# Evaluation of Colorectal Cancer Screening at the Miami VA- A Quality Improvement Study

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#### Introduction

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- Colorectal cancer (CRC) is the the secondleading cause of cancer-related death in the United States in men and women combined.
- The United States Preventive Services Task Force recommends CRC screening in patients between ages 50-75 years old.
- Screening for colorectal cancer has shown a substantial reduction in long-term CRC risk.
- The annual fecal immunochemical test (FIT) is an acceptable option for first-line CRC screening.
- The rate of CRC screening in the US population currently does not meet the recommended standard goal of 80%. Only 61% of adults in the United States over age 50 are screened.

#### **Colorectal Cancer Screening Modalities**

Table 2. U.S. Guideline Recommendations for Screening and Screening Intervals to Reduce Mortality from Colorectal Cancer in Patients at Average Risk.				
Strategy	U.S. Preventive Services Task Force (2016) <sup>23</sup> *	National Comprehensive Cancer Network (2015) <sup>43</sup>	Multi-Society Task Force (2008) <sup>50</sup> †	American College of Gastroenterology (2009) <sup>51</sup>
Sensitive guaiac FOBT‡	Annually	Recommended (annually)	Recommended (annually)	Recommended (annually)
FIT‡	Annually	Recommended (annually)	Recommended (annually)	Recommended (annually)
Stool DNA test	Annually or every 3 yr∮	Not recommended	Recommended (interval unknown)	Recommended (every 3 yr)
Flexible sigmoidoscopy	Every 5 yr	Recommended¶ (every 5 yr)	Recommended (every 5 yr)	Recommended (every 5 yr)
Flexible sigmoidoscopy plus FIT	Every 10 yr, with annual FIT or sensitive FOBT	Not recommended	Not recommended	Not recommended
Colonoscopy	Every 10 yr	Recommended (every 10 yr)	Recommended (every 10 yr)	Preferred∥ (every 10 yr)
CT colonography	Every 5 yr	Not recommended	Recommended (every 5 yr)	Recommended (every 5 yr)
Circulating methylated SEPT9 DNA	Not specified	Unavailable for guideline	Unavailable for guideline	Unavailable for guideline
* No recommended strategy was provided. † The Multi-Society Task Force included the American Gastroenterological Association, the American Society for Gastrointestinal Endoscopy,				

The Multi-Society Task Force included the American Gastroenterological Association, the American Society for Gastrointestinal Endoscopy the American College of Gastroenterology, the American Cancer Society, and the American College of Radiology.
Sensitivity for detection of colorectal cancer is higher than 70%.
The screening interval is for multitarget FIT-DNA.
Stool-based testing may be added at year 3.
Colonoscopy was identified as the preferred strategy.

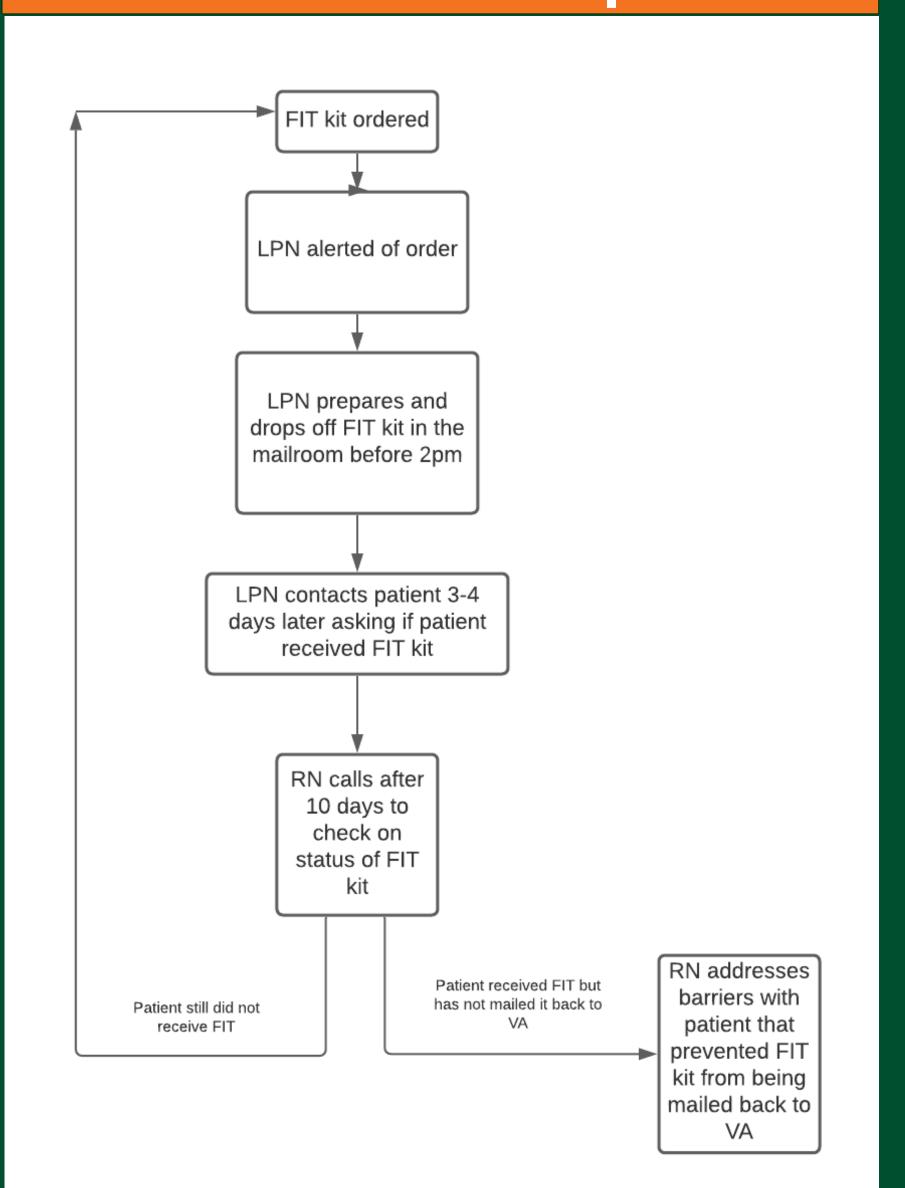
# Objectives

- In this QI project, we aim to improve the colorectal cancer screening rate at the Miami VA by focusing on FIT kit dispersal and return.
- We will use a process map to identify areas for improvement.

#### Methods

- Patients in a single academic center in Miami, Florida were reviewed.
- The SAIL database was used to obtain the CRC screening rates at the Miami VA for FY2020.
- The number of patients with pending FIT were obtained via use of the VA Primary Care Almanac.
- A process map was created to understand what happens after FIT kit is ordered

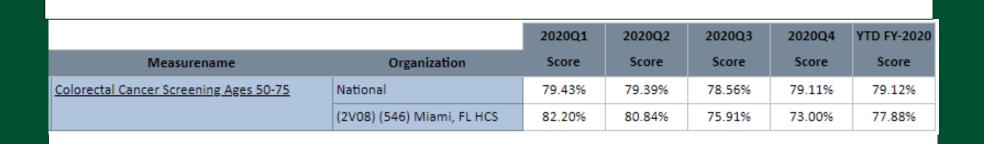
### Process Map



# Results

 The colorectal cancer screening rate for FY2020 at the Miami VA was 77.88%, while the national VA colorectal cancer screening rate for FY2020 was 79.12%.

#### Results contd



- The process map performed showed that patients are notified within 2 weeks after FIT kit is mailed to them.
- Upon review of the VA primary care almanac, a total of 1943 patients were identified as having FIT results pending for greater than 90 days.
- Going forward, Thursdays will be designated as "FIT Thursdays". The clinic nurse managers will be provided with a list of patients in their panel with pending FIT results. They will be contacted and further barriers to FIT kit not being sent back will be addressed.
- A note template will be created within the EMR to allow for nurse managers to send out a FIT kit reminder letter to patients.
- Pre and post analysis after 3 months will be performed to determine the impact of "FIT Thursdays" and FIT reminder letter on improving the colorectal cancer screening rate.

## Discussion

- Veterans followed in primary care clinics have a low rate of FIT kit return, thus leading to missed colorectal cancer screening opportunities.
- In light of the COVID-19 pandemic, screening at the VA has moved more towards FIT.
- We hypothesize the use of "FIT Thursdays" and a FIT reminder letter will improve the FIT kit return rate, thus leading to an overall improved colorectal cancer screening rate at the Miami VA Medical Center.

#### References

- 1. *Cancer Facts & Figures 2015*. [Web] 2015 [cited 2021 January 23].
- 2. Bibbins-Domingo, K., et al., Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. Jama, 2016. **315**(23): p. 2564-2575.
- 3. Gini, A., et al., *Impact of colorectal cancer screening on cancer-specific mortality in Europe: A systematic review.* Eur J Cancer, 2020. **127**: p. 224-235.
- 4. Rex, D.K., et al., Colorectal Cancer Screening: Recommendations for Physicians and Patients from the U.S. Multi-Society Task Force on Colorectal Cancer. Official journal of the American College of Gastroenterology | ACG, 2017. 112(7): p. 1016-1030.
- 5. Meester, R.G., et al., Public health impact of achieving 80% colorectal cancer screening rates in the United States by 2018. Cancer, 2015. **121**(13): p. 2281-5.
- de Moor, J.S., et al., Colorectal cancer screening in the United States: Trends from 2008 to 2015 and variation by health insurance coverage. Prev Med, 2018. 112: p. 199-206.
- Allison, J.E., The best screening test for colorectal cancer is the one that gets done well. Gastrointestinal Endoscopy, 2010. 71(2): p. 342-345.
- 8. Bhise, V., et al., Patient-Reported Attributions for Missed Colonoscopy Appointments in Two Large Healthcare Systems. Dig Dis Sci, 2016. 61(7): p. 1853-61.
- 9. https://www.nejm.org/doi/10.1056/NEJMcp1512286