

# Rural Policy Brief

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## Medicare Physician Payment

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**Policy Implications  
on Page 8  
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The resource-based relative value scale (RBRVS) is the most sweeping and far-reaching change to the Medicare Part B payment system. Implemented on January 1, 1992, the RBRVS replaced Medicare's 25-year-old "customary, prevailing, and reasonable" (CPR) charge system. In brief, RBRVS ranks physician services by assigning each a relative value. The individual relative values are based on the resources required to provide a unique physician service.

The RBRVS system is composed of three elements measured in relative value units (RVUs):

- \$ Physician work—the physician's individual effort
- \$ Practice expense—the practice costs associated with delivering a physician service
- \$ Professional liability insurance—the professional liability insurance premium costs

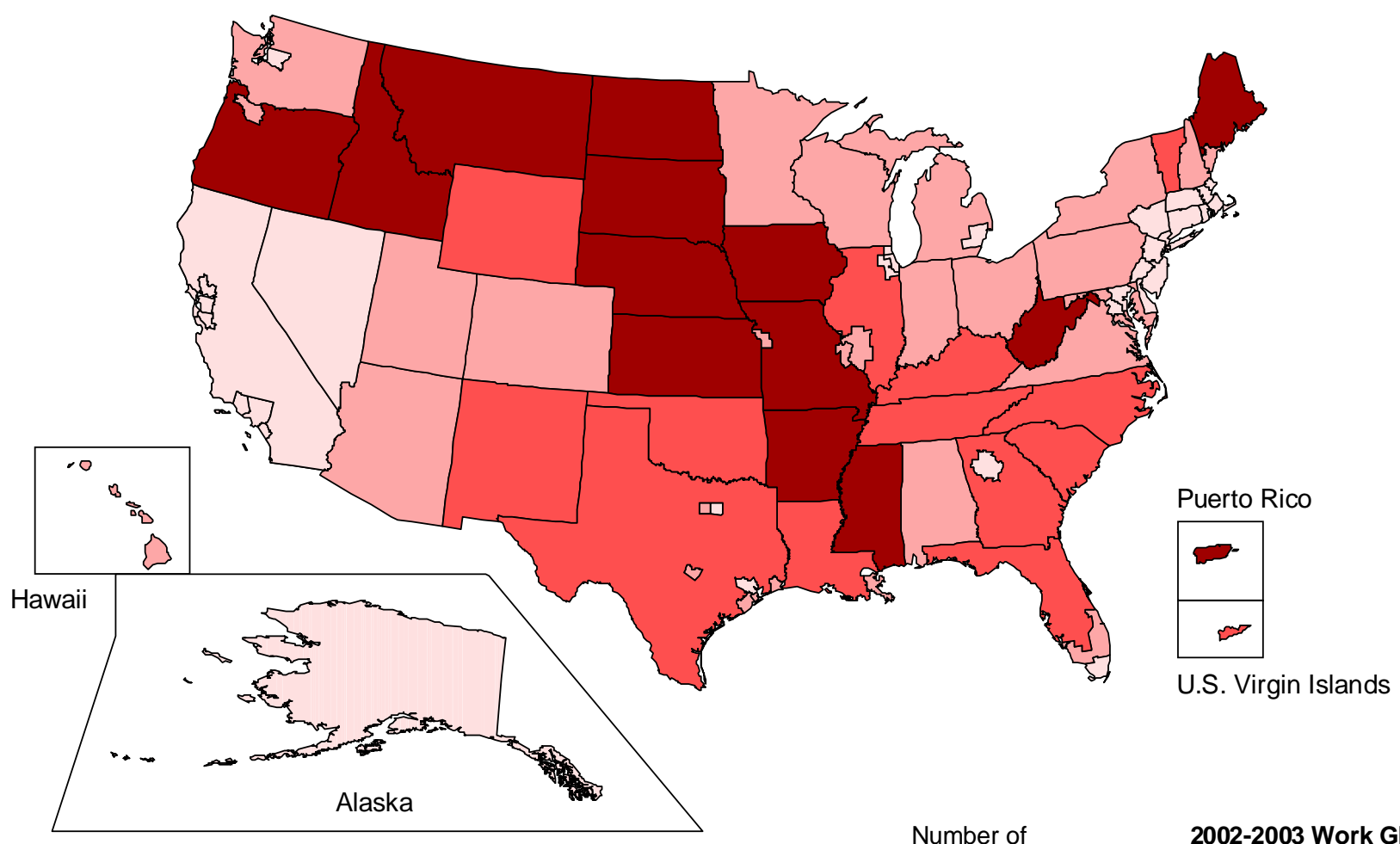
For each physician service, a relative value is assigned to physician work, practice expense, and professional liability insurance. Each element's relative value is adjusted for geographic differences in resource costs. The three adjusted relative values are totaled, and the total is multiplied by a dollar conversion factor to determine the physician payment allowance. The conversion factor is updated annually. In recent years, the annual update has reduced physician payment by 5.4% in 2002 and 4.4% in 2003 (unless Congress acts to change the update). These reductions have been the target of disgruntled physicians.

Geographic adjustment of RVUs has become a salient policy issue because of perceived inequities. Geographic practice cost indexes (GPCIs—often called "gypsies") are numeric factors used to adjust relative values. GPCIs for each element of payment are calculated for each of 89 Medicare Payment Localities representing a state, county, or group of counties.

Physician work GPCIs are based on variation in earnings between college-educated workers (1990 census data). They are designed to represent geographic cost-of-living differences. However, OBRA 1989 mandates that only 25% of the physician work payment is to be adjusted by geographic earnings differences. The remaining 75% of the physician work payment is to be the same for all areas. Published physician work GPCIs already include this calculation. In contrast, geographic cost differences in practice expense and professional liability insurance are fully reflected in their respective GPCIs.

Under current law, changes in GPCIs do not impact total Medicare expenditures. Instead, GPCIs redistribute payments among Medicare Payment Localities. Thus, suggested changes to GPCIs or GPCI formulation remain politically controversial.

# 2002-2003 Medicare Payment Localities Work Geographic Practice Cost Indexes (GPCIs)



Puerto Rico  
  
  
 U.S. Virgin Islands

Number of Payment Localities	2002-2003 Work GPCI
14 -	0.881 - 0.963
14 -	0.964 - 0.975
28 -	0.976 - 0.999
33 -	1 - 1.094

Source: Federal Register. Vol. 67, No. 25  
 Tuesday, Dec. 31, 2002. pp. 79965-80184.

## 2003 Medicare Payment Localities and GPCIs

LOCALITY NAME	Physician Work	Practice Expense	Professional Liability Insurance	LOCALITY NAME	Physician Work	Practice Expense	Professional Liability Insurance
National	1.000	1.000	1.000	METRO KANSAS CITY, MO	0.988	0.967	0.846
ALABAMA	0.978	0.870	0.807	METRO ST. LOUIS, MO	0.994	0.938	0.846
ALASKA	1.064	1.172	1.223	REST OF MISSOURI*	0.946	0.825	0.793
ARIZONA	0.994	0.978	1.111	MONTANA	0.950	0.876	0.727
ARKANSAS	0.953	0.847	0.340	NEBRASKA	0.948	0.877	0.430
ANAHEIM/SANTA ANA, CA	1.037	1.184	0.955	NEVADA	1.005	1.039	1.209
LOS ANGELES, CA	1.056	1.139	0.955	NEW HAMPSHIRE	0.986	1.030	0.825
MARIN/NAPA/SOLANO, CA	1.015	1.248	0.687	NORTHERN NJ	1.058	1.193	0.860
OAKLAND/BERKELEY, CA	1.041	1.235	0.687	REST OF NEW JERSEY	1.029	1.110	0.860
SAN FRANCISCO, CA	1.068	1.458	0.687	NEW MEXICO	0.973	0.900	0.902
SAN MATEO, CA	1.048	1.432	0.687	MANHATTAN, NY	1.094	1.351	1.668
SANTA CLARA, CA	1.063	1.380	0.639	NYC SUBURBS/LONG I., NY	1.068	1.251	1.952
VENTURA, CA	1.028	1.125	0.783	POUGHKPSIE/N NYC SUB., NY	1.011	1.075	1.275
REST OF CALIFORNIA*	1.007	1.034	0.748	QUEENS, NY	1.058	1.228	1.871
COLORADO	0.985	0.992	0.840	REST OF NEW YORK	0.998	0.944	0.764
CONNECTICUT	1.050	1.156	0.966	NORTH CAROLINA	0.970	0.931	0.595
DELAWARE	1.019	1.035	0.712	NORTH DAKOTA	0.950	0.880	0.657
DC + MD/VA SUBURBS	1.050	1.166	0.909	OHIO	0.988	0.944	0.957
FORT LAUDERDALE, FL	0.996	1.018	1.877	OKLAHOMA	0.968	0.876	0.444
MIAMI, FL	1.015	1.052	2.528	PORTLAND, OR	0.996	1.049	0.436
REST OF FLORIDA	0.975	0.946	1.265	REST OF OREGON	0.961	0.933	0.436
ATLANTA, GA	1.006	1.059	0.935	METRO PHILADELPHIA, PA	1.023	1.092	1.413
REST OF GEORGIA	0.970	0.892	0.935	REST OF PENNSYLVANIA	0.989	0.929	0.774
HAWAII/GUAM	0.997	1.124	0.834	PUERTO RICO	0.881	0.712	0.275
IDAHO	0.960	0.881	0.497	RHODE ISLAND	1.017	1.065	0.883
CHICAGO, IL	1.028	1.092	1.797	SOUTH CAROLINA	0.974	0.904	0.279
EAST ST. LOUIS, IL	0.988	0.924	1.691	SOUTH DAKOTA	0.935	0.878	0.406
SUBURBAN CHICAGO, IL	1.006	1.071	1.645	TENNESSEE	0.975	0.900	0.592
REST OF ILLINOIS	0.964	0.889	1.157	AUSTIN, TX	0.986	0.996	0.859
INDIANA	0.981	0.922	0.481	BEAUMONT, TX	0.992	0.890	1.338
IOWA	0.959	0.876	0.596	BRAZORIA, TX	0.992	0.978	1.338
KANSAS*	0.963	0.895	0.756	DALLAS, TX	1.010	1.065	0.931
KENTUCKY	0.970	0.866	0.877	FORT WORTH, TX	0.987	0.981	0.931
NEW ORLEANS, LA	0.998	0.945	1.283	GALVESTON, TX	0.988	0.969	1.338
REST OF LOUISIANA	0.968	0.870	1.073	HOUSTON, TX	1.020	1.007	1.336
SOUTHERN MAINE	0.979	0.999	0.666	REST OF TEXAS	0.966	0.880	0.956
REST OF MAINE	0.961	0.910	0.666	UTAH	0.976	0.941	0.644
BALTIMORE/SURR. CNTYS, MD	1.021	1.038	0.916	VERMONT	0.973	0.986	0.539
REST OF MARYLAND	0.984	0.972	0.774	VIRGIN ISLANDS	0.965	1.023	1.002
METRO BOSTON	1.041	1.239	0.784	VIRGINIA	0.984	0.938	0.500
REST OF MASSACHUSETTS	1.010	1.129	0.784	SEATTLE (KING CNTY), WA	1.005	1.100	0.788
DETROIT, MI	1.043	1.038	2.738	REST OF WASHINGTON	0.981	0.972	0.788
REST OF MICHIGAN	0.997	0.938	1.571	WEST VIRGINIA	0.963	0.850	1.378
MINNESOTA	0.990	0.974	0.452	WISCONSIN	0.981	0.929	0.939
MISSISSIPPI	0.957	0.837	0.779	WYOMING	0.967	0.895	1.005

\*Payment locality is serviced by two carriers.

Note: Work GPCI is the 25% work GPCI required by Section 1848(e)(1)(A)(iii) of the Social Security Act. GPCIs rescaled by the following factors for budget neutrality: Work = 0.99699; Practice Expense = 0.99235; Malpractice Expense = 1.00215.

Adapted from: *Federal Register*, Vol. 67, No. 25, Tuesday, December 31, 2002, pp. 79965-80184.

# Medicare Physician Payment Lexicon

**Conversion Factor (CF)** – The national dollar amount that is multiplied by the Total RVU to determine the Medicare Allowed Amount for a particular physician service. The Conversion Factor is updated yearly.

**Current Procedural Terminology (CPT)** – The American Medical Association coding system that assigns a specific alphanumeric code to approximately 8,000 unique physician services.

**Geographic Practice Cost Index (GPCI)** – The values used to adjust RVUs applied to physician work, practice expense, and professional liability insurance. GPICs are assigned to each Medicare Payment Locality to account for geographic variation in resource costs.

**HPSA Bonus Payments** – A 10% bonus payment available for physician services delivered in a designated Health Professional Shortage Area (HPSA). Primary care HPSAs usually include rural or inner city areas. Medicare carriers make quarterly bonus payments.

**Medicare Allowed Amount** – The Medicare Fee Schedule amount for any service. Non-participating physicians who accept assignment are paid 95% of this amount. Non-participating physicians not accepting assignment are limited to charges set at 115% of the non-participating physician allowed amount. The Medicare program pays 80% of the participating or non-participating amount to physicians accepting assignment and 80% of the non-participating amount to the patient if the physician is not accepting assignment. Medicare patients are responsible for the balance of the payment.

**Participating Physicians** – A physician signs an agreement to accept assignment on all Medicare claims. Medicare sends its payment (80% of the allowed amount) directly to the physician. Non-participating physicians can accept assignment, but the Medicare amount is less and will be sent to the beneficiary, meaning the physician must collect all payment from the beneficiary.

**Medicare Carrier** – The insurance company that administers Medicare for a particular region.

**Medicare Payment Localities** – The geographic region (state, county, or group of counties) used to determine GPICs (physician work, practice expense, and professional liability insurance). There are 89 Medicare Payment Localities.

**Physician Work (W) RVU** – A measure of physician work associated with a particular physician service. Physician work includes time required to perform the service, technical skill and physical effort, mental effort and judgment, and psychological stress.

**Practice Expense (PE) RVU** – A measure of practice costs associated with a particular service.

**Professional Liability Insurance (PLI) RVU** – A measure of professional liability insurance costs associated with a particular service.

**Relative Value Unit (RVU)** – A unit of measure assigned to unique physician services that allows relative comparisons and ranking. RVUs are assigned to physician work, practice expense, and professional liability insurance.

**Relative Value Scale (RVS) Update Committee (RUC)** – The American Medical Association/Specialty Society committee that reviews and recommends RVUs for new and revised CPT codes. The RUC makes recommendations to Medicare for its consideration. A comprehensive review of the RBRVS system occurs every five years (Five-Year Review).

**Resource Based Relative Value Scale (RBRVS)** – The Medicare physician payment system based on the relative values of resources required to deliver a particular physician service. RBRVS includes relative values for each of the three elements of a physician service (physician work, practice expense, and professional liability insurance) and adjusts those relative values for geographic variation in resource costs.

**Sustainable Growth Rate (SGR)** – The national Medicare expenditure target system determined by changes in fees for physician services, Medicare fee-for-service enrollment, inflation-adjusted per capita gross domestic product (GDP), and spending laws and regulations. Every percent that Medicare utilization growth exceeds the SGR results in a one percent Medicare physician payment decrease. The basis for annual updates has created challenges to Centers for Medicare and Medicaid staff who must estimate elements of the SGR, such as growth in GDP and changes in medical services. SGR calculations triggered conversion factor reductions in 2002 and 2003.

**Total Relative Value Units (Total RVUs)** – The sum of physician work RVUs, practice expense RVUs, and professional liability insurance RVUs. Total RVUs that have been adjusted for geographic variation (via GPICs) are called adjusted total relative value units.

2003 Allowed Medicare Payment Intermediate Office Visit — CPT Code 99213	
Manhattan, New York	\$59.36
Aberdeen, South Dakota	\$43.07
Physician payment for an Intermediate Office Visit is <b>38%</b> higher in Manhattan, New York than in Aberdeen, South Dakota.	

## 2003 Medicare Physician Payment Calculation

Approximately 8,000 CPT codes describe unique services performed by physicians and other health care professionals. A Medicare Allowed Amount is calculated for a significant majority of the CPT codes. For each code, three unique RVU values represent physician work (RVU<sub>W</sub>), practice expense (RVU<sub>PE</sub>) and professional liability insurance (RVU<sub>PLI</sub>). For each Medicare Payment Locality, three GPCIs are linked to W, PE, and PLI. To begin the calculation, the RVU<sub>W</sub>, RVU<sub>PE</sub>, and RVU<sub>PLI</sub> values for a particular CPT code are multiplied by the appropriate GPCI. The three products are then summed to determine the Adjusted Total RVU. The Adjusted Total RVU is multiplied by the CF to determine the Medicare Allowed Amount. The Medicare payment to the physician is typically 80% of the Medicare Allowed Amount to reflect the usual 20% co-payment mandated by Medicare Part B.

### Payment Calculation Formula

$$\begin{aligned} \text{Adjusted Total RVUs} = & \\ & \text{RVU}_W \times \text{GPCI}_W \\ & + \text{RVU}_{PE} \times \text{GPCI}_{PE} \\ & + \text{RVU}_{PLI} \times \text{GPCI}_{PLI} \end{aligned}$$

$$\begin{aligned} \text{Medicare Allowed Amount} = & \\ & \text{Adjusted Total RVUs} \times \text{CF} \end{aligned}$$

$$\begin{aligned} \text{Typical Payment} = & \\ & \text{Medicare Allowed Amount} \times 80\% \end{aligned}$$

### Example Assumptions

\$ Intermediate Physician Office Visit, Established Patient – CPT Code 99213

\$ The most frequently used office visit code

\$ 2003 Medicare data

$$\begin{aligned} \text{RVU}_W &= 0.67 \\ \text{RVU}_{PE} &= 0.69 \\ \text{RVU}_{PLI} &= 0.03 \\ \text{CF} &= \$34.5920 \end{aligned}$$

Calculations based on Federal Register, Vol. 67, No. 25. Tuesday, December 31, 2002, pp. 79965-80184

### Examples

RURAL – Ottumwa, Iowa  
(CPT Code 99213)

$$\begin{aligned} \text{GPCI}_W &= 0.959 \\ \text{GPCI}_{PE} &= 0.876 \\ \text{GPCI}_{PLI} &= 0.596 \end{aligned}$$

$$\begin{aligned} \text{Adjusted Total RVUs} & \\ &= (.67)(.959) + (.69)(.876) + (.03)(.596) \\ &= 1.265 \end{aligned}$$

$$\begin{aligned} \text{Medicare Allowed Amount} & \\ &= 1.265 \times \$34.5920 \\ &= \$43.76 \end{aligned}$$

$$\begin{aligned} \text{Typical Medicare Payment} & \\ &= \$43.76 \times 0.80 \\ &= \$35.01 \end{aligned}$$

Patient pays the 20% difference

URBAN - Los Angeles, California  
(CPT Code 99213)

$$\begin{aligned} \text{GPCI}_W &= 1.056 \\ \text{GPCI}_{PE} &= 1.139 \\ \text{GPCI}_{PLI} &= 0.955 \end{aligned}$$

$$\begin{aligned} \text{Adjusted Total RVUs} & \\ &= (.67)(1.056) + (.69)(1.139) + (.03)(0.955) \\ &= 1.522 \end{aligned}$$

$$\begin{aligned} \text{Medicare Allowed Amount} & \\ &= 1.522 \times \$34.5920 \\ &= \$52.65 \end{aligned}$$

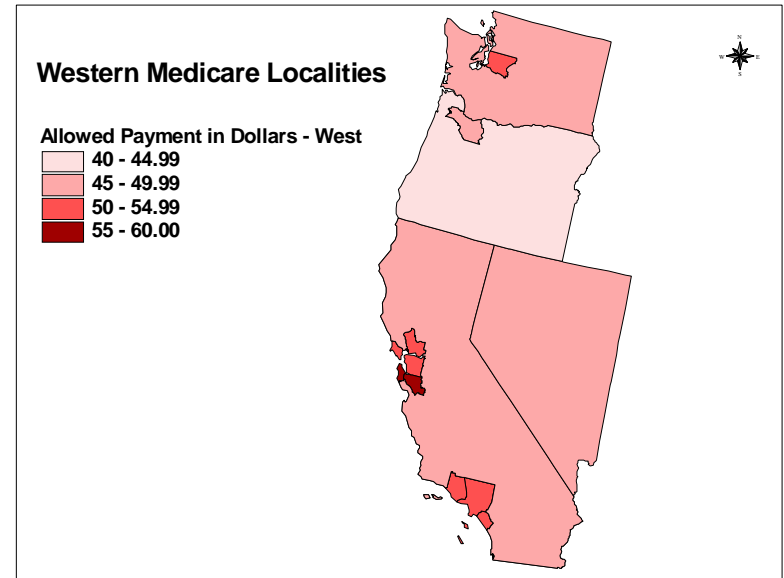
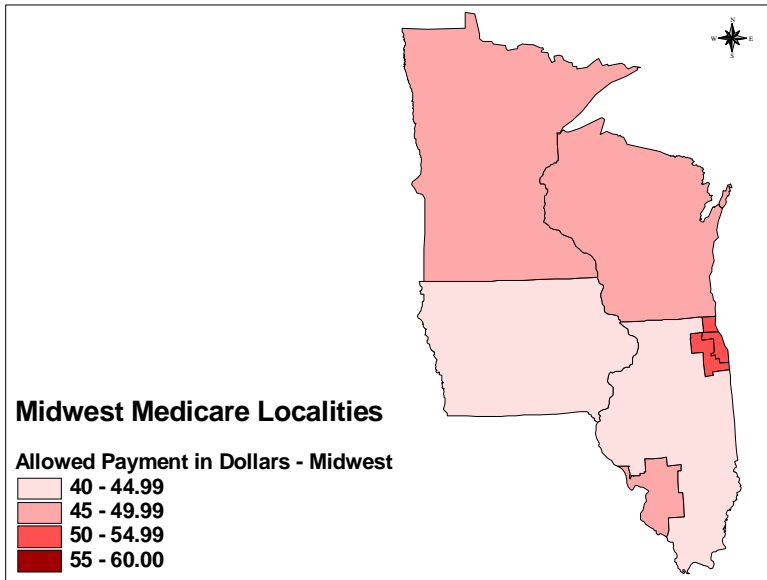
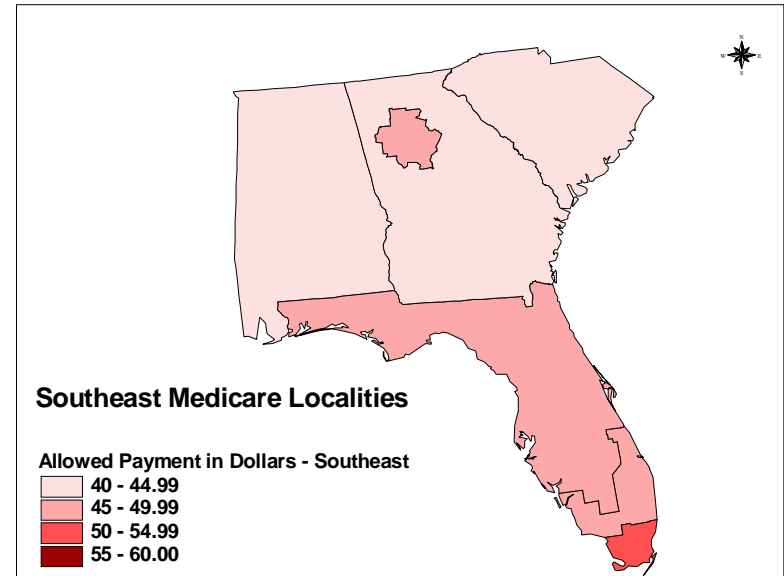
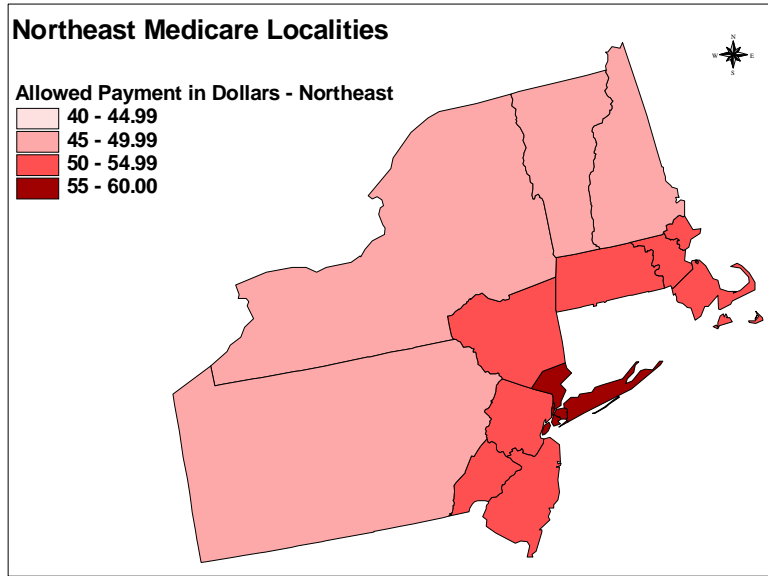
$$\begin{aligned} \text{Typical Medicare Payment} & \\ &= \$52.65 \times 0.80 \\ &= \$42.12 \end{aligned}$$

Patient pays the 20% difference

### Example Notes

- Los Angeles, California physician work is paid 10% more than Ottumwa, Iowa physician work (for all physician procedures and services)
- Los Angeles, California practice expenses are paid 20% more than Ottumwa, Iowa practice expenses (for Intermediate Office Visit, CPT Code 99213)

# 2003 Allowed Medicare Payments for an Intermediate Office Visit - CPT Code 99213





# Rural Issues in Physician Payment

## Physician Work GPCIs

Rural physician advocates argue that work is equal to work, regardless of where the work is performed. For example, lifting a 50-pound rock in a rural area involves the same amount of effort as lifting a 50-pound rock in an urban area. Thus, payment for that effort should be the same. However, the counterargument maintains that the *purchasing power* of the payment should be the same. That is, if cost-of-living is 20% less in a rural area than in an urban area, then payment should be 20% less in the rural area. The current GPCI system that limits cost-of-living adjustment to 25% of the physician payment represents a compromise between these two arguments.

GPCI appropriateness depends on how accurately GPCIs reflect actual physician earnings variation and on the intent of Medicare payment policy. GPCIs are based on 1990 earnings of professionals with five or more years of post high school education, not current physician earnings. Furthermore, it is not at all clear that wages truly mirror costs-of-living. Rural physician employers and rural communities recruiting physicians have argued that they must pay salaries that are competitive in regional and national, not local, markets.

2003 Allowed Medicare Payment Appendectomy — CPT Code 44950	
Boston, Massachusetts	\$639.97
Hanover, New Hampshire	\$581.19

Physician payment for an appendectomy is 10% higher in Boston, Massachusetts than in Hanover, New Hampshire.

## Practice Expense and Professional Liability Insurance

The geographic adjustor applied to the practice expense RVU is based on hourly earnings of medical and clerical occupations and residential rents. The adjustor applied to liability insurance cost is based on the average premium paid to a sample of insurers during the previous three years, representing, on average, 82% of the market in each state. Issues that continue to be debated about these adjustments involve the accuracy of data, the validity of the measure, and the currency of data given volatility in actual costs to physician practices.

## Physician Payment Parity

Despite the reduction in geographic adjustment variation, the issue of physician payment parity remains. Physician payments continue to differ for different geographic locations. In general, GPCIs (and thus, reimbursements) are less in rural areas than in urban areas largely because rural cost-of-living is estimated to be lower. Though the percentage difference may seem small, the elderly represent a higher percent of the rural population.

Consequently, Medicare patients will represent a greater percentage of a rural physician's practice. Therefore, the differences in payment can represent many thousands of reimbursement dollars. Furthermore, commercial insurers often reimburse at rates directly related to Medicare's fee schedule. Thus, the impact of any Medicare payment disparity is potentially extended to non-Medicare payors as well. While the payment for a particular service may seem equitable, the total of all such payments in a given rural primary care practice (which depends heavily on Medicare payment) may not be sufficient to provide an income that attracts physicians to rural practice sites. That is the logic supporting bonus payments for providing services in designated HPSAs and cost-based payment for Rural Health Clinics and Federally Qualified Health Centers. Calculating GPCIs differently, especially the element of physician work, may be a more sensible approach to the problems of recruiting and retaining physicians in rural areas.

## Rural Health Insurance Premiums

Reduced Medicare reimbursements indirectly impact employer health insurance premiums. In Medicare Payment Localities with low reimbursement, providers must shift costs from Medicare to commercial payors. Increased commercial insurance costs are most likely passed on to employers as premium hikes. For example, if Medicare represents 50% of a practice's business and under-reimburses by 10%, then commercial insurers must pay an extra 10% to offset the Medicare payment deficit, if the total income for physicians is to be held harmless to the deficit created by Medicare payment.

## Physician Recruitment and Retention

Recruitment and retention of rural physicians remains problematic. It seems that adjusting only 25% of the physician work payment to reflect cost-of-living differences has incompletely considered differences in cultural and environmental amenities. If the adjustment were to have worked as planned, recruitment and retention needs would be independent of geographic status. Physician recruitment is a regional, if not a national, process. Cost differentials of recruiting and retaining physicians are not reflected in the GPCIs.

## Health Care Access

Most importantly, rural physician recruitment and retention issues impact Medicare beneficiaries' access to health care. If certain geographic areas are already disadvantaged by limited cultural and environmental amenities, then Medicare payment differences (in an area likely to have a greater percentage of Medicare patients) will further challenge physician recruitment and retention, exacerbating rural access concerns. Physicians may decide that seeing Medicare patients is not cost-effective. Consequently, physicians may stop accepting new Medicare patients or leave a practice entirely if Medicare patients predominate.

## Medicare Physician Payment Policy Issues

- \$ Physicians most likely to be disadvantaged by geographic payment adjustment are also likely to be safety-net providers in rural communities.
- \$ The current Medicare payment system does not compensate physician work equally. However, a key policy issue is whether or not Medicare payment, via GPCIs, compensates physician work *equitably*.
- \$ Medicare payment differences are likely to extend to commercial payor fee schedules.
- \$ Under current law, changing GPCIs redistributes Medicare payments; it is a “zero-sum game.” This makes changes difficult to accomplish, particularly if a majority of physicians believe Medicare payment to be inadequate.
- \$ Changes to the GPCI calculation process that increase some GPCIs without decreasing other GPCIs can only occur if new revenues are found to cover new costs. This change will be more likely to occur when coupled with structural change in the Medicare program or fundamental change in physician payment (such as replacing the SGR).
- \$ Access, as measured by the percent of physicians seeing Medicare patients and the percent accepting new Medicare patients, may be correlated directly with Medicare payment and/or changes in payment. Thus, rural areas may be at greatest risk for reductions in access. This is due to the fact that reductions in payment are applied to what is already a relatively lower payment (in comparison to urban payment areas).

## Acknowledgment of Sources

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