OPINION

How Relative Value Units Undervalue the Cognitive Physician Visit: A Focus on Inflammatory Bowel Disease

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Medicare reimbursement for physician services has historically been based upon the relative level of time, skill, training, and intensity provided for a given service. Medicare bases relative value units (RVUs) on 3 different factors: physician work, practice expenses, and professional liability insurance expenses. Physician work includes the physician's expertise as well as the time and technical skill spent performing the service, including the mental effort and judgment expended by the physician prior to, during, and after the patient encounter. Documentation of the service is also included. Practice expenses take into account the costs of operating a medical practice. Professional liability insurance expenses incorporate the relative risk of services and costs to insure against the risk of loss in providing the service.

Medicare pays physicians for services based upon submission of a claim using 1 or more specific Current Procedural Terminology (CPT) codes. Each CPT code is assigned a RVU, which is multiplied by the conversion factor and geographic adjustment to create the compensation level for a particular service. In other words, the compensation level is comprised of 3 components: a RVU, the geographic adjustment, and the conversion factor.

However, the Medicare Resource-Based Relative Value Scale (RBRVS) undervalues cognitive office efforts, and the inflammatory bowel disease (IBD) office visit is an unfortunate paradigm. The Medicare RBRVS is the specific metric that sets reimbursement rates for each CPT code assigned to every physician service. RVUs for an office visit range from 0.18 (CPT code 99211) to 2.11 (CPT code 99215), yet RVUs for colonoscopy range from 3.36 (CPT code 45373) to 4.67 (CPT code 45385), depending upon the procedure (Table 1). Therein lies the disconnect: the office visit of a patient with a chronic, complex disease such as IBD may be encumbered by extensive records, imaging review, patient history, examination, and conferences with the patient and other physicians. Such a time-consuming visit is trapped in a low-level RVU and, therefore, low compensation; thus, an office visit cannot compete with the multiple colonoscopies that could be performed within the same time allotment. This opinion piece reviews the RVU system and its flaws, describes regional (ie, institutional) attempts at adjustment, and highlights the need for reevaluating compensation of cognitive physician services.

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The Problem

The present RVU system penalizes physician cognitive visits by giving preference to procedures in terms of compensating physicians. The diagnosis and management of IBD patients are both growing in complexity, as IBD involves numerous complicating disease features, such as fistulas, abscesses, obstruction, postoperative sequelae, biologic therapies, and changing paradigms of therapy. Management of these patients is further complicated by the numerous challenges of the growing elderly IBD patient population. These patients are often associated with comorbidities, polypharmacy, and cognitive and social care concerns that are not reflected by the current RVU system, and extensive time is required to review all prior data and communicate with past gastroenterologists, radiologists, surgeons, pathologists, and internists. The significant time commitment required for discussion with patients and their family members is also ignored. All of these efforts are required to provide accurate diagnosis and appropriate management, which are essential for proper care but virtually ignored by the present compensation system.

During the time required for all of these efforts in a single extended 1-hour-plus office visit (which would be awarded a maximum of 3.17 RVUs for a level 5 new patient encounter), 3 straightforward colonoscopies with

a polypectomy could be performed (which would be awarded a total of approximately 14 RVUs).

This disparity may frustrate gastroenterologists who have recently completed training and may discourage them from treating IBD patients. Furthermore, the RVU discrepancy serves as a disincentive to both community and academic practitioners from seeing this population because practitioners are increasingly being tasked with meeting RVU targets. Office visits are being compromised with shortened time allocations to patient contact in an attempt to meet RVU benchmarks, leading to increased patient dissatisfaction, which is reflected in surveys and physician evaluations.

In addition, as ancillary income is generated for a health system by the number of endoscopies, magnetic resonance studies, computed tomography scans, and infusions of biologic agents, specialty consultations are seldom credited to the source of the referral—that is, the IBD cognitive physician visit and evaluation/management (E/M) planning.

Background

The Medicare RBRVS establishes reimbursement for the CPT code assigned to every physician activity in a fee-for-service (FFS) model. The origin of this metric dates back to the Harvard Relative Value Scale Study, the results of which were published by William Hsiao in 1985; this scale sought to replace the market rate of novel and customary methods of physician payment.[1]

As previously mentioned, RVUs reflect physician work, which comprises the expertise, time, and technical skill (including clinical judgment) needed per patient encounter; practice expenses, which include the costs of conducting a medical practice; and professional liability insurance expenses, which serve as protection against the risk of service loss. Each of these 3 parts is then multiplied by the Geographic Practice Cost Index, which considers the local area in which services are delivered, and then is further adjusted by a Centers for Medicare and Medicaid Services (CMS) conversion factor, which is updated annually. This is the process that Medicare uses to convert RVUs into dollars paid to physicians.[2]

As physicians increasingly join or incorporate into hospital organizations, RVUs have become the standard measure of physician productivity used to calculate physician compensation. The advantage of RVUs is that they are not dependent upon a physician's charge schedule, insurance coverage, a reimbursement program by any payor for a specific CPT code, or the physician's collection per patient encounter. The RVU system removes physician risk relative to employer (ie, hospital) negotiated payments, capitation fees, reductions in reimbursement, or collection problems.

Table 1. 2015 and 2016 CMS RVU Schedule for Common Gastroenterology Codes

CPT Code	Type of Service	RVU/Service	
		2015	2016
Office Consultations			
99243	Office consultation	1.88	1.88
99244	Office consultation	3.02	3.02
99245	Office consultation	3.77	3.77
Office Visits			
99203	Office visit; new patient	1.42	1.42
99204	Office visit; new patient	2.43	2.43
99205	Office visit; new patient	3.17	3.17
99211	Office visit	0.18	0.18
99212	Office visit	0.48	0.48
99213	Office visit	0.97	0.97
99214	Office visit	1.50	1.50
99215	Office visit	2.11	2.11
Procedures			
43235	Esophagogastroduodenoscopy	2.39	2.19
43239	Esophagogastroduodenoscopy with biopsy	2.87	2.49
45330	Flexible sigmoidoscopy	0.96	0.84
45331	Flexible sigmoidoscopy with biopsy	1.15	1.14
45373	Colonoscopy	3.69	3.36
45380	Colonoscopy with biopsy	4.43	3.66
45385	Colonoscopy with polyp/snare	5.30	4.67
44380	Ileoscopy	1.05	0.97
44382	Ileoscopy through stoma and with biopsy	1.27	1.27
44386	Pouchoscopy with biopsy	2.12	1.60
45915	Fecal decompaction	3.19	3.19

CMS, Centers for Medicare and Medicaid Services; CPT, Current Procedural Terminology; RVU, relative value unit.

Drawbacks of the System

The disadvantage of the RVU system is that it is essentially a FFS program, which encourages physicians to perform services that are associated with higher RVUs. The system rewards faster physician work, irrespective of outcome or patient satisfaction, and penalizes a thoughtful, thorough management approach that requires more time with a patient even if the added time yields a better outcome. Therefore, RVUs reward volume and not quality.

This metric also encourages overutilization of tests and procedures, which generate more RVUs and add to a physician's daily tally to approach and potentially exceed his or her RVU benchmark, which determines his or her salary and possible bonus. RVU benchmarks may be based upon the physician's prior RVU productivity annually. Benchmarks may be based upon specialty and location, and may measure RVUs, gross charges, collections, or patient encounters.

Specific Obstacles Within the System

Measuring the financial value of physician services within the RVU system becomes problematic and is rife with the 7 obstacles listed below.

First, there are inconsistencies of attribution, as RVU values vary within the same institution regarding benchmarks. For example, physicians may be paid differently for the same type of work (ie, different fees per RVU or a different number of RVUs assigned to a visit or procedure).

Second, the current productivity-based physician compensation model rewards only the volume of care, not the quality or overall value of that care.

Third, the present system lacks a comprehensive linkage of physician compensation with quality measure outcomes, complexity of visits, safety, and patient experience.

Fourth, the institution or practice methodology may lack transparency to provide data management and reporting tools to allow physicians the ability to comprehend the data that determine their compensation.

Fifth, the use of nonfinancial metrics as quality measures (ie, nonproductivity measures) will soon occupy a greater role in the percentage of physician compensation. Examples include measures of patient outcomes, safety, and patient experiences crafted to each specialty. However, it remains contentious how to best incorporate this information into the present RVU system.

Sixth, linking salaries to RVUs essentially constitutes a FFS system. This incentivizes physicians to generate more and more RVUs to meet the benchmark. The result is a greater number of procedures, which generate more RVUs than clinic- (office-) related E/M; thus, cognitive visit RVUs cannot presently compete with procedural RVUs.[3]

Finally, a pure RVU-based salary system jeopardizes teaching and faculty activities that are not compensated.

Local/Regional Adjustments to Relative Value Units

IBD physicians, in conjunction with their administrators, have developed a variety of mechanisms to deal with the inequity of RVU assignment to cognitive visits. Different institutional approaches are listed below. Clearly, there is no uniformity of approach; uniformity may have to wait until a change from the CMS in the physician fee schedule for RVUs, particularly with compensation dependent on payment models based upon demonstration of value. The following 9 institutional adjustments were compiled by polling 11 different institutions (Table 2):

Table 2. Institutions Queried on Their Relative Value Unit Adjustments

University of Michigan, Ann Arbor, Michigan
University of Pittsburgh, Pittsburgh, Pennsylvania
Mayo Clinic, Rochester, Minnesota
University of Chicago, Chicago, Illinois
Mount Sinai Hospital, New York, New York
NewYork-Presbyterian/Weill Cornell Medical Center, New York, New York
NewYork-Presbyterian/Columbia University Medical Center, New York, New York
New York University Langone Medical Center, New York, New York
North Shore University Hospital, Manhasset, New York
Cedars-Sinai Medical Center, Los Angeles, California
Baylor College of Medicine, Houston, Texas

- Raising the RVU per visit, and lowering procedural RVUs to be budget-neutral
- Reducing the required RVU benchmark to be met by the cognitive clinician to permit adequate time for time-consuming, complex outpatient encounters
- Increasing RVUs for follow-up visits, considering their complexity and the time they entail, which are not comparable to a general medical visit
- Abandoning RVUs and substituting other measures (eg, the number of new patients—at least 2 per half-day sessions in addition to follow-up visits) because the downstream effect of a new patient is considerably greater than that of a follow-up visit
- Assigning RVUs from mid-level providers (eg, physician assistants, nurse practitioners) to the physician "supervisor" to supplement the physician's benchmark
- Establishing an increased predetermined dollar amount that the physician will receive per cognitive work RVU generated. Compensation per work RVU could be benchmarked for the physician's respective medical specialty.
- Increasing the specific dollar amount per RVU (eg, beginning with the mean Medical Group Management Association or University Health Conservation Benchmark Dollars per RVU)
- Guaranteeing that salaries not tied to RVUs are competitive with the expectation of clinical and scholarly

activities (ie, teaching or educational RVUs)
- Basing expected RVUs on the preceding year's RVUs plus other income (eg, grants), and then holding back 15% until the benchmark is reached. The 15% is returned if the benchmark is exceeded, and then the physician is given 90% of the added RVU as an incentive bonus payment.[4]

New Legislation

In 2015, a new law challenged the use of FFS models as a single metric. Modification of the RVU system will result from this new legislation, which discards the Medicare sustainable growth rate formula, as a growing proportion of payments by Medicare (along with FFS procedure codes) will be based upon value.[5] All previous attempts at including a value metric—for example, the Physician Quality Reporting System's meaningful use, e-prescribing, value-based payment modification program—will now be merged into a single Merit-Based Incentive Payment System, and FFS payments will be adjusted to physician performance with quality measures, practice improvement, and electronic health records.

How the effects of the new legislation will play out to better recognize cognitive clinical visits relative to procedural payments remains unknown. It also remains to be seen whether shared savings in accountable care organizations will better reflect careful, time-consuming, cognitive visits by reducing emergency room visits, hospital admissions, and other quality outcome measures.

Solicitation of Public Feedback

In its most recent annual physician fee schedule, Medicare announced that it seeks to resolve the disparity of RVU allotment for cognitive visits by soliciting public stakeholder feedback.[6] Below is an excerpt from the section entitled "Improving Payment Accuracy for Primary Care and Care Management Services"[6]:

> ....However, because the current E/M office/outpatient visit CPT codes were designed with an overall orientation toward episodic treatment, we have recognized that these E/M codes may not reflect all the services and resources involved with furnishing certain kinds of care, particularly comprehensive, coordinated care management for certain categories of beneficiaries....
>
> ...neither of these new sets of codes nor the inputs used in their valuations explicitly account for all of the services and resources associated with the more extensive cognitive work that primary care physicians and other practitioners perform in planning and thinking critically about the individual chronic care needs of particular subsets of Medicare beneficiaries....
>
> Similarly, we continue to receive requests from a few stakeholders for CMS to lead efforts to revise the current CPT E/M codes or construct a new set of E/M codes. The goal of such efforts would be to better describe and value the physician work (time and intensity) specific to primary care and other cognitive specialties in the context of complex care of patients relative to the time and intensity of procedure-oriented care physicians....
>
> ....Therefore, we are interested in receiving public comments on ways to recognize the different resources (particularly in cognitive work) involved in delivering broad-based, ongoing treatment, beyond those resources already incorporated in the codes that describe the broader range of E/M services. The resource costs of this work may include the time and intensity related to the management of both long-term and, in some cases, episodic conditions. In order to appropriately recognize the different resource costs for this additional cognitive work within the structure of FFS resource-based payments, we are particularly interested in codes that could be used in addition to, not instead of, the current E/M codes.
>
> ....these codes might allow for the reporting of the additional time and intensity of the cognitive work often undertaken by the primary care and other cognitive specialties in conjunction with an E and M service...

It is not yet known whether any changes will be incorporated into Medicare. However, the creation of specific cognitive visit codes would improve the accuracy of the relative values.

Conclusion

The present RVU metric for compensating physicians is flawed. The FFS system has been likened to the cottage industry of the 18th and early 19th centuries of payment for piecework. The RVU metric ignores the complexity of modern physician visits as well as the time required to incorporate all of the data of the newer diagnostic tools and increasingly complex therapies into a meaningful therapeutic strategy. In addition, the metric lacks consideration of the growing elderly population with its multiple comorbidities; polypharmacy with potential drug interactions; and cognitive, physical, and social obstacles. RVUs also discourage young physicians from cognitive endeavors, scholarly activities, research, and even attendance at informative meetings due to time pressures to see more patients, or simply encourage them to switch to a procedure-related formula. Finally, the RVU metric generates significant patient dissatisfaction with the decrease of office time, which impacts revenues in this era of accountable care organizations and home models of specialty care.

If the CMS corrects the inequity of RVU attributions between cognitive and procedural visits, it would mitigate the present intramural gyrations of wrestling with the RVU system as it currently stands. A nationwide uniform system of recognizing cognitive efforts would be best. This can only be accomplished by writing to the CMS outlining the negative impacts of the present RVU system on patient care, physician recruitment, and examinations. To write to the CMS, please use the following address: Andrew M. Slavitt, Acting Administrator, Centers for Medicare and Medicaid Services, Department of Health and Human Services, PO Box 8013, Baltimore, MD 21244-8013, RE: Medicare Program: Improving Payment Accuracy in Care Management and Evaluation and Management Services.

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Dr Katz has been on the speakers bureau for AbbVie, Actavis, and UCB. He has performed research for Abbott, Amgen, BMS, Centocor (now Janssen Biotech), Hutchison, Millennium, Pfizer, Receptos, Salix, and Sanofi. All fees, consults, and honoria are made out to New York University School of Medicine, not directly to Dr Katz. Dr Melmed has consulted for AbbVie, Celgene, Genentech, Given Imaging, Janssen, Luitpold, Pfizer, Takeda, and UCB Pharma.

The opinions expressed in this article are those of the individual authors and do not necessarily reflect the opinions of the journal.

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