

Introduction to Relative Value Units and How

Medicare Reimbursement is Calculated

Medicare pays physicians for services based on submission of a claim using one or more specific CPT® codes. Each CPT® code has a Relative Value Unit (RVU) assigned to it which, when multiplied by the conversion factor (CF) and a geographical adjustment (GPCI), creates the compensation level for a particular service. To understand this more fully, the calculations can be broken into three components – RVUs, the geographical adjustment and the conversion factor.

Relative value units (RVUs) – RVUs capture the three following components of patient care.

1. **Physician work RVU** – The relative level of time, skill, training and intensity to provide a given service. Each CPT® code is targeted for review at least every five years to determine the work RVU for a particular service and consider if it remains the same as the value previously set. Code values can increase or decrease if the components of service have changed during the preceding years. A code with a higher RVU work takes more time, more intensity or some combination of these two. Some radiation oncology codes, such as treatment codes, have no associated physician work.
2. **Practice Expense RVU** – This component addresses the costs of maintaining a practice including rent, equipment, supplies and nonphysician staff costs. The practice expense RVU is now calculated using a “bottom up” methodology where the direct costs of providing a service are calculated (staff time, supplies and equipment time) and indirect costs are allocated. Indirect costs are those that cannot be directly attributed the provision of a service, such as having a waiting room or a billing service. Direct costs are those that can be assigned to a specific service; a direct cost would be the actual supplies, equipment and staff time used for a given CPT code. Frequently, a CPT® code will be assigned a practice expense RVU for a facility setting, such as a hospital, and a different practice expense RVU for a nonfacility setting, such as a freestanding center. Generally, freestanding radiation oncology centers receive more practice expense compensation than hospital-based centers, since the practice expense of owning and operating equipment and providing staff resources are significantly more than the practice expenses covered by the physician in a hospital setting. As an aside, the hospital is paid under Hospital Outpatient Prospective Payment System (HOPPS or OPFS) for the radiation oncology equipment and services. Hospital-based physicians are paid under the Medicare Physician Fee Schedule (MPFS) in the same manner as freestanding-based physicians. 2009 is the third year of transition to a new methodology for calculating practice expense. The new methodology will be fully implemented in 2010. Therefore, the 2009 practice expense RVUs are often described as “transitioned” or “transitional.”
3. **Malpractice RVUs** - These are generally the smallest component of the RVU values and represent payment for the professional liability expenses. RUC and CMS rules suggest that these expenses are to be reviewed and updated on a bi-annual basis, but in practice, that has frequently not occurred.

Geographic Practice Cost Indices (GPCI) - Geographic Practice Cost Indices account for the geographic differences in the cost of practice across the country. CMS calculates an individual GPCI for each of the RVU components -- physician work, practice expense and malpractice. GPCIs are reviewed every three years.

Conversion Factor (CF) – The conversion factor converts the relative value units into an actual dollar amount. The dollar multiplier (CF) is updated on an annual basis according to a formula specified by statute. Congress has the ability to override the statutorily defined formula, as it has done in the past several years. In 2009, the Conversion Factor adjusted for budget neutrality is \$36.066.

Budget Neutrality (BN) – CMS is prohibited from changing its overall budget by more than \$20 million. Should RVUs shift in such a way that the CMS budget is impacted by over \$20 million, CMS must use a budget neutrality factor to bring its total payments back in line. CMS first used the BN in 2007 by applying it solely to the physician work RVUs, since a revaluation of physician work RVUs for evaluation and management codes lead to the expected overage. In 2009, CMS changed its BN application moving it to the conversion factor instead.

Facility/NonFacility – This designation identifies where services are provided. The Facility pricing amount generally covers services to inpatients or in a hospital outpatient clinic setting, but can include other settings. Off-site hospital-owned sites are also considered as “facilities” in the context of payment. NonFacility services are generally provided in a freestanding physician’s office, but can include other freestanding settings.

The formulas that reflect the above components and result in the 2009 physician fee schedule payment amount for each CPT[®] codes are:

$$\begin{aligned} \text{2009 Non-Facility Payment Amount} = &[(\text{Work RVU} * \text{Work GPCI}) + \\ &(\text{Non-Facility PE RVU} * \text{PE GPCI}) + \\ &(\text{MP RVU} * \text{MP GPCI})] \\ &* [\text{Conversion Factor adjusted for budget neutrality}] \end{aligned}$$

$$\begin{aligned} \text{2009 Facility Payment Amount} = &[(\text{Work RVU} * \text{Work GPCI}) + \\ &(\text{Facility PE RVU} * \text{PE GPCI}) + \\ &(\text{MP RVU} * \text{MP GPCI})] \\ &* [\text{Conversion Factor adjusted for budget neutrality}] \end{aligned}$$

Key:

Conversion Factor adjusted for budget neutrality - dollar amount used to convert RVUs into a payment amount adjusted for budget neutrality to ensure that total Medicare payments comply with allowed total Medicare funding.

Facility – Reflects the site of service designation, facility services generally are provided to inpatients or in a hospital outpatient clinic setting, but can include other settings.

GPCI – Geographic Practice Cost Index, used to reflect the variations in the cost of providing services between different geographic areas. There are different GPCI's for work, practice expense and malpractice.

MP – The portion of reimbursement associated with malpractice expenditures.

NonFacility – Reflects the site of service designation, nonfacility services are generally provided in a freestanding physicians office, but can include other freestanding settings.

PE – The portion of reimbursement associated with practice expense including reimbursement for supplies, equipment and nonphysician staff.

RVU – Relative Value Unit, used to provide relative comparisons between CPT[®] codes.

Work – The portion of reimbursement associated with physician work.