Title of Entry: It Takes a Village to Raise Awareness: Making Colon Cancer Screening Easy and Accessible

Division: Large Organizations

Award: Community Champions

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Date Results Achieved: 02/01/2018

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Executive Summary

Colorectal cancer is the second leading cause of cancer death in the United States. In 2016, nationally and in Allegheny County, one in three adults was not being screened. According to the CDC, if individuals aged 50-75 received regular colon cancer screenings and acted upon the results, at least 60% of deaths from colon cancer could be avoided. To carry out our mission of enhancing the health of our very large “village”, local healthcare and community leaders sought solutions that could address this deficit and ultimately improve colon cancer screening compliance.

Intent on reaching individuals 50-75 years of age who have eschewed colonoscopy for any number of reasons, we began researching barriers to preventative colon screenings, in order to develop a screening program that could overcome many of those impediments. The planning process included collaboration with a variety of community entities and a review of the colon cancer screening guidelines proposed by the American Cancer Society’s “80% by 2018” publication. In addition, the planning process also included the selection of an appropriate colon cancer screening method (FIT-fecal immunochemical test), finding a funding source, education of attendees, advertisement, recruitment, and short-term and long-term follow-up. The hospital’s Cancer Committee endorsed the screening initiative and the first colorectal cancer screening event was held on a Saturday in November 2016. Due to its success, additional screening events were held in March and November 2017 with increased participation at each subsequent event.

A total of 147 age-appropriate adults attended the three screening events with a 78% return of FIT tests. Individuals who received a negative result are sent reminder letters a year later to follow-up with another FIT test. All but one of the participants with positive results committed to having a colonoscopy; 85% of the colonoscopies reported required removal of polyps. No cancers were detected, but many potential cancers were prevented.

With the cooperation of dozens of community churches, food banks, news outlets (including local TV stations), hospital staff, and local agencies, the plan is to conduct the event twice a year, the goal being to reach deep into the community to offer vital colon health screenings and education in an accessible and non-threatening manner. By offering the screening at no cost to all, providing free transportation for those who need it, educating all who attend, and following up with personal phone calls and letters, we are hopefully instilling a lifelong commitment to healthier screening habits with the ultimate goal of preventing deadly colon cancers.

This model for community colon cancer screening has been shared state-wide through presentation on an American Cancer Society (ACS) webinar/conference call, with encouraging feedback. Another community hospital south of the city has consulted with us and has already planned a colon cancer screening event for their area in 2018. The reproducibility of this program is evident and expected to spread throughout the region.
Assessment

As a non-profit acute care hospital delivering state of the art tertiary care with a strong connection to our community, we offer a variety of programming to promote health and wellness. (CHNA, 2016) In FY2016, in compliance with the Internal Revenue Code 501 (r) (3), the hospital conducted a Community Health Needs Assessment (CHNA) incorporating input from community stakeholders as well as public health experts to establish action plans to address our community health needs. Partnering with a graduate school of public health, a rigorous structured process utilized a best practice methodology to identify needs and formulate an implementation plan to address those needs. Cancer was identified as a one of the 3 top community health needs. According to the Department of Health, cancer is one of the leading causes of death in our service area at 23%. (CHNA 2016)

According to SEER (Surveillance, Epidemiology & End Result) data, colorectal cancer represents 8% of all new cancer cases with an estimated 135,430 cases diagnosed in 2017. CRC remains the second leading cause of cancer death in the United States representing 8.4% of all cancer deaths.

Cancer stage at diagnosis (the extent of a cancer in the body) has a strong influence on survival. The earlier a colon or rectal cancer is detected, reduces morbidity and increases survival. According to the SEER data, if diagnosed at an early localized stage, five-year survival is 90%. Nationally, only 39% of colon and rectal cancers are diagnosed at a local stage. A recent increase in decline in the incidence of CRC, 3% per year from 2004- 2013 is thought to be related to the detection and removal of precancerous polyps through increased screening practices. (NCCN 2.2017)

In Pennsylvania the rate of colorectal cancer 43.1 exceeds the national rate of 39.8. In our county in 2010, it was stated that 66% of residents over the age 50 reported either ever having a colonoscopy or sigmoidoscopy. In 2015 the percentage of insured adults aged 50-75 years who had colorectal screening was reported 62.4 percent. (…County Health Department 2015 Community Health Assessment)

In 2014, the National Colorectal Round Table(NCCRT) initiative committed to reducing CRC as a major health problem in adults over the age 50 by working towards a goal of screening 80% by 2018. A group of oncology nurses from our health system attended a colorectal cancer leadership summit sponsored by the ACS and the PACHC (PA Association of Community Health Centers) in late 2015. From the program we gathered the information necessary to present a CRC screening initiative for endorsement to our hospital’s cancer committee. We reviewed comparative data from the American College of Surgeons Commission on Cancer’s National Cancer Data Base (NCDB), a reporting process jointly sponsored by the American College of Surgeons and the American Cancer Society. Our colon cancer by AJCC stage at initial diagnosis was assessed and we discovered our late stage (IV) rate was 28% compared to 19% for colon cancer cases accessioned in 1466 accredited hospitals in the country and diagnosed between the years of 2009-2013. Using this comparative data combined with information from our hospital’s community health needs assessment, the initiative for CRC screening was adopted by the cancer committee as a screening program. Our effort to reduce the number colon cancers diagnosed at later stages (III & IV) within our community, was to follow evidence-based national screening guidelines and have a formal process to follow-up on all positive findings.
**Intervention**

The data indicating a higher percentage of late-stage colon cancers in our hospital as compared to the NCDB data was presented to the hospital Cancer Committee for consideration. After establishing a working group to address the disparity, strategies for improving colon cancer screening in the community were explored. The goal is to promote earlier diagnosis and/or the removal of pre-cancerous polyps. The working group composed of advanced-practice nurses, included an Associate Professor in the School of Medicine.

Colonoscopy is the gold standard for the early detection and prevention of colon cancer. However, there remains many perceived and actual barriers to getting this important test. The top 3 categories of barriers to colorectal cancer screening that the research of Redmond Knight uncovered: 1) attitudes and beliefs, 2) health care provider and health care systems barriers, and 3) cost.

Barriers to screening vary significantly on the basis of educational status, race/ethnicity, income, and insurance status and, if addressed, could increase screening. Barriers related to attitude and beliefs were more prevalent among white adults, adults with more than a high school education, and those with annual incomes of $50,000 or more. Cost barriers were more prevalent among black adults, adults with lower education, and those with lower levels of income. To increase CRC screening, interventions should focus on removing the most common barriers for each population group discussed. Regardless of the type of barrier, the most important consideration is that the barriers are removed. Once the specific barriers to screening for each population are removed, screening rates should become the same for all populations. This should then decrease disparities in CRC screening. (Redmond Knight, 2015)

In an effort to address the majority of these barriers, a community colon cancer screening (CCS) process was developed that incorporated a sensitive, US Preventative Services Task Force and ACS recommended, non-invasive, fecal-immunochemical (FIT) screening test, offered at no cost to all (regardless of their insurance coverage or lack thereof), coupled with a 20 minute, small-group educational session. Specialist staffed tables providing cancer prevention information related to nutrition, smoking, activity, and lifestyle were also provided. Local grants covered the costs of the actual FIT kits, specimen processing, as well as the cost of transporting participants for those in need through ridesharing vehicles (e.g., Lyft). Scheduling of participants and follow-up is coordinated by a patient education nurse from within the cancer center. Staffing for the actual screening event and advertising within the community would be provided by volunteers from the hospital and local community organizations.

The screening process starts for the participant when they call for an appointment. This initial phone interview conducted by the coordinator nurse immediately engages the person as an active participant in their care, through encouragement and education, as evidenced by the over 90% appointment attendance rate. Once at the screening, the key component included a 20-minute small group session conducted by the oncology nurse specialists. This session provides an overview of risk factors and reinforces modifiable factors of maintaining a healthy weight, staying physically active, making healthy dietary choices, limiting alcohol intake and elimination of smoking. Additionally, clear instructions with demonstration on using the FIT kit, an overview on the various types of colon cancer screening, and the importance of following up with a colonoscopy for positive results is emphasized. There is also an opportunity for attendees to ask questions and have myths dispelled/barriers broken. (See Appendix B for flow of participants through the screening process)

The follow-up with participants is important as it allows for questions to be answered and trusting relationships to be formed, hopefully encouraging each person to take control of their health.
**Results**

The positive outcomes of the Colon Cancer Screening program are attributable to the collaborative community effort and willingness of individuals to take an active role in removing barriers to preventative colon cancer testing and education for adults aged 50-75 who have never had a colonoscopy or have delayed retesting as recommended. To date, three CCS events have occurred and follow-up data is complete. Prior to each screening, additional community agencies and hospital departments have offered services and advertising for the event, which has greatly influenced our attendance escalation. But even more significant than actual attendance is the return rate of the completed FIT kits (78%) and commitment to having a colonoscopy when results are positive (96%).

A total of 25 (22%) of the 114 returned FIT kits were positive, indicating that human globin was detected in the stool and colonoscopy is the expected next step. Each participant was initially notified of their results (positive or negative) over the phone. All but one of the participants with a positive result verbally committed to having a colonoscopy; each of these participants did have health insurance. As this was an open screening for the community, with attendees who carry a large variety of insurance types, many of the colonoscopies were done outside of our health system. Thus, there are incomplete data regarding a few of the colonoscopy results and some of the results are self-reported by the participants. Below is a chart with the results of 17 of the follow-up colonoscopies. No cancers were detected, but many potential cancers were prevented. (See follow-up Colonoscopy Data below)

<table>
<thead>
<tr>
<th>Benign polyps removed</th>
<th>Benign abnormalities detected – no polyps</th>
<th>Number of cancers detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Consensus of the program evaluations revealed that participants felt the screening was of benefit to them, explanations concerning the screening process were clear, health teaching material was understandable, information about follow-up and possible need for further exams was explained, and they would recommend this screening to family and friends.
Adaptability
Successful replication of the colon cancer screening will depend on partnerships with clinical experts and supporting community organizations. Our Colon Cancer Screening was coordinated by and held in a hospital setting. However, any Pennsylvania community healthcare clinic could also be an ideal setting for this type of screening, especially when there are strong community partnerships with agencies that can provide the ancillary screenings, education, and support, and send positive results to patients or their physicians for further evaluation of risk.

Our model for community colon cancer screening has been shared state-wide through presentation on an American Cancer Society webinar/conference call, with encouraging feedback. Additionally, another community hospital south of the city has consulted with us for specific details on how we conducted our screening, and has already planned a colon cancer screening event for their area in 2018. The reproducibility of this program is evident and expected to spread throughout the region.

Lessons learned, from this colon cancer screening, or any type of screening, is that despite educating the community members about the importance of routine screenings, getting them to follow through on the providing the samples for testing and then following up with recommendations after results are communicated, is not guaranteed. It often takes several phone calls and additional time educating them on the phone to encourage them to follow through. We also learned that providing positive results to the PCP with the individual’s permission, further ensured compliance with the recommended follow-up. Another important lesson learned, was that our most valuable resource for advertising the screening was not the paid advertisement that we put in the local newspaper, it was in fact our community partners (e.g. churches, foundations, libraries, food banks) sending or handing out printed flyers (see Appendix A) or messages to their community as well as through their social media process. Additionally, we learned that having insurance was not the barrier to the community for having a colon screening done, it was the process of having a colonoscopy. Those attending our screenings desire a non-invasive screening.

In order to maintain this as a biannual event, it is extremely important for us to maintain our good working relationships with our community partners and keep our clinical experts interested by providing them with the feedback on rates of returns and follow up with positive results.
Appendix A
Colon Cancer Screening flyer

Colorectal cancer is the 2nd leading cancer killer in the US, but it doesn’t have to be. If everyone 50 years or older had regular screening tests, at least 60% of deaths from this cancer could be avoided.

Would you like to take part in a non-invasive (**FIT) FREE Colon Cancer Screening Program?

Sign-up Today!* (must pre-register by November 8th)

You qualify if you:
✓ Are age 50-75
✓ Haven’t had a colonoscopy for many years or ever
✓ Have any kind of health insurance or no health insurance

This Colon Cancer Screening is sponsored by and will be held
Saturday, November 11, 2017 by appt. only at:

No-cost Screenings include:

- **FIT test kit (a more sensitive & easier stool test done at home)
- Bone Density test
- Blood pressure/Circulation test

Healthy Lifestyle Education available:

- Learn about the recommended guidelines for Colon & other cancer screenings
- Smoking Cessation
- Cancer prevention & nutrition

*To pre-register or for information, contact:

...........................
- MSN, RN, OCN®
- Clinical Education Specialist
- ………..

TRAVELERS
Free Transportation
provided by Travelers
Aid through Foundation grant
Appendix B
Colon Cancer Screening Flow Chart

Patient Flow for 2017 Colon Cancer Screening

Starting on day of screening: after phone pre-registration & appt. time set

- Person goes home & within the next week or so completes the FIT kit & mails it to lab
- General Health Screenings done (bone density, vital signs) and breakfast with colon healthy foods offered
- Healthy lifestyle and cancer awareness education, including ACS info, smoking cessation, nutrition, & Ask the Pharmacist
- FIT kits given to all attendees to take home - prepaid mailing envelope
- Attendee is greeted at entrance & is directed to Registration area to sign in
- Go to 20-minute, small group (6-8 people) education session led by nurse or Dr. in Conference Room
- For positive results, follow-up emails or calls of support, if needed, to ensure colonoscopy and obtain results
- Results called and mailed to home along with follow-up recommendations
- Reminder email or call after 1 & 2 months, if needed for non-returned FIT kits
- For negative results, FIT re-testing reminder email/letter sent yearly

- Notice of positive test results and scheduled colonoscopy appointment

- Notice of negative test results and next screening date

- Reminder for annual screening

- Final notice of non-compliance with screening protocol