

## THE BASICS

### Relative Value Units (RVUs)

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Medicare uses a physician fee schedule to determine payments for over 7,500 physician services. The fee for each service depends on its relative value units (RVUs), which rank on a common scale the resources used to provide each service. These resources include the physician's work, the expenses of the physician's practice, and professional liability insurance. To determine the Medicare fee, a service's RVUs are multiplied by a dollar conversion factor.<sup>1</sup> Estimating and updating the RVUs is a labor-intensive process because there are no readily available, up-to-date data on the resource requirements of each service.

Physician services, which are described by Current Procedural Terminology (CPT) codes and Healthcare Common Procedure Coding System (HCPCS) codes, range from those that require considerable amounts of physician time and effort, clinical staff, and specialized equipment, to those that require little if any physician time and minimal other resources. For each service, Medicare determines RVUs for three types of resources. **Physician work RVUs** account for the time, technical skill and effort, mental effort and judgment, and stress to provide a service. **Practice expense RVUs** account for the nonphysician clinical and nonclinical labor of the practice, as well as expenses for building space, equipment, and office supplies. **Professional liability insurance RVUs** account for the cost of malpractice insurance premiums.<sup>2</sup> Although the actual percentages vary from service to service, physician work and practice expenses comprise 52 and 44 percent of total Medicare expenditures on physician services, respectively.<sup>3</sup>

#### PHYSICIAN WORK RVUs

The work RVUs for a diagnostic colonoscopy are more than twice the work RVUs for an intermediate office visit because

the colonoscopy requires more physician time and effort than the visit. A diagnostic colonoscopy is estimated to require 75 minutes of physician time, which includes 30 minutes to prepare for the procedure and 15 minutes after the procedure. The time actually performing the colonoscopy—termed the intra-service time—is estimated to be 30 minutes. In contrast, an intermediate office visit is estimated to take about 40 minutes of physician time. This is comprised of 5 minutes before and 10 minutes after seeing the patient, and 25 minutes of intra-service time. The intra-service time for the colonoscopy is weighted more heavily than the intra-service time for the office visit to reflect the higher skill and effort and associated stress of providing the procedure.

**National Health Policy Forum**

2131 K Street, NW  
Suite 500  
Washington, DC 20037

**T** 202/872-1390  
**F** 202/862-9837  
**E** [nhpf@gwu.edu](mailto:nhpf@gwu.edu)  
[www.nhpf.org](http://www.nhpf.org)

Sally Coberly, PhD  
*Deputy Director*

**PRACTICE EXPENSE RVUS**

Practice expenses for services provided in a physician’s office include clinical staff time and the equipment and supplies typically used during a visit or procedure, as well as a share of the indirect expenses of a physician practice such as administrative staff, building space, and office supplies. When a physician provides a service in a facility, such as a hospital or outpatient clinic, the costs of the clinical personnel, equipment, and supplies are incurred by the facility, not the physician practice. For services provided in a facility, physicians are paid a “facility-based” practice expense RVU which excludes the practice expenses provided by the facility. The “facility-based” practice expense RVU is

**Relative Value Units for Selected Services, 2014**

Service (HCPCS code)	Total	Physician Work	Practice Expense	Professional Liability Insurance
Intermediate Office Visit (99214)*	3.01	1.50	1.41	0.10
Diagnostic Colonoscopy (45378)*	11.03	3.69	6.78	0.56
Total Hip Replacement (27130)†	38.94	20.72	14.32	3.90

\* Service provided in a physician office.

† Service provided in a facility.

Source: CMS website, [www.cms.gov/apps/physician-fee-schedule/overview.aspx](http://www.cms.gov/apps/physician-fee-schedule/overview.aspx).

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typically lower than the office-based practice expense RVU for the same service. For example, if a diagnostic colonoscopy is provided in the physician's office, the physician's payment would be based on a practice expense RVU of 6.78; if the procedure is performed in a facility, the payment would be based on a practice expense RVU of 1.94.

## GLOBAL FEES

The fee for major surgeries, such as a total hip replacement, encompasses the estimated physician inputs used during what is termed the global period. The global period is a specified amount of time that encompasses the day of the surgery and post-surgical physician follow up. For a hip replacement, the global period is 90 days. The physician work RVUs for the hip replacement include physician time and effort in performing the procedure as well as four expected post-operative follow-up office visits. The practice expenses for this service include the practice's estimated expenses for clinical staff, equipment, and supplies during the global period, including indirect expenses, but not the resources used in providing the procedure that are incurred by the facility.<sup>4</sup>

## UPDATING THE RVUS

The data for developing the original work RVUs came from a Harvard University study completed in the late 1980s. Physicians were asked to review patient vignettes and estimate the work involved in the vignettes, compared to the work of particular reference services. These estimates were refined with multiple iterations to establish the work RVUs. The original practice expense RVUs were based on specialty-specific information on hours worked and total practice expense spending from the American Medical Association's Socioeconomic Monitoring System (SMS) and estimates of nonphysician resources required for individual services made by Clinical Practice Expert Panels. The professional liability insurance RVUs were based on reported premiums by specialty.

The Centers for Medicare & Medicaid Services (CMS), which is responsible for maintaining the fee schedule, has continued to modify and refine the original methodology for estimating RVUs and developed new sources of information. CMS's methodology relies on ensuring that each component of providing a service (such as taking a patient history, administering an injection) is valued the same across services. Some of

the SMS data have been updated by physician specialty societies through member surveys that met certain specifications, as allowed by law.

CMS also relies on advice and recommendations from the American Medical Association/Specialty Society Relative Value Scale Update Committee (RUC). The 31 RUC members,<sup>5</sup> most of whom are appointed by a major physician specialty society, and others who provide input to CMS understand that increasing the RVUs for any service will result in a commensurate decrease in fees for other physician services, which is widely believed to help ensure that a specialty does not try to inappropriately boost the resources associated with the services it tends to provide.

Congress requires CMS to review the RVUs no less than every five years and it must develop RVUs for new services. Outside of the five-year reviews, CMS may examine the RVUs for services that it or physician specialty societies identify as being “misvalued” and possibly needing modification. For services selected for review, relevant specialty societies field surveys of their members to gather data on physician time and effort and the practice expenses required to provide the service. The RUC reviews these data and makes comparisons with similar services to develop its recommendations.<sup>6</sup> CMS reviews the RUC recommendations and the underlying data. The proposed RVUs are then published in the Federal Register for public comment before a final change is made to the physician fee schedule. In the past, CMS accepted over 90 percent of the RUC recommendations on revisions to the RVUs.<sup>7</sup> In recent years, however, CMS has accepted fewer of the RUC recommendations. For the 2014 physician fee schedule, CMS accepted 76 percent of the total RUC recommendations.<sup>8</sup>

## ENDNOTES

1. In 2014, the conversion factor was \$35.8228. The fee, which is the same regardless of the specialty of the physician, is adjusted to account for geographic differences in costs and other factors before the payment is made to a particular provider. For more information on the conversion factor, see “Estimated Sustainable Growth Rate and Conversion Factor for Medicare Payments to Physicians in 2015,” Centers for Medicare & Medicaid Services, November 2014, [www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/SustainableGRatesConFact/Downloads/SGR2015f.pdf](http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/SustainableGRatesConFact/Downloads/SGR2015f.pdf). For more on the calculation of the payment amount, see MedPAC, “Physician and Other Health Professional Payment System,” Payment Basics, October 2014, <http://medpac.gov/documents/payment-basics/physician-and-other-health-professionals-payment-system-14.pdf?sfvrsn=0>.

2. RVUs for individual HCPCS codes can be accessed from the CMS website via the Physician Fee Schedule Look-Up Tool, [www.cms.gov/apps/physician-fee-schedule/overview.aspx](http://www.cms.gov/apps/physician-fee-schedule/overview.aspx).
3. Stephanie Maxwell and Stephen Zuckerman, "Impact of Resource-Based Practice Expenses on the Medicare Physician Volume," *Health Care Financing Review*, 29, no. 2 (Winter 2007-2008): p. 65.
4. CMS is considering modifications to global codes and fees. See "Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule..." Final Rule with Comment Period, *Federal Register*, 79, no. 219 (November 13, 2014): pp 67547-68092, <https://www.federalregister.gov/articles/2014/11/13/2014-26183/medicare-program-revisions-to-payment-policies-under-the-physician-fee-schedule-clinical-laboratory>.
5. Of the RUC's 31 members, 21 are appointed by a major medical society. An additional four seats, including one reserved for a primary care representative, rotate on a two year basis. The remaining six seats include the chair and representatives of various organizations, such as the American Medical Association (AMA), and committees, such as the Practice Expense Review Committee. The RUC expanded from 29 to 31 members in 2011 to include greater representation from primary care and geriatrics. A complete list of specialties and current members is available from the AMA at [www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/medicare/the-resource-based-relative-value-scale/the-rvs-update-committee.page?#](http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/medicare/the-resource-based-relative-value-scale/the-rvs-update-committee.page?#).
6. For more information see AMA/Specialty Society, "RVS Update Process Booklet," American Medical Association, 2014, [www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/medicare/the-resource-based-relative-value-scale/the-rvs-update-process-booklet.page?](http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/medicare/the-resource-based-relative-value-scale/the-rvs-update-process-booklet.page?).
7. Rachel Fields, "ASA Expresses Concern Over CMS' Rejection of RUC Recommendations," *Becker's ASC Review*, July 7, 2011, [www.beckersasc.com/anesthesia/asa-expresses-concern-over-cms-rejection-of-ruc-recommendations.html](http://www.beckersasc.com/anesthesia/asa-expresses-concern-over-cms-rejection-of-ruc-recommendations.html).
8. American Medical Association, "2014 Medicare Physician Fee Schedule Final Rule," summary, [http://c.ymcdn.com/sites/www.aahcm.org/resource/resmgr/public\\_policy/ama\\_summary-2014\\_medicare\\_pf.pdf](http://c.ymcdn.com/sites/www.aahcm.org/resource/resmgr/public_policy/ama_summary-2014_medicare_pf.pdf).