Increasing Timely Colorectal Cancer Screening using a Shared Decision Making Tool at an urban FQHC

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Background

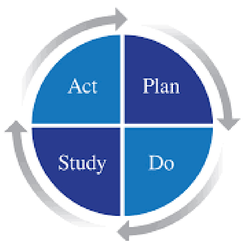
- Colorectal cancer (CRC) is the third leading cause of cancer related deaths in the United States [1]
- Thirty seven percent (37%) of New Mexico residents who are recommended to be screened for CRC do not get screened [1]
- It is estimated that there will be 97,220 new cases of CRC and 50,630 CRC related deaths in the year 2018 [1]
- Since the recognition and implementation and of routine CRC screening the 1990s, CRC incidence and mortality has decreased by up to half [1]
- CRC screening should start at age 50 and continuing until age 75, a grade A recommendation from the USPSTF[4]
- At the beginning of 2018, an audit of First Choice Community Healthcare (FCCH) North Valley Clinic (NVC) revealed that only 35% of applicable patients completed their CRC screening and 52% of patients had a discussion with their provider regarding CRC screening
- In primary care, it is best practice for providers to discuss CRC screening options with their patients and assist them in making an informed decision based on individual risk factors [4]
- The development of clinical decision tools improves chronic disease prevention and screening [2] and the primary care setting is ideal for disease screening, motivational discussion, and early intervention for preventative medicine recommendations such as CRC screening
- There are currently no published Shared Decision Making (SDM) tools used for CRC screening; for the purpose of this project, a SDM was developed by the project lead.

Aim

Increase the percent of patients between the ages of 50 and 75 who complete timely CRC screening through the use of a SDM Tool from 35% to 100% within a 90 day period, with a minimal increase in staff perception of visit time.

Planned Improvement

- The framework of this quality improvement project was screening, brief intervention, and referral to treatment (SBIRT)
- Four primary interventions were initiated with small tests of change over a 90 day period (Plan-Do-Study-Act Cycles)



Ramp	Planned Process Changes
Ramp A: Team Engagement	• Kick-off meeting • Mock OC Light kit activity • Monthly staff meetings • Twice weekly QI meetings • Daily Huddles • Constant Team Building
Ramp B: Patient Engagement	• Implementation and use of a CRC screening Shared Decision Making (SDM) Tool • Increase provider teams for each PDSA cycle
Ramp C: Stool-Based CRC screening (OC Light)	• Provider competition • "Need #2" sign in rooms, patients to do kits while in clinic
Ramp D: Colonoscopy Referral	• Provider emphasis on the benefits of colonoscopy verses stool-based kits • Provider reminders to document patient discussions in EMR using template. • Colonoscopy benefit posters in exam rooms • Play colonoscopy information in lobby

References

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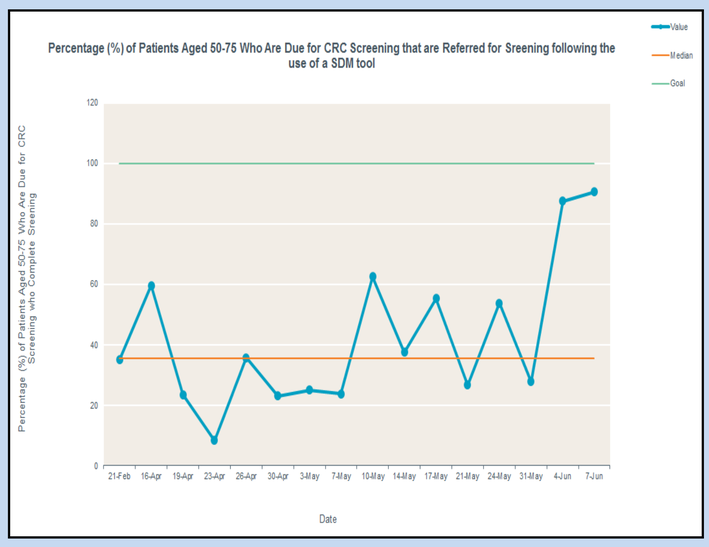
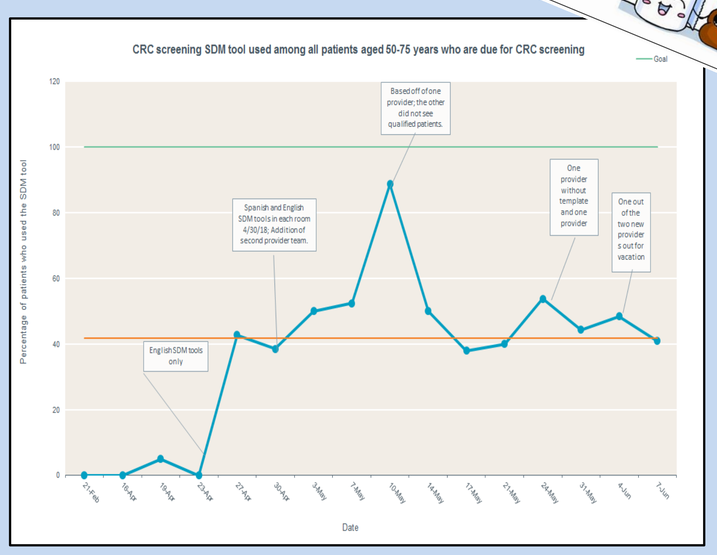
2. Manca, D. P., Campbell-Scherer, D., Aubrey-Bassler, K., Kandola, K., Aguilar, C., Baxter, J., et al.2015). Developing clinical decision tools to implement chronic disease prevention and screening in primary care: The BETTER 2 program (building on existing tools to improve chronic disease prevention and screening in primary care). Implementation Science: IS, 10, 107-107. doi:10.1186/s13012-015-0299-9
3. Ogrinc, G., Headrick, L. A., Moore, S. M., Barton, A. J., Dolansky, M. A., & Madigosky, W. S. (2012). Measurement part two: Using run charts and statistical process control charts to gain insight into systems. In K. Byrne (Ed.), *Fundamentals of health care improvement: A guide to improving your patient's care* (pp. 97-119). Oakbrook Terrace, IL: Joint Commission Resources
4. US Preventative Services Task Force. (2016). Colorectal Cancer: Screening. Retrieved February 10, 2018, from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/colorectal-cancer-screening2?ds=1&s=colorectal

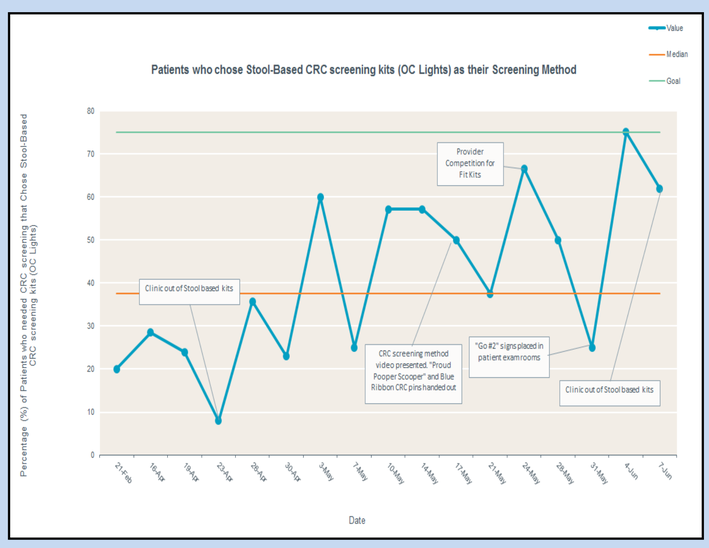
Results



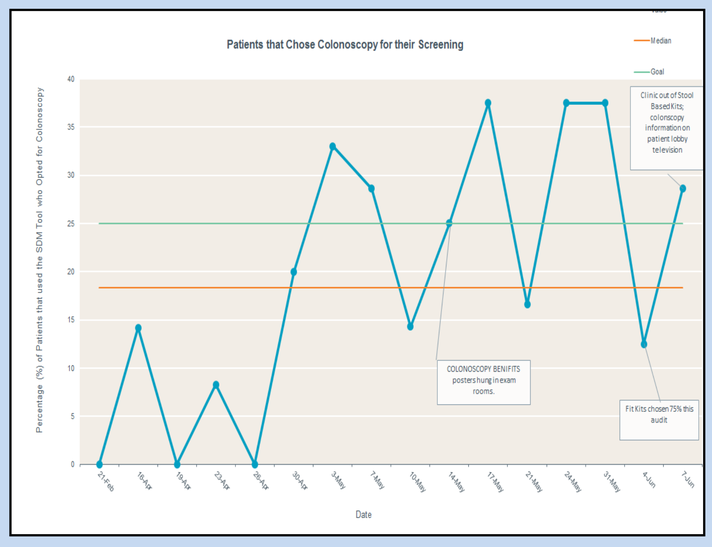
Run Chart illustrating the increase in the number of patients who were screened for colorectal cancer over time, starting at 37% and ending at **90.5%** by the end of the 90 day project.



Run Chart illustrating Ramp B Process of the patient utilization of the Shared Decision Making (SDM) tool to 41.9% by the end of the 90 day project.

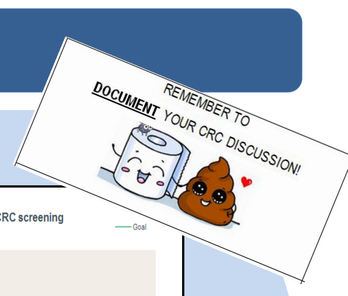


Run Chart illustrating the Ramp C Process increase in the number of patients who chose the OC Light stool-based kit as their screening method choice from 20% to 61.9% by the end of the project with a high of 75% during PDSA cycle 2.



Run Chart illustrating the Ramp D Process increase in the number of patients who chose colonoscopy as their screening method from 0% to 28.6% by the end of the 90 day period.

Note: Ramps C and D were inversely related.



Measures

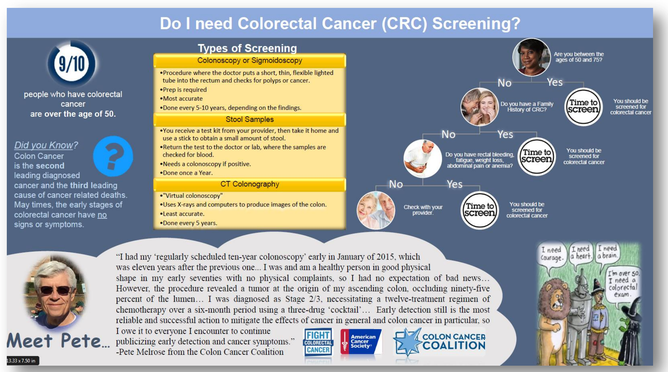
- All ramp process changes were audited every three days and examined using a data collection tool, recorded in run charts separated by ramp process and outcome, and analyzed for data trends in run charts[3]

A: Teamwork Teambuilding /staff development	Process:	# of team who attend and participate in team huddles/ # of team members in clinic
	Outcome:	The mean score of team members who feel informed, valued, and competent as measured on the Team survey will be increased. Provide survey completion incentives (cupcake for a survey) to increase survey responses. Email with survey link with poop facts, survey questions, and images for engagement.
B: Patient Engagement	Process:	#of patients aged 50-75 who engage in using the SDM tool with their provider/ total # of patients aged 50-75 who need CRC screening
	Outcome:	# of patients who make a screening decision/#of patients aged 50-75 who engage in using the SDM tool with their provider
C: Stool-Based CRC screening kits (OC Light)	Process:	# of patients who chose stool-based screening/# of patients who used SDM tool.
	Outcome:	# of stool-based kits given/# of total patients who opted for OC Light testing.
D: Colonoscopy Referral	Process:	# of patients who chose colonoscopy/# of patients who used SDM tool.
	Outcome:	# of patient charts audited who were sent for colonoscopy referral/# of patients who opted for colonoscopy
Balancing Measure		Staff satisfaction surveys that reflect their perceptions of the SDM tool impact on time. Monitored weekly. A mean satisfaction Likert score on the SDM tool effect on time calculated and recorded on run charts.

Conclusions

- Our aim was accomplished
- SDM tool increased overall CRC screening rates from 35% to 90.5%.
- This project is sustainable
- This project will be *extended* to the South Valley location of FCCH in Albuquerque, NM by the Quality Improvement Champion at the site
- I propose that the findings be presented to the FCCH board for spread to all 8 adult care clinics
- I support the need for the professional development of the SDM tool for further utilization
- There is still room for improvement to reach the USPSTF goal and recommendation of 100% of patients aged 50 to 75 to be screened

The SDM Tool



Lessons Learned

- Strengths: Team Engagement
- Direct correlation with team based activities and team survey completion, staff education and perception of support, and the percentage of ordered CRC screenings
- The more informed patients are, the more confident they felt
- Introducing Spanish tools and posters doubled the utilization
- Barriers: visit types, complex patients, patient declinations, increase in visit time, system and EMR difficulties
- Negative outcomes of the project included an increase in perceived visit time and specialist visit slots not necessitating or allotting time for CRC screening (Hep C, Suboxone, procedures, acute care visits, new patients, etc.)

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