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Clinical Perspectives on Colorectal Cancer Screening at Latino-Serving Federally Qualified Health Centers

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Abstract

Purpose—Colorectal cancer is the second most common cause of cancer death in the United States, and rates of screening for colorectal cancer are low. We sought to gather the perceptions of clinic personnel at Latino-serving Federally Qualified Health Centers (operating 17 clinics) about barriers to utilization of screening services for colorectal cancer.

Method—We conducted one-on-one interviews among 17 clinic personnel at four Latino-serving Federally Qualified Health Center networks in Oregon. All interviews were recorded, transcribed, and coded, and themes were grouped by influences at three levels: the patient, the organization, and the external environment.

Results—Estimated proportions of eligible patients who are underscreened for colorectal cancer ranged from 20% to 70%. Underscreening was thought to occur among low-income, underinsured, and undocumented patients and patients having multiple health concerns. Limited funding to pay for follow-up testing in patients with positive screens was cited as the key factor contributing to underscreening.

Conclusions—We identified health care provider perceptions about the underutilization of screening services for colorectal cancer; our findings may inform future efforts to promote guideline-appropriate cancer screening.

Colorectal cancer is the second leading cause of cancer death in the United States, and regular screening can substantially reduce mortality from the disease (American Cancer Society, 2011). Data from randomized clinical trials show that regular screening can reduce colorectal cancer mortality by 33% (Mandel et al., 1993). The U.S. Preventive Services Task Force (2009) recommends regular colorectal cancer screening among men and women aged 50 to 75 years using (a) annual high-sensitivity fecal occult blood testing, (b) colonoscopy every 10 years, or (c) sigmoidoscopy every 5 years combined with high-sensitivity fecal occult blood testing every 3 years. As of July 2012, colorectal cancer screening became a reportable Healthcare Effectiveness Data and Information Set measure, a measure used by more than 90% of U.S. health plans to monitor important aspects of care and service (National Committee for Quality Assurance, 2012). In 2010, colorectal cancer screening was included in the list of preventive services covered under the Affordable Care Act, which

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mandates health care plan coverage of screening without patient copays (U.S. Department of Health and Human Services, 2012).

Nevertheless, rates of screening are low in the general population, and particularly low in certain population subgroups.

Data from the National Health Interview Survey show that in 2010, only 57% of the U.S. population was adherent with colorectal cancer screening recommendations, with particularly low rates among Hispanics (47% vs. 60% for non-Hispanic Whites), those lacking insurance (21% vs. 65% for those having private or military insurance), and those having lived in the United States for fewer than 10 years (21% vs. 61% for U.S. born; Centers for Disease Control and Prevention, 2012). Notably, the subgroups least likely to be up-to-date with screening are those who receive preventive care services, including colorectal cancer screening, at one of 8,147 Federally Qualified Health Center (FQHC) delivery sites nationwide.

A limited number of qualitative and quantitative reports have examined patient-level factors that contribute to low colorectal screening participation. Available data show low patient awareness of colorectal cancer and the importance of screening (Goldman, Diaz, & Kim, 2009; Goodman, Ogdie, Kanamori, Canar, & O’Malley, 2006; Robinson et al., 2011), lack of a physician recommendation for screening (Feeley, Cooper, Foels, & Mahoney, 2009; Hoffman et al., 2011; Lasser, Ayanian, Fletcher, & Good, 2008; Robinson et al., 2011), fear of pain associated with the test (Getrich et al., 2012; Hoffman et al., 2011; Janz et al., 2007; Kelly et al., 2007), having no symptoms (Lasser et al., 2008), and feelings of embarrassment about the test (Hoffman et al., 2011; Kelly et al., 2007). Some patients are thought to face financial barriers, perceive the test as costly, or fear incurring costs of diagnostic follow-up (Goodman et al., 2006; Harden, Moore, & Melvin, 2011).

Less is known about organizational-level factors that contribute to low rates of colorectal cancer screening. Available data from community-based primary care practices show lack of provider time, patient reluctance, and the lack of referral and treatment sources for colonoscopy for follow-up of abnormal fecal occult blood testing (FOBT) as major barriers to the initiation of colorectal cancer screening (Feeley et al., 2009; Goodman et al., 2006; O’Malley, Beaton, Yabroff, Abramson, & Mandelblatt, 2004). Even less is known about organizational-level factors at play in clinics that specialize in services for Latino patients. Klabunde et al. (2009) report on colorectal cancer screening attitudes and practices from a national survey of 1,235 physicians; however, these interviews were not restricted to physicians serving low-income or Latino patients.

We sought to understand perspectives on colorectal cancer screening among clinic personnel who work in FQHCs that specialize in the delivery of primary care services for Latino patients. Our objectives were to understand clinical perspectives on the reasons patients do not obtain screening and to identify elements for a future intervention to raise rates of colorectal cancer screening. Few previous investigations have explored these issues in FQHCs in general, and among Latino-serving FQHCs in particular.

Method

Setting

Our study involved four Latino-serving FQHCs operating 17 medical clinics that deliver primary care services. Together, the clinics serve more than 94,410 unique clients each year, of which 45% are Latino and 19.2% are aged 50 to 75 years. Among patients aged 50 to 75 years, 20.9% were on Medicaid and 36.4% were uninsured.

Data Collection

Medical and clinical support staff were recruited using a purposive sampling technique, with the goal of interviewing a family physician, nurse, medical assistant, and outreach worker from each site. In some cases, the family physician served in the role of medical director. We developed a 15-item, semistructured interview schedule that addressed colorectal cancer screening practices and factors associated with underutilization of screening services. Interviews lasted about 1 hour, and all clinics were offered a monetary incentive as compensation for their staff members' time. Interviews were conducted between July 2011 and May 2012. All interviews were audio recorded and transcribed verbatim. We used a qualitative content analysis approach (Elo & Kyngas, 2008; Graneheim & Lundman, 2004) and grounded theory to develop codes (Elo & Kyngas, 2008; Graneheim & Lundman, 2004). All transcripts were coded by three trained coders. Themes were grouped, according to aspects of the socioecological framework (Centers for Disease Control and Prevention, 2013), by influences at the patient and organizational levels and the external environment. To assure the accuracy of our findings, a draft manuscript was circulated to all participating medical directors, and feedback was solicited to ensure accuracy of our interpretations (i.e., member check). All interviews were conducted by two project staff: a psychologist trained in qualitative data collection and the project principal investigator. All study procedures were reviewed by the institutional review board at the Kaiser Permanente Center for Health Research and qualified for a waiver of consent.

Results

A total of 17 providers were interviewed, including four physicians, two nurse practitioners, three registered nurses, five medical assistants, two outreach coordinators, and one operations director (Table 1). The mean age was 45 years; respondents were mostly female, and two thirds were non-Hispanic White. The mean numbers of years in role was 13 years.

Clinic personnel reported that the proportion of age-eligible patients who received colorectal cancer screening less frequently than recommended ranged from 20% to 70%. None reported that patients were screened more frequently than recommended. Several factors were thought to influence low screening adherence (Table 2).

Patient-Level Factors

Clinic personnel reported that patients had a low awareness of the need for colorectal cancer screening and the benefits of early colorectal cancer detection. One clinic personnel noted,

> There is an element in the Hispanic population to a degree … of

> … you know, not recognizing that cancer caught early is curable. (Registered nurse)

Clinic personnel perceived that patients feared receiving a positive screening result and that patients thought the test was unpleasant (clinic personnel did not distinguish between a fecal test and colonoscopy). One clinic personnel noted,

> [The test] … it's not particularly pleasant. It's expensive. I think there're just barriers, a lot of barriers. (Physician)

Lacking health care insurance and having a low income were perceived as patient barriers to receiving colorectal cancer screening.

Organizational-Level Factors

In general, clinic personnel had concerns that patients who were given an FOBT during a clinic appointment would not complete the test. One clinic personnel noted:

> I can think of 2 or 3 patients this year that I've referred and they've been set up for the initial consultation and then they either go to that and they don't follow up or they don't go to that and those are patients with insurance.

Several clinic personnel expressed intentions to adopt the use of fecal immunochemical testing in their clinical practices. Most providers expressed optimism that the new test, which generally relies on the collection of fewer stool samples, would increase patient participation in screening. Other concerns were limited time during the clinic visit to discuss colorectal cancer screening, providers' belief that patients will not adhere to recommendations for colonoscopy, providers needing to prioritize patients' acute health concerns, and limited clinical resources (e.g., too few clinical staff to serve patient needs).

External Factors

An overwhelming concern of clinic personnel was the high cost of colonoscopy and limited patient resources to pay for it. Limited access to colonoscopy services (few available specialists, high cost of colonoscopy, inconsistent patient follow-up) was a key factor that impeded providers from initiating screening. Some providers expressed interest in retaining patient care within their clinic and a concern that referring sites that perform colonoscopy offer no sliding fee scales and low-cost care options for patients. Even among insured patients, clinic personnel perceived a low likelihood that patients would receive recommended follow-up care. One participant noted,

> Even if you have insurance, it takes about 9 months for a routine colonoscopy in this community. Usually, to get a colonoscopy with any speed, you need some reason. (Medical director)

Some providers noted long wait times to make appointments and difficulty in obtaining colonoscopy services. Providers also noted few available community resources to aid patients in paying for screening.

Most clinic personnel reported offering fecal testing to patients beginning at age 50. Some clinics were using a pre-visit review or "scrub" process where clinic staff reviews patient records in advance of clinic appointment to identify disease management and preventive care needs; however, only one reported scrubbing for colorectal cancer screening, specifically. This process was perceived as effective at recruiting patients for screening. Apart from identifying patients with standing clinic visits who are eligible for screening, no other systems were in place to remind patient to complete screening or proactively recruit them into screening programs.

Discussion

We sought to understand clinic personnel's perceptions of the extent to which underutilization of colorectal cancer screening occurs. Clinic personnel report high proportions of underutilization, ranging from 20% to 70%. Many reported providing home-based FOBT cards during clinic visits. Limited funding to pay for follow-up testing in patients with positive screens was cited as a key factor contributing to underscreening. No respondent believed that patients were overscreened for colorectal cancer. As mandates of the Affordable Care Act emphasize affordable, coordinated, and accountable care, interventions to promote appropriate use of screening will become increasingly important.

Our findings reveal important factors that contribute to the underutilization of colorectal screening services: The most notable is limited access to colonoscopy services. Our respondents noted limitations in (a) resources to pay for screening, (b) access to follow-up care, and (c) specialists to perform needed exams. The high patient burden of the exam also meant that even insured patients were sometimes nonadherent with colonoscopy testing.

This finding is corroborated by previous literature; in separate qualitative reports involving African Americans,Harden et al. (2011) and O'Malley et al. (2004) cite perceived cost of diagnostic follow-up as a barrier to initial screening, a finding that was further corroborated in qualitative interviews with providers serving the same patients (O'Malley et al., 2004). Goodman et al. (2006) conducted focus groups involving 70 Latino patients and 27 primary care providers. Findings showed that providers and patients repeatedly cited as key barriers to screening the lack of funding and referral sources for colonoscopy; even when lower cost fecal testing was used as first-line screening, colonoscopy follow-up was thought to be unavailable.

Zapka, Taplin, Price, Cranos, and Yabroff, (2010) emphasize that health disparities can result from care gaps that often occur along the transitions of the cancer continuum. In the case of colorectal cancer screening, for example, disparate rates of participation in diagnostic care or delays in treatment can occur when patients are referred to a specialty care facility for a colonoscopy but there is a lack of systems to support their receipt of follow-up care. These gaps are more likely to occur when patient care is transferred across health system entities.

Our findings might suggest that improved access to follow-up colonoscopies is needed among patients who screen positive on fecal testing. In the regions served by these clinics, community organizations provide colonoscopies through a system of donated care, and some community hospitals provide such services. However, these programs were not reported to be routinely used by providers we interviewed and were perceived as having insufficient capacity to meet the demand.

It is important to note that systems-based strategies to raise the rates of colorectal cancer screening were rarely mentioned by the individuals we interviewed. Although several clinics had outreach programs to raise community awareness about health topics, none reported addressing colorectal cancer screening. Moreover, programs to assure that patients who were provided a fecal test during a clinic visit mailed in their completed test were rarely mentioned.

Also not mentioned were programs to proactively recruit patients into screening programs, apart from patients with clinic visits who are identified during the scrub process. Previous reports have highlighted successes with systems-based strategies, including using team-based approaches (O’Malley et al., 2004), chart reminders or flow sheets to identify patients in need of screening (Feeley et al., 2009; O’Malley et al., 2004), and direct-mail programs to promote at-home testing among patients without clinic visits (Coronado, Golovaty, Longton, Levy, & Jimenez, 2011; Green et al., 2013).

The National Cancer Institute and the Agency for Healthcare Research and Quality sponsored a review of colorectal cancer screening implementation in primary care. The review concluded that improvements in rates of colorectal cancer screening largely depend on efforts of primary care practices to implement effective systems and procedures for screening delivery. Recommended components of such systems were the following: (a) a team approach, (b) information systems to identify eligible patients and remind them to get screened, (c) involving patients in the decision about their care, (d) monitoring practice performance, (e) reimbursement for services outside of the medical encounter (e.g., telephone and e-mail contacts), and (f) training providers in communication, cultural competence, and use of information systems (Klabunde et al., 2007).

Such systems-based strategies may be needed to elevate rates of colorectal cancer screening in this clinic population. Our findings, however, suggest that establishing strong referral processes so that patients screened in FQHC can obtain necessary follow-up care may be needed first.

Limitations

This study has limitations that deserve mention. Our convenience sampling of participants means that our data cannot be widely generalized; however, our inclusion of several clinics means that it is more generalizable than most qualitative reports. Our interviews were complete prior to July 2012, at which time colorectal cancer screening became a reportable Healthcare Effectiveness Data and Information Set measure, which has been shown in some reports to incentivize screening. Moreover, our data represent perceptions of clinic personnel, an important aspect in designing clinic-based activities, though additional quantitative data should also be considered.

Conclusions and Recommendations

Our findings highlight key factors to address in future efforts to implement evidence-based clinical practices for the prevention of cancer. Further research is needed to confirm and quantify the extent of underutilization of services for the prevention of colorectal cancer.

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Table 1

Demographic Characteristics of Clinic Personnel (*n* = 17).

Characteristic	***N* (%)**
Clinical sites	17
Mean age, years (range)	45.1 (29–63)
Gender	
Female	15 (94)
Race/ethnicity	
Non-Hisjpanic White	11 (65)
Latino	6 (35)
Profession	
Family physician	4 (24)
Nurse practitioner/registered nurse	5 (29)
Medical assistant/licensed practical nurse	5 (29)
Community health worker/out reach worker/other	3 (18)
Mean years in practice/role (range)	12.6 (1–33)
Mean years at present clinic (range)	10.0 (1–33)

Table 2

Categories, Themes, and Illustrative Quotes Obtained From Narratives of Clinic Personnel.

Categories/Themes	**Illustrative Quotes**
Individual (patient-level) factors • Low awareness of colorectal cancer and the need for screening • Psychosocial factors (fear/anxiety) • Low-income, uninsured • Testis perceived as unpleasant	“There is an element in the Hispanic population to a degree—you know, not recognizing that cancer caught early is curable.” (Registered nurse) “I think it’s the knowledge. I think if they knew what usually happens and what can cause, I think they would be more willing to do it versus not.” (Medical assistant) “… just sort of seems insurmountable to get the population of under 100% of poverty to think about going and paying for a colonoscopy.” (Physician) “Definitely the uninsured don’t get a colonoscopy, or I shouldn’t say “don’t get,” but it’s much harder for them to come up with the resources to go and get the test.” (Nurse practitioner)
Organizational factors • Low patient adherence to referral to colonoscopy • Conversion to fecal immunochemical testing may improve screening rates • Providers have limited time • Providers must address patients’ more acute concerns • Limited clinic resources (panel sizes too large, unable to recruit/retain providers)	“I can think of 2 or 3 patients this year that I’ve referred and they’ve been set up for the initial consultation and then they either go to that and they don’t follow up or they don’t go that and those are patients with insurance.“ (Physician) “We are the clinic where people would come for quick care. We’re trying to follow people more than we’ve done in the past to do prevention, but we’ve really had to also put out fires for people to keep them out of the ER. We’re trying to do both, and that’s why our access is so tight.” Licensed practical nurse) “You know, it’s not particularly pleasant. It’s expensive. I think there’re just barriers, a lot of barriers.” (Physician)
External factors • High cost of exam (colonoscopy) • Limited access to follow-up colonoscopies ○ Limited number of facilities that provide colonoscopies ○ Facilities that provide colonoscopy rarely offer sliding fee scales ○ Limited community resources to pay for colonoscopies for the uninsured	“I hear a lot of frustration from doctors that want to have their patient have the colonoscopy and it’s just not happening. It’s really an expensive exam …” (Nurse practitioner) “Even if you have insurance … it takes about nine months for a routine colonoscopy in this community. Usually, to get a colonoscopy with any speed, you need some reason.” (Medical director) “People say, “What if I found something out? Then where would I be because I would never go get it treated? Why would I want to test knowing I would have to carry that burden, you know?” (Registered nurse—manager) “So, (one program) is helpful for colonoscopy for the very, very, very indigent. That’s a good thing. I don’t know of any other programs for colonoscopy.” (Registered nurse-manager)