

Colorectal Cancer Prevention Through Expanding Knowledge of CRC Screening Options

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Background

Colorectal adenocarcinoma (CRC) is a malignant tumor that occurs along the intestinal wall and is the third leading cause of cancer related death in both men and women with an estimated 145,600 cases of colorectal cancer diagnosed every year^{1,5,6,10}. Overall, it has a better prognosis given slow progression from precancerous lesions which are detectable via multiple testing methods that are both noninvasive (stool and blood based) and invasive (flexible sigmoidoscopy and colonoscopy)^{1,3,5,6}. Studies have shown a decrease in incidence and mortality with increased screening measures^{1,2,3,5,6,7,8,9,10,11,12}. It should be noted that multiple therapeutic treatment options are available for patients who test positive for CRC including surgical resection for localized cancer, adjuvant chemotherapy, neoadjuvant chemotherapy, chemoradiation, and targeted therapies (PDQ)^{8,9}. This increases the importance of early screening and diagnosing CRC. Based on numerous data collected, the US Preventative Services Task Force (USPSTF) designates a Grade "A" recommendation to screen all adults aged 50 to 75 years^{5,12}. However, as there is a higher incidence of CRC in non-white populations with higher mortality rates, the USPSTF has given a "B" grade recommendation for screening to start between age 45 to 49 years old (USPSTF)^{8,11,12}. Thereafter recommended intervals for colorectal cancer screening varies depending on the testing methods which will be discussed later.

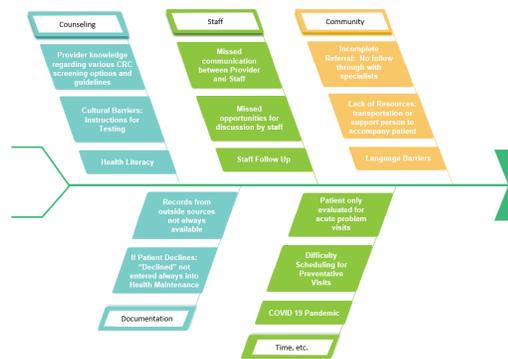
Objectives

- To use education of providers to improve counseling of patients and promote colon cancer screening
- To improve patient literacy via direct education to increase CRC screening among our patient population
- To implement various interventions to address potential barriers to CRC screening
- To determine whether practice wide interventions will increase screening

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Provider-Identified Barriers to Completing Colorectal Cancer Screening Intervention



Barriers are divided into five broad categories: Counseling, Staffing, Community, Documentation, and Miscellaneous. Each category is further divided into subcategories identifying more specific barriers commonly cited by providers as obstacles to successful completion of CRC screening, towards which structured interventions designed to increase screening completion rates will be targeted.

Current Statistics

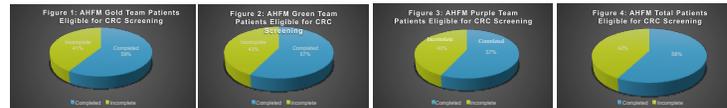


Table 1: AHFM Patients Seen in Office with a Completed CRC Screening as of 9/23/2021
(*Rounded to nearest whole number)

Team	Completed	Incomplete	Eligible seen	% Completed	Target # of 65% Completion*	Number Needed to Meet Goal*
AHFM GOLD/FAM MED	354	248	600	60%	390	210
AHFM GREEN/FAM MED	330	250	580	57.3%	337	178
AHFM PURP/FAM MED	330	250	580	57%	377	203
Grand Total	977	714	1691	57.8%	1100	591

Figure 5: Completed Colorectal Screening for Patients by Care Team



Interventions

- Data will initially be collected to establish the baseline number and percentage of patients who meet the current screening guidelines per the entire practice, per team, and per provider
- During didactics, resident physicians will be given an evaluation to gauge their knowledge regarding screening intervals and available screening methods
- Subsequently, an educational PowerPoint will be presented to the residents which will include information on the new guidelines and on how patients can access the different testing methods
- Residents will then be re-tested with the same exam to assess the short-term recall of the information and whether the examination scores improve
- In several months, residents will be given the test again to ensure that the education is retained
- Staff will receive education regarding testing options and measures to improve workflow
- Will design and create patient fliers with education for colorectal cancer
- Will ensure fliers outlining screening options are available in several languages
- Will identify all eligible patients per guidelines and given handout at each appointment
- Residents will be reminded quarterly of the patients on their patient panel who are eligible for the colorectal cancer

Data

Prior to any new targeted interventions, the current number of patients eligible for CRC screening at AHFM for whom screening has been successfully completed and documented is 977 out of 1691 eligible, for a 57.78% success rate. Individual care teams vary between 56.90% and 59.00%, while individual providers with at least 15 eligible patients range between 23% and 88% (*individual provider data not shown*). Based on current number of eligible patients in the practice, 591 additional patients must be screened to meet the stated practice goal of 65%, a mean average of 197 patients per care team.

Projected Outcomes

This quality improvement will involve physicians, residents, and staff of a multi-provider primary care facility, located in an underserved urban neighborhood. The office is divided into three provider/staff patient pools or "teams" designated as "Green Team", "Gold team", and "Purple Team". We project that given our interventions, the number of patients screened for CRC will increase by the end of the year on an office, team, and individual level.

Our practice wide goal for CRC screening is 65%, with the above mentioned interventions, we anticipate meeting, if not exceeding this goal.