Relative Value Unit for the Athletic Trainer

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What is a Relative Value Unit (RVU)?

RVUs are a standard measurement for cost. Under the Social Security Act, Medicare established a national fee schedule for physicians based on Relative Value Units (RVUs). RVUs are part of the Resource-Based Relative Value Scale (RBRVS) adopted by Medicare in 1992. Medicare mandates the updating of RVUs every f ive years. The RBRVS uses RVUs to assign a certain value to all procedures.

Why are RVUs used?

RVUs have continued to be used as they have become the standard measurement for cost benchmarking and have been validated and used by almost all third party payers besides Medicare.

RVUs are commonly thought to measure productivity; where more accurately RVUs are a measure of the amount of resources that a physician consumes during practice. For example, RVU_ws are a measurement of time and effort put in by the physician. Therefore, if the physician records 5,000 RVU_ws and is compensated $200,000, they have used $40 worth of resources for every RVU_w. So, although there is a relationship between physician productivity and RVU's, the true value of RVUs is accounting for cost or measuring the consumption of resources.

Practice efficiency, cost accounting purposes/fee schedule

A practice can determine expenses per RVU but this requires the practice manager to track expenses as well as the total RVUs for each of the three expense components (work, practice expense and malpractice).

	Expense ($)	RVUs	Expense per RVU ($)
Work RVU_w	$ 2,500,000	50,000	$ 50
Practice RVU_{PE}	$ 2,000,000	65,000	$ 31
Malpractice RVU_{MP}	$ 150,000	5,000	$ 30

Practices should use RVU 'costing' to track revenues and determine the resources consumed by the practice for a specific procedure or service. It is useful for instance to determine the cost per RVU for the practice. This can be calculated by dividing the total cost by total RVUs (Total expenses/ sum of total RVUs = cost/RVU). Each practice should have Total RVUs as well as each of the three components (RVU_w, RVU_{PE} and

RVU_{MP}) for each CPT code on a spreadsheet. This allows the practice to calculate dollar value for each component of the RVU by dividing total expenses for each of the three RVU categories.

What is the difference between total, work and facility RVUs?

The RBRVS reimbursement schedule assigns certain values to procedures based on Total RVUs. The total RVU consists of three separate components: work (RVU_w), practice expense (RVU_{PE}) and malpractice (RVU_{MP}). The main component of total RVU is RVU_w and accounts for 50-55% of the total RVU. The RVU_w is comprised of two separate components: time (approximately 70%) and effort (approximately 30%). Time is calculated by the time spent before, during and after providing a service, such as charting or dictating. Similarly, the effort consists of the physical effort, skill and stress involved with providing that service. The more complex a medical problem, the higher the RVU_w.

The RVU_{PE}, the next major component of total RVU, accounts for 40-45% of the total RVU formula. This includes all non-physician and administrative payroll and benefits, office expenses, medical supplies, equipment and miscellaneous expenses such as accounting and legal. Medicare has gathered information by prior year surveys and, after calculating per hour cost, modifies this portion of the RVU for each specialty as well as for the type of facility.

Furthermore, Medicare adjusts payments by designating a geographic price cost index or GPCI and pays differently for the same procedure depending on where the practice is located. Additionally important is the Conversion Factor (CF), which converts the RVU into a charge and reimbursement. The CMS Medicare CF for 2015 is $28.2239. The payment formula is:

[(RVU_w x work GPCI) + (RVU_{PE} x PE GPCI) + (RVU_{MP} x malpractice GPCI)] x CF for the year in question.

Why do physicians care about RVU_ws?

RVU_ws are commonly used to measure a physician's productivity & compensation. Each physician's productivity is measured by the sum of Total RVU's recorded for each CPT code multiplied by the CF, which gives the practice reimbursement for each CPT code.

Why do athletic trainers care about RVU_ws?

Since physicians often rely on their RVU_w to determine their compensation, it is vital to our position as an athletic trainer working in a physician practice to help them increase their efficiency, productivity and ultimately their compensation. If we were able to make our physicians more efficient, this would allow them to see more patients within the same time period, therefore increasing their revenue without also increasing their RVU_w,RVU_{PE} and RVU_{MP} (costs). Additionally, by performing tasks such as casting, splints and DME fitting, this allows the physician to see other patients while the AT is still adding services that can be billed for the physicians under incident to billing, again therefore increasing revenue without increasing cost.

Why do administrators/private practices care about RVU_ws?

As discussed, there are many reasons why practice administrators would care about RVUs; however, a large reason is in regards to insurance companies' contract negotiations. RVUs and Cost per RVU are the two most common measurements used during contract negotiations between physicians and insurance companies. Therefore it is crucial to understand the cost per RVU in order to determine if a specific procedure is profitable or is losing money. For example: Let's use CPT code 99213 for an Established Patient Level 3 office visit (non-facility) as an example and expense per RVU from the previous table. To calculate a potential profit for a contract for 1,000 office visits for the same CPT code, the analysis is illustrated below. The practice then has to determine whether the contract offer is worth accepting. If the insurance company is offering $60 per visit on a contract of 1,000 patients, this would equal $60,000. We know that by calculating the RVU_{PE} and the RVU_{MP} that the total expense for those same 1,000 patients is approximately $32,000. This leaves a profit of approximately $28,000 for those 1,000 patients. In addition to helping determine if this is an acceptable contract from the insurance company, once accepted, it can also help determine potential non-physician employee raises, bonuses, supplies expenses and other business expenditures.

(Table continued on next page.)

NOTE: All are estimates	RVU_w	RVU_{PE}	RVU_{MP}
Total RVUs 2.01	0.97	0.97	0.07
Expense per RVU (from previous table)	50	31	30
Total Expense for 1000 visits $ 30,070 + 2,100 = $32,170		0.97 x 31 x 1000= $30,070	0.07 x 30 x 1000= $2,100
Contract Offer for 1,000 visits $60 per visit			
Gross Income	$60 x 1000 = $60,000		
Expense for visits	$32,170		
Profit	$27,830		

To take home, practice managements should always enter the RVUs of each code during the charge capture process. This will enable a more comprehensive cost management process by allowing administrators to determine their consumption of resources versus the compensation they are bringing in. If there is a deficit in the profit due to high consumption, it can be more easily identifiable using the RVU system. The Medical Group Management Association (MGMA) or University Health Consortium, who track RVUs based on specialty, type of practice and location, can provide great points of reference .

What is the Medicare $ amount per RVU?

Medicare has the lowest reimbursement rate out of all insurances. It is also the most consistent; Medicare reimburses every physician/facility at the same rate. Medicare is also the only insurance company that is transparent with their rates. The 2015 RVU conversion factor for one RVU is $28.2239. This is important to understand because when the administrators, physicians or athletic trainers in a practice are looking to determine value, productivity or increased efficiency, you will want to use Medicare reimbursement rate. Medicare is the lowest reimbursement rate out of all insurances, so this guarantees that the values you calculate are the absolute worst you can expect. Therefore, if you get just one private party insurance payer you will have exceeded your expectations that were originally based on Medicare values.

What effect can athletic trainers have on clinic revenue by increasing clinic efficiency?

By increasing clinic efficiency, ATs are increasing the number of patient visits. Every patient visit results in an additional office visit (E/M) charge. Every office visit has an associated level of service (LOS). There are many criteria that go into quantifying LOS but essentially the more involved the patient's visit, the higher the LOS.

E/M Code	Description	wRVU
99201	New Patient LOS 1	0.48
99202	New Patient LOS 2	0.93
99203	New Patient LOS 3	1.42
99204	New Patient LOS 4	2.43
99205	New Patient LOS 5	3.17
99211	Established Patient LOS 1	0.18
99212	Established Patient LOS 2	0.48
99213	Established Patient LOS 3	0.97
99214	Established Patient LOS 4	1.50
99215	Established Patient LOS 5	2.11

Besides increased E&M charges, what other sources of revenue generation can increased patient volumes lead to?

In addition to increased E/M charges, every patient seen has the possibility of creating downstream revenue. Common sources of downstream revenue that result in additional wRVUs for physicians are injections and surgeries. Below you will see charts that display common injections and surgeries with their associated wRVUs.

Injection CPT code	Description	wRVU
20550	Inject tendon sheath/ligament	0.75
20551	Inject tendon origin/insertion	0.75
20552	Inject trigger point 1-2 muscles	0.66
20553	Inject trigger point >2 muscles	0.75
20600	Small joint/bursa drain/injection w/o US	0.66
20604	Small joint/bursa drain/injection w/ US	0.89
20605	Medium joint/bursa drain/injection w/o US	0.68
20606	Medium joint/bursa drain/injection w/ US	1.00
20610	Large joint/bursa drain/injection w/o US	0.79
20611	Large joint/bursa drain/injection w/ US	1.10
20612	Aspirate/inj ganglion cyst	0.70
76998	US guide needle placement	1.20

Surgery CPT codes	Description	wRVU
24346	UCL reconstruction with autograft	15.21
29807	SLAP repair	14.67
29877	Arthroscopic Meniscectomy	8.30
29888	ACL reconstruction with autograft	14.30

Can athletic trainers directly generate wRVUs without being able to bill for their services?

Yes. Applying casts is a source of wRVU generation that ATs directly generate. With casting, the AT completes the service but the service is billed by the physician thus generating wRVUs for the physician. Casting is not the only way ATs can generate wRVUs. Some other examples include gait training (crutch training), therapeutic exercises and therapeutic activities. Therapeutic exercises and activity could include the creation and demonstration of home exercise programs. This is not a comprehensive list, but below is a chart that displays common CPT codes and their associated wRVUs.

CPT codes	Description	wRVU
29065	Hand gauntlet/spica cast	0.87
29075	Short arm cast	0.77
29085	Long arm cast	0.87
29435	Short leg cast	1.18
29355	Long leg cast	1.53
97110	Therapeutic exercises	0.45
97530	Therapeutic activities	0.44
97116	Gait training	0.40