



Geographic adjustment and the Medicare fee schedule

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While the Medicare fee schedule has been in place for a decade, Fellows continue to have questions about payment differences across the country. Much of this variance has to do with geographic contrasts in practice costs. Just as the cost of living varies across the country, the cost of running a practice varies from locality to locality. This article briefly describes how the Medicare program determines and applies the geographic adjustment of payments for services around the country.

Bases of payment

Payment is based on three factors. Two of them are nationally uniform: (1) three sets of relative value units (RVUs) for a service, which represent the total value for physician work, practice expenses, and malpractice premiums; and (2) a dollar conversion factor that translates RVUs into payments. For 2002, the conversion factor is \$36.20, so, this year, each fee schedule RVU is worth \$36.20.

A third factor, called a geographical practice cost index (GPCI, which is pronounced “gypsy”) is used to adjust the payment for variations in operating costs of medical practices in different markets. Because there are three RVUs to be adjusted, there are three GPCIs, each measuring different geographic-based costs:

- The *physician work GPCI* measures geographic differences in the earnings of all college-

educated workers based on census data. It is intended to reflect geographic differences in the cost of living. However, the value of the GPCI for work is reduced because the statute specifies that only one-quarter of the value of work has the GPCI applied to it.

- The *practice expense GPCI* measures geographic differences in medical practice costs as determined by office rent and staff wages. The office rent portion of the GPCI is based on apartment rental data from the Department of Housing and Urban Development, and the staff wages portion of the GPCI is derived from census data. According to the Centers for Medicare & Medicaid Services (CMS), the cost of medical equipment and supplies is virtually the same nationwide, so the practice expense GPCI does not reflect differences in those expenditures.

- The *malpractice GPCI* measures the difference in premiums for a \$1 million/\$3 million policy and is based on actual premium data for each state.

For each component of the fee schedule, the national RVUs are multiplied by the appropriate area GPCI to arrive at the adjusted value for the locality. The three locality components are then added together and multiplied by the national conversion factor. A value for the GPCI of 1.000 yields the national average payment amount. Most GPCIs range from 0.85 to 1.10, or within 15 percent below and 10 percent above the national average.

GPCI components applied to representative surgical services

CPT/procedures	National		Manhattan, NY		Arkansas	
	Total unadjusted RVUs	Payment	Total adjusted RVUs	Payment	Total adjusted RVUs	Payment
27447 Total knee replacement	41.83	\$1,514.21	51.94	\$1,880.29	36.19	\$1,309.90
33512 CABG, vein, three	52.15	1,887.79	63.45	2,297.02	45.67	1,653.07
35301 Rechanneling of artery	29.32	1,061.36	35.51	1,285.52	25.69	929.80
44140 Partial removal of colon	32.36	1,171.41	38.90	1,408.20	28.71	1,039.17
49505 Repair inguinal hernia	12.38	448.15	14.98	542.20	10.96	396.81
52601 Prostatectomy (TURP)	21.27	769.96	25.79	933.62	18.95	686.04
63047 Removal of spinal lamina	28.64	1,036.75	35.77	1,294.67	24.48	886.28
66984 Remove cataract, insert lens	18.49	669.32	22.48	813.79	16.54	598.65

Note: All payments were calculated for facility settings. Payments for 2002 were calculated using the 2002 conversion factor and final rule values published in the *Federal Register* on November 1, 2001.

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Differences in GPCIs

The table above shows payment amounts from a locality with very high GPCIs (Manhattan, NY) and from a locality with very low GPCIs (Arkansas) to illustrate the differences GPCIs make. Generally, the payments in Arkansas are 70 to 75 percent of what they are in Manhattan. The variation from procedure to procedure occurs, of course, because there are differences in the percentage of payment for work, practice expense, and malpractice. For example, the malpractice expense for code 63047 represents 9 percent of the total RVUs, whereas work for code 66984 represents 2 percent of the total RVUs.

By statute, CMS is required to update the GPCIs with new data every three years, with the most recent update occurring in 2001. However, the GPCIs did not change much because 1990 census data were still used to determine the cost of wages. When the 2000 census data become available, some significant changes may occur in the physician work and malpractice GPCIs. The rent data were updated using data collected in 2000. Malpractice

data, which are always the oldest, were updated using data from the three-year period of 1996 to 1998.

The GPCIs are not perfect, of course. The work GPCI should be based on physician-equivalent data rather than data for all college-educated workers. Apartment rental data are used as a proxy for non-existent medical office rental. Data from the American Medical Association's Socioeconomic Monitoring System (SMS) suggests that geographic differences do exist in the cost of medical equipment and supplies. These limitations in the GPCIs suggest the need for an ongoing survey of physician-specific data.

The development of a geographic adjustment became necessary when a national fee schedule was put into place. There had to be some way to account for the economic differences across geographical regions of the country. The intent behind the current methodology was to provide a fair and equitable way to appropriately compensate those areas of the country with higher costs of living. □