## **RELATIVE VALUE UNITS (RVUs): A PRIMER**

## **ON WHY THEY ARE IMPORTANT TO PHARMACISTS**

### JULY 1, 2022





Pharmacy Health Information Technology Collaborative



#### Table of Contents

1.	Overview	. 3
2.	Background	. 3
3.	How RVUs are Applied Across the Health Care System by Different Provders	. 4
4.	Assigned to Evaluation and Management Codes	. 5
5.	How RVUs Are Used By Pharmacists In Practice	. 6
6.	Evolution of Fee-For-Service and Value-Based Models	. 8
7.	Conclusion	. 9
8.	Resources	10
9.	Acknowledgements	10



#### 1. OVERVIEW

Most medical practices use relative value units (RVUs) to assess payment and workforce needs. RVUs are a new concept to many pharmacists but are important to understand, especially as payment opportunities for pharmacists emerge in multiple practice settings. The purpose of this document is to provide pharmacists with baseline information on RVUs, including an overview, how RVUs are determined, and practical examples of how RVUs may be applied to pharmacists' patient care services in clinical practice now and in the future.

#### 2. BACKGROUND

The Resource-based Relative Value Scale (RBRVS) is the system used by the Centers for Medicare & Medicaid Services (CMS) and private payers to determine payment for physician and other health care professional services.<sup>1</sup> Pursuant to enactment of the Social Security Amendments of 1965 creating the Medicare program, physicians set rates for the medical care they provided to patients using Medicare's customary, prevailing, and reasonable charge system, also referred to by private insurers as the usual, customary, and reasonable reimbursement system. RBRVS was established in response "to distortions in payment rates between services," which included geographic differences in prevailing rates and variances in physician compensation.

In 1992, Medicare revised its payment system, with help from the American Medical Association (AMA), establishing a standardized physician fee schedule based on relative value units (RVUs).<sup>2</sup> Health care services and procedures are assigned a unique identifying code using either an AMA Current Procedural Terminology (CPT<sup>®</sup>) code or CMS Healthcare Common Procedure Coding System (HCPCS) code. More than 10,000 CPT<sup>®</sup> and HCPCS codes are used for reporting and billing for medical services and procedures performed by physicians and other qualified health care professionals, including pharmacists (where permitted).<sup>3</sup> While CPT<sup>®</sup> or HCPCS codes can uniquely identify and describe a service or procedure, they do not provide guidance on the amount of time and effort, clinical staff, and specialized equipment required to perform the service or procedure. Therefore, an RVU system was established to provide a mechanism for standardizing and comparing the time and resources required to pervices and procedures.

The AMA CPT<sup>®</sup> - Relative Value Scale Update Committee (RUC) oversees the RVU system and conducts valuation processes for various codes. The RUC, a multispecialty AMA committee, makes recommendations to CMS, informed by surveys of providers, on the resources required to deliver various services and procedures. RUC recommendations are then considered by CMS in determining the number of RVUs assigned to the billing code representing each service and procedure.

W.C. Hsiao, P. Braun, D.L. Dunn, et al, "An overview of the development and refinement of the Resource-Based Relative Value Scale. The foundation for reform

of U.S. physician payment," National Library of Medicine, Med Care, 30(11 Suppl): NS1-12 (November 1992). doi: 10.1097/00005650-199211001-00001. https:// pubmed.ncbi.nlm.nih.gov/1434963/.

<sup>&</sup>lt;sup>2</sup> RBRVS overview. RVS Update Committee (RUC). American Medical Association. https://www.ama-assn.org/about/rvs-update-committee-ruc/rbrvs-over-

view#:~:text=The%20resource%2Dbased%20relative%20value,CMS)%20and%20most%20other%20payers.&text=Instead%20of%20basing%20payments%20 on,payment%20schedule%20based%20on%20RBRVS.

<sup>3</sup> Ibid.



# 3. HOW RVUS ARE APPLIED ACROSS THE HEALTH CARE SYSTEM BY DIFFERENT PROVIDERS

The three categories that comprise an RVU in the Resource-based Relative Value Scale (RBRVS) model include provider work in delivering the service or procedure, practice expenses, and professional liability insurance. (Figure 1).

- Provider work RVUs (wRVU) account for the work done by a provider (e.g., physician or qualified provider, such as a nurse practitioner, physician assistant) in providing patient care for a specific procedure or service. Factors that are included in a work RVU determination include technical skills, physical effort, mental effort and judgement, stress related to patient risk, and the amount of time required to perform the service or procedure.
- Practice expense (PE) RVUs account for the cost of clinical and nonclinical labor and expenses of the practice. These include medical supplies, office supplies, clinical and administrative staff, costs of building space, utilities, medical equipment, and office equipment.
- Malpractice (MP) RVUs reflect the cost of professional liability insurance based on an estimate of the relative risk associated with each CPT<sup>®</sup> or HCPCS code. .

#### Figure 1: RVU Components



From a practical perspective, one RVU represents an established amount of work and effort from which all other services and procedures can be compared. For example, a service that is assigned five total RVUs means that the resources consumed in delivering the service are five times greater than those consumed by a service with one total RVU.

Table 1: CMS 2022 RVUs Assigned to Evaluation and Management Codes dominant set of codes used by physicians and other qualified healthcare professionals for billing office visits (detailed information about E/M billing can be reviewed in the CMS Evaluation and Management Services Guide). The 2022 RVUs assigned by CMS are displayed for E/M CPT<sup>®</sup> codes 99211-99215 (office visits for



established patients). For example, E/M code 99212 is used for an office visit that takes an average of 10-19 minutes to deliver, if billed based on time. E/M code 99215 is used for patient office visits that take an average of 40-54 minutes to deliver. The respective total RVUs (tRVUs) for these two codes reflect the difference in provider work, practice expense, and malpractice insurance, with E/M code 99215 (tRVU 5.29) requiring over three times greater time and resource requirements to deliver than E/M code 99212 (tRVU 1.63).

E/M Code (CPT)	Work RVU (wRVU)	Practice Expense RVU	Malpractice RVU	Total RVU (tRVU)
99211	0.18	0.49	0.01	0.68
99212	0.70	0.89	0.07	1.63
99213	1.30	1.26	0.10	2.66
99214	1.92	1.71	0.12	3.75
99215	2.80	2.28	0.21	5.29

#### Table 1: CMS 2022 RVUs Assigned to Evaluation and Management Codes

"RVUs provide a stadardized mechanism for tracking the total overall workload in a practice, tRVU, and the idividual work of providers, wRVU. They also play a role in payment for services."

Based on Centers for Medicare & Medicaid Services, 2022 Physician Fee Schedule, Relative Value Unit Files.<sup>4</sup>

RVUs provide a standardized mechanism for tracking the total overall workload in a practice, tRVU, and the individual work of providers, wRVU. They also play a role in payment for services. For example, in the Medicare program, CMS determines the number of tRVUs assigned to each billing code for a service or procedure. On an annual basis, CMS also sets the rate for a conversion factor that is used to translate the number of tRVUs assigned to a billing code to a payment rate for that service. In 2022, the Medicare conversion factor is: 1 tRVU = \$33.59. For CPT<sup>®</sup> code 99212 in Table 1, the 2022 Medicare payment rate is:

(tRVU for CPT<sup>®</sup> code) x CMS conversion factor (\$/RVU) = CMS payment for the CPT<sup>®</sup> code

2022 CMS payment for CPT<sup>®</sup> Code 99212: 1.63 (tRVU) x \$33.59/RVU = \$54.75

Note that there is also a geographic adjustment factor applied for all services in the Medicare feefor-service program so payment rates to providers and practices will vary based on geographic location. The following sections will focus on how the work of providers, the wRVU component is used in practices for healthcare providers, including pharmacists.

<sup>&</sup>lt;sup>4</sup>Physician Fee Schedule, Relative Value Unit Files. January 22 release (Sheet PPRVU 22 JAN, lines 17417-21). Centers for Medicare & Medicaid Services. https:// www.cms.gov/medicaremedicare-fee-service-paymentphysicianfeeschedpfs-relative-value-files/rvu22a.



"Like any other providers, pharmacists can utilize this established system to mesure their workload and to compare the volume and complexity of the patient care provided."

#### 4. HOW wRVUS ARE USED BY PHARMACISTS IN PRACTICE

Provider work RVUs (wRVU) have been used for many years to measure the work output of providers in a practice and for determining the provider salary targets. The RVU system not only considers the volume of patients in the practice but also the complexity of patient care provided. The wRVUs are essentially a method of standardizing fee-for-service compensation metrics and comparing clinic services in a variety of settings and locations. Like any other providers, pharmacists can utilize this established system to measure their workload and to compare the volume and complexity of the patient care provided.

Historically, pharmacists' positions were justified by using cost avoidance models or net benefit to practice site metrics. Pharmacists are increasingly able to generate direct revenue for their patient visits and utilize the same CPT<sup>®</sup> codes as other practitioners for billing with some payors. Several states have passed legislation opening pathways for pharmacists to receive reimbursement from state Medicaid programs or commercial health plans. This is a significant advancement for pharmacy practice; however, the ability to bill independently for services comes with new responsibilities and expectations. It is noteworthy that pharmacists are not classified as eligible providers for reimbursement in the Medicare Part B benefit, regardless of state payment policy; thereby, limiting a standard method of reimbursement for pharmacists nationwide.

Now that pharmacists are being recognized as another billing provider in certain states, it is important that they have a general understanding of the RVU system, how it is used to measure the value of their work, and how it can be used to compare the work of pharmacists to other providers.

RVUs can be applied by pharmacists in any practice setting including primary care and specialty clinics, community pharmacies, and long-term care facilities. The following example highlights how RVUs are used in a primary care clinic. Like other health care providers in this clinic, pharmacists see patients by appointment and are responsible for meeting budgeted visit goals and accurately documenting and billing for the services provided. Pharmacists in these practices often use E/M CPT<sup>®</sup> codes, based on the level of complexity or time for the service, to charge all patients for face-to-face and telehealth appointments regardless of insurance coverage. The wRVUs for the visit are documented based on the CPT<sup>®</sup> code chosen by the pharmacist. The selected CPT<sup>®</sup> code must be supported by clinical documentation and the time spent in patient care for the service provided. Billing departments may adjust the CPT<sup>®</sup> code sent to the payer based on payer policy.

By using the wRVU chosen by the pharmacist, the actual time and level of complexity for the visit can be measured. Visit volume per clinic full-time-equivalent (FTE) and wRVUs are reported for all provider types working within this clinic. Many standard clinic performance reports have been adapted to include various pharmacist performance metrics.

Pharmacists' visit volume, billing level of service and wRVU data are collected each month and used to evaluate individual clinic and pharmacist performance. The information can be used to assess and compare pharmacist practices, individual pharmacist visits volumes, appropriateness of pharmacist billing habits, and for comparison across all providers working in the same clinic. This information is valuable as it helps leadership assess pharmacist performance, opportunities for clinic growth, and compare the complexity and value of patient care provided by pharmacists to other provider types.

Table 2 below demonstrates an example of how wRVUs are used to measure pharmacists' work contributions to the practice in this clinic. Pharmacists in this practice generally bill E/M CPT<sup>®</sup> codes



99212-99215. The pharmacist practice metrics demonstrate how data collected from pharmacist visits, E/M code selection, and the associated wRVUs can be used to compare and evaluate pharmacist practices. E/M codes can be selected for each visit based on either time spent with a patient or on the medical decision making (patient complexity) attributed to the visit<sup>1</sup>. In this example, pharmacists commonly manage anticoagulation and chronic conditions including hypertension, diabetes, etc. Pharmacists tend to spend more time educating their patients about medications than other providers and frequently choose E/M codes reflecting the total time spent in patient care. Alternatively, shorter visits with patients that have several chronic diseases requiring multiple prescription drugs would be billed based on the complexity of care provided.

Based on the complexity and time spent with patients managed, it is expected that pharmacists will most frequently select E/M codes 99213 (wRVU 1.3) and 99214 (wRVU 1.93). The pharmacists are compared to each other and to other provider types to evaluate the volume and value of patient care provided. In this example, data presented demonstrates that pharmacists generally bill at a lower level than physicians but at a comparable rate to advanced registered nurse practitioners. The information about visit volume and complexity is presented each month in addition to quality metrics that help tell the complete story of each pharmacist's value on the care team.

	CPT 99212: Assigned wRVU = 0.7	CPT 99213: Assigned wRVU = 1.3	<b>CPT 99214:</b> Assigned wRVU = 1.93	CPT 99215: Assigned wRVU = 2.8	Total Monthly Visits	Total wRVU*
Primary Care Pharm	acists					
Pharmacist A	0	75 visits	95 visits	25 visits	195	350.9
		(97.5 wRVU)*	(183.4 wRVU)	(70 wRVU)		(Total wRVU)
Pharmacist B	15 visits	75 visits	65 visits	0	155	233.45
	(10.5 wRVU)	(97.5 wRVU)	(125.45 wRVU)			(Total wRVU)
Pharmacist C	0	120 visits	85 visits	0	205	320.05
		(156 wRVU)	(164.05 wRVU)			(Total wRVU)
Primary Care	45 visits	155 visits	40 visits	10 visits	250	338.2
Advanced Registered Nurse Practitioner	(31.5 wRVU)	(201.5 wRVU)	(77.2 wRVU)	(28 wRVU)		(Total wRVU)
Primary Care MD	0	40 visits	185 visits	43 visits	268	529.5
		(52 wRVU)	(357.1 wRVU)	(120.4 wRVU)		(Total wRVU)

#### Table 2: Clinic Monthly wRVU Caseload Experience

\*Example: Pharmacist A billed 75 visits using CPT<sup>®</sup> code 99213. The CMS assigned wRVU for CPT<sup>®</sup> code 99213 is 1.3. This translates to 97.5 wRVU: 75 visits x 1.3 RVU/visit for CPT<sup>®</sup> 99213 = 97.5 wRVU

Salaries for physicians and other health care practitioners may include annual wRVU targets. In this clinic, pharmacist month-to-month wRVU reporting tends to be consistent, allowing for annual wRVU projections. Figure 2 provides anticipated annual wRVU data for the E/M codes billed by the three pharmacists in this clinic. It's estimated that pharmacists in this clinic will produce 10,853 wRVUs (for an average of 3,618 wRVUs/pharmacist annually). Actual pharmacist wRVU data and E/M code selection are tracked monthly and reported annually in this real clinic example to demonstrate annual trends in the complexity of patient care provided.

<sup>5</sup>CPT Evaluation and Management (E/M) Office or Other Outpatient and Prolonged Services Code and Guideline Changes. American Medical Association. https:// www.ama-assn.org/system/files/2019-06/cpt-office-prolonged-svs-code-changes.pdf.



Figure 2: Projected Jan-Dec Pharmacist E/M wRVUs Billed – Three Pharmacists



"This type of modeling is evolving and may be used for pay-for-performance and risk sharing models moving forward."

#### 5. EVOLUTION OF FEE-FOR-SERVICE AND VALUE-BASED MODELS

Historically, the RVU system has been the primary tool used to set patient care goals and compare the clinical work being performed. As efforts transition to the increasing use of value-based models, many practices are now utilizing a combination of wRVU and performance on clinical metrics to determine provider compensation. This type of modeling is evolving and may be used for pay-for-performance and risk sharing models moving forward.

Table 3 below provides a hypothetical example of how a practice may measure its providers in a mixed fee-for-service (FFS) and value-based model scenario. Historically, in a straight FFS environment, providers were measured solely on wRVU (column C) for productivity. With the movement to value-based care, practices may now include a mixture of wRVU with clinical indicator performance (columns E-H) to measure provider productivity and impact on patient outcomes. There are many clinical metrics that may be chosen that can depend on factors such as payer mix, practice setting, or patient population and often include a mixture of access, wellness/prevention, and chronic condition management as shown.

In the example, providers are being measured on annual performance. Each provider has an assigned panel of patients with the clinical metrics of those patients measured against a predetermined practice goal. In the example, Providers A and B are both maintaining a large panel of patients and have a large number of wRVU. Historically, this would likely lead to a large compensation. In other words, the providers were incentivized to care for a high volume of patients via frequent office visits. When adding in access and clinical metrics, it appears the providers could improve the quality and comprehensiveness of the care they are providing. In contrast, Provider C is providing high value care to patients clinically but does not manage as many patients. Finally, Provider D appears to be managing an appropriate panel of patients and providing high value care. Current compensation plans are evolving to factor in both the wRVU and the quality or value of workprovided. It will be important for pharmacists to learn about these value-based models when they may be listed as a provider in a practice or be part of a team that shares a patient panel.



Table 3: Examples of How Practices May Measure Providers in a Mixed FFS/Value-based Model

	Patient Panel Size* (B)	Annual wRVU** (C)	Third Next Available Appointment (TNAA)*** (E)	A1c <9% (F)	Hypertension control (G)	Pneumovax rate for age >65 y/o (H)
Clinic's Target Goals^		>5,100	7 days	64%	62%	77%
Physician A	2700	7,922	13 days	62%	68%	54%
Physician B	3500	11,281	32 days	48%	60%	72%
Physician C	1200	2,971	3 days	74%	78%	42%
Physician D	2000	4,954	7 days	72%	74%	72%

\*Panel size is the number of patients attributed to or currently under the care of a particular provider.

\*\*Annual wRVU is a measure of fee-for-service productivity of a provider. There are many factors that can influence wRVU (e.g., number of visits, complexity of visits). Many provider salaries have a baseline wRVU minimum with additional payment based on wRVU above goal.

\*\*TNAA is a common metric used by practices to measure patient access to care

^ This is a hypothetical example of clinic providers' target goals based on panel size, wRVU, and quality metric targets. Each clinic will set their own goals for providers.

#### 6. CONCLUSION

This resource document provided an overview of RVUs, how they are determined, and practical examples of how RVUs may be applied to pharmacists' patient care services in clinical practice now and in the future. Understanding RVU processes and use will enable pharmacists to be better informed and ready to work in practices where performance is tracked and understand how RVUs are applied to a practice's payment goals.



#### 7. RESOURCES

- 1. American Medical Association. 2022 RVS Update Process (updated annually). https://www.ama-assn.org/system/files/ruc-update-booklet.pdf. (https://www. ama-assn.org/).
- 2. American Medical Association. RVS Update Committee (RUC). rvs-update-committee-ruc.
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#### 8. ACKNOWLEDGEMENTS

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