



Establishing Patient Linkages to Diagnostic Colonoscopy

GET SCREENED SD
Stop Colorectal Cancer.



INTRODUCTION

The Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion released funding for “**Public Health and Health Systems Partnerships to Increase Colorectal Cancer Screening in Clinical Settings.**” Funding was awarded to 35 states, universities, tribal and other organizations to partner with health systems and individual primary care clinics to implement evidence-based interventions (EBIs) to increase colorectal cancer (CRC) screening uptake among defined priority populations ages 50–75 years that have CRC screening rates lower than the national, regional, or local rate.

Award recipients were provided funding to:

- Establish partnerships with health systems and primary care clinics to implement EBIs for CRC screening recommended in *The Community Guide* (such as client reminders, provider reminders, reduction of structural barriers, and provider assessment and feedback)
- Establish partnerships with organizations that provide expertise to support the implementation of EBIs in primary care clinics
- Conduct formal assessments of each clinic’s capacity/readiness to implement EBIs
- Utilize clinic assessments to select appropriate EBIs to implement
- Provide resources to partner clinics to offer and support completion of follow-up colonoscopies after a positive or abnormal screening test
- Collect and submit high-quality, clinic-level data including baseline and annual CRC screening rates

The South Dakota (SD) Colorectal Cancer Control Program (CRCCP), housed within the SD Department of Health (DOH), was funded by the CDC through the outlined funding mechanism. Through the SD CRCCP, partnerships were established with identified health systems and primary care clinics to implement EBIs that will enhance CRC screening efforts. Overall funding aims to result in increased CRC screening rates and ultimately decreased CRC incidence and mortality. The remainder of this report outlines how one federally qualified health center (FQHC) in SD utilized awarded funding to develop an agreement for colonoscopy services with a nearby critical access hospital in order to support completion of follow-up colonoscopies for their eligible patients after a positive or abnormal screening test. The outlined steps may serve as a guide to similar clinics seeking to enhance adherence to recommended follow-up colonoscopies and overall service provision to their patient population through patient navigation.

COLORECTAL CANCER IN SD

CRC is the second leading cause of cancer death in the United States.¹ In SD, an average of 169 people died annually from CRC spanning the years from 2014 to 2018.² In 2022, SD expects 430 new CRC cases and 160 deaths due to this cancer.³ Screening and surveillance are effective ways to prevent CRC and to find it early. Evidence demonstrates screening for CRC reduces the incidence of and death from this disease. Individuals diagnosed with CRC at a localized stage have a 5-year relative survival rate of 90.6%; however, individuals with CRC diagnosed at a distant stage have a 5-year relative survival rate reduced to 14.7%, portraying the key importance of early detection.¹ Despite the evidence, screening rates remain relatively low, especially among low-income, uninsured, and underinsured individuals.

Recent data identifies only 76.2% of SD adults ages 50–75 years have fully met the United States Preventive Services Task Force (USPSTF) recommendations for CRC screening, ranking SD 17th of 53 reporting states, DC, and territories.⁴ However, vast disparities exist among population groups in SD, as seen below:

Up-To-Date CRC Screening Rates (SD BRFSS 2020)⁴

Total Recommended Population	76.2%
Males	74.8%
Adults Aged 50–59	64.5%
Less Than a High School Diploma	63.6%
American Indian	61.5%

Taking a closer look at colonoscopy, specifically, the disparities become even more prominent.

Colonoscopy in the Past 10 Years (SD BRFSS 2018)⁵

Overall	66.8%
Males	60.6%
Adults Aged 50–59	58.7%
Annual Household Income <\$15,000	56.4%
Less Than a High School Diploma	51.7%
American Indian	46.8%

Frequently identified barriers to CRC screening include lack of a provider recommendation, lack of awareness, not having a choice of tests, the absence of systematic processes to identify patients due for screening and to support them through the screening process, lack of transportation, language barriers, and lack of access to health care systems during normal working hours.

The rural nature of SD also inhibits CRC screening rates. The state encompasses over 77,000 square miles and is one of the nation's most rural and frontier geographic areas. Data indicates that CRC screening rates are lower in nonmetropolitan counties.⁶ In SD, 43.3% of the population lives in rural areas.⁷ The state's rural geography also impacts access to health care services. Approximately two-thirds of the state is designated by the federal government as a Health Professional Shortage Area due to geographic and low-income disparities.

Small Area Income and Poverty estimates indicate 11.6% of South Dakotans live below 100% of the Federal Poverty Level.⁸ However, poverty levels for counties in or near American Indian (AI) reservations are significantly higher. The ten poorest counties in SD are either part of or adjacent to one of nine AI reservations, with poverty levels from 24–43.9%.⁸ Lack of health insurance is another barrier to accessing and receiving appropriate screening. Within SD, 9.5% of the population are uninsured; however, among AIs, 33.2% are uninsured.⁹

Given the vast rural and frontier nature of SD and noted disparities, health systems and associated primary care clinics were strategically chosen to partner with the SD CRCCP as they best serve the identified target populations the program hopes to impact.

HORIZON HEALTH CARE, INC.



The SD CRCCP selected Horizon Health Care, Inc, an FQHC health system network, for partnership to enhance CRC screening efforts within three specified clinic locations. Horizon serves patients in 22 communities across SD, maintaining 22 medical clinics, eight dental clinics, and two outreach clinics across its 28,000 square mile service area.

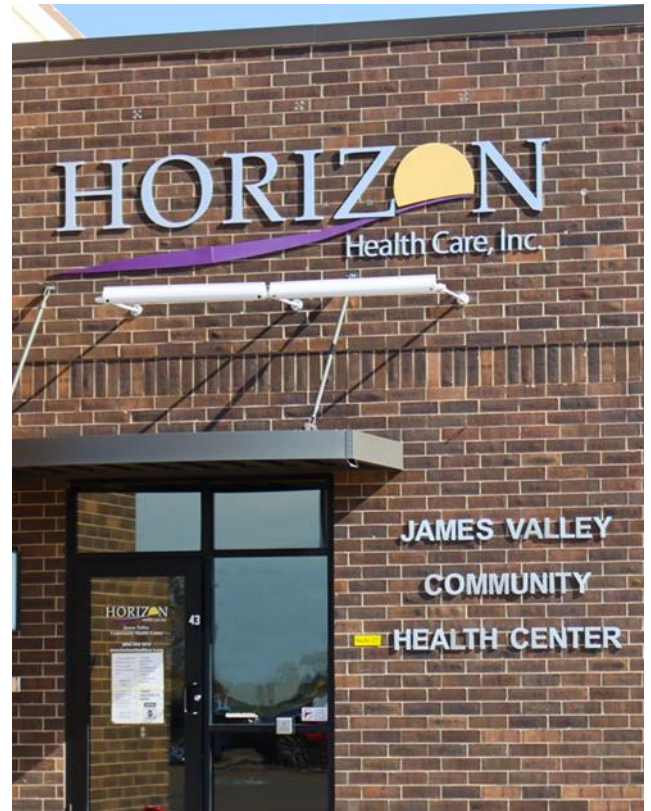
As an FQHC, Horizon delivers care to the most vulnerable individuals in SD, including: uninsured; rural, racial, and ethnic minorities; those with lower annual household income; and those with lower educational attainment. Access to care is a large barrier in the rural clinic locations, as services are often not available in the local community and patients may have to drive long distances for a colonoscopy. Additionally, many patients cannot afford a colonoscopy, including patients with high-deductible health plans and those without health insurance.

The three clinic locations selected for partnership agreed to implement at least two EBIs to enhance CRC screening efforts including provider reminders, provider assessment and feedback, client reminders, and reducing structural barriers. The SD CRCCP further worked with these partner clinics to tailor and adapt selected EBIs to ensure effectiveness among the target priority populations.

JAMES VALLEY COMMUNITY HEALTH CENTER

James Valley Community Health Center (James Valley CHC), located in Huron, SD, was one of the three clinics selected from Horizon's network to implement EBIs for enhanced CRC screening. This clinic serves a diverse patient population, including a significant number of non-English speaking Hispanic and Karen patients. This clinic site was selected due to the opportunity it presents to reach the target priority populations of minorities and rural patients.

At the start of this partnership, there were approximately 672 patients who met the age criteria for CRC screening at James Valley CHC. A reported 17% of clinic patients ages 50–75 were uninsured. Additionally, 46% of the patients served by James Valley CHC are better served in a language other than English.



In addition to the challenges with language, other barriers to CRC screening include lack of education and health literacy, cost, and lack of transportation. Clinic staff noted many patients don't understand the importance of early detection and aren't aware of the need for CRC screening. Patients consider a colonoscopy to be costly and invasive, regarding the procedure with dread. The Hispanic and Karen heritages create a language barrier, and the Hispanic values may even stigmatize CRC screening. Lastly, within the community, many people don't have access to transportation. The cumulative barriers resulted in a clinic CRC screening rate of 44% (UDS, 2019).

As part of the SD CRCCP partnership, James Valley CHC identified the critical issues and challenges they face with regards to CRC screening, selected the appropriate EBIs and supportive strategies best-suited to address the critical issues, and further outlined the details to implement the strategies within their clinic environment. James Valley CHC decided to implement provider assessment and feedback, patient reminders, and reducing structural barriers as the best EBIs for their practice. The clinic has also incorporated patient navigation and community health workers to enhance and support CRC screening among their diverse patient population. After the first year of EBI implementation, the clinic's CRC screening rate increased to 63% (UDS, 2020), displaying the positive impact of the incorporated measures.

IMPLEMENTED ACTIONS

James Valley CHC has a motto for CRC screening of “no missed opportunity”. They view every touchpoint as a chance to discuss preventative medicine with their patients, using every opportunity to make sure patients are educated about CRC, understand the importance of screening, and are aware of the different screening options available.

As a partner of the SD CRCCP, James Valley CHC routinely reviews CRC screening rates and leverages a population health tool in their electronic health record to assess each provider’s quality measures, including patients due for CRC screening. A standing order was also developed for CRC screening, which includes a patient navigation component. Patient navigation has allowed for increased client reminder frequency, birthday card reminders, and enhanced education for patients on all CRC screening options the clinic has available.

In addition, the health center is avidly working to reduce structural barriers to CRC screening. The clinic held an educational session with in-house interpreters to improve translation for patients. Staff also increased their small media for CRC screening to include Spanish translations. Through a partnership with the Horizon Foundation, the health center was also able to offer transportation assistance through the provision of gas cards for eligible patients.

James Valley CHC provides an immunochemical fecal occult blood test (iFOBT) form of screening that can be taken home or completed in the primary care setting. The health center also ran a mailed promotion of the iFOBT to increase access for patients.

By utilizing continuous quality improvement practices, the outlined implemented interventions have improved the clinics ability to educate on CRC, increase CRC screening awareness, catch early symptoms and improve overall CRC screening rates to ultimately reduce the CRC burden in their community. However, one large barrier to obtaining appropriate screening needed to be addressed: **establishing patient linkages to diagnostic colonoscopy.**

As an FQHC community health center, James Valley CHC was not able to provide follow-up diagnostic colonoscopies to patients with a positive CRC screening test. Staff were concerned that patients would not complete a recommended follow-up diagnostic colonoscopy elsewhere due to the previously outlined financial barriers to screening among their patient population. This challenge led the team to partner with a nearby critical access hospital, Huron Regional Medical Center, to establish an agreement for diagnostic colonoscopy services.

DIAGNOSTIC COLONOSCOPY PARTNERSHIP

James Valley CHC selected Huron Regional Medical Center (HRMC) for colonoscopy partnership as both organizations serve the same communities and populations. The mission statements of the two organizations also align:

"We are blessed to partner with HRMC being in the community we each serve. Our mission here at Horizon is 'Horizon Health Care, Inc. provides rural communities with access to high quality, affordable primary healthcare services.' We are able to provide healthcare to those in need."
– JV CHC staff member

HRMC's mission is to 'work together with each individual and organization in the region to promote and improve community health'.



HRMC has several physicians that provide colonoscopy services at the organization's outpatient surgery center in Huron, SD. This critical access hospital with a charitable designation also has a financial assistance policy in place with a reduction in collection charges for individuals meeting eligibility requirements based upon income. Based on these positive findings, James Valley CHC determined HRMC an ideal partner to provide colonoscopies.

The organizations were able to connect to discuss and clarify the patient need for diagnostic colonoscopy, with both organizations agreeing to partner for betterment of the patients. The organizations identified key professional roles from each location for input in developing the partnership (Table 1). The identified personnel then met to clarify the need, discuss steps to achieve a successful partnership, and determine a process that would work best for the patients and involved care teams.

The resulting agreement for colonoscopy services outlines how James Valley CHC will utilize grant funding to support provision of colonoscopy services provided at HRMC by their physicians for a limited number of income eligible FQHC patients. HRMC agreed to accept payment based on current Medicare Part B rates as payment in full for up to 10 FQHC patient colonoscopies annually. James Valley CHC agreed to facilitate the scheduling of grant funded patients with HRMC staff and must attest that the patient receiving services meets financial assistance eligibility requirements of less than 200% of the most recent Federal Poverty Income Guidelines based on family size. The 12-month agreement is set to renew annually in order to continue to serve patients in need. In the first year of partnership, five patients from James Valley CHC were navigated to receive a colonoscopy free of charge at HRMC using the contract agreement and follow-up colonoscopy process.

Table 1. Identified Key Personnel for Successful Partnership

Organization	Job Title	Role in the Partnership
Federally Qualified Health Center	Chief of Operations	Guidance in projects and ability to contract with an outlying facility.
	Chief Financial Officer	Tracks time for those involved in the project. Facilitates contract agreements and any changes needed to keep moving forward. Submits information required of the program financially.
	Regional Manager	Joins monthly meetings as a leader to help facilitate and pass along information to the care teams.
	Director of Clinical Informatics	Gathers clinical information for FQHC sites for quarterly reporting required of the grant project.
	Director of Marketing and Communications	Assists in developing the story of success for care teams and outlying facilities. Helps to communicate the available program opportunities to patients.
	Quality Advisor	Facilitates responsibilities of the team members. Gathers information before, during and after the project to help identify successes and establish sustainable practices. Submits quarterly and yearly reporting. Shares success within teams.
	Navigator	Completes monthly meetings with care teams and site champions. Helps the care teams to identify a patient in need. Outlines steps to successful navigation for the patient in receiving follow-up care from a positive screening with all options available. Communicates with outlying facilities for follow-up care.
	Champion	Helps to educate the care teams and provide guidance as to how the program and teams can assist in increasing their quality measure for CRC screening efforts.
Critical Access Hospital	Director	Participates in contract agreement between sites.
	Senior Vice President	Participates in financial aspects of contract agreement between sites.
	RN	Helps to coordinate care for those involved in follow-up colonoscopies through the contract agreement.

*Please Note job titles and roles could vary substantially among other FQHC's and CAH's.

COLONOSCOPY WORKFLOW

James Valley CHC follows an outlined process for CRC screening which now includes the newly established follow-up colonoscopy process. To begin, the care team screens all patients ages 50–75 for CRC using their early detection workflow. Care teams scrub the chart to identify patients in need of preventative health screening and use reports to see compliant vs. non-compliant lists. Patient and provider reminders are activated for the non-compliant list. Medical record staff assist in follow-up of records for those that have completed screening outside of the FQHC.

James Valley CHC provides screening by an iFOBT that can be taken home or completed in the primary care setting. The care team then identifies any patient with a positive iFOBT and begins navigation to connect the patient to the recommended diagnostic colonoscopy. If the patient requires financial assistance for a follow-up colonoscopy, the Navigator is notified. The Navigator will assess if the positive iFOBT is within parameters of the grant and assess for patient financial barriers on a sliding scale. The Navigator develops a plan of care with the patient by discussing options for follow-up such as the patient's preferred facility, financial assistance available (grant project, charity care or patient pursuing insurance) to complete the recommended follow-up colonoscopy.

When utilizing the agreement for colonoscopy services between James Valley CHC and HRMC, the Navigator will communicate with the scheduling team at HRMC to note the patient is a contract agreement patient, talk with the nurse to address barriers (such as language, need for medication assistance or follow-up to complete the preoperative and surgical procedure), and follow-up with the care team to submit all required paperwork. The Navigator will also remind the patient before the appointment on the importance of completion of the procedure, follow-up to make sure the patient completes, and track the results to share with the patient before closing out the case.

SUMMARY

The outlined partnership may serve as a guide to similar clinics seeking to enhance adherence to recommended follow-up colonoscopies within their patient population. An illustrative workflow is provided at the close of this report to utilize within similar settings. The organizations in this partnership utilized feedback and reflection from the care teams to make improvements to the process and communicate successes and concerns moving forward with each patient experience. Overall, the agreement for follow-up colonoscopy between these organizations resulted in reduced barriers to recommended care and improved screening adherence, ultimately reducing the CRC burden in their shared community. The partnership is a prime example of how to improve patient experiences while enhancing the quality of value-based care delivery.

PATIENT LINKAGE TO DIAGNOSTIC COLONOSCOPY WORKFLOW

1

Establish Colonoscopy Partnership

- Identify nearby endoscopy centers serving the same patient population
- Reach out to administration to determine interest in partnership
- Gather a team of personnel from both locations to discuss and develop partnership details
- Outline full partnership details in a contract agreement for colonoscopy services
- Both organizations sign contract to execute the agreement

2

Identify Preventative Health Needs

- Care team follows an early detection workflow
- Identify all patients within the recommended screening age interval
- Care team scrubs the chart to identify patients in need of preventative health screening
- Utilize EHR reports to see compliant vs. non-compliant lists for CRC screening
- Activate patient and provider reminders for the non-compliant list
- Medical records staff assist in follow-up and rectification of records for patients with CRC screening completed outside of the organization

3

Screening Completion

- Screening test completion (distribute home test kit or patient completes in primary care setting)
- Care team identifies patients with a positive fecal occult blood test
- Care team communicates results with patient and recommends patient completes a diagnostic colonoscopy

4

Offer Patient Navigation

- Patients with a positive iFOBT receive instruction to schedule diagnostic colonoscopy
- Patient Navigator (PN) is notified if the patient requires financial assistance for a follow-up colonoscopy
- PN assesses if the positive iFOBT is within parameters of the grant and assesses for patient financial barriers on a sliding scale
- PN develops a plan of care with the patient by discussing options for follow-up such as the patient's preferred facility, financial assistance available (grant project, charity care or patient pursuing insurance) to complete the connection to recommended follow-up colonoscopy
- When utilizing the agreement for colonoscopy services between organizations, the PN communicates with the scheduling team at the endoscopy center to note the patient is a contract agreement patient, talk with the nurse to address barriers (such as language, need for medication assistance or follow-up to complete the preoperative and surgical procedure), and follow-up with the care team to submit all required paperwork
- PN reminds the patient prior to the appointment and discusses the importance of completing the procedure
- PN follows-up to make sure the patient completed procedure and tracks the results to review with the patient before closing out the case

5

Resolve Financial Coverage

- Endoscopy center agrees to accept payment based on relevant codes at current Medicare Part B rates as payment in full
- Endoscopy center provides itemized billing statement to partner organization
- Partner organization agrees to resolve itemized billing statements within 30 days of receipt, using grant funding for eligible patients

6

Maintain Colonoscopy Partnership

- Designate time to reflect on partnership with care teams
- Make adjustments to the partnership agreement based on feedback
- Renew partnership contract annually

COLORECTAL CANCER SCREENING PROGRAM IN SOUTH DAKOTA

Acknowledgement: This publication was supported by Cooperative Agreement Number DP006763 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

REFERENCES

1. SEER Cancer Stat Facts: Colorectal Cancer. National Cancer Institute. Bethesda, MD, <https://seer.cancer.gov/statfacts/html/colorect.html>.
2. South Dakota Department of Health. (May 2021). Colorectal Cancer in South Dakota. Available at <https://getscreened.sd.gov/documents/2021CRCmonograph.pdf>.
3. American Cancer Society. Cancer Facts & Figures 2022. Atlanta: American Cancer Society; 2022.
4. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2020. [accessed February 10, 2022]. URL: <https://www.cdc.gov/brfss/brfssprevalence/>.
5. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2018. [accessed February 22, 2022]. URL: <https://www.cdc.gov/brfss/brfssprevalence/>.
6. United States Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey, 2010. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2017-06-29. <https://doi.org/10.3886/ICPSR36144.v1>
7. United States Census Bureau. 2010 Census. U.S. Census Bureau. 2010. <http://www.census.gov/2010census/data/>.
8. United States Census Bureau. 2020 Small Area Income and Poverty Estimates. 2020. https://www.census.gov/data-tools/demo/saipe/#/?map_geoSelector=aa_c.
9. United States Census Bureau. (2020). American Community Survey 5-Year Estimates – Public Use Microdata Sample, 2015–2019.