Increasing Colorectal Cancer Testing: Translating Physician Interventions Into Population-Based Practice

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Colorectal cancer (CRC) screening in the Medicare population remains low despite Medicare coverage. We describe a population-based effort to increase CRC testing of Medicare enrollees in two States through promotion and distribution of office-based tools to primary care physicians and gastroenterologists. Small increases in colonoscopy test use by primary care physicians were observed, but the differences were not statistically significant. Results in one State were stronger than the other, and two components of the intervention appeared more promising than others. Use of CRC tests can be increased, but additional approaches are needed.

BACKGROUND

Medicare provides coverage for CRC screening for average risk enrollees age 50 or over through four options: a yearly fecal occult blood test (FOBT), a flexible sigmoidoscopy or barium enema once every 4 years, or a colonoscopy every 10 years. The Medicare benefit allows CRC testing within the intervals recommended by the U.S. Preventive Services Task Force (USPSTF) guidelines (Pignone et al., 2002). However, despite insurance coverage, CRC screening of Medicare enrollees falls below recommended guidelines (Pham et al., 2005).

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In 2000, CMS funded Quality Improvement Organizations (QIOs) in two States (North and South Carolina) to develop, pilot-test, and evaluate interventions to increase Medicare CRC test use rates. Through an interagency agreement with CMS, NCI participated with the QIOs in evaluating the CRC interventions. A multilevel approach was designed targeting both Medicare consumers and their physicians. This article describes and evaluates the impact of the physician-level intervention on the utilization of CRC screening tests for Medicare enrollees.

The importance of physician recommendation for CRC screening is well documented (Brawarsky, Brooks, and Mucci, 2003, Rawl et al., 2000; Lewis and Asch, 1999; Mandelson et al., 2000; Stockwell et al., 2003; Taylor et al., 2003; Vernon, 1997). Yet, a number of factors constrain physicians' ability to provide CRC testing to their eligible patients including: lack of awareness or understanding of CRC screening guidelines (Klabunde et al., 2003; Sharma et al., 2000; Cabana, et al., 1999); inadequate reimbursement (Lewis and Asch, 1999); lack of a system to identify those who need testing; lack of patient knowledge; and too little time during the office visit (Jaen, Stange, and Nutting, 1994; Yarnall et al., 2003).

Office-based interventions to increase physician use of CRC tests generally target one or more of these constraints and, for the most part, have shown strong evidence of effectiveness (Snell and Buck, 1996; Balas et al., 2000; Shea, DuMouchel, and

Bahamonde, 1996; Peterson and Vernon, 2000; Vernon, 1997; Pignone, Harris, and Kinsinger, 2000). Why then, if interventions to increase physician CRC testing have been developed and shown to work, has CRC test use remained low? The reason for the gap may be that most of the evidence for efficacy of interventions to promote CRC screening comes from academic or managed care settings, or physician practices where higher authority or peer pressure can be leveraged to encourage physician participation. Proving that interventions are efficacious in such settings does not guarantee they will be effective in population–based settings (Glasgow, Lichtenstein, and Marcus, 2003). Our study examines the outcome of translating clinically proven techniques into low-cost interventions and delivering those interventions to physicians on a population basis.

METHODS

Study Design

A quasi-experimental design was used with intervention and comparison counties designated in each State and measurement of CRC test use before and after the intervention (Cook and Campbell, 1979). Contiguous counties were selected for each study group to minimize the likelihood of contamination due to practices with multiple sites being assigned to opposite study groups. In North Carolina, the selection process involved identifying the urban counties and surrounding counties bordering them and selecting one of the areas, which consisted of 12 counties, to receive the intervention. The remaining identified areas, containing 36 counties, serve as the comparison group. In South Carolina, 17 contiguous counties were included in the intervention group and 17 similar counties were in the comparison group. Intervention efforts targeted internal medicine, family practice, general practice, and gastroentrology physicians in the intervention counties.

The intervention activities occurred over the span of 1 year. For this evaluation, July 2001–June 2002 is treated as the intervention period. In an effort to minimize the potential effect of seasonal variations in CRC testing, the same calendar quarters, one year apart, was selected for measuring the effects of the intervention. The baseline period was designated as April 1, 2001—June 30, 2001; the evaluation period was April 1, 2002—June 30, 2002. While the evaluation period actually includes the last part of the intervention window, the majority of the interventions had already been delivered by that time so we felt it likely that any impact of the intervention would be detectable in the evaluation period.

Description of the Interventions

Two interventions were offered to physicians in both States: telephone-based continuing medical education and office-based tool kits. In South Carolina, two additional interventions were piloted with small groups of physicians: personalized letters sent by the physician to patients encouraging CRC testing, and distribution of free FOBT kits in physician offices. A brief description of each intervention is provided.[1]

Continuing Medical Education Teleconferences

Two teleconferences with continuing medical education credits were conducted to educate physicians and their office staff. The first teleconference introduced the (then) new coverage of colonoscopy screening for average-risk Medicare enrollees, and provided details on all Medicare-covered CRC screening tests. Other topics included:

[1] Further details on the interventions are available on request from the authors.

a discussion of the USPSTF guidelines for CRC screening and an introduction of the QIO project. The second teleconference included information on how to increase office-based testing, a review of the tools included in the tool kits, and billing procedures for CRC tests under Medicare. The teleconferences, lasting 1.5 hours, were offered free of charge, and conducted in the evening. Participation in the teleconferences was promoted through direct mail to all targeted physicians and FAXed announcements when physician FAX telephone numbers were available. Fifty-four physicians from both States participated in one or both teleconferences.

Office-Based Tool Kits

Physician-office tool kits contained office-based interventions shown to be successful based on published literature. The tool kits included provider and patient educational materials from the Centers for Disease Control and Prevention Screen for Life program, county and State CRC test use rates, and a patient education video based on stage-of-change theory that had been successfully tested in an earlier trial (Pignone, Harris, and Kinsinger, 2000). The tool kits also included a patient health maintenance checklist to be completed by the patient at check-in to identify patients in need of CRC testing, and chart stickers instructing physicians to discuss CRC testing with patients who needed it. The tool kits included a CD-ROM with electronic files of all the materials (including the patient education video). Physicians could print copies of any of the tools included in the kit. In addition, each tool kit contained information about how to order additional copies from the State QIO free of charge.

Tool kits were promoted through direct mail and FAXes to all primary care and gastroenterology physicians in the intervention counties. Tool kits were shipped to physicians (n=181) who ordered them. In South Carolina, additional kits were mailed to a sample of physicians (n=73) who had not ordered them, targeting those in intervention counties where the testing rate for Medicare was lower than the State rate.

FOBT Distribution by Physicians

Two clinics agreed to participate in a 1-month pilot to distribute FOBT kits to patients free of charge: a federally qualified health center (FQHC), and a private physician office. The State QIO prepared simplified instructions for the kits and distributed them to participating practices who were then asked to give them to eligible Medicare enrollees visiting the practice during the month. Four physicians participated, distributing a total of 90 FOBT kits.

Physician Letter Mailing

In South Carolina, the QIO invited physicians to share lists of patient names with them so that they could send letters to the Medicare patients reminding them of the importance of screening. Fourteen physicians in four offices agreed to provide the QIO with names of their patients. Names were linked to the Medicare enrollment database to identify Medicare beneficiaries in the intervention counties. A personalized letter from the patient's physician was sent to all identified patients (n=7,726) encouraging them to be tested for CRC.

EVALUATION MEASURES

Medicare inpatient, outpatient, and physician claims for screening and diagnostic CRC tests (FOBT, sigmoidoscopy, colonoscopy, and barium enemas) were used to measure physician testing. Test use was analyzed in the aggregate (all CRC tests)

and separately by type of test. Claims for tests conducted during April–June 2001 were used to create the baseline testing measures; claims for tests in April–June 2002 were used in the evaluation measure.

To analyze the effect of the physician interventions, we constructed a patient test ratio (PTR) measure, which consisted of the number of unique Medicare patients for whom the physician referred or performed a CRC test per 100 unique Medicare patients seen for outpatient evaluation or management visits. The PTR was modeled after the health maintenance ratio of Balas and colleagues (2000). The physician unique physician identification number (UPIN) on the CRC test claim was used to determine the number of CRC tests completed. Physicians were credited with a CRC test if they were listed as the referring or performing physician for a CRC test for a Medicare enrollee age 50 and over. The Medicare Outpatient Opportunities Files, which contain records of visits for new or established patients for outpatient services, consultation or preventive services, were used to determine the number of unique Medicare patients age 50 or over seen by physicians each quarter. The PTR did not require patients included in a physician's numerator to be in the denominator for that physician. Thus, there was a potential for physicians to be credited with more tests in the numerator than patients in the denominator. To avoid conceptually impossible PTRs, we constrained PTRs to the theoretical maximum of 100 tests per 100 patients.

When the referring and performing physicians were different doctors, both were credited with a CRC test. Although this approach counts tests in more than one physician numerator, this is offset by the fact that patients can be included in the unique patient volume count for more than one physician. We chose to credit physicians with referrals as well as actual tests conducted because a major goal of the intervention was to change the behavior of primary care physicians, many of whom refer patients to specialists for sigmoidoscopy and colonoscopy tests rather than perform the tests themselves. To check for potential blurring of intervention effect, we repeated the analyses using only claims for performing CRC tests in the calcuation of the PTRs. The results were not substantively different and are available on request from the author.

STATISTICAL ANALYSES

CRC test use was analyzed using an "intention to treat" approach comparing test use ratios for targeted physicians in intervention counties with those in comparison counties for baseline and evaluation periods. Analyses were conducted separately for gastroenterologists and primary care physicians (internists and general and family practice physicians). To mitigate confounding due to secular trends, the impact of the evaluation was assessed by calculating the difference of the difference—that is, the increase in test ratios among intervention physicians compared with the increase among comparison physicians. This difference measure, which we term intervention effect (IE), represents the number of additional tests ordered or performed per 100 eligible Medicare patients by intervention area physicians relative to comparison area physicians. The IE is calculated as:

IE =

(PTR for intervention county MDs during the evaluation period – PTR for intervention county MDs in the baseline period) – (PTR for comparison county MDs during the evaluation period – PTR for comparison county MDs during the baseline period).

Table 1

Characteristics of Physician Populations in Study Areas[1]

Characteristic	North Carolina		South Carolina	
	Intervention	Control	Intervention	Control
	N (%)	*N* (%)	*N* (%)	*N* (%)
Physicians Overall	1,408	3,257	1,316	1,307
Speciality				
Internal Medicine	802 (57.0)	1,606 (49.3)	636 (48.3)	538 (41.2)
Family and General Practice	528 (37.5)	1,473 (45.2)	601 (45.7)	725 (55.5)
Gastroenterology	78 (5.5)	178 (5.5)	79 (6.0)	44 (3.4)
Practice Size				
Solo	324 (23.1)	715 (22.0)	304 (23.1)	195 (14.9)
2–5	320 (22.7)	955 (29.3)	322 (24.5)	380 (29.1)
6–10	156 (11.1)	469 (14.4)	154 (11.7)	181 (13.9)
11–25	43 (3.1)	326 (10.0)	204 (15.5)	124 (9.5)
> 25	276 (19.6)	256 (7.9)	226 (17.2)	363 (27.8)
Unknown	289 (20.5)	536 (16.5)	106 (8.1)	64 (4.9)
Practice				
Rural	161 (11.4)	633 (19.4)	315 (23.9)	323 (24.7)
Urban	1,247 (88.6)	2,624 (80.6)	1,001 (76.1)	984 (75.3)
Average Number of Monthly Medicare Patient Visits	59.3	73.2	72.2	80.5

[1] Physicians were included in the study group counts if they had at least one claim for a Medicare patient during a 1-year period.

SOURCE: Centers for Medicare & Medicaid Services: Program Resource System, 2005.

Standard errors of test use ratios were calculated using methods appropriate for ratios (Cochran, 1977). Statistical significance was assessed using z-scores.

Analyses were repeated comparing participating with non-participating physicians (regardless of their county of practice) to assess the effect of participation on CRC testing rates. The IE was calculated using PTRs from participating and non-participating physicians during the baseline and evaluation periods. These analyses were conducted separately for participation in any part of the intervention and separately by intervention component.

RESULTS

The intervention counties contained 2,724 physicians (Table 1) The majority of targeted physicians were internists, followed by family and general practioners. Gastroentrologist comprised 5.8 percent of the targeted physicians. Most physicians were solo pratictioners or practiced in groups of less than 10 physicians. The average number of Medicare patients seen per month ranged from 59.3–80.5 patients/month across the intervention and comparison areas.

A total of 282 participating physicians were available for analyses (Table 2) representing 10.4 percent of those targeted by the study design. Actual participation in the interventions was greater, however, not all participating physicians could be linked to the claims data to be used for evaluation. The main reasons participants could not be tracked for evaluation were that the UPIN was unknown, the physician practiced in a non-targeted specialty, or the physician did not have any Medicare visits during the study window. In addition, a few physicians from control counties in both States participated in the interventions (total n=9).

Baseline CRC testing by primary care physicians ranged from 6.6-7.9 tests per 100 patients for any CRC test (Table 3) across both States and study groups. Gastroenterologists had considerably higher baseline PTRs for any CRC test: 58.5-66.5 tests per 100 patients across both States

Table 2

Number of Physicians Participating in Any Component of Intervention, by State and Specialty: 2001-2002

Speciality	North Carolina		South Carolina		Total	
	Number	Percent of target	Number	Percent of target	Number	Percent of target
Primary Care	95	7.1	160	12.9	255	9.9
Gastroenterology	14	17.9	13	16.4	27	17.2
Total	109	7.7	173	13.1	282	10.4

SOURCES: Schenck, A.P., Gunter, N., Peacock, S., and Jackson, E., The Carolinas Center for Medical Excellence, Pignone, M., University of North Carolina Department of Medicine, Klabunde, C.N., National Cancer Institute, 2005.

and study groups. Primary care physicians were more likely to test using FOBT (PTRs = 4.4-5.6 tests per 100 patients) whereas gastroenterologists conducted more colonoscopy exams (PTRs = 46.1-56.7 tests per 100 patients).

In the intention to treat analyses, the IE among primary care physicians showed small decreases in use of FOBT and any CRC test, and a slight increase in the use of colonoscopy in both States (Table 3) although none of the changes were statistically significant. Among gastroenterologists, larger intervention effects were observed although only in South Carolina. CRC testing by gastroenterologists in South Carolina intervention counties increased more than testing by gastroenterologists in comparison counties for FOBT, sigmoidoscopy, colonoscopy, and any test. The IE for any test for gastroenterologists in South Carolina was 8.96 tests per 100. None of the IEs observed in South Carolina gastroenterologists were statistically significant.

The analyses by participation status produced similar results (Table 4). Again, no statistically significant participation effects were observed, although small increases in colonoscopy were observed in both States for primary care providers (North Carolina IE=0.33, South Carolina IE=0.83) and larger IEs were observed among South Carolina gastroenterologists (IE=7.1 for any CRC test).

Analyses of the separate intervention components was hampered by the small number of participants in some of the interventions. Two components of the intervention showed some evidence of effectiveness. In South Carolina, participants in teleconferences appeared to have increased CRC testing (primary care physicians IE= 5.3 tests per 100 Medicare patients, $p > 0.05$ and gastroenterologists IE=14.4 tests per 100 Medicare patients, z-square=8.27, p=0.0059). Similarly, sharing patient data with the QIO to mail letters to patients appeared effective for increasing FOBT (IE=1.1 tests per 100 Medicare patients, z-square=3.64, p=0.056). However, the number of physicians participating in these two interventions was small and overlapped with other interventions, making it difficult to determine the source of the improvement in CRC test use. There was no meaningful difference in the change in CRC testing among physicians who ordered tool kits compared to the physicians randomly selected to receive a tool kit by mail, and no increase in CRC testing by physicians who distributed FOBT kits.

DISCUSSION

Our study pilot-tested four interventions designed to increase CRC testing of Medicare enrollees by primary care and gastroenterology physicians. We found relatively low levels of CRC test use at baseline and low interest in CRC interventions among primary care physicians. Although the interventions were free to participating physicians, only 10 percent of the primary care physicians we targeted responded to

Table 3

Colorectal Cancer Test Use Before and After Intervention, by Study Area, Physician Specialty, and State: 2001-2002

	North Carolina					South Carolina				
	Baseline		Evaluation			Baseline		Evaluation		
Physician	Intervention	Comparison	Intervention	Comparison	IE[1]	Intervention	Comparison	Intervention	Comparison	IE[1]
Primary Care	(*n*=1,135)	(*n*=2,764)	(*n*=1,191)	(*n*=2,826)	—	(*n*=1,141)	(*n*=1,155)	(*n*=1,169)	(*n*=1,180)	—
Type of Test	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—
FOBT	5.59	4.47	4.91	4.06	-0.27	5.01	4.38	4.58	4.00	-0.05
SIG	0.81	0.80	0.57	0.57	-0.01	0.41	0.62	0.29	0.41	0.09
COL	1.88	1.81	2.61	2.31	0.23	1.56	1.90	2.06	2.21	0.20
Any Test[3]	7.95	6.83	7.68	6.66	-0.11	6.86	6.65	6.74	6.33	0.20
Gastroenterologist	(*n*=68)	(*n*=172)	(*n*=74)	(*n*=167)	—	(*n*=73)	(*n*=43)	(*n*=72)	(*n*=44)	—
Type of Test	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—
FOBT	6.44	6.81	5.65	4.24	1.78	6.61	2.65	7.62	1.49	2.17
SIG	21.72	18.71	19.60	16.91	-0.32	16.52	19.13	17.37	17.23	2.75
COL	55.94	46.10	61.79	53.37	-1.41	52.10	56.73	62.33	59.60	7.36
Any Test[3]	66.50	58.54	67.98	60.24	-0.22	59.86	63.36	68.80	63.36	8.96

[1] Intervention effect (IE) represents the number of additional tests ordered or performed per 100 eligible Medicare patients for intervention area physicians relative to comparison area physicians. It is calculated as: (intervention area physician evaluation patient test ratio (PTR)) – intervention area physician baseline PTR) – (comparison area physician evaluation PTR – comparison area physician baseline PTR).

[2] PTR (physician patient test ratio) represents the number of colorectal cancer (CRC) tests per 100 eligible patients seen.

[3] Any test includes barium enema tests. Patients may have more than one type of test but are counted only once in the any test measure.

NOTES: FOBT is fecal occult blood test. SIG is sigmoidoscopy. COL is colonoscopy.

SOURCE: Centers for Medicare & Medicaid Services: Medicare Inpatient, Outpatient and Physician/Supplier Claims for 2001-2002.

Table 4

Colorectal Cancer Test Use Before and After Intervention, by Participation, Physician Specialty and State: 2001-2002

	North Carolina					South Carolina				
	Baseline		Evaluation			Baseline		Evaluation		
Physician	Participant	Non-Participant	Participant	Non-Participant	IE[1]	Participant	Non-Participant	Participant	Non-Participant	IE[1]
Primary Care	(*n*=91)	(*n*=3,808)	(*n*=93)	(*n*=3,924)	—	(*n*=91)	(*n*=2,205)	(*n*=89)	(*n*=2,260)	—
Type of Test	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—
FOBT	8.39	4.64	7.03	4.20	-0.91	6.50	4.58	5.88	4.19	-0.21
SIG	1.14	0.79	0.96	0.56	0.05	0.50	0.52	0.43	0.35	0.11
COL	2.75	1.79	3.62	2.35	0.33	1.96	1.73	3.15	2.09	0.83
Any Test[3]	11.49	6.98	10.95	6.80	-0.36	8.67	6.65	9.01	6.39	0.60
Gastroenterologist	(*n*=14)	(*n*=226)	(*n*=14)	(*n*=227)	—	(*n*=13)	(*n*=103)	(*n*=13)	(*n*=103)	—
Type of Test	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—	PTR[2]	PTR[2]	PTR[2]	PTR[2]	—
FOBT	9.05	6.63	7.91	4.42	1.07	8.20	4.57	8.82	4.56	0.63
SIG	24.63	19.16	20.80	17.38	-2.05	18.85	17.34	20.32	16.88	1.96
COL	61.00	47.81	66.87	54.85	-1.18	48.28	54.79	61.07	61.18	6.40
Any Test[3]	72.38	59.80	74.14	61.52	0.08	58.35	61.70	69.79	66.03	7.11

[1] Intervention effect (IE) represents the number of additional tests ordered or performed per 100 eligible Medicare patients for participant physicians relative to non-participant physicians. It is calculated as: (participant physician evaluation patient test ratio (PTR)) – participant physician baseline PTR) – (non-participant physician evaluation PTR – non-participant physician baseline PTR).

[2] PTR (physician patient test ratio) represents the number of colorectal cancer (CRC) tests per 100 eligible patients seen.

[3] Any test includes barium enema tests. Patients may have more than one type of test but are counted only once in the any test measure.

NOTES: FOBT is fecal occult blood test. SIG is sigmoidoscopy. COL is colonoscopy.

SOURCES: Centers for Medicare & Medicaid Services: Medicare Inpatient, Outpatient and Physician/Supplier Claims for 2001-2002. Schenck, A.P., Gunter, N., Peacock, S., and Jackson, E., The Carolinas Center for Medical Excellence, Pignone, M., University of North Carolina Department of Medicine, Klabunde, C.N., National Cancer Institute, 2005.

the invitations to participate. As might be expected, the test use and interest in participation among gastroenterologists was higher, with 17.2 percent participation.

No statistically significant intervention effects were observed for increase in testing for any of the CRC tests. In both States, a small, positive IE was observed among primary care physicians for colonoscopy (North Carolina IE=0.23, South Carolina IE=0.20) in the intention to treat analyses, and slightly larger effects for colonoscopy in the analyses of participants (North Carolina IE=0.33, SC IE=0.83). Small changes in testing such as observed here could translate into important public health gains if implemented on a population wide basis. For example, if an intervention effect of 2 colonoscopy tests per 1,000 Medicare enrollees (or 0.20 tests per 100, as was found here) were implemented for the entire eligible Medicare populations in both States, it could result in approximately 3,000 additional colonoscopy procedures.

In South Carolina, the observed increase for all CRC tests among gastroenterologists, while not statistically significant, may have clinical impact, depending on the numbers of Medicare enrollees seen by the gastroenterologists. This increase may be a result of changes on the part of the gastroenterology physicians, or may be reflective of additional referrals from primary care providers.

The evaluation of these interventions was challenging for a number of reasons. We relied on claims to measure tests, yet the validity of Medicare claims to assess FOBT use has been questioned (Engleman et al., 2001), since some providers may not submit claims for such low-reimbursement tests. Sigmoidoscopy and colonoscopy claims are thought to be accurate, however, it is unclear how quickly patients are able to get appointments for testing, so some effects of the interventions may have been missed. By relying on claims, we only count completed tests, and miss changes that may have occurred if physicians increased their ordering of the tests, but patients failed to comply with the recommendation. Another measurement obstacle was the variation that we found in CRC test use by physicians. The test use ratios ranged from 0-100 tests per 100 Medicare patients. The wide variation made it difficult to attribute changes to interventions and for changes in test use to achieve statistical significance.

At the time these interventions were tested, Medicare had just implemented screening colonoscopy for average risk enrollees, the updated USPSTF guidelines were not yet published and a Health Plan Employer Data and Information Set (HEDIS®) measure for colorectal cancer screening had not been implemented. Attention to CRC has grown since that time. Although interest and awareness among primary care providers would likely be greater if the study were implemented today, physicians face many barriers in trying to promote CRC testing, including competing demands on their time, concerns about reimbursement, and patient compliance.

Physicians who participated in the interventions were already providing CRC testing at a higher level than non-participants. This was true for both primary care and gastroenterologists. This may be reflective of a higher interest or ability to provide preventive services in the first place. Creative approaches and extraordinary recruiting efforts will be needed to promote any CRC physician intervention and encourage participation in CRC physician interventions, particularly if we hope to reach lower performing physicians.

Two of the interventions tested showed promise: the letters from physicians to their patients and teleconferences. The letters to patients were offered only in

South Carolina. However, the teleconferences were offered in both States—yet an effect was only observed in South Carolina. Whether the differential effects observed across States are due to differences among the participants or the combination of interventions cannot be determined from this study.

The results of this study imply that additional work is needed to translate what is known to work in clinical settings into widespread use. We need to know how to engage more physicians with CRC testing and we need approaches that produce larger changes in CRC test use.

Although the effectiveness of CRC testing in reducing colorectal cancer mortality has been documented (Pignone, 2002) and the burden colorectal cancer places on the Medicare population is known, in the 5 years following the introduction of the screening benefit, less than one-half of the Medicare population had a CRC test of any kind (The Carolinas Center for Medical Excellence, 2005). Medicare coverage of CRC screening tests provides the Medicare Program with an excellent opportunity to prevent mortality and morbidity associated with colorectal cancer. This opportunity will be lost, however, if we cannot increase CRC testing among Medicare consumers. Increasing physician use of the tests is only part of the equation—educating Medicare beneficiaries is also needed. The interventional approaches used in this study did not provide a ready solution. New efforts are needed to better understand how to achieve increased CRC testing in the Medicare population.

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