

Physician-related Barriers to Colorectal Cancer Screening in Missouri

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Abstract

Intro: Colorectal cancer screening (CRCS) utilization is poor, despite evidence demonstrating efficacy in reducing colorectal cancer (CRC) incidence and mortality. Patients have identified physician recommendation, or lack of, as an important influence determining CRCS utilization. We sought to understand barriers to CRCS delivery and utilization in our community.

Methods: Physicians in our metropolitan area were contacted and invited to participate in focus group dinner meetings. Each group engaged in a dialogue framed by specific questions that inquired about barriers to screening in their particular patient population, methods of obtaining and using family history of CRC as an identifier of high risk for CRC. Finally, practitioners were asked whether they would be interested in participating in a practice based research network (PBRN) that would be focused on testing systems in practitioners' office that might improve CRCS delivery and utilization.

Results: Responses were grouped and are reported with respect to the three specific aims of the project. Two barriers to CRCS that were consistent across practices were 1) insufficient time to counsel patients about the importance of CRCS and 2) patients being unclear regarding what to expect during CRCS. Additional consistent barriers were that CRCS requires a multi-step process for the practitioner and the patient. Regarding family history (FH), most practitioners had systems in place to identify and record FH, and determined a patient's risk for CRC based on currently published recommendations. Finally most practitioners would welcome a system that would reduce the "hassle factor" of ordering CRCS, and that would reduce reliance on their memory alone to calculate risk based on FH. All believed that their patients would benefit from receiving more detailed instruction about the importance of CRCS and what to expect from CRCS, but felt unable to provide this information themselves due to time constraints in the outpatient clinic setting.

Conclusion: Barriers to CRCS that were uniform across the practices we queried were not having enough time to counsel patient, patients not knowing what to expect about colonoscopy preparation or the procedure itself. Additional barriers were the complexity of generating a referral for CRCS, and inability to obtain an accurate family history about CRC. Barriers that appeared more prominent to low SES patients were inability to afford colonoscopy, males less likely to want to discuss CRCS with a female provider.

Introduction and Brief Literature Review

Colorectal cancer (CRC) is a leading cause of cancer death in the U.S. Studies have shown that all currently recommended means of colorectal cancer screening (flexible sigmoidoscopy (FS), fecal occult blood testing (FOBT) and colonoscopy) are effective in reducing mortality rates¹⁻⁴. Less than half of eligible patients, however, participate in colorectal cancer screening (CRCS) programs⁵⁻⁸.

Past research has demonstrated repeatedly that a physician's recommendation, or lack of, to a patient to undergo CRCS is the most important influence on screening utilization.^{9,10} Reasons for nonparticipation, also referred to as "barriers" to CRCS, are often divided into provider-specific barriers (issues that prevent providers from recommending screening) and patient-specific barriers (issues that prevent patients from participating in screening).¹¹⁻¹⁴

The overarching aim of this project was to interact with physicians directly to identify barriers to CRCS in their individual practices. A secondary aim of this project was to learn if practitioners have systems in place to obtain information about a patient's family history of CRC, and how this information impacts CRCS delivery. Finally, at the time the project was developed we were exploring the possibility of developing a PBRN in the greater metropolitan St. Louis area.

We anticipated that the level of interest in our focus groups might guide us in predicting interest in establishing a PBRN.

Methods

Primary care physician names and contact information were accessed from existing databases at Siteman Cancer Center and Washington University in St. Louis. Potential participants were contacted by phone and/or letter by the PI and invited to participate. The response rate to both phone and mail solicitation was poor. Targeted recruitment was thus centered on physicians with a strong tie to the PI and/or institution.

The focus groups were conducted by the PI (DE) and co-investigator (SR). Questions were posed to the participants from a standardized template (Appendix A). Results were analyzed using a transcript based long table approach.¹⁵

Results

We have conducted three focus group dinner meetings of practitioners with the following profiles:

Group 1—Two practitioners at a federally funded city health clinic, primarily uninsured or underinsured patients.

Group 2--Four practitioners from four different physician groups, which are all located in St. Louis county, patients are insured.

Group 3--Three practitioners and practice manager from a single group, practitioners span two generations. Patients insured.

Barriers to colorectal cancer screening

For practitioners in the federally funded city clinics, inability to pay represented a barrier to delivery and utilization of CRCS, especially colonoscopy. Cultural barriers such as language (Hispanic patients who do not speak English) and modesty (e.g. male

patients of female practitioners) exist as well. Within both the city and county practices, practitioners not having adequate time to stress the importance of screening, and to counsel patients on screening options and efficacy were identified as significant barriers. This is coupled with the fact that colorectal cancer screening by colonoscopy is a “multi-step” process (requires a phone call for an appointment, prescribing and instructing patients on a bowel prep and other pre-procedure instructions, etc) as compared to mammography or PSA (practitioners just check a box on a form). Most practitioners have reminder systems already in place (section of chart to record preventive care, computer reminders, chart flags), and none seem to have thought about adding further reminders to their existing office systems.

Practitioners felt that women in general are more receptive to CRCS recommendations than men. In the city clinics, practitioners felt that Hispanic males were relatively resistant to screening, and black males needed more education about the importance in order to be receptive to screening. It is perceived that Bosnian patients are similarly uninformed about the importance of CRCS, likely due to a language barrier.

Practitioners use both FOBT and colonoscopy for screening, and believe that they have significant influence over their patients’ acceptance of CRCS. Practitioners in the federally funded clinic primarily use FOBT, since the upfront cost is minimal. Practitioners in the suburban practices predominantly recommend colonoscopy. This shift from FOBT and FS toward colonoscopy is consistent with a national trend in which colonoscopy is perceived as the “gold standard” test that examines the entire colon and allows for removal of colorectal polyps.

Practitioners’ methods of obtaining family history of CRC

All practitioners have a chart-based form that includes family history, and is completed by all new patients and updated at some interval. The major barrier to collecting a family history is a lack of information on the patients’ part regarding details about their family medical history. None of the practitioners identified barriers to screening that appear unique to high-risk individuals. Some stated that persons with a family history of colon cancer might be slightly more motivated to comply with a physician recommendation to undergo CRCS.

None of the practitioners ask specifically about family history of colon *polyps*. The practitioners did not have specific ideas about systems that might improve ability to obtain and use an accurate family history in stratifying patients with respect to CRC risk.

Interventions

Interventions that all practitioners felt would enhance participation were means to educate patients about the preparation the day before (colon cleansing) and what to expect during the colonoscopy. As regards implementing new systems to improve screening, a process that would make ordering CRCS more “routine” and decrease the number of steps required would be favorable.

Level of interest for establishing a PBRN.

None of the participants expressed interest in participating in a PBRN. While not stated, the investigators perceived that practitioners considered participation in a PBRN would complicate their office systems rather than streamline them.

Discussion, including implications, intended next steps, and potential

Overall, practitioners involved in this project recognize CRCS as an important preventive care issue. The participants believed they had significant influence on their patients' willingness to participate in CRCS, which is consistent with published research in this area. While previous research has identified specific barriers to CRCS delivery and utilization, none has specifically addressed ways in which these processes could be improved. Participants emphasized that breast cancer screening with mammography and prostate cancer screening with PSA, are generally a "single step" process for the practitioners and their ancillary staff, while CRCS is a multi-step process. Additionally, participants felt the process of CRCS was not well understood by patients, and that patient education about the importance of CRCS and what to expect during CRCS would be a positive influence on participation.

All practitioners in the project recognized that obtaining and using information about family history of CRC is an important issue in determining risk for CRC. However, specific published guidelines about how to risk stratify patients with respect to family history are not used. Lack of specific knowledge about FH by the patients was identified as the main barrier to obtaining FH about CRC or polyps. Intuitively, one could conclude that processes designed to improve risk stratification using FH information would be useful, while inability to obtain an accurate FH due to lack of knowledge on the patients' part is much more difficult to modify.

As regards interventions to improve CRCS delivery and utilization, a streamlined process, as outlined above, appeared most desirable by the practitioners. This would be expected to improve both delivery and utilization. Improving patient education regarding preparation for colonoscopy and what to expect during colonoscopy were also cited as interventions that could be highly successful in increasing CRCS utilization.

The information gathered from this focus group project will be used, along with other CRCS data from these investigators¹⁶, in a future grant application for NIH PAR-04-036, "Colorectal cancer screening in primary care practice". This proposal is designed to "encourage health services, social and behavioral, and outcomes researchers to develop innovative research projects to increase the knowledge base for enhanced translation of effective colorectal cancer screening techniques into community practice". Our data parallels specific topics of the above mentioned proposal, specifically 1) our data regarding *barriers* to CRCS can be used to design interventions, particularly for diverse populations and those that have compromised access to care, 2) our data regarding collection and use of *FH information* can serve as a basis to create a system to identify high risk individuals and improve decision making regarding CRCS options, and 3) our data about possible interventions to increase utilization can lead to development of approaches in community practice that integrate delivery of CRCS with delivery of other preventive services.

Lay Summary

Colorectal cancer (CRC) is the second leading cause of cancer death in the US, and is preventable by colorectal cancer screening (CRCS). Nevertheless, participation in CRCS is low, below 50% in most published series. Published data shows that patients consider their doctors' recommendation as the single most important influence on whether they participate in CRCS. Barriers have been identified in both deliver of CRCS (recommendation by the doctor) and utilization of CRCS (participation by the patient). We sought to determine specific barriers that exist in the St. Louis metropolitan area, whether information about a family history of CRC was being gathered by doctors and used to make decisions about CRCS for their patients.

For patients in the suburban areas (mainly insured), the main barriers seem to be lack of knowledge about what to expect, and inconvenience in terms of scheduling a screening colonoscopy. For patients in urban federally funded clinics (predominantly uninsured), the same barriers exist, but in conjunction with inability to pay and less access to CRCS services.

Doctors generally gather as much family history as possible and adhere loosely to published guidelines about risk stratification regarding CRC. No barriers unique to patients with a family history of CRC were identified.

Interventions that were felt likely to improve delivery and utilization were those that increased patient education about the entire process, and streamlined the process within the doctor's office of coordinating a colonoscopy appointment.

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Appendix A

Script for Focus Groups

Good evening and welcome. Thank you for taking the time to join our discussion of colorectal cancer screening. I'm Dayna Early (and this is a co-investigator). We are physicians at Washington University School of Medicine. The purpose of this session is to hear your views on the major barriers to colorectal cancer screening. We are going to focus on two major areas: barriers to routine colorectal cancer screening, and barriers to identifying high-risk individuals. We are also very interested in hearing your ideas of how to effectively overcome those barriers in a practice like yours. You were invited because you are an adult primary care physician in St. Louis or a surrounding area.

There are no right or wrong answers. We expect that you will have differing practice patterns and points of view. Please feel free to share your point of view even if it differs from what others have said. Feel free to say what you think and not what you think we want to hear.

We're tape recording the session because we don't want to miss any of your comments. No names will be included in any reports. Your comments are confidential. Please try to speak one at a time so we can hear what everyone has to say.

We have name tents here in front of us to help us remember each other's names. We are interested in hearing from each of you because you have different experiences. So if you're talking a lot I may ask you to give others a chance, and if you're not saying much, I may call on you. We just want to make sure we hear from all of you.

I also want to mention the questionnaire you were given when you walked in. This is designed to give us an overview of the types of practice you have. You'll also notice at the bottom a question about participating in a PBRN. Let me tell you a little bit about that. A group of clinical researchers at Washington University and St. Louis University are interested in developing a Practice Based Research Network. A PBRN is a group of physicians in community practices who are interested in using clinical research and its outcomes to improve their practices and their patient care. Participating in this focus group tonight in no way "enrolls" you in a PBRN, but the questionnaire we have distributed gives you the opportunity to let us know if this is something you might be interested in.

We'll start by going around the room. Tell us your name and where you went to medical school.

Now we'll move on to the focus group questions. First, I'd like to hear about general delivery and utilization of colorectal cancer screening in your patient panel.

Probe questions:

1. What particular processes do you have in place that are effective for identifying or referring patients for routine CRC screening? Or what processes do you think might be effective if they could be put in place?
2. What issues, if any, are unique to men or women patients?
3. What issues, if any, are unique to particular ethnic or cultural groups?
4. How does your perception of effectiveness or acceptability of individual screening tests (such as FOBT, flex sig., colonoscopy) impact your use/recommendation of it?
5. How does your patients' perception of effectiveness or acceptability of individual screening tests impact your use/recommendation of it?

Now let's switch and talk about identifying individuals at high risk for colorectal cancer because of a family history of cancer, and discuss the barriers that limit your ability to identify these patients, determine their cancer risk and refer them for appropriate screening.

Probe questions:

1. What barriers do you see for collecting a family history about colorectal cancer or colorectal polyps? (time, appropriate forms, interest, patient knowledge)?
2. What barriers do you see to interpreting a family history or determining who is at increased risk for colorectal cancer?
3. Once you have identified people who are at increased risk, are the barriers to referral similar to those discussed for people at population risk? Or are there unique barriers?

Let's now turn toward interventions.

1. What interventions (to increase delivery and utilization of CRCS) would you be willing to have studied in your own office, assuming that the demands on your own personnel are sufficiently constrained or reimbursed?
2. How could colorectal cancer screening be incorporated into your existing office systems?

Appendix B

Questionnaire

What is your age? _____ Gender? _____

How long have you been in practice? _____

In what town(s) are your offices? _____

Are your patients primarily: urban rural

In what age range are most of your patients?

Would you be interested in learning more about the PBRN and/or participating in the PBRN? _____ (If yes, we need your name and contact info, including email):
