

A Resident-Led QI Initiative to Improve Colorectal Cancer Screening Rates in the Center of Excellence for Primary Care Clinics

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VA HEALTH CARE Defining EXCELLENCE in the 21st Century

Introduction & Background

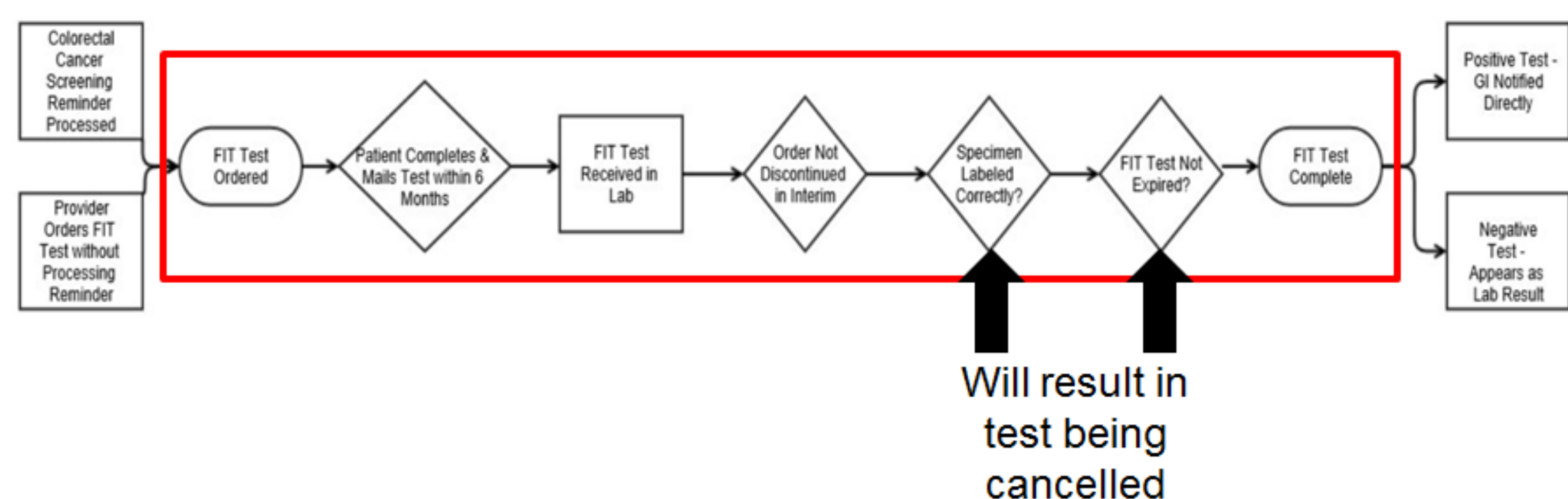
- Colorectal cancer (CRC) is the 3rd most common cancer and the 3rd leading cause of cancer deaths in the US.
- The USPSTF has issued a grade A recommendation for use of fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults ages 50-75 years for CRC screening. (1) However, only 59.1% of US adults age 50 or older reported screening fitting current recommendations (2).
- Fecal occult blood testing (FOBT) and fecal immunohistochemical testing (FIT) both test for the present of blood in stool samples, although FIT tests are specific for human blood (3).
- In the Louis Stokes Cleveland VA Medical Center Wade Park Primary Care (WPPC) clinics, **FIT tests were only completed 57% of the time when ordered between January 1, 2012 and November 30, 2014 (baseline data).**

Aim

To increase FIT completion rates by 15% among patients of the WPPC clinics between December 1, 2014 and December 1, 2015.

Methods

- How are FIT tests ordered in the WPPC clinics?**
 - A clinical reminder is generated for patients age 50-75 when they are checked in by the triage nurse.
 - A patient is given a FIT card to complete only if they meet the criteria established in the clinical reminder.
- What is the process for completing a FIT test?**
 - The patient must take the stool card home, follow the low literacy instructions on the back, and return a labeled specimen by mail within 6 months of the test being ordered for it to be completed (pictured below).

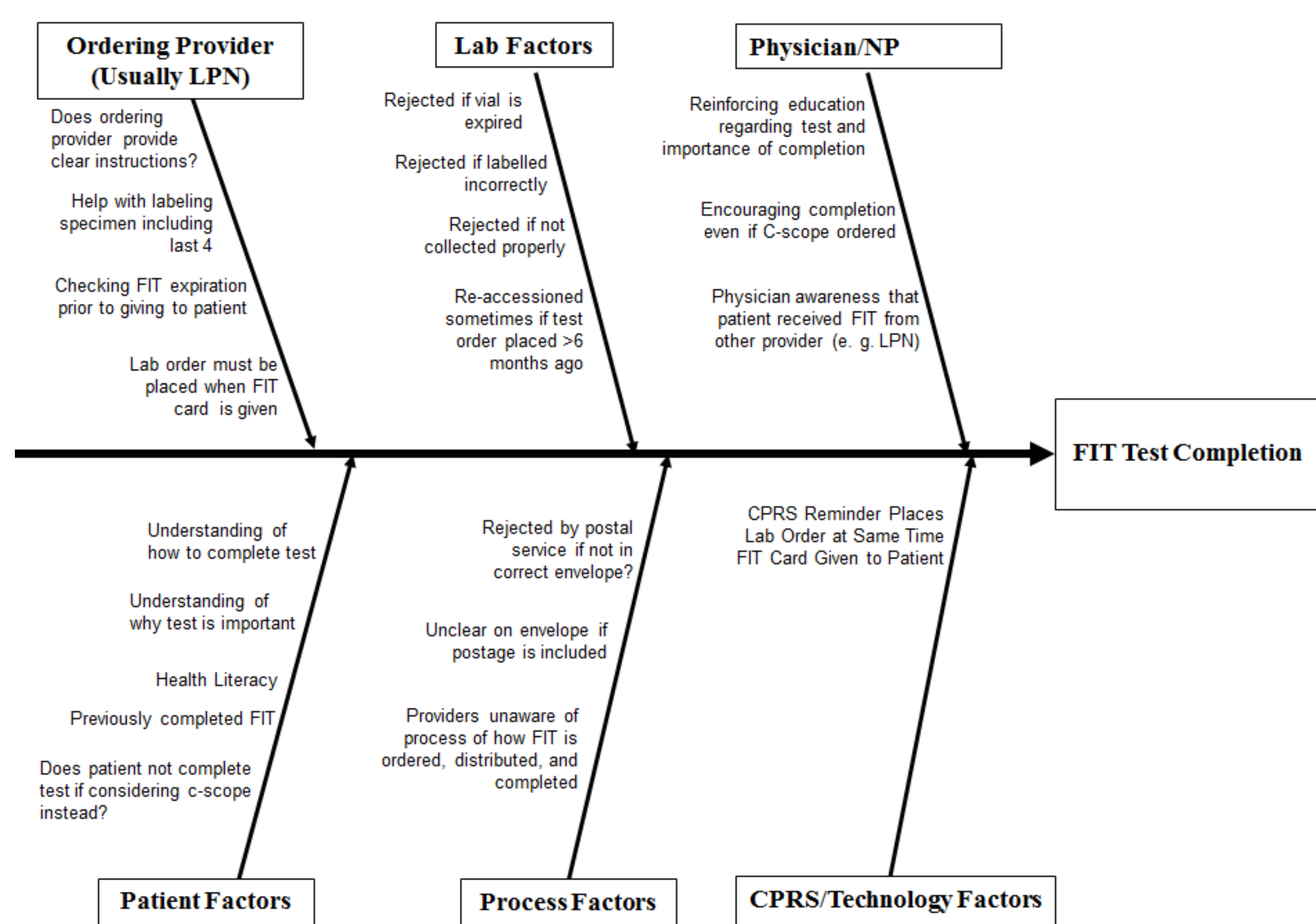


- How did you calculate that only 57% of tests were completed in your baseline data?**
- FIT tests can be sorted by the status of the order. The following are the possible statuses:
 - Complete** – the patient has returned the card and it has been processed
 - Cancelled** – cancelled because of a problem with the test (e.g. it was mislabeled)
 - Discontinued** – actively discontinued because the test is no longer needed
 - Lapsed** – the patient has not returned the test within 6 months from the order date
 - Pending** – the patient has not yet returned the test but the 6 months to complete the test of have not yet expired

- We calculated completed tests as follows:

$$\frac{[\text{completed tests}]}{[\text{completed tests} + \text{lapsed tests} + \text{cancelled tests}]}$$

- We excluded tests that were discontinued as these tests were actively cancelled by a provider for another reason.
- We generated a fishbone diagram based on possible factors contributing to low completion rates.

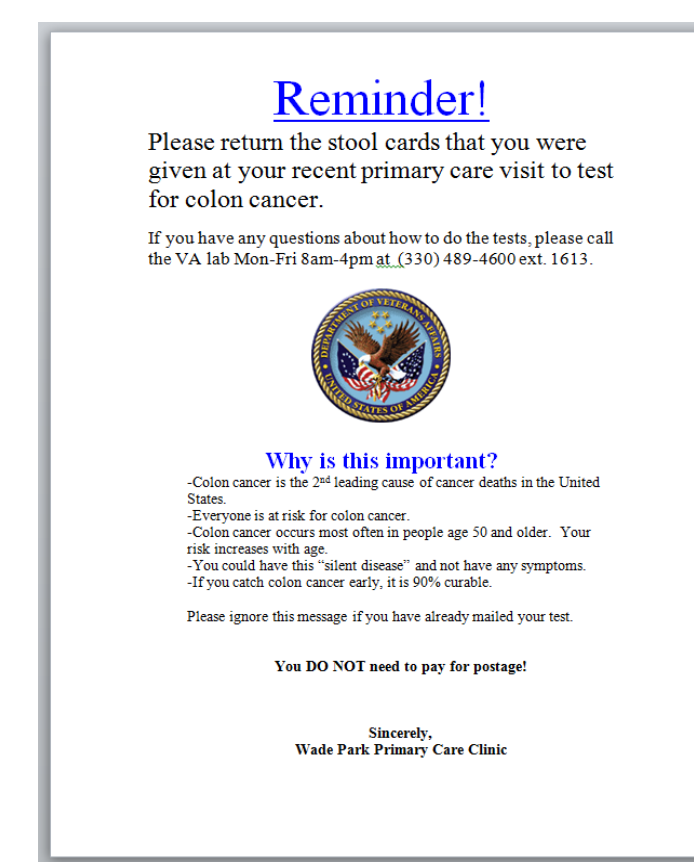


- We found that a negligible number of tests were being cancelled upon arrival at the laboratory.
- Nursing staff also demonstrated routine procedures in distribution, labelling, and teaching patients about the test at check-in.
- We focused on patient factors and designed both an in clinic and phone survey of the patients to determine barriers to returning the FIT
 - The phone survey did not yield actionable results and was marked by poor participation, and concerns for selection and recall bias.
- We therefore **designed an intervention based on a previously successful intervention in the literature.**
 - We sent a mailed educational reminder to patients who had received a FIT test during the previous calendar month reminding them to complete the test.
 - This intervention had been previously successful at the San Diego VA Medical Center and had increased the return rate of stool cards by 16% (4).

Results

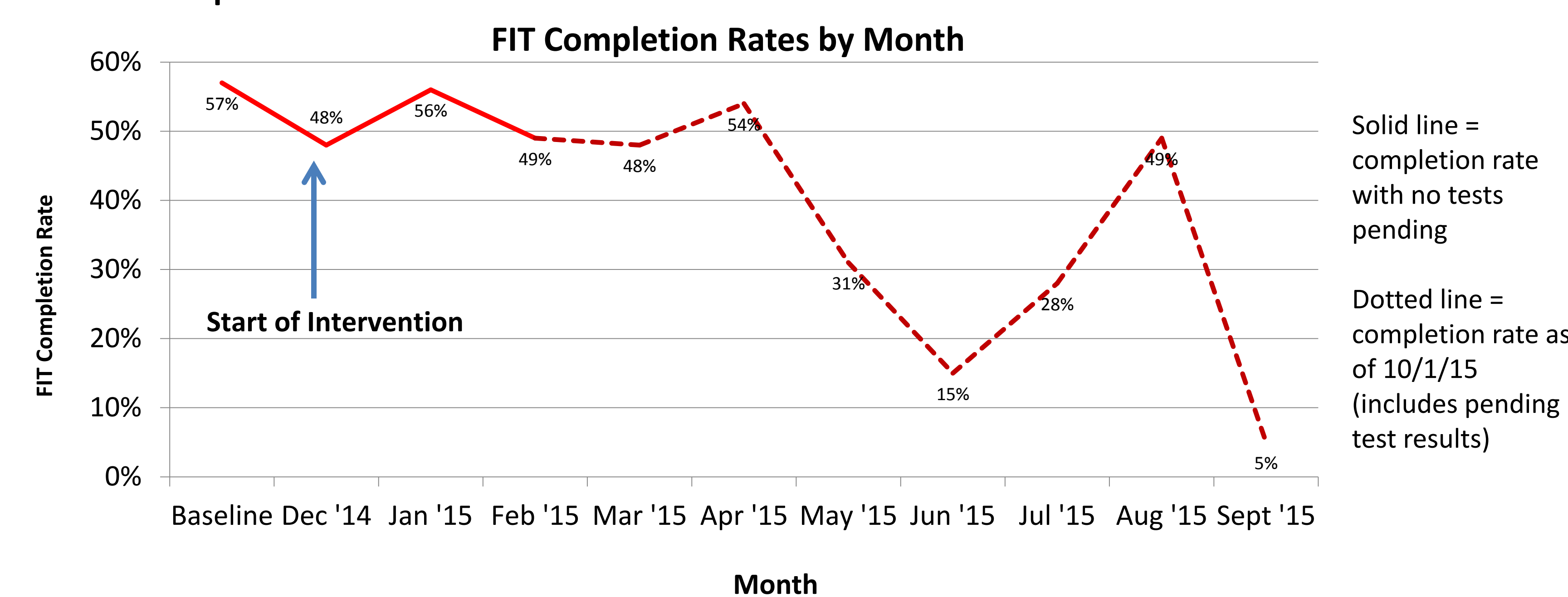
Measuring The Outcome of Our Intervention:

- We mailed a reminder letter based on a letter used with prior success to patients who had not yet completed their FIT test at the end of the month (4).
- We used a template in the electronic medical record to generate these letters, which the office staff mailed to the patients. The inclusion and exclusion criteria for sending the letters is listed below.



Inclusion Criteria for Mailed Reminder	Exclusion Criteria for Mailed Reminder
Patients in Wade Park VAMC primary care and/or women's health clinic who had FIT test ordered on or after December 1, 2015	Patient who: <ul style="list-style-type: none"> Had or scheduled a colonoscopy since stool card was ordered Have their primary care clinic at a site other than Wade Park Are enrolled in the CONFIRM trial (ongoing at the time of project)

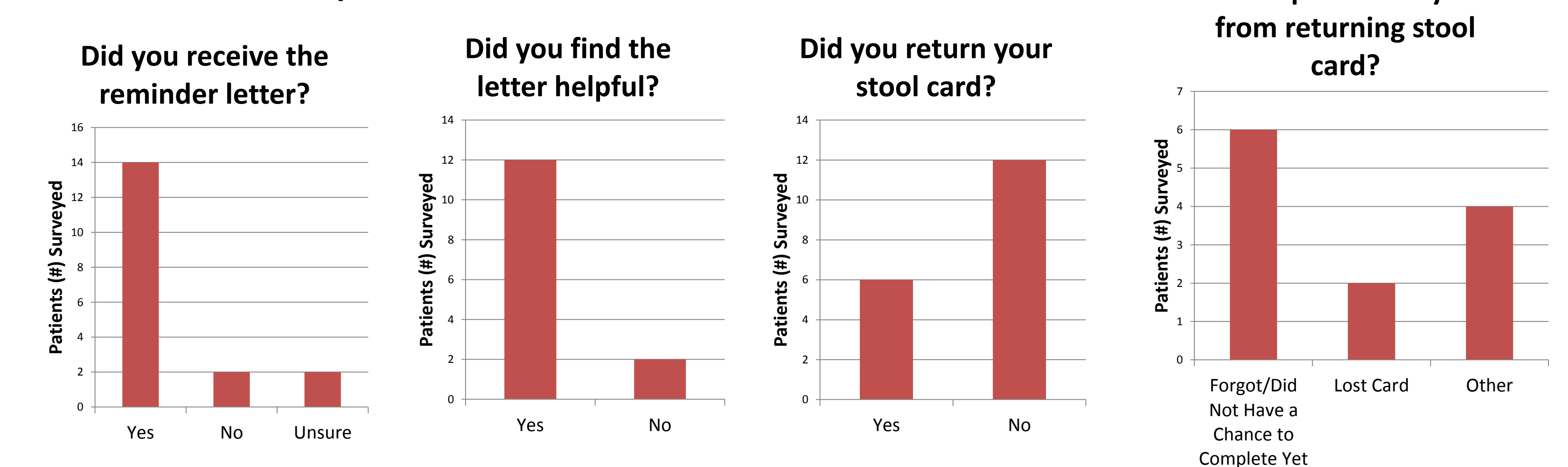
- Our intervention has yet to show a measurable improvement:
 - Only data for December 2015 to February 2015 reflect a full 6 month time period for patients to return their stool card (solid line).
 - The number of cards completed thus far [(completed tests)/(completed + cancelled + pending tests)] is reflected by the dotted line, and these patients have remaining time to complete their tests.



Date	Complete	Pending	Lapsed	Discontinued	Cancelled	Completion Rate	Completed as of 10/1/15
Baseline (12/1/14-12/1/15)	825	0	606	486	16	57%	
Dec '14	22	0	24	1	0	48%	
Jan '15	30	0	22	2	1	56%	
Feb '15	28	0	29	3	0	49%	
Mar '15	22	1	23	1	0		48%
Apr '15	33	27	1	0	0		54%
May '15	11	22	0	1	3		31%
Jun '15	7	36	0	3	1		15%
Jul '15	16	41	0	1	0		28%
Aug '15	17	34	0	1	0		49%
Sept '15	2	41	0	0	1		5%

Measuring The Process:

We surveyed the 28 patients who were mailed a reminder in April 2015 to ensure that our intervention process was working and that the reminder letter was being received. We were able to contact 18 out of 28 patients.



Conclusions

- We attempted to improve the completion rates of FIT testing in our clinic by replicating a previously successful intervention trialed at the San Diego VA.
- Our mailed reminder was reliably received by the patients, but did not necessarily change behavior.

Lessons Learned

- The Difficulty of Surveying Patients:**
 - Surveying the patients was challenging and had low participation.
 - We therefore based our intervention on the literature rather than data collected directly from our patients.
 - This may be a reason for the limited response to our intervention.
- The Importance of Stakeholders:**
 - Our intervention relied on the office staff who kindly agreed to assist in sending the reminder letters.
 - We excluded patients who had scheduled a colonoscopy since receiving their FIT card secondary to complaints from the gastroenterology (GI) clinic that our letter would confuse the patients.
 - If the project were started over, we would therefore include the GI staff as planning stakeholders
- Our intervention has yet to show a measurable improvement; however, more time may be needed for further analysis
- Given the lack of measurable improvement, we will not pursue automating letter distribution.

References:

- Final Update Summary: Colorectal Cancer: Screening. U.S. Preventive Services Task Force. July 2015. <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/colorectal-cancer-screening>
- National Health Interview Survey Public Use Data File 2010, National Center for Health Statistics, CDC.
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