

Should We Pay Doctors Less for Colonoscopy?

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Despite recent reductions in the rate of increasing healthcare expenditures, public attention remains focused on the high cost and high volume of certain procedures.¹ Healthcare costs burden both individuals and businesses, creating pressure for policy makers and providers alike to improve the delivery of healthcare and to provide more value for less cost. Colonoscopy reimbursements highlight some of the challenges in balancing the goals of maximizing public health while carefully allocating limited resources.

Colonoscopy is an important modality in screening for colorectal cancer, a common malignancy that is both preventable and treatable at an early stage.^{2,3} However, colonoscopy has highly variable costs within the United States, and these costs are purportedly excessive compared with those of other countries.⁷ Medicare paid physicians who perform colonoscopy professional fees of \$239 million for 1.1 million screening and diagnostic colonoscopies in 2012.⁵ The 2014 Medicare Physician Fee Schedule reduced reimbursement for upper endoscopy as a misvalued service,⁶ and colonoscopy reimbursement will likely meet a similar fate in 2015 due to public scrutiny of Medicare reimbursements for colonoscopy.^{4,7}

Careful review of all payment policies by the Centers for Medicare & Medicaid Services is warranted. However, relying on a strategy of just reducing professional fee payment to the performing endoscopist may be problematic. First, endoscopist reimbursement is only a small proportion of the overall cost for colonoscopy (Table 1). Second, endoscopists in different practice settings (Table 2) may respond differentially to reductions in reimbursements. Finally, the blunt tool of reducing endoscopist reimbursement for all colonoscopies may incur the unintended consequence of reducing access to high-quality colonoscopy for screening and surveillance of colorectal cancer.

Medicare physician reimbursement for colonoscopy is based on the resource-based relative value scale (RBRVS), from which commercial payers also typically derive their physician fee schedules.⁸ However, the professional fee paid to the performing endoscopist accounts for as little as 20% of

ABSTRACT

Colonoscopy reimbursements highlight some of the challenges in balancing the goals of maximizing public health while carefully allocating limited resources. Colonoscopy is an important modality in screening for colorectal cancer, a common malignancy that is both preventable and treatable at an early stage. However, colonoscopy has highly variable costs within the United States, and these costs are purportedly excessive compared to those of other countries. Public concerns about the cost of colonoscopy have promulgated suggestions to reduce endoscopist reimbursement. However, relying on a strategy of just reducing professional fee payment to the performing endoscopist may be problematic. First, endoscopist reimbursement is only a small proportion of the overall cost for colonoscopy. Second, endoscopists in different practice settings may respond differentially to reimbursement reductions. Finally, the blunt tool of reducing endoscopist reimbursement for all colonoscopies may incur the unintended consequence of reducing access to high-quality colonoscopy for screening and surveillance of colorectal cancer. Alternative approaches are warranted to ensure appropriate utilization of colonoscopy for maximal societal benefit.

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Take-Away Points

Public concerns about the cost of colonoscopy have promulgated suggestions to reduce endoscopist reimbursement. However, this approach may compromise screening and prevention of colorectal cancer.

- Colonoscopy is an essential and effective modality in screening for colorectal cancer.
- Endoscopist fees are a small component of the overall reimbursement for colonoscopy.
- Physicians in different practice settings may respond to cuts by reducing access to and quality of colonoscopy.
- Alternative approaches are warranted to ensure appropriate utilization of colonoscopy for maximal societal benefit.

the total cost of colonoscopy (Table 1), when taking payments to the associated facility, and for anesthesia and pathology, into consideration as well. Additionally, the different facility reimbursements among office, ambulatory surgery center, and hospital outpatient settings also drive variability in overall cost. For example, the hospital outpatient facility fee is more than double the endoscopist fee, so direct reimbursement to the endoscopist represents a small portion of total cost to Medicare and other payers. Therefore, reducing the endoscopist professional fee by 50% would reduce the total cost of a colonoscopy by only 10% to 32% (Table 1), depending on the site of service and type of colonoscopy. Few (<5%) colonoscopies occur in the physician office setting (Table 2), the site of service with the largest impact of a reduced endoscopist fee. Thus, reducing only the endoscopist reimbursement would not directly create a large reduction in the overall cost of each colonoscopy.

By law, the RBRVS focuses on reimbursing accurately and consistently for the resources (eg, time and intensity of physician work; practice expenses of clinical staff, supplies, and equipment) needed to provide a service. The RBRVS cannot account for the value of that service, as can occur with value-based insurance design.⁹ Any reduction in endoscopist fees must occur by reductions in the time and intensity of endoscopist work and cannot be offset by any measured or perceived clinical benefit of the endoscopy.⁵

The clinical benefits of colonoscopy are well established. Routine colorectal cancer (CRC) screening is recommended by the US Preventive Services Task Force for all individuals aged 50 to 75 years, and can include screening colonoscopy, flexible sigmoidoscopy, or stool-based testing.¹⁰ While no prospective study demonstrates superiority of any one modality, colonoscopy is an essential component for any population-based screening program, whether performed as primary screening or for patients that screen positive in stool-based tests. Yet, only about

65% of eligible patients in the United States are current on colorectal cancer screening recommendations.¹¹ In an effort to encourage colorectal cancer screening, prior laws and the Affordable Care Act (ACA) mandate that colonoscopy must be covered by Medicare and all private insurers, and there has been a concomitant decline in colorectal cancer mortality in the past decade.¹² However, colonoscopy overuse coexists,

with regional variations, repeat colonoscopy more frequently than guidelines recommend, and excessive use of anesthesia services.^{13,14} This creates a particularly vexing issue, with simultaneous underutilization and overutilization of colonoscopy in this country.¹⁵

The endoscopist practice setting (Table 2) may contribute to these different utilization patterns, as well as to differing responses to changes in physician reimbursement. As described, the site of service drives how much the endoscopist fee contributes to the overall reimbursement for the procedure (Table 1). In the physician office setting, the endoscopist fee is a large component, while in the outpatient hospital suite, it is a smaller component compared to facility and other fees. Additionally, the relationship of the endoscopist to the facility may play a critical role, as the endoscopist may receive significant revenue through ownership of the facility. In private practice settings, the physician may have ownership of the facility and other service lines, but in an employed or academic setting, they may only directly receive reimbursement for the physician fee.¹⁶ The variety of practice and organizational settings demonstrates the heterogeneity in colonoscopy reimbursement, and how a simple change in reimbursement could have varying degrees of response, based upon site of service and facility ownership.

Given the complexity of practice environments, it is plausible that a decrease in reimbursement could unleash unintended consequences upon both access and quality. Traditional economics suggests that when reimbursements decrease exogenously, utilization decreases with supply directed to other activities. Physicians who perform colonoscopy may redirect their activities to other services, or they may selectively reduce access to their services by patients who carry certain insurance types that reimburse less, such as Medicare or Medicaid. Reductions in Medicare reimbursement for bone scans to screen for osteoporosis resulted in decreased access in this population.¹⁷ In the case of screening colonoscopy, initial cov-

■ **Table 1.** Components of Medicare Reimbursement for Colonoscopy in 2014

	Endoscopist Fee	Facility Fee				Anesthesia Fee	Pathology Fee	Total Fee	Endoscopist Fee as % of Total
		Physician Office	Hospital Outpatient	Ambulatory Surgical Center					
Screening colonoscopy (G0105)	\$220	\$190	\$647	\$357	\$153	—	\$410-1020	22-54%	
Screening colonoscopy (G0121)	\$220	\$190	\$647	\$357	\$153	—	\$410-1020	22-54%	
Diagnostic colonoscopy (CPT 45378)	\$220	\$190	\$737	\$407	\$153	—	\$410-1110	20-54%	
Colonoscopy with biopsy (CPT 45380)	\$263	\$226	\$737	\$407	\$153	\$70	\$559-1223	22-47%	
Colonoscopy with snare polypectomy (CPT 45385)	\$312	\$238	\$737	\$407	\$153	\$70	\$620-1272	25-50%	

Total costs vary based on where the service is provided and whether anesthesia is included, which is not always included. Anesthesia (CPT 00810, 2 units [30 mins]) × Pathology fee: CPT 88305. CPT codes are copyright of the American Medical Association.

Sources:

Physician fee data from www.cms.gov/apps/physician-fee-schedule/search/search-results.aspx.

Facility fees from: www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS and www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ASCPayment.

Anesthesiologist fee from: <http://www.cms.gov/Center/Provider-Type/Anesthesiologists-Center.html>.

■ **Table 2.** Sites of Service for Colonoscopy Reimbursed by Medicare in 2012

CPT Code	Hospital Inpatient	Hospital Outpatient	Ambulatory Surgical Center	Physician Office
Screening colonoscopy (G0105)	0%	50%	47%	3%
Screening colonoscopy (G0121)	1%	53%	43%	3%
Diagnostic colonoscopy (CPT 45378)	17%	46%	33%	5%
Colonoscopy with biopsy (CPT 45380)	10%	44%	42%	4%
Colonoscopy with snare polypectomy (CPT 45385)	6%	46%	44%	4%

The percentage of each CPT code provided in each site of service.

erage by Medicare resulted in higher screening rates and earlier identification of colorectal cancer.¹⁸ Therefore, reducing endoscopist reimbursement could potentially reduce access to screening in practice settings where physician income is limited to the endoscopist fee.

On the other hand, physicians could respond to reduction in endoscopist reimbursement with an increase in utilization, to achieve an expected target income.¹⁹ Medicare reductions in the 1990s in surgeon reimbursement for coronary bypass surgery led to an increase in utilization of the procedure.²⁰ In the case of colonoscopy, physicians may respond by performing more and/or shorter procedures in order to maintain their target income.¹⁵ Not all colonoscopies offer the same quality and outcomes, so physicians should spend more, not less, time finding and removing polyps.^{21,22} While it is hard to predict exactly how physicians would respond to the reduction of colonoscopy professional fees, potential responses such as de-emphasizing screening colonoscopy or performing

shorter exams would reduce the societal benefit of CRC screening.

Rather than reduce endoscopist fees, alternative reimbursement policies could improve the efficiency of colonoscopy, while encouraging greater access.^{9,23} First, requiring certain training and competence measures could be a precondition for reimbursement eligibility. Second, the payment for colonoscopy could be tied to quality standards, such as guideline-based indications and frequencies for screening, and rates of adenoma detection or cecal intubation. Third, a bundled colonoscopy payment including endoscopist, facility, pathology, and anesthesia services would align providers (including potentially supervised nonphysician providers)^{24,25} and facilities to coordinate care efficiently, and could be easily done under existing law.

By implementing these 3 policies, all payers (including Medicare) would only pay for necessary procedures, performed by qualified endoscopists, focused on increasing access to evidence-based screening and surveillance. While

each of these alternatives may have their own challenges, implementation of all 3 would be a large step in the right direction of aligning reimbursement to achieve societal benefit from colonoscopy and provide a model for other services.

In summary, colonoscopy provides enormous benefit to individuals and to society, as colorectal cancer remains one of the few effectively preventable and treatable malignancies. Presently, one third of United States adults older than 50 years did not receive colorectal cancer screening.¹¹ The current cost-conscious environment fosters discussions of spending wisely on efficient and effective programs, and avoiding overutilization. However, the endoscopist fee is a small component of the overall cost of colonoscopy, and merely reducing endoscopist reimbursement for colonoscopy risks the possibilities of diminished access to and quality of screening and consequently increased colon cancer mortality. While the ACA may increase demand for screening colonoscopy through a larger insured population and removal of cost sharing, it remains unclear if such increased demand would mitigate reduction in endoscopist reimbursement. The case of colonoscopy also provides insight into the policy implications for other common procedures with multiple reimbursement components such as prostate biopsy, cataract surgery, and arthroscopy. Achieving the goals of reducing costs and overutilization requires a more nuanced understanding of the comprehensive sources of colonoscopy costs, and realignment of physician incentives towards access and quality.

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