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Medicare Physician Payment: Practice Expense

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In a previous *Rural Policy Brief*, "Medicare Physician Payment," we primarily discussed the physician work component of Medicare payment. In this *Rural Policy Brief*, we will concentrate on the practice expense component. Medicare payment for practice expense proportionately results in greater geographic physician payment variation than does the physician work payment. Thus, the practice expense adjustment methodology warrants careful validation to demonstrate that the index measures actual geographic practice cost differences. The current geographic variation in payment per procedure has generated objections by physicians in lower-payment areas and legislation to create minimum payments. A complete understanding of the reasons for different payments will inform both physicians who want to know why the same procedure results in less reimbursement in one place than it does in another and policymakers who want to address that concern.

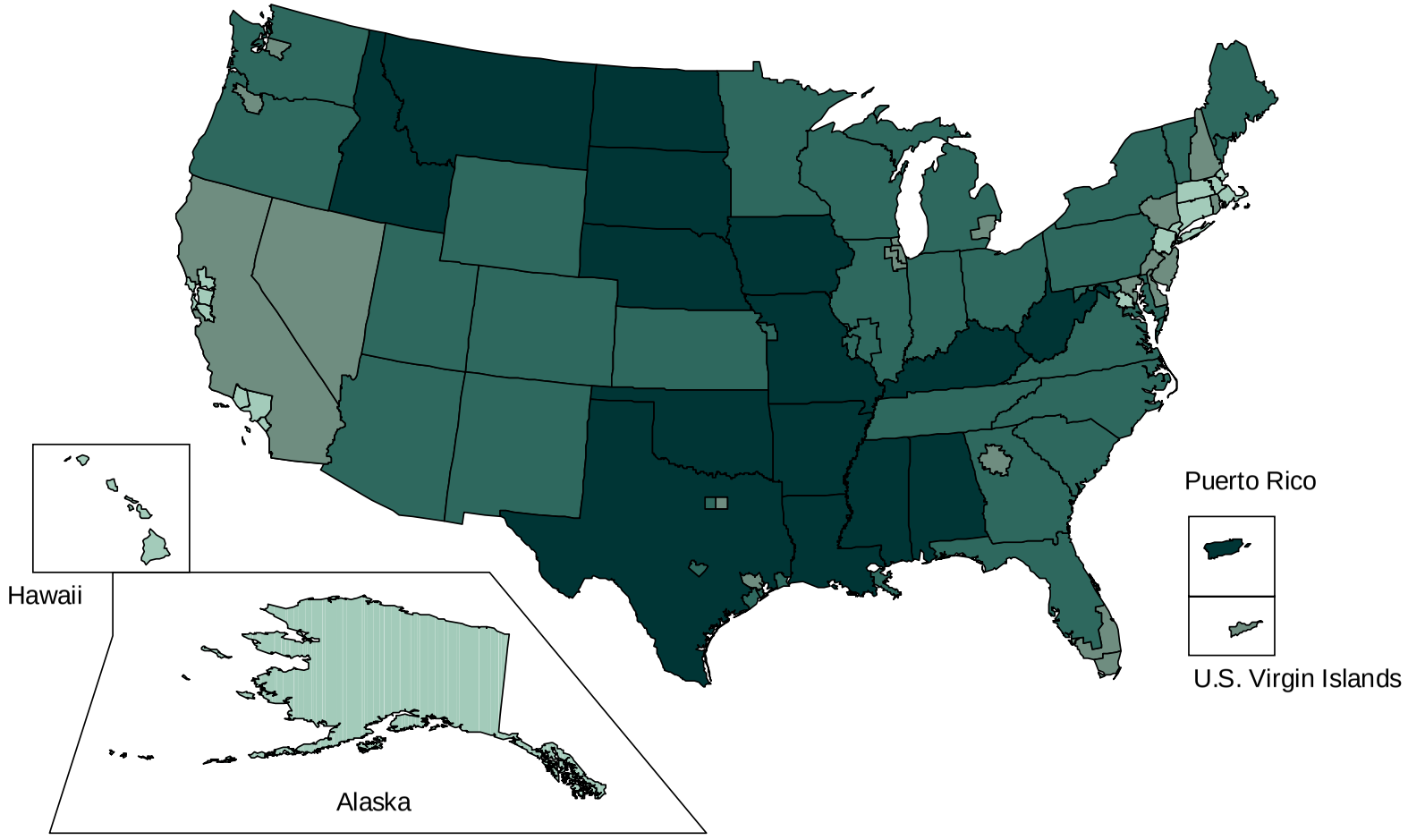
Policy Implications on Page 8 (back cover)

The resource-based relative value scale (RBRVS) is Medicare's physician payment system, based on a set of relative value units (RVUs) representing physician work, practice expense, and professional liability insurance. The Centers for Medicare and Medicaid Services (CMS) implements RBRVS by calculating three different RVUs to each of nearly 8,000 unique physician services.

CMS adjusts each RVU for geographic variation in cost with Geographic Practice Cost Indexes (GPCIs – pronounced "gypsies"). GPCIs are price indexes based on resource costs (e.g., rent and staff salaries) in each of 89 Medicare Payment Localities (see national map). CMS updates the GPCI price indexes every three years. The next scheduled update occurs for the period 2004-2006.

To determine payment for a physician service, the RVUs for physician work, practice expense, and professional liability insurance are multiplied by their respective and geographically specific GPCI. The products are summed, and the sum is multiplied by a dollar amount (called the "conversion factor") to determine a physician payment.

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



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

2003 Medicare Payment Localities and GPCIs

LOCALITY NAME	Physician Work	Practice Expense	Profes-sional Liability Insurance		LOCALITY NAME	Physician Work	Practice Expense	Profes-sional 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: Physician Work = 0.99699; Practice Expense = 0.99235; Professional Liability Insurance = 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 alpha-numeric code to approximately 8,000 unique physician services.

Geographic Practice Cost Indexes (GPCIs) – The values used to adjust RVUs applied to physician work, practice expense, and professional liability insurance. GPCIs 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 geographic Health Professional Shortage Area (HPSA). Geographic 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 who 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 GPCIs (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.

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 1% Medicare physician payment decrease. The basis for annual updates has created challenges to CMS 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 GPCIs) are called adjusted total relative value units.

Medicare Physician Payment Calculation

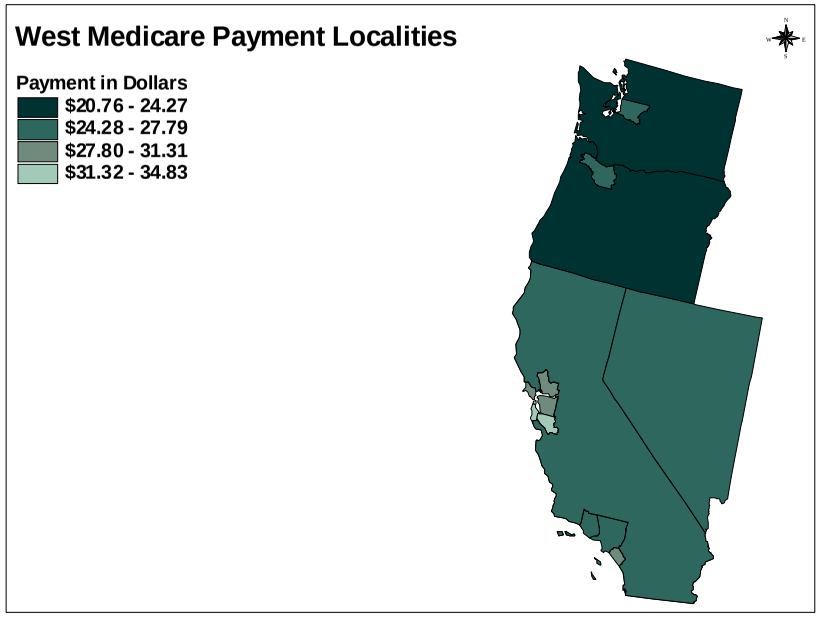
The practice expense payment is divided to equal approximately 40% employee wages, 25% office rent, and 35% supplies and equipment. CMS determines geographic variation in practice expense through evaluation of regional differences in staff salaries and rent. For employee wage geographic variation, a wage index based on median hourly earnings is produced for the following employee categories—clerical workers, registered nurses, licensed practical nurses, and health technicians. For rent, proxies for physician office rent are based on the Department of Housing and Urban Development "Fair Market (Apartment) Rents" index. CMS makes no adjustments in GPCIs for geographic variation in supplies and equipment, believing that there is little if any difference in pricing based on location.

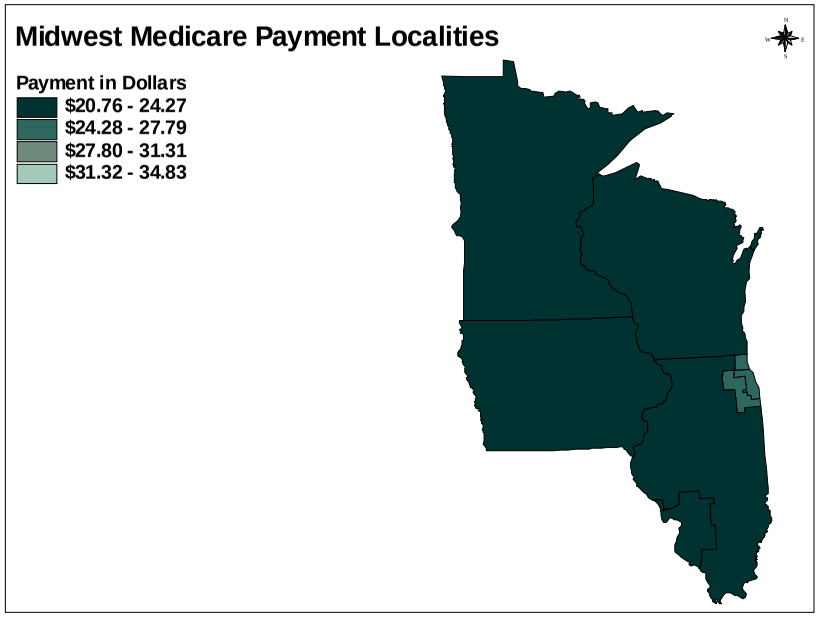
An example of how the physician payment is calculated helps illustrate the role of the practice expense geographic adjustment. An Intermediate Office Visit – Established Patient (CPT code 99213) is the most frequent service provided by rural physicians. The 2003 Medicare Allowed Amount for CPT code 99213 is $55.98 in Los Angeles, CA, and $46.56 in Ottumwa, IA—a geographic variation (or difference) of $9.42. Of that $9.42 payment difference, $2.35 is due to physician work geographic variation, $6.66 is due to practice expense geographic variation, and $0.40 is due to professional liability insurance geographic variation. Although in both Los Angeles and Ottumwa the practice expense percent is approximately 50% of the total payment, a full 71% ($6.66/$9.42) of the difference in Medicare physician payment is due to GPCI-predicted geographic variation in practice expense. Thus, practice expense GPCIs, or geographic variation in practice expense, is a more important factor than physician work in determining payment variation across Medicare Payment Localities.

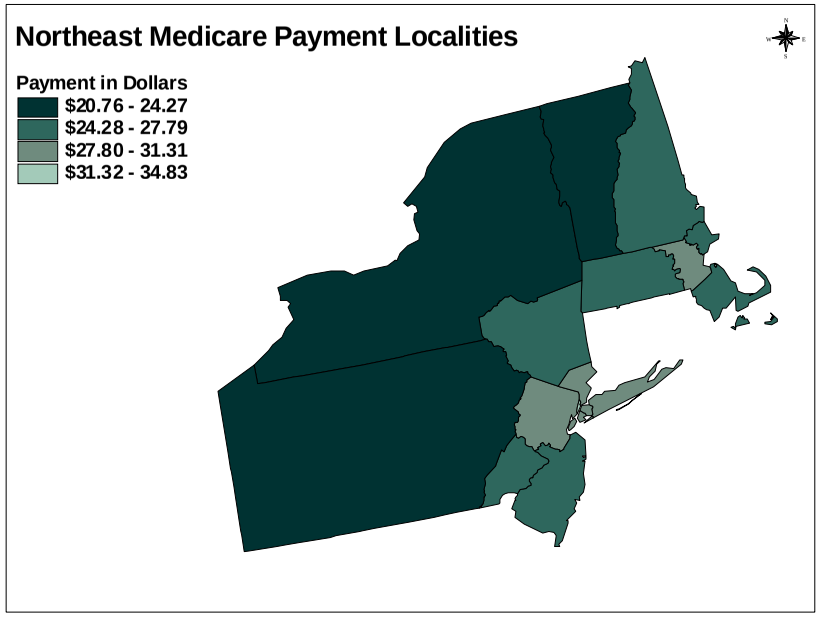
Physician Payment Differences Attributable to Work, Practice Expense, and Professional Liability
Two Locations - Los Angeles, CA and Ottumwa, IA
CPT Code 99213 (Intermediate Office visit - Established Patient)

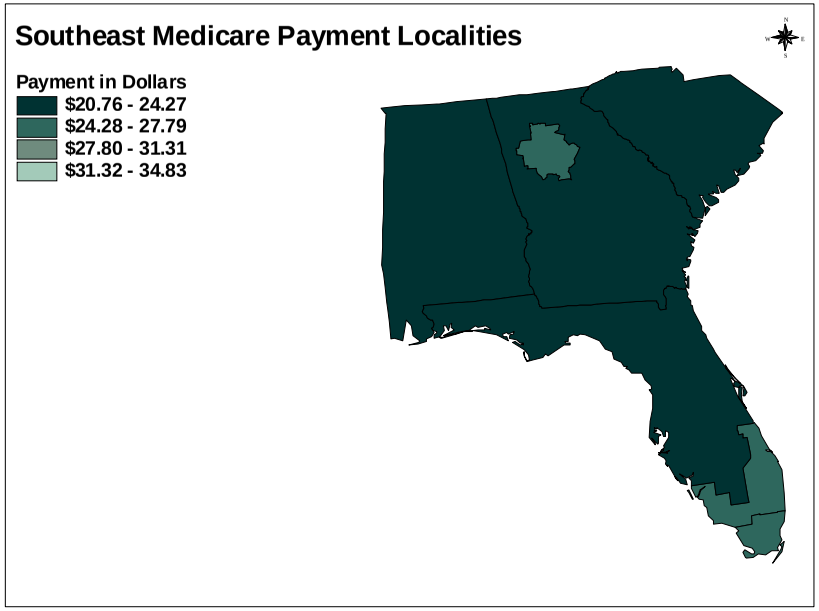
		Payment attributable to:		
	Total Payment	Physician Work	Practice Expense	Professional Liability Ins.
Los Angeles, CA	$55.98	$26.00	$28.91	$1.07
Percent of payment attributable to:	100.0%	46.5%	51.6%	1.9%
Ottumwa, IA	$46.56	$23.65	$22.25	$0.66
Percent of payment attributable to:	100.0%	50.8%	47.8%	1.4%
Payment difference between LA and Ottumwa	$9.42	$2.35	$6.66	$0.40
Percent difference between LA and Ottumwa	20.2%	10.0%	29.9%	61.1%
Percent of difference in payment between LA and Ottumwa attributable to component		**25%**	**71%**	**4%**

2003 Practice Expense RVUs for an Intermediate Office Visit - CPT Code 99213









Practice Expense

Policymakers modified the geographic adjustment of work so that only 25% of the payment is adjusted by geographic wage index variation and 75% of the payment is the same regardless of practice location. Assuming the wage index proxy is both fair and methodologically valid, in a budget-neutral environment this policy results in a redistribution of RBRVS payment from urban to rural physicians. There is no similar adjustment in the geographic practice expense index adjustment for wages and rents, although the index assumes there is no difference in the price of supplies and equipment. Geographic practice expense variation, as measured by wage and rent proxies, is fully reflected in the GPCIs. Since on average the proportion of physician payment for practice expense is nearly equal to physician work (as in the example of payment in Los Angeles and Ottumwa), *the impact of practice expense geographic variation on Medicare physician payment is often greater than the impact of physician work geographic variation, since the latter does not include the full measure of variation.* Thus, validation of the practice expense GPCI calculation methodology is a subject of concern among rural physicians and their advocates. Several GPCI methodology issues are pertinent to rural places.

CMS develops a wage index, based on median hourly earnings from the 1990 census, for the following employee categories—clerical workers, registered nurses, licensed practical nurses, and health technicians. Since 1990, the mobility of workers and urban sprawl may have narrowed the wage gap across all regions and between urban and rural areas. The categories of employees in physician offices has also changed as more care is provided in ambulatory settings. CMS will use 2000 Census data in calculating the wages used in the 2004-2006 index, which may affect the payment differences seen in current data.

Proxies for physician office rent are based on the Department of Housing and Urban Development "Fair Market (Apartment) Rents" index. Although the Omnibus Budget Reconciliation Act of 1986 directed HCFA (now CMS) to use *commercial rents*, residential rates are more available (a reliable source for commercial rents at the geography needed to calculate the index has not been identified). Primary collection of physician office rents would seem to be more specific to actual costs, but data would need to be collected, and using measures generated by the offices themselves creates incentives to inflate costs. Alternatives (including using a sample of physician office rents) were considered in the mid-1990s, but simulations showed little if any change would occur (Pope et al., 1994).

CMS does not adjust for geographic cost variation in supplies and equipment. Analysis by CMS researchers could not establish a clear pattern of geographic cost variation. Furthermore, mail order supplies are thought to be uniformly priced regardless of location. A 1994 study (Pope et al., 1994) found that transportation costs were insignificant in all states and territories except Hawaii and Puerto Rico. However, it is plausible that several rural-specific factors may *increase* rural supply and equipment costs. Rural providers may not be able to obtain high volume discounts on supplies. Rural providers who mail order may take longer, incur higher shipping costs, and increase wait times. Due to lower patient volume or fewer equipment alternatives in nearby facilities, rural practices may utilize equipment less efficiently, resulting in increased "stand-by time" and consequently higher costs. A limited number of supply and equipment vendors in rural areas may result in less competitive prices. Finally, rural physicians may experience higher maintenance and service costs due to a greater distance from service firms.

Effects on Private Payer Payment

The effect of Medicare physician payment is not limited to Medicare beneficiaries and their physicians. Changes in Medicare payment affect payment from private insurance carriers in two ways. First, many private insurance plans use the Medicare fee schedule as the basis for calculating their payment. For example, a Blue Cross plan may decide to pay physicians 150% of the Medicare fee schedule. Obviously, if the Medicare fee schedule changes and the Blue Cross policy stays in place, private payment will change as well. Further, any geographic variations in Medicare payment are copied by private insurance payment. Second, if Medicare payment does not satisfy the physician's desired income, the physician can be expected to increase fees for private insurance (perhaps by negotiating a higher percentage of Medicare fees). This could occur if Medicare payment does not cover all associated costs, and/or if Medicare payment does not meet expectations for per-patient earnings for the physician.

Physician Recruitment and Retention

A number of factors make recruitment and retention of physicians in rural areas difficult. One of those factors, though most researchers would say not the most important factor, is earning potential (Rabinowitz, Hojat, & Hazelwood, 1999; Scammon & Williams, 1994; Pathman, Williams, & Konrad, 1996). Thus, the setting of the Medicare payment to physicians in general, but the setting of GPCI's in particular, are policy tools that could be used to reduce disincentives to practice in physician shortage areas. In addition, commercial payers often set their fee schedules as a percent of Medicare physician payment rates (RBRVS). Currently, Medicare pays a 10% bonus for services provided in geographic HPSAs. This policy has not completely resolved the shortage issue but seems to have improved primary care access (Shugarman & Farley, 2003). So Congress has enacted a number of policies that impact physician recruitment and retention, including general payment policies and specific subsidies. Precedent exists for revisiting the geographic adjustments as levers that may affect location and retention of physician practices.

Health Care Access

Adequate payment to cover expenses and provide profit is basic to a successful business model. If practice income does not cover practices expenses and provide a competitive profit (physician salary), the practice will fail. Consequent alternatives include moving the practice to a higher-paying locality or declining to see patients with low payment insurance policies (Medicare payment is lower than commercial payment in most market areas). Either alternative results in reduced access for rural Medicare beneficiaries.

Medicare Physician Payment Policy Issues

In creating a system that must be budget-neutral, Medicare policy establishes provider payments either above or below the index value. While a reasonable payment methodology from an economic perspective, this approach has led to confusion and complaints from rural providers and their advocates. The Office of Personnel Management utilizes a different approach that identifies 33 metropolitan areas in which government employee compensation is higher because of cost-of-living differences, but base salary remains the same in all other areas (i.e., policy does not attempt to balance highs and lows). Such a policy could be considered for Medicare.

GPCI calculations rely on proxy data. In the case of practice expense, proxies include U.S. Census Bureau-reported occupational earnings and the Department of Housing and Urban Development "Fair Market (Apartment) Rents" index (not physician office or commercial rents). *Using proxy data creates a special importance in validating the methodology; that is, the proxies must be appropriate and accurately measured.*

- Reports from the American Medical Association, *Medical Economics*, and the Medical Group Management Association suggest that practice cost differentials may not be as significant as suggested by the GPCIs (Henley, 1997). Although these data do not yet provide a definitive answer to the actual geographic practice costs differentials, they suggest that validation of the GPCI methodology is required.

- From 1999 to 2003, the Medicare Conversion Factor increased 5.9% ($34.7315 to $36.7856), an average of 1.5% per year (Gallagher, 2003). However, CMS estimates a 4.2% conversion factor reduction in 2004 and further reductions in the succeeding three years, 2005-2007 (Tieman, 2003). Due to a higher proportion of Medicare beneficiaries in rural populations, Medicare payment reductions may result in a greater financial burden to rural practices. If the GPCI methodology inaccurately specifies a rural/urban payment differential, physicians in predominantly rural payment areas may choose to reduce Medicare services. Annual surveys conducted by the American Academy of Family Physicians and the Center for the Study of Health System Change (Cunningham, 2002) have shown a modest decrease in the percentage of physicians accepting new Medicare patients. Therefore, overall Medicare payment reductions and the perception of an unjustified rural/urban payment differential, in combination with a demographically disproportionate elderly population and an often tenuous physician supply, may increase the risk that rural Medicare beneficiaries will lose access to health care.

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