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## Physicians' Approaches to Recommending Colorectal Cancer Screening: A Qualitative Study

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### Abstract

Little is known about strategies that physicians use to encourage receipt of colorectal cancer screening (CRCS). This study conducted focus groups with physicians. Twenty-seven physicians participated in four focus groups. Physicians described four categories of approaches: (1) why screening is important, (2) providing test information, (3) motivational strategies, and (4) tailoring strategies. Participants reported tailoring based on their relationship with a patient, as well as to patient gender, education, and language. Tailoring to cultural background or ethnicity was not prominent. Most physicians reported a typical approach to CRCS and reported some tailoring based on gender, education, and language, but not on ethnicity.

### Keywords

Doctor–patient communication; Colorectal cancer screening; Qualitative research

### Introduction

Colon cancer is the third most common form of cancer in the USA and the third leading cause of death from cancer in both men and women [1]. Screening for pre-cancerous polyps and early stage cancer is widely known to reduce mortality [2–5]. Although rates of colorectal cancer screening are increasing, they remain low. Recent data from the Morbidity and Mortality

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Weekly Report reveal that only 57% of US adults aged 50 and over have been recently screened with fecal occult blood testing (FOBT) or lower endoscopy [6]. Rates of colon cancer screening are often even lower among ethnic minority populations in the USA [7–12]. The level of patient acculturation to the dominant culture has also been shown to influence rates of cancer screening [9,13,14]. Less educated individuals as well as those with limited English proficiency are less likely to be screened even after controlling for other socio-demographic risk factors [12,15,16].

Screening for colorectal cancer is complicated as there are several available screening modalities. The US Multi-society Task Force on Colorectal Cancer recommends presenting multiple options, including annual FOBT or fecal immunochemical testing, flexible sigmoidoscopy every 5 years, barium enema every 5 years, colonoscopy every 10 years, CT colonography every 5 years, or fecal DNA testing, although the interval for testing with this last modality is uncertain [5]. The United States Preventive Services Task Force recommends screening for colorectal cancer (CRC) for all persons aged 50–75 with either stool tests, sigmoidoscopy, or colonoscopy [17].

Physician recommendation is a critical factor in whether or not individuals receive screening tests [18]. In a community-based telephone survey of 775 Latinos, Vietnamese, and low-income whites, the biggest predictor of having been screened for CRC was provider recommendation [19]. Lack of a provider recommendation for screening has been described as a barrier to CRC screening in several other studies [20–22]. Despite the centrality of the provider recommendation, little is known about how providers and patients communicate about CRC screening and what components of that communication influence patient screening decisions.

Physicians' communication with patients may be influenced by patient socioeconomic and racial/ethnic factors. A survey of 5,978 patients of 191 physicians showed some socioeconomic and race/ethnic differences in the discussion of cancer screening [23]. Other studies have suggested that physicians may be more verbally dominant and engage in less participatory decision making with African Americans compared with Whites [24,25].

There has been much attention paid to training physicians in culturally competent care [26,27]. This training has typically focused on individual's awareness of their own cultural rules and norms and cross-cultural differences such as verbal and non-verbal communication [28,29]. However, how culturally competent physicians communicate and whether or not they tailor messages to certain subgroups is not known.

Physicians may routinely use one approach when recommending colorectal cancer screening, or they may tailor their message to individual patients. Tailoring can be defined as “the adaptation of the intervention and/or total redesign to best fit the needs and characteristics of a target audience” [30]. Little is known about strategies that physicians use in encouraging patients to undergo CRC screening.

Some prior studies of physician–patient communication have focused on physician communication with individuals of certain ethnic groups, such as African Americans and Whites [24,31–34]. However, these studies have not assessed whether and how physicians might tailor their communication based on several different patient characteristics, including: ethnicity, gender, education, and language.

This report is part of a larger exploratory study that sought to assess current practices in cross-cultural, provider–patient communication in the course of a colorectal cancer screening referral [35]. Herein, we detail findings that address the following research questions: What strategies

do physicians use when encouraging patients to undergo CRC screening? Do physicians tailor certain messages to particular subgroups (e.g., gender, education, language, or ethnicity)?

## Methods

In this study, we conducted focus group interviews with physicians practicing in several settings including three community clinics serving primarily African American, Latino, and Chinese patients and one large integrated health care delivery system serving an ethnically diverse patient population. All of the environments were busy, often somewhat chaotic, and time-pressured. We chose a combination of community clinics and an integrated health care delivery system for this study. This allowed us to learn about physicians' experience and practice in diverse clinical settings with diverse patient populations. All participants provided written informed consent. All procedures were approved by the Institutional Review Boards of participating institutions.

## Recruitment

We approached clinic directors in facilitating physician recruitment for participation in focus groups. These directors referred interested physicians, mentioned the study in staff meetings, and sent emails to notify physicians of upcoming focus groups and to encourage participation. They also provided access to the clinics that enabled direct recruitment of physicians while on site conducting the larger study.

## Physician Focus Groups

Focus groups were scheduled to last 2 hours in the evening. Each focus group was conducted by two members of the research team that included one or more of the following disciplines: medicine, sociology, public health, communications, and medical anthropology. During the focus groups, physicians were asked about their CRC screening practices and approaches. In addition, they were asked whether or not they tailored their approaches to a patient's characteristics. Questions from the focus group guide are shown in Table 1. Probes encouraged participants to share specific experiences with the groups. Physicians received a \$100 honorarium in appreciation for their participation.

## Analysis

All focus groups were taped and transcribed. Transcripts were reviewed, coded, and reconciled for trustworthiness by three sets of two research team members working with the Project Director. Two team members reviewed and coded each focus group transcript individually. These members then met with the project director to discuss and reconcile differences in interpretation or meaning. Discussion continued until consensus was reached. Reconciled codes were then entered into ATLAS.ti ethnographic software, a qualitative software program designed to manage and organize qualitative data and to facilitate multi-level analysis [36].

There were three steps in the qualitative analysis. The first step, described above, included parsing quotes from focus group transcripts into coded segments of text. The second step included a review of the codes to identify several groups of codes or categories relevant to our research questions: "physicians' approach to CRC recommendation," "CRC motivation technique," "relational approach," and "repetition of recommendation." In addition to these general categories, we created several that focused on tailoring techniques: "culturally tailored approach," "gender and gender tailored approach," "education," "socioeconomic status/class," and "language." In the third step of the analysis, we generated reports which included all quotes/utterances associated with the categories listed above. We reread these reports closely and grouped categories into themes reflective of the overarching strategies physicians reported:

“Explaining why CRC screening is important,” “Providing test information,” “Motivational strategies,” and “Tailoring strategies.”

## Results

### Physician Characteristics

A total of 27 physicians participated in four focus groups. Of these, 19 were male, 22 practiced in an integrated health care system, and 5 were from community clinics. The majority were Asian ( $n=15$ ) or Caucasian ( $n=8$ ); two were African American, and one was Latino.

### Themes and Strategies

**General Categories**—The strategies physicians described fall into four broad categories: (1) explanation of why CRC screening is important, (2) provision of test information: what the tests are and how they are done, (3) motivational strategies, and (4) tailoring strategies.

**Why CRC Screening is Important:** Physicians reported that when making a CRC screening recommendation, they frequently talked to patients about why CRC screening is important. First, they described the tests to patients as a standard part of health maintenance or “treating it as a sort of a regular routine thing that we do” to stay healthy. Second, they often relied on the authority of the recommendations of others such as the recommendations of expert groups, stating that this is recommended for everyone, “It’s not just recommended by Dr. X...It’s something that’s recommended by everyone else.” Thirdly, they emphasized the importance of early detection, explaining that screening can prevent cancer by removing precancerous polyps, “We want to go in early when there are tiny little polyps. It takes them ten years to turn into cancer, and if we can catch those tiny little polyps before they turn into cancer, we can snip them right out...and you’ve prevented cancer right then and there.” Fourth, they used statistics—such as explaining that colon cancer is a leading cause of cancer mortality—to tell the patient why screening is important, “You know this is the number 3 killer, cancer killer.” Fifth, they describe screening as important for everyone aged 50 and over, “If you are over 50 years old, I really suggest that you do this.”

**Providing Test Information: What It Is and How It Is Done:** The second category of strategies/techniques used by physicians included providing information about the tests, what they are, and how they are done. Sometimes, physicians drew pictures to aid their explanation. When one doctor was asked why he drew a picture, he stated, “I think people have a very unclear sense of what the procedure is and how it’s done. I think the more informed they are the more likely they are to go through it smoothly.” Physicians frequently spoke about the perceived need to talk about all possible tests, which may take time away from simply getting any test done, “We have to sit there and discuss all these other tests that are available.” Many physicians felt that it was important to tell the patient what to expect, “The good news is that it’s usually only a ten minute test” and tried to make the tests easy for the patient to do. Physicians sometimes told patients about the flexible tube, “We don’t do that [hard tube] anymore, we use this fiber optic, something smaller than a pencil.” In addition, they spoke about being honest about the discomfort involved, “I try to be as honest as I can—I tell them if it’s going to be painful.” Some issues discussed were system-specific—for example, in the integrated health care system, patients are sent directly down to the GI department to make their appointments. These physicians reported that they often spent a fair amount of time describing to patients exactly how to get to the GI department, “Go down the stairs and make a left-hand turn. I write on there ‘Gastrointestinal clinic’ in big letters,” and say, “If you get lost, just show somebody and ask them where this place is.”

**Motivational Strategies:** Physicians used a variety of other strategies to encourage patients to undergo CRC screening. Several of these strategies used aspects of the physician–patient relationship to encourage patients; for example, they spoke of the importance of developing trust within the relationship, telling the patient, “We are friends for life.” Some physicians said that they sometimes touched the patient during the discussion (e.g., on the patient’s arm) to demonstrate or reinforce their personal connection. Physicians often used repetition, stating that if the patient did not undergo screening, they would bring it up again at the next visit, “Your first chance is not your last chance.” Some physicians reported recommending FOBT if the patient was frightened, “Some patients are very frightened of a scope test.... they’re willing to go ahead and do the stool test because that’s less invasive.” Some physicians used their own personal experience to persuade the patient to be screened, “My mother is 84 and had it done.” Some physicians employed strategies such as using any type of GI symptom to convince the patient to be screened, “Another trick I use is that if they have a twinge of abdominal pain, constipation...I tell them...this is a good opportunity for you to do the test.” Others described other tactics: “I’ll try to guilt them into it” and “Maybe it’s a scare tactic, but I talk about the consequences of not doing it.” Some provided practical tips, “Do it in the early afternoon—take the afternoon off.” Others tried to get family members to pressure them. Additional strategies included addressing the patient’s religious beliefs, “Yes the Lord will protect you but you need to do what your doctor says too.” Also, telling them the test is free, and using humor, “It’s time for your 50,000 mile tune up.”

**Tailoring Strategies—**Although all of the physicians acknowledged having their own approach that they used with most patients, they did report also adapting this for specific circumstances when both time and opportunity allowed. Some of this tailoring appears to be based on the physician’s relationship with the individual patient, as noted above. However, physicians also reported tailoring based on education, gender, and language, but rarely reported on ethnicity. Descriptions of some of these tailoring approaches follow.

**Gender:** Physicians did some tailoring by gender, particularly when explaining why CRC screening is important. This type of tailoring was often an attempt to place CRC screening in the context of other cancer screening tests that the patient might already be engaged in. For example, comparing it to Pap smears and mammograms for women, “Look, women put up with Pap smears, which they don’t like very much either,” or to prostate cancer screening and rectal examinations for men. Some physicians suggested that the patient ask for a provider of the same gender to do the procedure. In addition, some physicians suggested to female patients the convenience of having their CRC screening test and their mammogram on the same day. “Well, you’re going every year to get your mammogram and you’re coming here every couple of years to get a pap smear, so why don’t you also just do this?”

**Education:** Physicians tailored some discussions depending on the patient’s level of education. For example, physicians reported avoiding use of sophisticated medical terms with those less educated, “I try to keep medical terminology to a minimum or keep it to language that is easily understandable.” For more educated individuals, physicians felt that they needed to spend more time in discussing the choice of test, and in particular, discussing the pros and cons of colonoscopy, “I have very savvy, educated professionals who read everything and bring me things off the Internet. I’m going to talk to them on a different level.” In addition, physicians felt that they had to spend more time with educated patients to discourage the use of such tests that were unnecessary, “So you spend 15 minutes going over with [upper middle class white patients] them why the data doesn’t support [colonoscopy] as a screening test.” Physicians often explained the risks of colonoscopy and why it is not necessarily the preferred test, “[Patient says] Sigmoidoscopy? I want the colonoscopy,” ... That’s where I get the most trouble.” Some physicians said that medical terminologies may convince patients more. For

instance, “I’ve actually observed that sigmoidoscope, we say sigmoidoscopia in Spanish, it doesn’t always scare people. In fact, for certain people there’s a certain air of legitimacy that a long word carries.”

**Language:** Some physicians reported challenges unique to convincing their limited English proficiency (LEP) patients to complete screening. They described difficulties due to a language barrier at all stages in the screening process, from explaining the exam, to the patient obtaining an appointment, completing the necessary bowel preparation, or feeling scared and isolated during the exam, “And there are multiple Chinese patients who would say, ‘The last time I went (to a specialist) they didn’t order me a translator. I had absolutely no idea what the doctor was telling me.’ I think these are a lot more significant issues...it’s what goes beyond my clinic that’s difficult for me to control.” Thus, physicians reported attempts to tailor their CRC screening discussion for their LEP patients—including telling patients that someone who speaks their language could do the test, and/or that they could ask for a particular doctor by name, “Tell them that one of the doctors...in GI, who does the procedure actually speaks Chinese.” Sometimes physicians used pictorial images to help individuals who do not speak English get to the GI clinic and schedule the procedure. “So I tell the patient this is—I draw it up on the map, ‘This is how you go from MB1 to the GI clinic.’ I give them special pointers, ‘There’s a long hallway. Go all the way to the end of the hallway then make a left. The GI clinic is then on your left.’

**Culture:** Individual physicians did report some tailoring based on their perceptions of the patient’s culture. However, despite probing by the interviewers and focus group leaders, tailoring based on culture was not a prominent theme. For example, physicians told us, “I have difficulty convincing everybody, regardless of their ethnic group, to have sigmo(idoscopy),” and “If the patient doesn’t believe in the value of preventative health screening, regardless of the ethnic group, I think you basically use the same strategies.” Examples of when physicians did report tailoring to cultural background included attention to gender dynamics, such as enlisting the help of family members to convince patients. One physician stated, “For my Asian men, often I can get the wives to sort of pressure them.” Others noted the importance of recognizing religious beliefs or background when discussing the test with patients. One physician reported telling patients, “Yes the Lord will protect you but you need to do what your doctor says too.”

## Discussion

Physicians described multiple ways to encourage patients to undergo colorectal cancer screening. The results demonstrated that they usually take a standard approach, followed by enhancing their discussion with strategies they think will motivate a specific patient. Physicians use repetition, their relationship with the patient, GI symptoms, and gender, education level, or patient language-specific messages. However, they report very little tailoring based on ethnicity or on their perception/knowledge of the patient’s cultural beliefs.

Physician–patient communication is complex. The ideal medical encounter has been described as integrating a patient-centered approach (the patient leads the discussion in areas where he/she is the expert, e.g., symptoms, preferences, and concerns) with a physician-centered approach (the physician leads in areas where he/she is the expert, e.g., details of disease, screening, and treatment) [37]. In this study, participants reported both physician-centered approaches (describing why screening is important, describing the details of the tests) and patient-centered approaches (recommending an FOBT for a patient who expressed concern about an endoscopic procedure, recommending that a physician who speaks the language perform the procedure).

There are several limitations to this study. We do not have information on the physician respondents' actual screening practices; instead, we only have what they reported to us. A second limitation is that physicians who are willing to take time to be in focus groups are probably highly interested in CRC screening and may not be representative of other physicians. However, including physicians from a number of different sites (three community clinics and an integrated health care delivery system) increases the representativeness of these results.

In addition, while we did not find that physicians tailor their CRC discussions based on culture, we did not ask about physicians' individual understanding of culture. Culture has been described as the "customary beliefs, social forms, and material traits of racial, religious, or social group" [38]. It has also been described as referring to the values and beliefs that are shared with a significant community of others" [30,39,40]. Culture is a complex concept, and an individual's definition of culture may change with time. However, we did probe specifically about this topic during each focus group and encouraged any discussion of cultural tailoring regardless of the definition.

Despite these limitations, this study provides a unique window into physician-patient discussions about CRC screening in primary care practice and thus can be used in the development of interventions to increase rates of screening. It is possible that if a physician had a better sense what might actually "work" for any given individual patient, he/she could use a particular strategy with that patient and thus enhance the likelihood that the patient would get screened.

## Conclusion

Most physicians report having developed their own approach to CRC screening, which they may alter based on their relationship with the patient or tailor based on gender, education, and English proficiency. Physicians use a variety of strategies to encourage patients to undergo CRC screening. Tailoring based on ethnicity was less common.

## Practice Implications

Individually tailored interventions have resulted in increased rates of mammography and Pap smear screening in ethnically diverse populations [41–43]. Tailored approaches have the potential to increase rates of CRC screening. Whether further attention to tailored approaches will result in improved rates of CRC screening should be investigated in future studies. Additionally, the effectiveness of specific physician strategies to promote CRC screening is a topic for future study.

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**Table 1**

## Questions asked of physicians participating in physician focus groups

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<b>Physician focus group questions</b>
Do you have a usual way of approaching the CRC screening recommendation?
How do you know if your approach is working?
Does your approach differ for men and women?
What if the patient is obviously of a lower education level?
How is your approach different for patients of different cultural backgrounds?
Can you share an experience you have had recommending CRC screening to a patient of a different ethnic and cultural background from yours?
How can you tell if a patient is receptive to the screening recommendation?
Can you think of a time you recommended CRC screening and patient did not do it—tell us a little about what happened.

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