularly, can prevent or detect colorectal cancer at an early and curable stage. Evidence has also shown that screening can lead to a decrease in mortality rates. It has been estimated that 9 out of 10 colorectal cancer cases can be prevented through regular screening.

Colorectal cancer is the third leading cancer diagnosed for American Indian men and women in the Northern Plains. It is the second cause of cancer deaths among American Indian men, and third cause of cancer deaths for American Indian women.

III. Responsibility:

It is the responsibility of all CLINIC staff members to be familiar with patient education for different types of colorectal screening, data entry and patient follow ups.

- *(See Screening Guidelines and Recommendations)*

IV. Procedure:

1. Identify men and women age 45 and above who are due for a colorectal cancer screening:
 - Average-Risk Men & Women (45-75)
 - High-Risk Men & Women
 - *(see Colorectal Cancer Screening: Decision Guide)*
2. Screen for symptoms and appropriate screening pathway
3. Document response/results. Provide education if needed.
4. Provide FIT kit test
5. Document receipt of FIT kits in patient record

V. Goals

- 80% by 2018

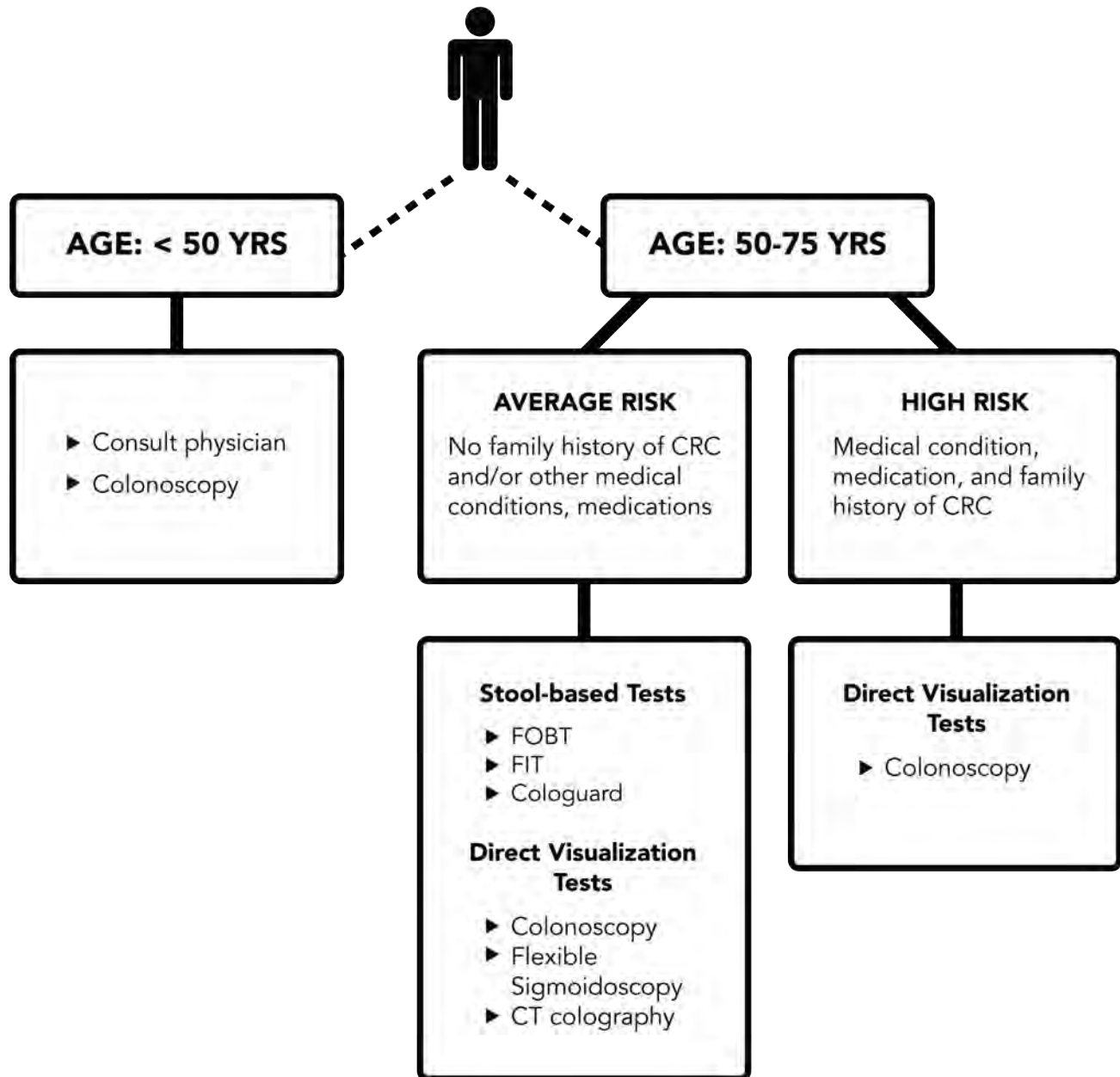
VI. Exclusions

- Individuals who have or have had colorectal cancer
- Individuals who have a family history of colorectal cancer (*colonoscopy is only option*)

VII. Reminders

- Follow up with results
- Reminder system (*call for next screening test*)

Choosing the Right Test





Sample Chart Sticker

Notes: Currently, the content listed on each of the stickers is the same. Color coding can be used for either screened vs. not screened or under 50 vs. 50-75

For charts of patients in the recommended CRC screening age range

Never screened for CRC

*****For patients 50-75*****

Is colon cancer screening needed?
 Yes No

Personal history? Family history?
 Yes No Yes No

Referral date: ____ / ____ / ____

Results
 Negative Positive

Details: _____

Follow-up
 Referral
 Screening in ____ year(s)

Previous CRC Screening

*****For patients 50-75*****

Is colon cancer screening needed?
 Yes No

Personal history? Family history?
 Yes No Yes No

Referral date: ____ / ____ / ____

Results
 Negative Positive

Details: _____

Follow-up
 Referral
 Screening in ____ year(s)

For charts of patients under 50

Never screened for CRC

*****For patients under 50*****

Is colon cancer screening needed?
 Yes No

Personal history? Family history?
 Yes No Yes No

Referral date: ____ / ____ / ____

Results
 Negative Positive

Details: _____

Follow-up
 Referral
 Screening in ____ year(s)

Previous CRC Screening

*****For patients under 50*****

Is colon cancer screening needed?
 Yes No

Personal history? Family history?
 Yes No Yes No

Referral date: ____ / ____ / ____

Results
 Negative Positive

Details: _____

Follow-up
 Referral
 Screening in ____ year(s)

Feedback requested:

- Is different info needed for patients in the screening age range vs. if they are younger?
- Is different info needed for patients who have been screened vs. if they have not been screened before?
- Is there any info that you do not need?
- This there any info that would be helpful to add?

Please make notes directly on the drafts.

APP B_6

Clinic Name
Location:

Team		
Name (* Team)	Role	Contact Info

Overview	
Current cancer screening initiatives:	
Potential initiatives:	
Goals:	

Clinic background	
General Info	•
Opportunities	•
Barriers	•
Possible Focus Areas	•
Action items	•

Follow up meetings/calls	
DATE	•
DATE	•



ICD-9	DIAGNOSIS
V16.0	Family history of colon cancer
V10.05-V10.06	History of Colon Cancer
V12.72	History of Colon polyps
153.0-153.9	Malignant neoplasm of the colon
150-154.8	Malignant neoplasm of the rectum
197.4-197.5	Secondary malignant neoplasm
211.2-211.4	Benign neoplasm of the other digestive systems
230.3-230.6	Carcinoma in situ of digestive organs
235.2	Neoplasm of uncertain behaviors
556-556.9	Ulcerative colitis
558.9	Other unspecified noninfectious colitis
569.0	Anal & rectal polyps

MEASURE YOUR PROGRESS: Assess Your Communication with the Health System

Instructions: Work with stakeholders and health systems to answer the following questions throughout the project's timeframe.

Type of Engagement	Question	Current Status	Plan for Change	Measure	Baseline			
					Q T R 1	Q T R 2	Q T R 3	Q T R 4
Stakeholder engagement	Who is involved in onsite clinic engagement?			# of stakeholders				
	Who has not been engaged?							
Clinic team check-ins	How does your stakeholders engage with your clinic? (meetings; events)			# of engagements				
	How do you conduct your check-ins?			# of engagements				
	How often are these check-ins held?			# of action items				
	Who participates in these?			# of people				
Trainings & quality improvement	Who is missing from these check-ins?							
	What group clinic team training has occurred?			# of trainings				
Screening events	What type of quality improvement strategies does your team lead?			# of QI strategies				
	How do you conduct your screening events?							
	How frequently?			# of attendees				
Social media	Who attends screening events?			# of groups				
	Type of social media your program uses			# of events				