



## Understanding Work Moving beyond the RVU

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### Introduction

In the United States, the most widely used measure of clinical productivity is the relative value unit (RVU) system, which calculates compensation on the basis of relative physician resource costs. Before its implementation, payers for health care services based compensation on the historical charges physicians billed for their services. The RVU system was on the basis of a review of patient vignettes in which physicians were asked to estimate the work involved in these cases compared with the work for particular referenced services (1). Over time and with multiple iterations, RVU values were refined. The Centers for Medicare and Medicaid Services (CMS) is currently responsible for updating RVU values (updates are mandated by Congress to occur no less than every 5 years). CMS relies on advice and recommendations from the American Medical Association/Specialty Society Relative Value Scale Update Committee (2). To prevent inappropriate boosts of resources associated with specialty services, an increase in any RVU service amount results in a commensurate decrease in RVU valuation for another clinical service.

RVUs are now the national standard for measuring productivity, budgeting, and expense allocation. Because the RVU reflects the amount of work required to perform a service, it provides quantitative measures for tracking productivity beyond counting the number of patients seen and procedures performed. Although RVUs themselves do not represent monetary values, they are used in conjunction with a conversion factor (dollars per RVU) to determine the amount of payment for a service. The conversion factor is updated annually according to a complex formula set by statute. This complex RVU system can be broken down into several components: (1) the “work,” RVU accounts for work performed by a provider in delivering the service and relates to time and effort (the actual time to provide the service, the physical and mental effort, and the stress associated with the risk of the service); (2) the “practice expense,” RVU accounts for the cost to operate the system providing the service and is related to overhead expenses; and (3) the “malpractice,” RVU estimates risk associated with the provision of the service and relates to malpractice expenses. CMS also utilizes a geographical practice cost index to account for variations in the cost of

providing services in differing locations. Total RVUs are then calculated for any current procedural terminology code using a formula that factors all components of the RVU system. For more details see reference (3).

This discussion focuses solely on the provider component of the RVU system—the work RVU. Work RVUs for commonly performed services in nephrology are shown in Figure 1. For comparison, the work relative value units (wRVUs) for the provision of a single hemodialysis session are comparable to those for the performance of a transthoracic echocardiogram with Doppler study or a level 3 new patient office visit (4).

As most practitioners are keenly aware, RVUs are now the dominant currency of work output and are benchmarked within specialties through several member-driven health care performance improvement companies such as Vizient and the Medical Group Management Association (MGMA). Intrinsic to this system is that complex work is distilled to a single cumulative value that is often used, and sometimes misused, by administrators to measure the value of clinical work and to assess clinician performance. As an example, a nephrologist treating a patient for GN likely uses additional time outside of the clinic visit to coordinate care, obtain preauthorizations for medications, review laboratory work, and manage complications. None of these activities are counted or credited in the current system. Organizations commonly set targets for clinical productivity on the basis of RVUs and clinicians are, at least partially, evaluated and compensated by this measure. This system of quantifying clinician performance has the trademark flaws and tradeoffs inherent in the development of any system to quantify the amount of work required to perform a complex service. In addition to slowing the uptake of value-based, population-focused care, overreliance on RVU measurements has led to serious physician burnout and job dissatisfaction. Even more troubling is the pervasive misuse of the RVU system to value and compensate clinicians. This is true especially in the face of changing care models.

It is widely believed that current wRVUs are misvalued and unfairly favor procedure-based specialties (5). This is partly because wRVU valuation that does not reflect changes in technology. Technological

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Code	Service	Work RVU
90935	Hemodialysis – one evaluation	1.48
90945	Dialysis – one evaluation	1.56
90960	ESRD service 4 visits per month, age > 20	5.18
90961	ESRD service 2–3 visits per month, age > 20	4.26
90962	ESRD service 1 visit per month, age > 20	3.15
90966	ESRD home service per month, age > 20	4.26
99201	New outpatient office visit	0.48
99202	New outpatient office visit	0.93
99203	New outpatient office visit	1.42
99204	New outpatient office visit	2.43
99205	New outpatient office visit	3.17
99211	Established outpatient office visit	0.18
99212	Established outpatient office visit	0.48
99213	Established outpatient office visit	0.97
99214	Established outpatient office visit	1.50
99215	Established outpatient office visit	2.11

**Figure 1. | Work RVU values for commonly performed services in Nephrology.**

advances have vastly increased the efficiency of many procedures, thus allowing some physicians to generate more RVUs per hour than specialties requiring actual face time with complex patients, such as in nephrology. For example, one older analysis determined that Medicare reimbursement is three to five times higher for common procedural care than for cognitive care. In fact, the performance of colonoscopies or cataract extractions over a 1- to 2-hour period yielded more revenue than a cognitive-based provider received for an entire workday (6). Thus, RVUs may not reflect the actual differences in clinician time and involvement required to perform various clinical services.

Transparency regarding the process of measuring RVUs has increased over the past decade. The current method for valuing services relies heavily on survey data, which now requires careful reassessment (7). In nephrology, the total cash compensation per wRVU in 2017 was actually slightly lower than for primary care physicians, making the relative valuation of services and the volume provided the major driver of compensation (providers maintain higher compensation by maintaining high wRVU totals) (8). This dynamic is counterintuitive to the tenets of value-based care, and is a significant contributor to physician burnout—physicians operate under ever-increasing pressure to boost work output for the same amount of credit.

The introduction of the electronic medical record has dramatically increased the amount of time required in providing patient care, especially in more cognitive-based specialties. A recent study focusing on four specialties (nephrology was not included) determined that for every hour physicians provide direct clinical face time to patients, nearly two additional hours is spent on electronic medical records and desk work within the clinic day. Physicians spend an additional 1–2 hours of personal time each night completing computer and other clerical tasks (9). This burden is disproportionately true for cognitive-based specialties and is not accurately or fairly accounted for through the wRVU system. This change in physician workflow, coupled with continued reliance on compensation and determination of physician productivity on the wRVU, presents a troubling and rising concern within

the medical profession. Essentially, clinicians now work harder for each wRVU earned.

A critical aspect of the RVU system is that the total number of wRVUs accumulated is matched to a clinical productivity bar, or benchmark. In nephrology, the two most commonly used systems were developed by the Faculty Practice Solutions Center (FPSC), which is part of Vizient, and MGMA. There are marked differences between these two benchmarks with respect to the number of RVUs required to meet “benchmark.” FPSC data are derived directly from insurance claims, and the MGMA benchmark is derived using self-reported data. The most recent FPSC data are based on only 300 practitioners. The MGMA data in 2019 was on the basis of 21 groups, totaling approximately 176 practitioners. Thus the current clinical benchmarks are based on woefully small surveys. In addition, subspecialties within nephrology often participate in extensive work that has no wRVU value and is not well captured in current benchmarking. This might include traveling to a remote dialysis center, care coordination meetings for patients with ESKD, or transplant-related meetings such as donor and recipient selection meetings. National organizations of nephrology need to step into this void by providing regular and systematic surveys that can yield meaningful metrics from and for all types of nephrology practices.

Regardless of benchmark, productivity goals that are based solely upon wRVUs are fundamentally flawed. They do not align with the higher goals and values of clinicians nor with societal needs. Revenue generation must support compensation. Health care institutions must evolve their compensation systems to recognize and incentivize physician performance that keep people healthy and improve health for the patients in their care.

Health care is rapidly evolving from a fee-for-service model to a value-based system that focuses on population health and performance-based compensation. In these new care models, physician activities shift toward managing systems of care, managing the health of populations, and performing clinical activities that improve outcomes. In the current system, wRVUs do not distinguish between activities that might be favorable to the healthcare system in providing more effective care at a lower cost, such as preventative services. In fact, the opposite may be true because the wRVU system disproportionately favors higher-cost and intensive procedures over cognitive clinical work (10). The shift in health care toward a value-based model necessarily requires a wRVU system that more fairly measures the time and effort required in care coordination, provision of mental health, attention to the social determinants of health and focus on implementing evidence-based care that improves outcomes. Within nephrology, the recently announced Executive Order on Advancing Kidney Health signals the interest of CMS to explore alternative payment models that can align the care of patients with CKD and ESKD with improved outcomes in these patient populations. These alternative care models require alignment of payment models with outcomes, something that the current wRVU model does not accomplish. We would propose that future determination of physician work include items that better align with new payment models, such as patient contact hours, patient panel size, number of sessions worked, patient satisfaction scores, quality measure attainment, team-based goals, and others. The relative

weights of these measures might vary depending upon the goals of the system and needs for improvement.

During the 30 years since the development of the RVUs system, our health care systems have undergone tremendous change. Cognitive-based care is now more complex, procedural-based care is now more efficient, and there is an increasing focus on improved outcomes and cost-control. The RVU system has evolved only incrementally over the last three decades and now requires dramatic reform that aligns payment with performance and more clearly values the time and effort required to provide high-quality patient care. Modifications have been proposed, but urgent discussion and action is still needed. There is much to gain from RVU-based payment reform and much to lose if the system advances with only baby steps.

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#### References

1. Hsiao WC, Braun P, Yntema D, Becker ER: Estimating physicians' work for a resource-based relative-value scale. *N Engl J Med* 319: 835–841, 1988
2. American Medical Association: RVS update committee (RUC). Available at: <https://www.ama-assn.org/about/rvs-update-committee-ruc/rvs-update-committee-ruc>. Accessed August 9, 2019
3. National Health Policy Forum: The basics: relative value units (RVUs). 2015. Available at: [https://www.nhpf.org/library/the-basics/Basics\\_RVUs\\_01-12-15.pdf](https://www.nhpf.org/library/the-basics/Basics_RVUs_01-12-15.pdf). Accessed August 9, 2019
4. Centers for Medicare & Medicaid Services: Relative value files. 2019. Available at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Relative-Value-Files-Items/RVU19A.html>. Accessed August 9, 2019
5. Zuckerman S, Merrell K, Berenson RA, Lallemand NC, Sunshine J: *Realign Physician Payment Incentives in Medicare to Achieve Payment Equity Among Specialties, Expand the Supply of Primary Care Physicians, and Improve the Value of Care for Beneficiaries*, 2015. Available at: <https://www.urban.org/research/publication/realign-physician-payment-incentives-medicare-achieve-payment-equity-among-specialties-expand-supply-primary-care-physicians-and-improve-value-care-beneficiaries>. Accessed December 27, 2019
6. Sinsky CA, Dugdale DC: Medicare payment for cognitive vs procedural care: Minding the gap. *JAMA Intern Med* 173: 1733–1737, 2013
7. American Medical Association: An introduction to the RUC. Available at: <https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/rbrvs/introduction-to-the-ruc-updated.pdf>. Accessed August 9, 2019
8. Urban Institute and SullivanCotter; Medicare Payment Advisory Commission: Analysis of disparities in physician compensation. 2019. Available at: [http://www.medpac.gov/docs/default-source/contractor-reports/jan19\\_medpac\\_disparities\\_physiciancompensationreport\\_cvr\\_contractor\\_sec.pdf?sfvrsn=0](http://www.medpac.gov/docs/default-source/contractor-reports/jan19_medpac_disparities_physiciancompensationreport_cvr_contractor_sec.pdf?sfvrsn=0). Accessed August 9, 2019
9. Sinsky C, Colligan L, Li L, Prgomet M, Reynolds S, Goeders L, Westbrook J, Tutty M, Blike G: Allocation of physician time in ambulatory practice: A time and motion study in 4 specialties. *Ann Intern Med* 165: 753–760, 2016
10. Nissenon AR, Maddux FW: Nephrologists and integrated kidney disease care: Roles and skills essential for nephrologists for future success. *Am J Kidney Dis* 70: 132–138, 2017

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