Increase Colorectal Cancer Screening Rates in a Federally Qualified Health Center in Alabama

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Structured Abstract

LOCAL PROBLEM
Colorectal cancer (CRC) has been reported as the fourth primary cause of cancer deaths in the world, with an estimated 700,000 deaths annually. CRC is the second leading cause of cancer deaths of all cancers in men and women in the United States but has a 90% five-year survival rate if diagnosed early. CRC prevention and screening have been shown to reduce mortality rates significantly. However, it is estimated that one-third of adults who qualify for colorectal cancer screening (CRCS) have never been screened. In Alabama, CRC is the second leading cause of cancer deaths and has a higher incidence than in the United States nationally. African American males and females have a higher death rate from CRC than white males and females. Two years of data collection from a federally qualified health center (FQHC), located in northeast Alabama, demonstrated companywide CRCS rates below the company’s set benchmark of 25% and the national benchmark of 80%. To address the CRCS gap, three clinics within the FQHC corporation will implement three evidence-based interventions to increase CRCS rates above the company’s set benchmark.

PROJECT PURPOSE
The purpose of this project is to improve CRCS rates in three clinics, within a large federally qualified health center, by implementing three evidence-based interventions for patients ages 50 to 75 who are at average CRC risk and who are eligible to have the fecal immunochemical test (FIT).

METHODOLOGY
The Health Belief Model (HBM) guided the implementation of the three evidence-based interventions, which includes educational materials on CRC and CRCS, a medical provider recommendation, and a one-week post-intervention telephone reminder. These interventions were given to individuals ages 50 to 75 receiving care in the three FQHC clinics, who are of average CRC risk and are not up to date on CRCS. Initial identification of individuals who met the CRCS criteria with the FIT test was performed with the office/clinical staff and the medical provider during morning huddles. Educational materials on CRC and CRCS (CRC Fact Sheet and Colon Cancer Can Be Prevented) and a FIT packet were given to the patient upon initial workup by the clinical staff. During the visit, the medical provider reiterated the importance of and recommendation for the CRCS test to the patient. Before check-out, the clinical staff reviewed how to collect the sample using the accompanying visual instructions and requested the patient to repeat the collection process. At the one-week post-
intervention, those patients who have not returned their FIT packet were called using a scripted message, encouraging them to complete and return the test kit. Chart reviews and data collection were conducted weekly throughout the eight weeks of implementation. A comparison of CRCS rates from the previous year to the data post-implementation was collected and reviewed. The results were disseminated to key stakeholders, clinical, other staff members, and faculty.

RESULTS
Among the three clinics within the FQHC organization, 92 participants were given the CRCS test in 2019 and 74 participants in 2020. “Clinic 1” had an increase in CRCS rates from 29% in 2019 to 91% in 2020; “Clinic 2” had an increased rate from 7% in 2019 compared to 61.5% in 2020; “Clinic 3” had a decrease in the completion of CRCS rates from 62.5% in 2019 to 50% in 2020. A retrospective comparison of data from the same timeframe in 2019 compared to 2020 post-intervention implementation demonstrated an increase in CRCS rates in the combined three clinics from 41% to 67%. There was no difference in CRCS completion rates among males and females who completed the FIT test, 76%, respectively. The age groups that most often completed the FIT testing were 50 to 55 [33.8%] and 56 to 60 [32.4%]. The barriers reported by participants one-week post-intervention telephone reminders were “I forgot,” “I was not motivated,” “I had no transportation,” “I felt asymptomatic,” “I had no time,” and “I could not get there before closing.” The barriers reported by the investigators were no way to leave a message and incorrect phone numbers. Overall, CRCS rates improved from 41% in 2019 to 76% in 2020, post-implementation of the interventions.

IMPLICATION FOR PRACTICE
Implementation of the three interventions to increase CRCS rates was seamlessly introduced into the routine clinical practice within the FQHC clinics located in northeast Alabama. There was an increase in the evidence-based knowledge among the clinical support staff and key stakeholders of the organization. There was an overall improvement in communication between the organization’s leaders, clinical members, medical providers, and patients. The three interventions increased CRCS rates, which could result in the early identification of CRC, thus likely to reduce mortality rates in the patient population. The interventions improved the patients’ experience with the healthcare system, by decreasing barriers with care coordination efforts and empowering the patient with the knowledge and confidence to perform the screening test. The interventions increased the patient’s engagement in healthcare self-management and improved the communication between the patient-provider. Lastly, the process enhanced interprofessional relationships within and outside the organization.

Keywords: colorectal cancer screening (CRCS), fecal immunochemical test (Fit), telephone call-back, medical provider recommendation, educational material, federally qualified health center

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