

COLORECTAL CANCER SCREENING STUDY

SUMMARY

FEBRUARY 2016 – March 2017

Key Statistics

Excluding skin cancers, colorectal cancer is the third most common cancer diagnosed in both men and women in the United States. The American Cancer Society's estimates for the number of colorectal cancer cases in the United States for 2017 are:

- 95,520 new cases of colon cancer
- 39,910 new cases of rectal cancer

Colorectal cancer is the third leading cause of cancer-related deaths in women in the United States and the second leading cause in men. It is expected to cause about **50,260 deaths during 2017**.

The death rate (the number of deaths per 100,000 people per year) from colorectal cancer has been dropping in both men and women for several decades. There are a number of likely reasons for this. One is that colorectal polyps are now being found more often by screening and removed before they can develop into cancers or are being found earlier when the disease is easier to treat. In addition, treatment for colorectal cancer has improved over the last few decades. As a result, there are now more than 1 million survivors of colorectal cancer in the United States.

Colorectal Cancer Screening Tests

Screening is the process of looking for cancer in people who have no symptoms. Several tests can be used to screen for colorectal cancers. These tests can be divided into:

- **Tests that can find both colorectal polyps and cancer:** These tests look at the structure of the colon itself to find any abnormal areas. This is done either with a scope (a tube-like instrument with a light and camera) put into the rectum or with special imaging (x-ray) tests. Polyps found during these tests can be removed before they become cancer, so these tests may prevent colorectal cancer. Because of this, these tests are encouraged if they are available and you are willing to have them.
- **Tests that mainly find cancer:** These tests check the stool (feces) for signs of cancer. These tests are less invasive and easier to have done, but they are less likely to detect polyps.

Tests that can find both colorectal polyps and cancer are encouraged if they are available and you are willing to have them. But the most important thing is to get tested, no matter which test you and your physician choose.

TRMC Quality Study of Colorectal Cancer

The Tift Regional Medical Center Cancer Committee identified an opportunity to improve colorectal cancer (CRC) screening rates at the Tift Community Health Center (TCHC) for non-insured patients age 50-65 years. A team of physicians and nurse practitioners reviewed the CRC screening data for a group of 136 patients followed at TCHC.

Through this data the team identified that only 41 % of patients appropriate for screening received screening, 43% did not have a current screen and did not have an order for a screening, 16% had an order or a PCP discussion and did not complete the order.

There was discussion within the team that if the provider ordered the screen but the patient did not complete the screen, shouldn't that count in the screening number. After group discussion it was determined this was another opportunity for improvement. It was an opportunity to utilize a patient centered approach to determine why patients would not complete the screening and educate the patient on options for screening.

The team set a goal: 75% CRC screening for appropriate non-insured patients age 50-65 at TCHC by the end of December 2016. The team also made a decision to join the national goal of 80% by 2018.

The team began to realize improvement in CRC screening rate even before interventions were implemented. Just through a dedicated alertness to the patient appropriateness and need for screening, screening rates increased to 48% by the end of April. The team also noted an increase in orders not complete. Potentially meaning they were improving on ordering but not improving their patient centered approach.

The team took time to educate themselves on evidence based literature for CRC guidelines and recommendations for screening and follow-up, best test for stool guaiac, and tools to increase screening rates. During this education period the team did learn that the recommended iFOBT or fecal occult blood test was the test being completed through the TRMC lab. This test detects blood in the stool. If blood is detected in the stool, a colonoscopy will be needed to find the reason for the bleeding.

Through the course of this project the team was able to identify some specific barriers related to the gaps in ordering screening and getting the patient to complete the screening. They were able to implement some interventions that aided in closing some of the gaps. However some gaps were beyond their ability to change.

It is expected a systems barrier will be resolved within the next year. The EHR, Cerner, will help track and alert when screenings are due. Until that time the providers are utilizing an easy to read section within their current EHR to document screening test and the date. However, this is a manual process dependent on remembering to document the information in a second place.

Other gaps addressed were the time delay for colonoscopy through the Cancer Coalition. The number of colonoscopies through the Cancer Coalition was increased to six per month. Financial issues addressed included, Affinity clinic waiving the \$50.00 up front fee for the colonoscopy and providing the iFOBT test. Filing results of iFOBTs done through the Cancer Coalition required manually scanning to the patient's record. By TRMC providing the iFOBT without billing the patient, results were electronically sent to the patient record and provided evidence of screening.

The team identified transportation issues as well as financial issues as patient barriers related to returning the FIT test. Working with the Tift Regional Foundation the team acquired funds for stamps to mail the FIT test back. This helped to ease transportation issues for returning the fecal immunochemical test (FIT) test and financial issues related to cost of mailing (\$2.60 per test). Much like the iFOBT, this tests for blood in the stool. Patients do this test themselves at home with the help of a kit that gives detailed instructions on how to collect and return the samples. Again, if blood is detected in the stool, a colonoscopy will be needed to investigate further.

Posters designed for the exam rooms helped to improve communication with the Hispanic patients and helped to educate and remind all patients of the importance of screening and encouraged active participation and conversations about screening and getting a screening order.

Some gaps not resolved during the course of this PI project include GI physician shortage, dedicated navigator, transportation and care giver for post colonoscopy procedure.

By the end of October 2016, 68% of patients appropriate for screening had a current screening, 18% did not have a current screen and did not have an order for a screening, 15% had an order or a PCP discussion and did not complete the order.

By the end of December 2016, the number of the patients followed during the course of the project decreased from 136 to 126. The number decreased due to death, documented discharge, documented moving or patient changing to a PCP outside of TCHC.

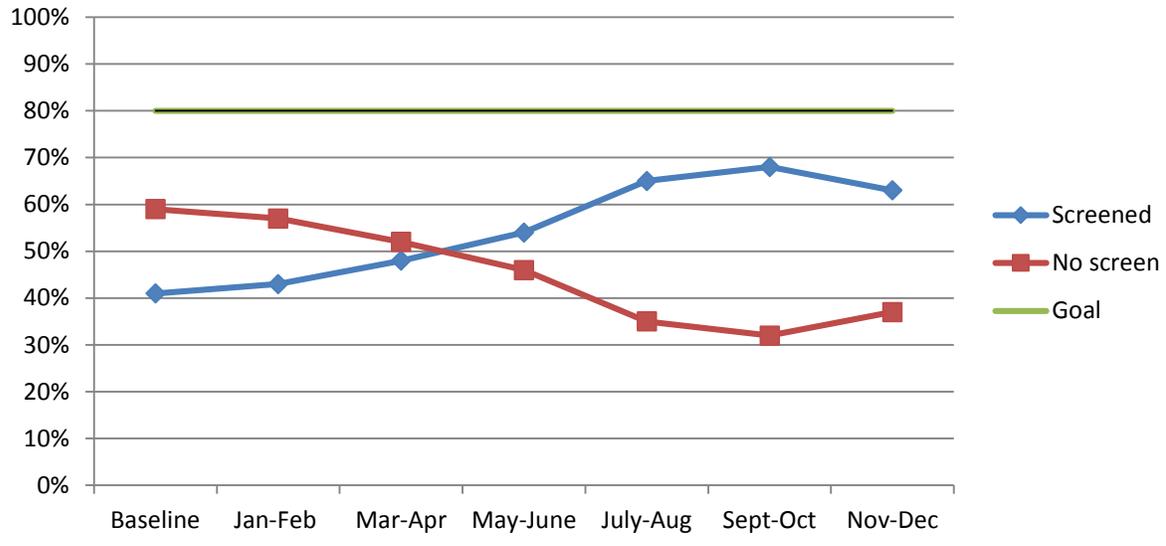
It was also noted that 10% of patients included in this project did not have a visit to TCHC in the past year or longer. It is worth noting that some of these patient charts had documentation of "no call, no show" to appointments. It was also documented "letter sent, no patient response"; "phone messages were left, no response"; and "attempt to call, no answer".

Due to turn over, at the conclusion of the project two advanced practice providers and Dr. Katherine Gibbons, were no longer participating. The final data was reviewed with Dr. Apurva Shah, March 21, 2017. The data indicated that 63% of patients appropriate for screening received screening, 22 % did not have a current screen and did not have an order for a screening. The manual process had been effective for improving screening rates but might be difficult to maintain moving forward with staff turn-over. The new electronic health record, Cerner may help with tracking when screenings are due.

Once hired, a GI nurse navigator may be able to assist with the high at risk populations, such as the TCHC patients. Assistance with tracking and follow-up would help maintain the improvements seen at TCHC. Also, potentially the new EHR system may help with automated notice to patients. The EHR will improve continuity across the board; inpatient, outpatient and clinic documentation/procedures done within the TRMC system will be transparent to all.

A closer look at the patients who did not have a current screening indicated that 15% of patients had been advised and refused or had an order and did not follow-up. Barriers to completing testing that may not have been fully addressed could include patient education, patient centeredness, transportation and/or follow-up with patient. A future review of patients that did not complete screening should separate patients who flatly refused screening at time of advisement from the patients who just never showed up or followed up on screening.

2016 Colorectal Cancer Screening Percent of patients screened vs no screen



2016 Screens: Screen completed - No Screen order - Screen order not completed

