

SPECIAL ARTICLE

Use of Physicians' Services under Medicare's Resource-Based Payments

Stephanie Maxwell, Ph.D., Stephen Zuckerman, Ph.D.,
and Robert A. Berenson, M.D.

ABSTRACT

BACKGROUND

In 1992, Medicare implemented the resource-based relative-value scale, which established payments for physicians' services based on relative costs. We conducted a study to determine how the use of physicians' services changed during the first decade after the implementation of this scale.

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METHODS

With the resource-based relative-value scale, Medicare payments are based on the number of relative-value units (RVUs) assigned to physicians' services. The total number of RVUs reflects the volume of physicians' work (the time, skill, and training required for a physician to provide the service), practice expenses, and professional-liability insurance. Using national data from Medicare on physicians' services and American Medical Association files on RVUs, we analyzed the growth in RVUs per Medicare beneficiary from 1992 to 2002 according to the type of service and specialty. We also examined this growth with respect to the quantity and mix of services, revisions in the valuation of RVUs, and new service codes.

RESULTS

Between 1992 and 2002, the volume of physicians' work per Medicare beneficiary grew by 50%, and the total RVUs per Medicare beneficiary grew by 45%. The quantity and mix of services were the largest sources of growth, increasing by 19% for RVUs for physicians' work and by 22% for total RVUs. Our findings varied among services and specialties. Revised valuation of RVUs was a key source of the growth in RVUs for physicians' work and total RVUs for evaluation and management and for tests. New service codes were the largest drivers of growth for major procedures (accounting for 36% of the growth in RVUs for physicians' work and 35% of the growth in total RVUs), and the quantity and mix of existing services were the largest drivers of growth for imaging. The growth in RVUs for physicians' work was greatest in cardiology (114%) and gastroenterology (72%). The total growth in RVUs was greatest in cardiology (99%) and dermatology (105%).

CONCLUSIONS

In the first 10 years after the implementation of the resource-based relative-value scale, RVUs per Medicare beneficiary grew substantially. The leading sources of growth varied among service types and specialties. An understanding of these sources of growth can inform policies to control Medicare spending.

IN 1992, MEDICARE IMPLEMENTED THE resource-based relative-value scale, which established payments for physicians' services based on relative costs instead of prevailing charges. The goal of the new system was to correct distortions caused by charge-based payments and to encourage efficiencies in medical practice.¹ With the use of this scale, payments are based on the number of relative-value units (RVUs) assigned to each service. Total RVUs for a given service reflect three cost components: physicians' work (the time, skill, and training required for a physician to provide the service), practice expenses, and professional-liability insurance. The costs associated with each component are assigned a weight, or index value, and are adjusted to account for differences in practice expenses in different geographic locations. The three index values for a service are then summed and multiplied by a standard dollar amount (a "conversion factor") to arrive at a payment amount. On average, physicians' work accounts for 52% of total payments to physicians, practice expenses account for 44%, and professional-liability insurance accounts for 4%.² Overall, Medicare payments represent approximately 20% of the revenues that physicians receive, although the share varies according to the physician's specialty.³

Early policy simulations suggested that when the resource-based relative-value scale was phased in (by 1995), it would increase payments for evaluation and management services by 25 to 30%, decrease payments for procedures by 25%,⁴ and redistribute overall payments toward evaluation and management services⁵ and the physicians' specialties that furnish mainly those services.⁶ Medicare's relative values for practice expenses and professional-liability insurance were based on historical charges until 1999 and 2000, respectively, when resource-based values for these components were phased in. By 2002, the entire system's relative values were derived from estimates of resource costs. Like the original resource-based relative-value scale, the shift to resource-based values for practice expenses and professional-liability insurance was intended to better align payments with resource costs, and this shift was expected to redistribute payments toward evaluation-oriented services.

The resource-based relative-value scale was never expected to control overall Medicare spending on physicians. To do that, Congress established performance standards based on the volume of physicians' services and, in 1997, a sustainable

growth rate for use in determining the annual update to the conversion factor.^{6,7} Recently, Congress has overridden these policies and determined the updates without strictly adhering to the sustainable growth rate, because this rate would have resulted in annual reductions in Medicare fees.

The Centers for Medicare and Medicaid Services (CMS) maintains the resource-based relative-value scale, relying on recommendations from the Specialty Society Relative Value Update Committee of the American Medical Association (AMA). During the first 10 years after its introduction, the scale was altered annually to introduce new service codes and make revisions to codes for which definitions had been modified. In addition, two comprehensive reviews (known as 5-year reviews) of relative values for physicians' work were performed in 1997 and 2002, as required by statute.^{8,9} Policymakers and stakeholders focus on these refinements to the scale and on the annual update, since they are the main policy levers that influence Medicare spending on physicians' services. However, other factors play important roles in determining the growth and distribution of Medicare's spending on physicians. Most directly, growth in the number of beneficiaries adds to spending, even if the fee schedule remains static. Spending also increases as a result of the introduction and application of new service codes and the expanded application of existing services.

The literature on Medicare's resource-based relative-value scale includes assessments of the early effects of the system on all specialties^{4,6} and numerous articles on its effects on particular specialties.^{10,11} However, we are not aware of recent or cumulative assessments of the effect of the scale on all service types or major specialties or of examinations of the sources of changes to the scale. We analyzed the overall growth in the volume of physicians' services per Medicare beneficiary during the first 10 years after the introduction of the Medicare fee schedule. We also examined the contributions to that growth that were made by refinements of existing service codes in the scale, the addition of new codes, and the growth in the quantity and mix of existing services.

METHODS

DATA

We used annual claims files from the CMS for data on the use of Medicare physicians' services in 1992 and 2002. We obtained files on RVUs for 1992

through 2002 from the AMA.¹² Files on RVUs list the values for physicians' work, practice expenses, and professional-liability insurance for each service paid for through the Medicare fee schedule. Using these files and claims files from 1992 and 2002, we calculated the RVUs for physicians' work and total RVUs for services paid for through the Medicare fee schedule in those years. We also obtained a file from the AMA that identified the review status of all services ever paid for through the Medicare fee schedule. Categories for the review status included new codes, codes reviewed during the first or second 5-year review, codes reviewed during the annual review process, and codes not yet reviewed.

CALCULATIONS OF SERVICE VOLUME

An RVU is the unit of measure for the resource-based relative-value scale; each service is assigned a specific number of RVUs according to its relative resource costs. Since payment rates are determined by multiplying RVUs by a single conversion factor, RVUs are analogous to relative payment rates. In this study, we used RVUs to calculate an intensity-weighted measure of the quantity of service — this measure is called "RVU volume."¹³ Thus, RVU volume in a given year is the sum, for all services, of the number of units of each service multiplied by the RVU value assigned to that service in that year. We calculated the RVU volume for physicians' work and total RVUs (which includes RVUs for physicians' work, practice expenses, and professional-liability insurance). We accounted for the increase in Medicare beneficiaries over the 10-year period by dividing the RVU volume for physicians' work and total RVU volume in 2002 by the number of beneficiaries in 2002 and the RVU volume amounts in 1992 by the number of beneficiaries in 1992.¹⁴

We calculated the aggregate percent change in the RVU volume for physicians' work and the total RVU volume per beneficiary over the 10-year period, for all services and according to service type and specialty, as follows: $[(\text{the RVU volume in 2002} \div \text{the RVU volume in 1992}) - 1] \times 100$. We also examined changes in the percent distribution of the RVU volume for physicians' work and total RVU volume per beneficiary among service types and specialties.

We then calculated three components of the aggregate change in the RVU volume of physicians' work and the total RVU volume per beneficiary: changes in the quantity and mix of services from 1992 through 2002, revisions of the valua-

tion of RVUs for existing services, and the introduction of new service codes after 1992. We used the following calculation for changes in the quantity and mix of services: $[(\text{the quantity of existing services in 2002} \times 1992 \text{ RVU values for each service}) \div (\text{the quantity of services in 1992} \times 1992 \text{ RVU values}) - 1] \times 100$. Policymakers and researchers use such a calculation of the quantity and mix of services when analyzing changes in the volume of physicians' services.¹⁵⁻¹⁹

We calculated revisions of the valuation of RVUs as follows: $[(\text{the quantity of existing services in 2002} \times 2002 \text{ RVU values for each service}) \div (\text{the quantity of existing services in 2002} \times 1992 \text{ RVU values}) - 1] \times 100$. This calculation reflects the effect of "price" changes for existing services due to RVU revisions made by the CMS and the Relative Value Update Committee of the AMA.

We used the following calculation for the introduction of new service codes: $[(\text{the quantity of all existing and new services in 2002} \times \text{the 2002 RVU values for each service}) \div (\text{the quantity of existing services in 2002} \times 2002 \text{ RVU values}) - 1] \times 100$. This calculation reflects the effect of new service codes.

These three component rates of growth, when multiplied together, are equal to the aggregate growth rate calculated above. To present our results in a clinically meaningful way, we analyzed physicians' services, using the Berenson-Eggers Type of Service^{20,21} system, which classifies services into 104 service groups. We present data for five summary service groups in this system: evaluation and management, imaging, major procedures, other procedures, and tests. Major procedures include coronary-artery bypass grafting and hip and knee replacements; other procedures include cataract extraction, colonoscopy and other endoscopic procedures, and routine dermatologic procedures. We identified the top 10 specialties in terms of their share of Medicare spending for physicians' services in 2002. These 10 specialties accounted for more than 70% of Medicare spending for physicians: internal medicine, family practice, cardiology, ophthalmology, diagnostic radiology, orthopedics, general surgery, dermatology, urology, and gastroenterology.

For our analyses, we assigned each service code to one of four hierarchical groups according to the review status: new codes (i.e., codes present in 2002 claims but not in 1992 claims), codes in one or both 5-year reviews, codes in annual reviews, and codes not yet reviewed. New codes represent

both new services and services replacing previous procedures or techniques. Without this hierarchy, 10% of the codes would fall into multiple groups.

RESULTS

During the first decade that the resource-based relative-value scale was used, the overall RVU volume per beneficiary for physicians' work grew by 50% (Table 1). The RVU volume per beneficiary grew more slowly for evaluation and management services (39.5%) but grew more rapidly for imaging (62.5%), other procedures (68.2%), and tests (184.8%, from a very small value in 1992). The share of the RVU volume that was accounted for by evaluation and management services decreased by 4.2 percentage points over the decade, whereas the shares for imaging, other procedures, and tests increased (Table 1).

Of the three components that affected growth, the quantity and mix of services accounted for the most growth in the overall RVU volume for physicians' work (18.8%). Revisions in the valuation of

RVUs accounted for 14.8% of overall growth, and new service codes accounted for 10.0%. These percentages for all three components, when multiplied together according to our method, equal the percentage of overall growth. For example, $[(1 + 0.188) \times (1 + 0.148) \times (1 + 0.100) - 1] \times 100$ is equal to the 50% growth in the RVUs for physicians' work.

The relative importance of these components varied among the three service types. Growth in the volume of RVUs per beneficiary for imaging work was due mainly to the growth in the quantity and mix of services (38.4%). Growth in the RVUs for major procedures was due mainly to new service codes (35.6%). Finally, growth in the RVUs for tests was due mainly to revisions in the valuations of the RVUs (68.2%).

In general, growth in the volume of total RVUs was similar to growth in the volume of RVUs for physicians' work, but there was less variation among service types (Table 1). The differences between growth in the volume of RVUs for physicians' work and total RVUs were due mainly to

Table 1. Distribution and Sources of Growth of RVUs According to Type of Service, 1992 to 2002.*

RVU Component and Service Category†	Distribution of RVUs		Mean RVUs per Medicare Beneficiary		10-Year Change in RVUs per Medicare Beneficiary			
	1992	2002	1992	2002	Overall	Due to Quantity and Mix of Services	Due to Revised Values for Existing Codes	Due to New Codes
	percent		number			percent		
Physicians' work								
Overall	100.0	100.0	15.6	23.4	50.0	18.8	14.8	10.0
Evaluation and management	59.9	55.7	9.4	13.1	39.5	18.4	15.5	2.0
Imaging	8.4	9.1	1.3	2.1	62.5	38.4	10.8	5.9
Major procedures	11.5	11.5	1.8	2.7	50.1	0.6	10.0	35.6
Other procedures	18.9	21.2	2.9	5.0	68.2	21.1	12.7	23.2
Tests	1.3	2.5	0.2	0.6	184.8	37.6	68.2	23.1
Physicians' work, practice expenses, and liability insurance								
Overall	100.0	100.0	31.0	45.0	44.9	22.0	7.6	10.4
Evaluation and management	49.5	49.5	15.4	22.3	44.8	17.9	20.1	2.3
Imaging	11.8	14.0	3.7	6.3	71.9	69.7	-6.9	8.8
Major procedures	13.1	10.4	4.1	4.7	14.8	-0.4	-14.7	35.3
Other procedures	22.6	22.6	7.0	10.1	44.9	21.2	-1.1	21.0
Tests	3.0	3.6	0.9	1.6	71.5	6.5	36.4	18.1

* Data are from physicians' Medicare claims and files on RVUs from 1992 to 2002. Percentages may not sum to 100 because of rounding. There were 33,956,000 Medicare beneficiaries in 1992 and 38,088,000 Medicare beneficiaries in 2002.¹⁴

† Service categories are based on the Berenson-Eggers Type of Service classification.

the introduction of resource-based RVUs for practice expenses and professional-liability insurance. This change lowered the total RVUs for many services, which offset some of the growth in the volume of RVUs for physicians' work. Consequently, the growth in the total RVU volume due to revisions in the valuation of RVUs was only 7.6%. The revisions in the valuation of RVUs for practice expenses and professional-liability insurance resulted in a decrease in the total RVU volume for imaging (−6.9%), major procedures (−14.7%), and other procedures (−1.1%).

Changes in the RVU volume for physicians' work and the total volume per beneficiary varied among the top 10 specialties (Table 2). Cardiology

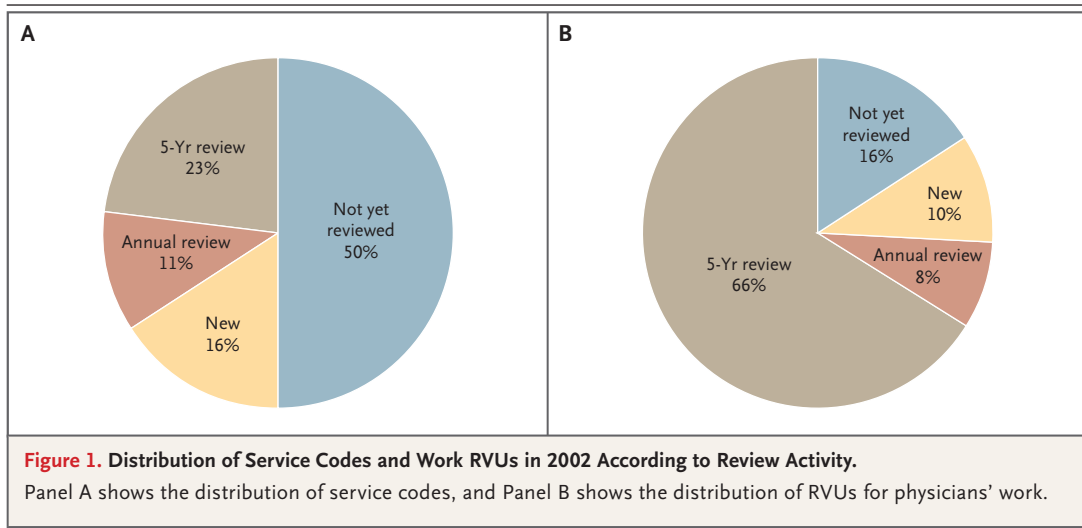
had the largest overall growth in the RVU volume for physicians' work (113.6%), whereas urology had a decrease in the RVU volume (−1.0%). Three specialties in particular exhibited substantial growth in the RVU volume for physicians' work due to the quantity and mix of services: cardiology (52.0%), dermatology (41.4%), and gastroenterology (49.4%). Revisions in the valuation of RVUs were the leading sources of growth in the RVU volume for physicians' work in internal medicine (20.1%) and general surgery (23.8%).

For all specialties, growth in the total RVU volume and the three components of that growth (Table 2) differed from growth of the RVU volume for physicians' work mainly because of the intro-

Table 2. Distribution and Sources of Growth of RVUs from 1992 to 2002, According to Specialty.*

RVU Component and Specialty	Distribution of RVUs		10-Year Change in RVUs per Medicare Beneficiary			
	1992	2002	Overall	Due to Quantity and Mix of Services	Due to Revised Values for Existing Codes	Due to New Codes
<i>percent</i>						
Physicians' work						
Internal medicine	17.6	15.8	31.7	5.1	20.1	4.3
Cardiology	6.6	9.7	113.6	52.0	21.5	15.6
Ophthalmology	10.2	7.5	7.8	2.9	0.9	3.8
Diagnostic radiology	7.7	7.3	37.9	17.3	6.3	10.6
Family practice	8.4	7.6	32.4	9.4	16.4	3.9
Orthopedic surgery	4.6	4.9	56.7	30.0	9.0	10.5
General surgery	6.5	5.0	11.8	−19.5	23.8	12.2
Dermatology	2.6	2.9	62.0	41.4	−3.2	18.4
Urology	3.9	2.6	−1.0	−12.2	2.5	10.1
Gastroenterology	2.9	3.4	71.8	49.4	7.6	6.9
Physicians' work, practice expenses, and liability insurance						
Internal medicine	16.0	14.6	28.8	3.7	18.7	4.6
Cardiology	7.6	10.8	99.4	87.4	−4.3	11.2
Ophthalmology	12.1	8.6	−0.4	2.3	−7.4	5.2
Diagnostic radiology	8.5	8.1	33.6	26.8	−7.2	13.5
Family practice	7.5	7.5	40.8	8.9	24.1	4.2
Orthopedic surgery	5.4	5.6	44.4	29.0	2.0	9.7
General surgery	6.4	4.4	−3.7	−20.3	7.8	12.1
Dermatology	2.4	3.5	104.8	41.1	21.9	19.1
Urology	3.8	3.0	10.5	−14.1	14.3	12.6
Gastroenterology	3.1	2.9	33.2	52.3	−18.0	6.6

* Data are from physicians' Medicare claims and files on RVUs from 1992 to 2002. There were 33,956,000 Medicare beneficiaries in 1992 and 38,088,000 Medicare beneficiaries in 2002.¹⁴



duction of resource-based RVUs for practice expenses and professional-liability insurance. The growth of total RVUs due to revisions in their valuations differed substantially from the growth of RVUs for physicians' work in all specialties except internal medicine.

To further understand the sources of growth in the RVU volume for physicians' work, we examined the distribution of service codes and the RVU volume for physicians' work according to the review activity of the CMS and the Relative Value Update Committee (Fig. 1). The service codes examined during these comprehensive reviews accounted for only 23% of all the codes, but they accounted for 66% of the RVU volume of physicians' work. Given the influence of the comprehensive reviews, we examined them closely. During the first 5-year review, values for physicians' work were increased for only 30.6% of the service codes, but these codes accounted for 82.0% of the RVU volume for physicians' work under review (Table 3). During the second 5-year review, the values of RVUs increased for a large share of codes (55.7%), but this increase accounted for a smaller share of the RVU volume for physicians' work under review (38.0%). In both 5-year reviews, relatively few codes were reduced in value (10.9% during the first review and 3.6% during the second review).

Table 4 provides examples of service codes in three categories of volume growth: codes for which there were substantial increases in the frequency of use, those that were revised to higher values, and those introduced after 1992. The first category

includes a range of services that were used more frequently after 1992 and were used very frequently in 2002. The second category includes some codes in which the valuation of either the RVU for physicians' work or the total RVU per service increased substantially. The third category includes new codes. Some have particularly high RVU values; others are used frequently. The services listed in Table 4 are examples of service types within each of these three categories. There may have been larger increases or even decreases in the use or valuation of RVUs for other services.

DISCUSSION

Our findings show that the volume of physicians' services per Medicare beneficiary grew considerably during the first decade after the resource-based relative-value scale was introduced. This growth varied among services and specialties and resulted in a redistribution of the total RVU volume (a close counterpart to Medicare spending on physicians). We examined the role of three key factors affecting growth in the RVU volume per beneficiary: increases in the quantity and mix of existing services, revisions of the valuation of RVUs for existing codes, and the introduction of new codes. In terms of the total RVU volume per beneficiary, the volume of imaging services increased the most because of a dramatic increase in the quantity and mix of services. Among all services, the volume of major procedures increased the least, with the introduction of new codes (both to represent new services and to replace previous procedures) accounting for most

Table 3. Distribution of Services and RVUs for Physicians' Work According to Valuation Changes.*

RVU Valuation	First 5-Year Review (1997)		Second 5-Year Review (2002)	
	Service Codes (N=932)	Distribution of RVUs	Service Codes (N=698)	Distribution of RVUs
	no. (%)	%	no. (%)	%
Increased	285 (30.6)	82.0	389 (55.7)	38.0
Reduced	102 (10.9)	2.4	25 (3.6)	0.8
Remained the same	545 (58.5)	15.7	284 (40.7)	61.2

* Data are from Medicare physicians' claims and files on RVUs from 1992 to 2002.

of the growth. Because of these growth patterns, imaging services gained a greater share of the distribution of total RVU volume. The share of total RVU volume accounted for by evaluation and management services remained the same because of increases in the valuation of RVUs for physicians' work in these services and introduction of resource-based RVUs for practice expenses and professional-liability insurance, which offset the declining relative volume.

In terms of work volume, values for the majority of services (84%) in 2002 reflect a combination of new, reviewed, and revised service codes, rather than the values from the original resource-based relative-value scale. The share of volume affected by these changes in service codes increased in January 2007, when CMS implemented changes based on its third 5-year review of RVUs for physicians' work. That review, which was conducted in 2006, focused on high-frequency service codes that had not been reviewed before and on another review of codes for evaluation and management.²² The Medicare Payment Advisory Commission recently described weaknesses in the 5-year review process for valuing physicians' work and proposed improvements to the process for addressing potentially overvalued codes.^{23,24} A major concern was the lack of a mechanism for identifying and correcting overvalued services. The commission's view was that the RVUs for physicians' work in providing any service should be reduced if the level of work effort needed to furnish the service declines as physicians gain experience with the service.

We did not explicitly examine the relationship between changes in the supply of physicians and the services provided. However, we analyzed external data on changes in the number of physicians and concluded that the relative growth in the num-

ber of physicians among the 10 specialties in this analysis does not track directly with the growth in the total RVU volume or RVUs for physicians' work.²⁵⁻²⁷ For example, the three specialties with the greatest increases in the numbers of physicians — family practice, gastroenterology, and internal medicine — are not the three specialties with the greatest growth in the volume of RVUs for physicians' work and the total RVU volume — dermatology, cardiology, and orthopedics.

A potential limitation of our study is that it measured what occurred during the first 10 years of the fee schedule and does not reflect more recent data and policy developments. However, we think that current policy developments and trends reinforce our findings. For example, although the CMS recently announced that the RVUs for physicians' work associated with certain higher-level evaluation and management codes increased by 29 to 37% (as a result of the third 5-year review), the overall effect of these changes on evaluation and management services was significantly smaller for two reasons.²⁸ First, many other values for evaluation and management services were not increased under the third 5-year review, and second, the CMS reduced all RVUs for physicians' work by 10% as a budget-neutrality adjustment. Furthermore, RVUs for physicians' work account for only about half of the total RVUs. These factors dilute the effect of the increases in evaluation and management services, and the CMS estimated that this year, internists and family physicians, for example, will each receive only a 5% increase in payments as a result of the increases from the third 5-year review.²⁹

Furthermore, our findings suggest that new service codes have a strong influence on the growth and distribution of RVUs for physicians'

Table 4. Examples of Service Codes Contributing to the Growth in RVUs between 1992 and 2002.*

Type of Code	CPT Code	CPT Description	RVUs for Physicians' Work		Frequency of Service (per 100,000 Medicare Beneficiaries)	
			1992	2002	1992	2002
Billed more frequently in 2002 than in 1992	99214	Office or outpatient visit, established patient, 25-min visit	0.93	1.10	76,964	116,564
	88305	Tissue examination by pathologist	0.79	0.75	22,201	39,064
	93320	Doppler echocardiographic examination of heart	0.39	0.38	7,750	16,563
	99285	Emergency department visit	2.79	3.06	6,020	14,102
	99243	Office consultation	1.56	1.72	5,076	11,671
	70450	Computed tomographic scan of head or brain without dye	0.90	0.85	5,051	9841
Revised to higher values in 2002 than in 1992	17304	Micrographic surgery to remove malignant skin lesion, up to 5 tissue specimens examined	5.84	7.60	228	757
	99244	Office consultation	2.29	2.58	6,858	12,475
	99213	Office or outpatient visit, established patient, 15-min visit	0.58	0.67	226,374	280,009
	67210	Treatment of retinal lesion	6.75	8.82	391	514
	43832	Placement of gastrostomy tube	11.25	15.60	38	7
	44140	Partial removal of colon	15.39	21.00	318	207
	44950	Appendectomy	6.39	10.00	36	29
	47120	Partial removal of liver	25.12	35.50	6	6
New	33533	Coronary-artery bypass grafting with the use of a single arterial graft	NA	30.00	NA	577
	27245	Treatment of thigh fracture	NA	20.31	NA	66
	53850	Prostatic microwave thermotherapy	NA	9.45	NA	47
	66172	Incision of eye	NA	15.04	NA	32
	33863	Placement of ascending aortic graft	NA	45.00	NA	8
	92135	Diagnostic imaging of eye	NA	0.35	NA	4202
	92980	Insertion of intracoronary stent	NA	14.84	NA	859

* Data are from physicians' Medicare claims and files on RVUs from 1992 to 2002. CPT denotes current procedural terminology, and NA not available.

work and total RVU volume. This influence may be increasing, since new codes continue to be introduced. Since 2002, approximately 800 codes have been added to the Medicare fee schedule, and about 275 existing codes have been deleted; the total number of codes for which RVUs are determined now approaches 7000.³⁰ Finally, our findings show that the RVU volume has grown at different rates among service types. The overall patterns we identified have continued. Most recently, imaging has been the fastest-growing service type, followed by other procedures and tests, whereas the volume of evaluation and manage-

ment services and the volume of major procedures have grown much more slowly.³¹

Recent trends and policy decisions overall are consistent with our findings and reinforce the importance of understanding the roles of new service codes, revised valuation of RVUs, and the quantity and mix of services in the growth and distribution of the volume of physicians' services and, by extension, payments. Furthermore, as long as the sustainable growth rate that controls the aggregate growth in spending remains in place, Medicare payment to physicians is essentially a zero-sum game. Thus, differences in rates of

growth in the RVU volume of physicians' work and the total RVU volume among service types and specialties affect the overall costs to Medicare, and they should be considered in policies to control Medicare spending.

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