

CASE STUDY SPOTLIGHT

Allegheny Health Network Premier Medical Associates



Type
Primary Care System

Location
Pittsburgh, PA

EHR
Allscripts

81,000+
patients

- 0.2% are best served in a language other than English
- 11% Black
- 0.8% (679 patients) Hispanic
- 1% (1,026 patients) of patients are uninsured

100+
providers

24
medical services and specialties

10
locations



Patient Strategies

- Patient reminder or recall/in reach
- Patient education
- Small media
- Navigator/Community Health Worker
- Automated campaigns



Clinician/Staff Strategies

- Provider assessment & feedback
- Provider reminder or recall
- Provider education
- Care team/team-based approach
- Clinical champion
- HIT interventions Dashboard
- Shared decision-making model
- Follow up to abnormal (positive) FIT



Reducing Structural Barriers

- Mailed FIT

Background

Premier Medical Associates, an affiliate of the Allegheny Health Network (AHN), is the largest multi-specialty physician practice in the Greater Pittsburgh area. In 2012, AHN had a colorectal cancer (CRC) screening rate of 57.5% with a 15-20% mailed fecal immunochemical test (FIT) kit return rate. Many providers were only offering colonoscopies as well, believing them to be the “gold standard” of CRC screening.

Results

Within 15 months of implementing changes, the practice increased its CRC screening rate to 75%. By 2019, AHN increased CRC screening rates to 88.7% through a combination of strategies, including a revised FIT kit mailing process (achieving a 90% mailed return rate) as well as the practice’s efforts to follow up with patients with positive (abnormal) FIT results, AHN.

Evidence-based Strategies and Innovations

AHN used a multipronged approach to increase CRC screening rates, including patient- and clinician/ staff-focused strategies as well as reducing structural barriers through their revised mailed FIT program. Patient and provider education as well as reminders for both groups, a shared decision-making model, provider assessment and feedback, a FIT registry, and follow-up on positive abnormal test results are highlights from their success story.

In 2012, Dr. Francis Colangelo, the chief quality officer at the time, acting as a provider champion, brought in a nationally recognized clinical champion to educate providers on the importance of offering patients appropriate choices for screening. By sharing data on practice performance and developing routine processes for outreach, mailing and follow-up, the organization implemented a mailed FIT intervention with high rates of success. AHN provided the following strategies to increase CRC screening rates as well as lessons learned:

Educate Providers to Offer Patients Choice

In 2012, Dr. Colangelo invited Dr. Richard Wender, ACS NCCRT chair at the time, to conduct grand rounds with 100 providers in the practice explaining the different screening modalities and the importance of offering patients choice in screening. They offered providers a new verbal script to use when offering patients CRC screening and explained the absolute need for the follow-up colonoscopy after positive or abnormal FIT results. Dr. Colangelo continues to be the clinical champion for this effort and continues to provide regular training to providers on offering patients choice. Examples of the scripts used to reinforce the need for colonoscopy after positive or abnormal FIT results are available in [Appendix CS01-1](#).

Be Transparent in Reporting Data

The practice began to transparently report monthly CRC screening rates in a visual display at provider meetings, listing each provider and how well their patient panel was doing on meeting the metric. The practice has transitioned to reporting CRC screening rates by office location instead of by provider, emphasizing the team-based nature of the improvement initiative. Examples of the current report of screening rates by office location and original provider-by-provider CRC Screening dashboard display are included as an attachment to this case study.

Outreach to Existing Patients Turning 50* Each Month

Each month, the quality team pulls lists of average-risk patients who are newly turning 50 in the upcoming month (an average of 50-70 patients per month) and sends a tailored phone message about screening. The message alerts the patient that it is time to begin screening, that there are multiple ways for the individual to get screened, and that a kit will be mailed to their house that week for them to start screening. These patients are then added to the practice's FIT Registry for annual FIT screening. Increased or high-risk patients receive a recommendation to go straight to colonoscopy. The practice is now implementing plans to include patients aged 45-50 who have not been screened in such outreach.

* At the time this intervention was conducted, most major guidelines recommended individuals at average risk of CRC start screening at age 50.

FIT Registry

The organization maintains a FIT registry within an Excel spreadsheet of all average-risk patients who have reached the initial age of screening and who choose to be screened with FIT, and on the 11-month anniversary of their prior test, the health center mails a FIT kit to them. Most of the patients return their FITs within a week or two. The registry contains nine years of data for patients whom they've been following for eight years now, and that's what has enabled the practice to achieve screening rates above 80% and to keep them above 80%. Patients who have a positive or abnormal FIT result are moved into the practice's Abnormal FIT Registry (see below).

Abnormal FIT Registry

For patients who have a positive or abnormal finding on a FIT, the practice added an Alert to the EHR banner indicating "+FIT Test" in red text to grab the attention of the provider and address the issue. Providers offer these patients colonoscopy scheduling and follow-up with these patients every six months until the colonoscopy is completed. Once a colonoscopy is completed, patients are followed-up for colonoscopy screening at the recommended interval for their level of risk.

Automated Robocall Reminders

The health system quality department runs monthly automated robocall campaigns just prior to the kits being mailed to patients. The calls are run via their EHR which delivers a recorded message to patients reminding them that their screening anniversary is coming up and that they'll be receiving a FIT kit in the mail from the health system. The quality team then mails out the FIT kits to all patients who are due for their screening that month.

Exam Room Screening Reminder Posters

Every exam room has a locally created poster that provides education on the importance of CRC screening. An example poster is included as an attachment to this case study in [Appendix CS01-2](#).

Educating Providers on Timely Follow-up of Abnormal FIT Results

The practice makes an ongoing, concerted effort to remind providers that all positive or abnormal screening tests must be followed by colonoscopy. Examples of the scripts made available to providers are included in [Appendix CS01-1](#).

Messaging to Patients About Abnormal FIT Results

The practice provides the medical assistants and RNs with a script to use for patients who receive positive or abnormal FIT results and are reluctant to proceed with colonoscopy. Patients are reminded every 30 days to schedule their follow-up colonoscopy if necessary. Patients who still don't schedule the colonoscopy receive a mailed letter from their provider outlining the potential negative consequences of delaying follow-up.

Tools Shared

- Examples of:
 - Script for providers for FIT – [Appendix CS01-1](#).
 - Script used by MAs/RNs when contacting patients who had positive or abnormal FIT results and are reluctant to proceed with colonoscopy – [Appendix CS01-1](#).
 - Mailed letter for monthly positive or abnormal FIT/colonoscopy procrastinators – [Appendix CS01-1](#).
 - Robocall/text (sent one month before 50th birthday if patient has never been screened before) – [Appendix CS01-1](#).
 - Example of provider-by-provider CRC screening dashboard display – [Appendix CS01-3](#).
 - Screenshots of Abnormal FIT Alert in EHR and Abnormal FIT Registry – [Appendix CS01-4](#).
- Exam Room Poster – [Appendix CS01-2](#).



Interviewee

Frank Colangelo, MD, MS-HQS, FACP

Vice President and Chief Quality Officer

Premier Medical Associates

CASE STUDY APPENDICES

CS01-1

Script for providers:

I will agree to allow you to be screened with a FIT (or FIT-DNA) if you promise me that you will do a colonoscopy if the result is positive.

Script for MA/RN contacting the patient with positive FIT result who is reluctant to proceed with diagnostic colonoscopy:

- Dr. _____ will be very concerned that you do not want to have the colonoscopy done. He/She thinks it is very important to do that.
- The colonoscopy is needed because a positive result on a FIT test can be the first warning sign that there is a polyp or colorectal cancer.
- Yes your hemorrhoids may have been bleeding, but you could also have a polyp or cancer. The only way to make sure you are OK is to have the colonoscopy done.
- No. We never order second FIT tests to make see if the bleeding has gone away. Every positive FIT needs a colonoscopy to rule out more serious causes of bleeding.
- I am going to let Dr. _____ know today that you do not want to do the test. He/She may reach out to you letting you know how important it is to get this done.

Mailed letter for monthly positive FIT/colonoscopy procrastinators:

Dear _____

As your Primary Care Physician at Premier Medical Associates, I am writing to ask you to schedule a very important test.

Our records show that within the past month, you completed an at-home stool test for colorectal cancer screening which showed a positive result. As a result, I recommended that you have a colonoscopy. To date, our records show that you have not completed your colonoscopy, and as your doctor, I am very concerned.

A positive test result is sometimes a warning sign that a person has pre-cancerous colon polyps (growths) that need to be removed to prevent them from turning into colorectal cancer. Rarely, a positive test is a warning sign of early-stage colorectal cancer that needs to be taken care of promptly.

If our records are inaccurate and you have had a colonoscopy done, please contact your GI doctor and have them forward your results to our office. If you have not had a colonoscopy done, it is critical that you do so and I ask that you contact our office in the next 10 days, or as soon as possible, to schedule this test.

Let's face it, few people consider themselves at risk for cancer and these screenings are very easy to put off. For some reason, the idea of a colonoscopy itself is daunting. However, the reality is that colorectal cancer is the second leading cause of cancer-related deaths in Pennsylvania and the United States.

Most colorectal cancer-related deaths can be prevented. If detected early, this cancer has a 90% survival rate. Early detection can mean the difference between life and death. Our team at Premier Medical Associates stands by to assist you any way we can.

If you have questions about how this test is done, how it will be paid for, or any other concerns we can address or you or a member of your family as you follow through on this important test, please contact our GI nurse at 412-457-0427.

Sincerely, Dr. _____

Robocall/text (sent 1 month before 50th birthday if a patient has never been screened before)

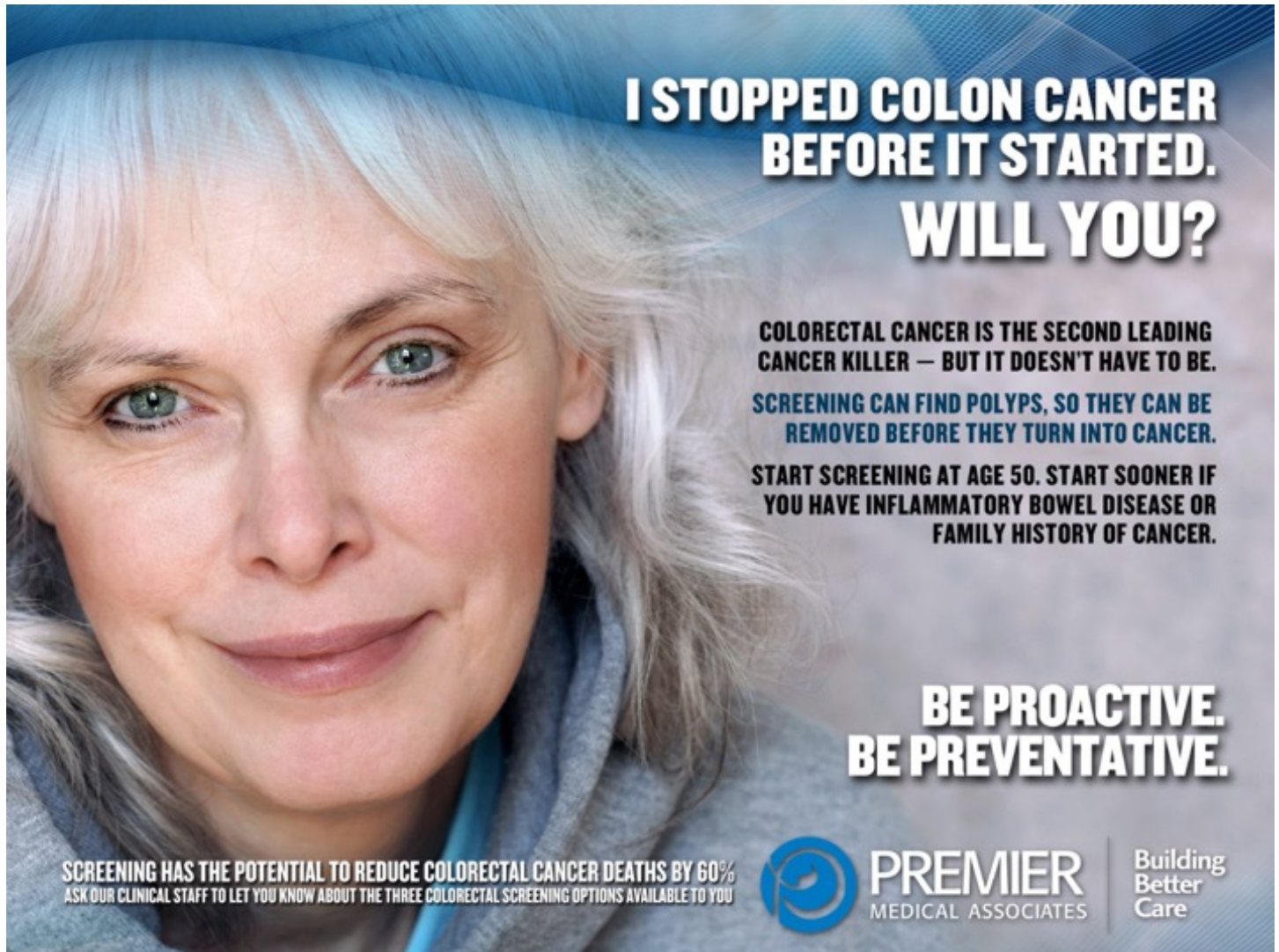
Happy 50th Birthday!

Colorectal cancer rates are increasing for the 50-54 year age group.

A colonoscopy isn't the only option for colorectal cancer screening. There are simple, affordable options, including tests that can be done at home. Talk to your doctor about which option is right for you. Ask which tests are covered by your health insurance.

CS01-2

Exam Room Poster – Allegheny Health Network / Premier Medical Associates




**I STOPPED COLON CANCER
BEFORE IT STARTED.
WILL YOU?**

**COLORECTAL CANCER IS THE SECOND LEADING
CANCER KILLER — BUT IT DOESN'T HAVE TO BE.
SCREENING CAN FIND POLYPS, SO THEY CAN BE
REMOVED BEFORE THEY TURN INTO CANCER.
START SCREENING AT AGE 50. START SOONER IF
YOU HAVE INFLAMMATORY BOWEL DISEASE OR
FAMILY HISTORY OF CANCER.**

**BE PROACTIVE.
BE PREVENTATIVE.**

**SCREENING HAS THE POTENTIAL TO REDUCE COLORECTAL CANCER DEATHS BY 60%
ASK OUR CLINICAL STAFF TO LET YOU KNOW ABOUT THE THREE COLORECTAL SCREENING OPTIONS AVAILABLE TO YOU**

 **PREMIER**
MEDICAL ASSOCIATES

Building
Better
Care

CS01-3

Examples of CRC Screening Dashboard Displays

CRC Screening Rates by Office – Year ending 6/30/2020

Site of Care	Patient Count	Prior Report Screening Rate	Current Screening Rate	Trend
IM OMC	2,607	86.5%	86.1%	↓
FP Mon	2,156	84.3%	84.8%	↑
FP Irwin	2,372	82.5%	81.0%	↓
FP FH	1,398	80.5%	81.0%	↑
FP GM	3,430	81.9%	80.8%	↓
IM NV	2,007	79.5%	80.6%	↑
FP PH	3,818	77.6%	77.8%	↑

Provider-by-provider CRC Screening Rates (original dashboard)

	1/1/16	10/1/15	7/1/15	4/1/15	1/1/15	10/1/14	7/1/14	4/1/14	target
Dr. Brown	91.8	90.7	89.4	88.9	86.4	88	88.1	88.5	80
Dr. White	90.3	89	89.5	89.3	88.5	87.5	88.1	86.7	80
Dr. Black	89.9	88.7	87.3	84.8	86.2	83.1	83.6	80.1	80
Dr. Blue	88.8	86.8	84.2	80.9	79.4	75.2	73.2	71	80
Dr. Green	85.8	84.7	84.9	83.7	86	84.1	82	79	80
Dr. Gold	85.6	86.1	85.8	85.3	84.1	83.7	83.1	82.7	80
Dr. Scarlett	85.4	85.3	85.2	85.2	83.9	82.6	82.2	82.1	80
Dr. Goldenrod	84.6	86	83.5	81.2	80.7	77.8	78.9	78.2	80
Dr. Olive	83.9	82.5	83.7	82.7	82.7	82.5	83.1	82.4	80
Dr. Forest	83.3	82	82	80.1	80.1	79.2	80.2	78.6	80
Dr. Cerulean	83.1	83.5	82.9	82.6	83.8	82.2	81.1	79.9	80
Dr. Periwinkle	82.4	82.4	82.9	81.1	81.1	81.6	80	79.6	80
Dr. Fushia	82.3	79.5	76.3	73.2	75.8	74.7	75.3	72.9	80
Dr. Mulberry	80.8	79.4	79.1	80.3	76.5	71.3	66.3	61.8	80
Dr. Sienna	80	80	80.2	80.7	79.5	80.5	81.1	80.9	80
Dr. Van Dyke	76.6	77.1	75.7	73.2	73.2	74.7	74.5	74.8	80
Dr. Umber	76	75.2	75	77	77.1	77.7	76.5	76.9	80
Dr. Gray	75	72.9	73.9	72	70.5	69.5	68.6	68	80
Dr. Maroon	74.7	73.1	73	72.8	72.3	72.1	71.6	68.9	80
Dr. Maize	72.7	72.5	72.1	70.7	70.8	72.5	74.1	73.6	80
Dr. Robin	71.6	70.8	69.3	68	70.9	72.5	74	72	80
Dr. Wisteria	68.1	67.8	67.6	66.7	63.9	61	59.2	55.7	80
Dr. Jazzberry	65.8	63.5	61.3	60.1	59.2	59.4	59	58.8	80
Dr. Cerise	65.2	64.8	64.4	65.5	66	64.3	67.3	68.7	80

CS01-4

Positive FIT Alert in EHR and Positive FIT Registry Screenshots

Positive FIT Alert in EHR (shown on Test Patient, Betty)

[R] ALLSCRIPTS, Betty 05-Jun-1965 (56y) F | Break Glass MRN 915920 PCP Yanizeski, Caitlin

+FIT Test

SCHEDULE | | | | | | | | CHART CHARGE

Positive FIT Registry

This report is sent out weekly to providers for their patients who had a positive FIT Test

Patient name	DOB	MRUN	Date of + FIT	Home office	Provider	Action taken	Patient mailing address