

Guided Physician-Patient Discussion to Improve Patient Compliance with Colorectal Cancer Screening in a Resident Clinic

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Introduction

- Colorectal cancer (CRC) is the third most common cause of cancer among adult males and females, excluding skin cancer. Men and women have approximately a 4-5% lifetime risk of developing CRC, and it is the third leading cause of cancer death in the US.¹ The majority of CRC begins as polyps which are identifiable with appropriate screening.
- Screening is recommended every ten years for colonoscopy or annual fecal immunohistochemical testing as first tier of the screening tests.³
- Despite recommendations and benefits to screening, compliance rates remain subpar both in the Ascension Genesys Downtown Health Clinic and throughout the nation, with a clinic compliance rate of 46% at the time of beginning this study, and a nationwide compliance rate of 65%.
- Reported reasons for the poor compliance rates: patient's lack of awareness, fear of invasive testing, and anxiety towards cancer screening.
- There have been a number of initiatives developed in recent years to improve CRC screening compliance. Electronic health record tracking is the best tool to achieve this. This was demonstrated by a study which they looked at 717 primary care providers over two years. They concluded that individual strategies had very small effects, but the conglomerate of multiple strategies did result in improved compliance.⁴
- This quality improvement project aimed at improving patient CRC screening compliance. The goal of this project was to encourage physicians to utilize a document to help guide discussion about the importance of CRC screening and offer potential solutions to barriers that patients may face.

Hypothesis

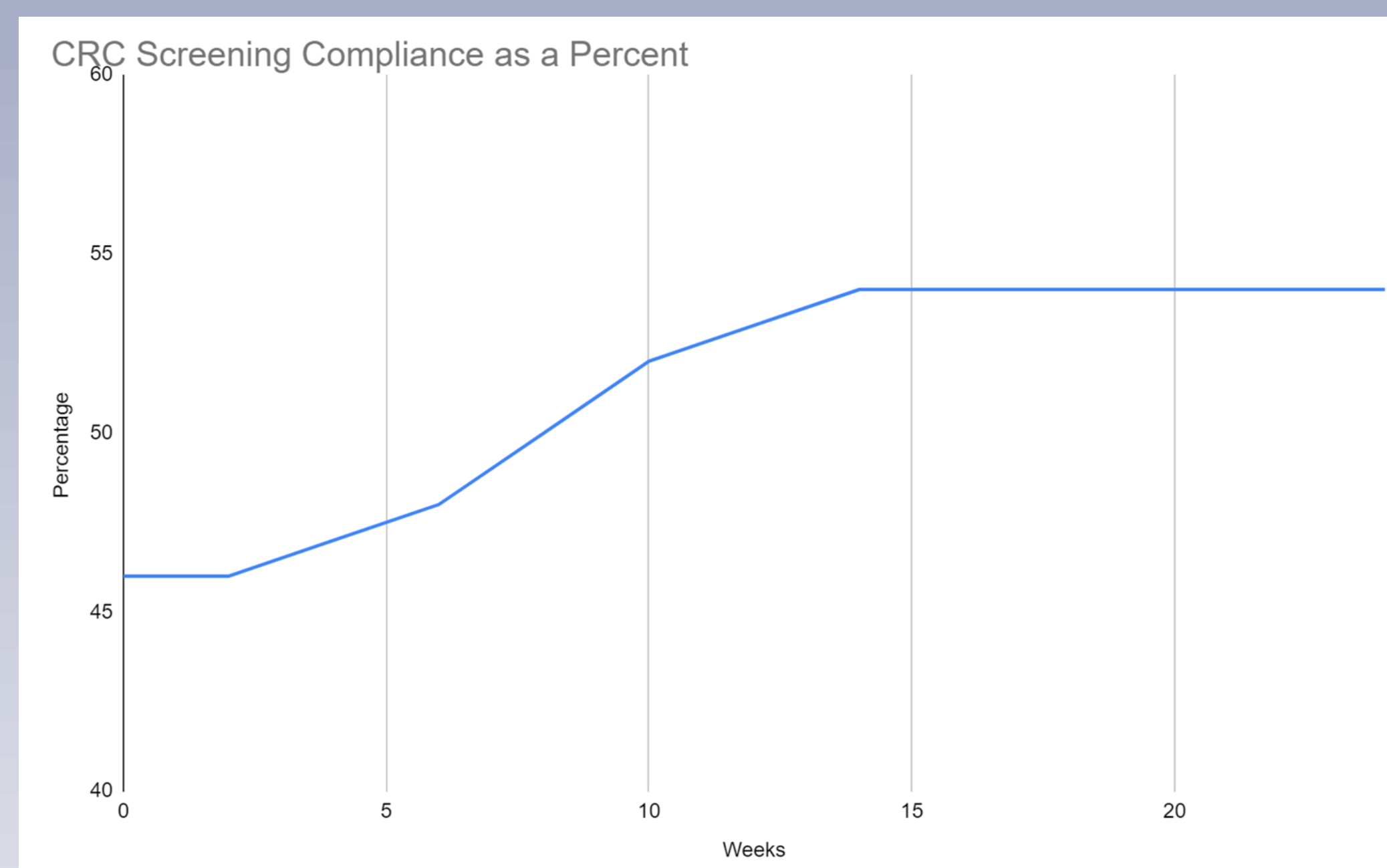
The hypothesis is that by providing a document that is easily accessible during health maintenance visits, with answers to common questions, and options to overcome common barriers, our clinic's CRC screening compliance rate, as measured by Allscripts Clinical Quality Solution (CQS), will improve over a period of 6 months.

Methods

- IRB approval was obtained from the Ascension Genesys Hospital IRB.
- The CRC Screening Guide (Fig. 1) was placed in each of the 15 patient rooms at the Ascension Genesys Downtown Health Clinic.
- Education was performed during the morning of clinic days at the beginning of the data tracking period (December 1, 2019 – December 13, 2019). Education included encouraging physicians to use the CRC screening document to guide discussion with patients who are non-compliant with CRC screening or have questions about their current methods of CRC screening. Physicians were periodically reminded and encouraged to use the document throughout the entire 6 month data tracking period.
- Data was pulled from Allscripts electronic health records. This is the CQS measurement tool for clinic compliance for CRC Screening based on USPSTF recommendation that adults aged 50-75 years old be screened with one of several screening tests. This metric is calculated based on the individual patient's age, time from last CRC screening method, and record of current CRC screening method. No individual patient data was examined for this project.
- CQS monitor captured and recorded data for all patients who met United States Preventive Services Task Force criteria including age between 50 and 75.
- Although certain selected patients were candidates for CRC screening, they were not captured by Allscripts CQS monitor for CRC screening. These patients include those with first degree relatives diagnosed with CRC at an early (<60 years old) age, those who have inflammatory bowel disease diagnosed by endoscopy, and those with hereditary colonic polyps.

Results

- Total N = 1183 Early in the course of the quality improvement project, there was an increase in the number of patients who were compliant with CRC screening per CQS guidelines.
- This leveled off at about 14 weeks into the study.
- At the end of the 6 month data collection period, there was an overall 8% absolute improvement in CRC screening compliance. This represented a 14.8% relative improvement in CRC screening compliance.
- These results can be visualized over time on Graph 1.
- Complicating the execution of this quality initiative, was the global coronavirus pandemic. Approximately 16 weeks into data collection, the pandemic began to affect the volume of patients coming into the clinic.
- This caused a reduction of patients seeking care, temporarily halted in-person patient encounters, limited virtual encounter to the most urgent complaints by patients, and slowed preventative and elective procedures greatly (including colonoscopies).⁶



Graph 1

ARE YOU DUE FOR COLORECTAL CANCER SCREENING?

What is colorectal cancer?

- Colorectal cancer is one of the most common cancers in both men and women.
- It is the third leading cause of cancer death.
- The lifetime risk is that 5 out of every 100 people will develop colorectal cancer.
- Most colorectal cancers **start** out as little growths called "polyps" that can be removed before they turn into cancer.

What's a colonoscopy?

- A colonoscopy is a procedure in which a specialist will use a flexible tube with a camera on it to look at the inside of your colon.
- During this procedure, polyps that potentially can grow into cancer can be removed before they become dangerous.
- The specialist will provide you with some medicine to make you more relaxed during the procedure.
- This procedure should be done every 10 years if your colon looks normal. However, your specialist may ask you to come more frequently if there are polyps in your colon.

Colorectal cancer screening saves lives!

- Colorectal Cancer rates are down because of improved screening tests.
- Colonoscopy and FIT reduce the number of new cases of colon cancer every year by catching the polyps before they become cancerous.
- Mortality from colon cancer is down to 50% from what it once was, largely due to improved screening techniques.

What can I do to prevent colorectal cancer?

- Regular screening is the best method to find and prevent colorectal cancer before it does too much damage to the body.
- There are several available screening tests, the two best current tests are Colonoscopy and FIT.

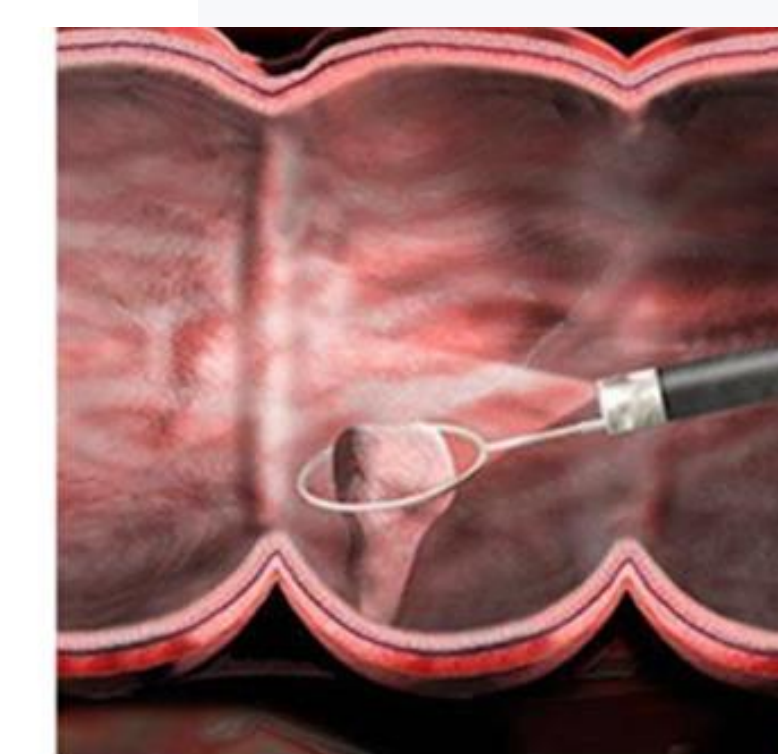
What's a FIT?

- FIT is a take home test that needs to be done every year.
- A laboratory sends you a kit to provide a stool sample and mail back, where it will be analyzed for signs of polyps and cancer.
- If this test is ever positive, you would have to have a colonoscopy.

Figure 1



Colon, also known as large intestine, with a stylized growth.



Removal of a polyp during a colonoscopy

Discussion

- Although this was a limited quality improvement initiative in that the data was collected from one clinic with 30 residents and 4 attending physicians, initial results are promising.
- Providing an easy to use informational document to residents and attending physicians along with encouragement to discuss colorectal cancer screening with patients who were not up to date, did improve colorectal cancer screening compliance rates. Other research has shown that without guiding documentation, physicians often omit several options when discussing CRC screening with patients.⁷
- The absolute and relative improvement are promising. This is an inexpensive and easy to implement intervention, and could prove useful in resident clinics as well as non-residency practices.
- There are a few limitations to this study. One is that the data collection period was interrupted by a coronavirus pandemic that locally decreased colonoscopies performed and decreased clinic visits.
- Another is that part of the initiative was regularly reminding clinicians to use this document if they have a patient that is non-compliant. The initial explanation of the project was done at a residency wide didactics session, but the follow-up reminders were done informally during the morning before clinic appointments started. These reminders may need to be more formalized in the future.
- There are also at least two confounding variables in place. One is that in preparing for this project, a simplified order set for colorectal cancer screening was implemented. It is possible that the new order set contributed to improvement in colorectal cancer screening in isolation of the fact that the quality improvement project was ongoing.
- The other confounding variable is that the clinic did have minor fluctuations in total patient population, and the CRC screening measure is based on total patient population. It is possible that passive patient influx and efflux marginally affected the colorectal cancer screening compliance rate.

Conclusion

Despite the limitations of this quality improvement initiative, the results are promising. This is a very inexpensive intervention that can be disseminated to many clinicians that work at one clinic in a very short amount of time, and can improve colorectal cancer screening among clinic patients.

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