

Rural Policy Brief

Volume 11, Number 2 (PB2006-2)

September 2006

RUPRI Center for Rural Health Policy Analysis

Medicare Physician Payment: Impacts of Changes on Rural Physicians

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Introduction

Medicare payment disproportionately impacts rural physicians compared to urban. For example, 51% of rural physicians, compared to 44% of urban physicians, receive at least 38% of their payments from Medicare.¹ Thus, the Medicare physician payment system is of significant rural interest.

In this policy brief, we present the effects of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 on physician payment rates in rural areas. Specifically, we examine the impact of creating a floor of 1.00 in the geographic practice cost index (GPCI) for work expense. We also show the effects of the Medicare incentive payment (MIP) for providing services in shortage areas and of the bonus for practicing in a physician scarcity area. Our principal findings are the following:

- Increases to the GPCI for work expense accounted for a substantial percentage of the two-year increases in total payment to physicians in rural payment areas.
- Increases in the conversion factor (CF) (base payment) accounted for most of the increases in total payment in all but 6 of the 89 Medicare payment localities; in those 6 areas, the dominant factor was GPCI adjustment.
- Bonus payments are a more direct means of targeting increased payments to physicians in specific areas than is a general increase in one part of the payment formula.

This policy brief completes a series of RUPRI Center analyses of the rural issues embedded in physician payment policy. In previous policy briefs, the RUPRI Center examined key components of the current physician payment calculation—practice expense and work geographic adjustments—and the potential impact of payment changes on physician willingness to accept new Medicare patients.

Implications Summarized

- The Medicare physician payment formula is a lever that policy makers can use to address differential payment across geographic areas.
- The total adequacy of physician payment is affected more by a single component of the formula—the CF—than by changes in the GPCI multipliers.
- Bonus payments are a direct means of providing increased payment that exceeds what can be achieved through minor adjustments to the payment formula.

The Rural Policy Brief series is published by the Rural Policy Research Institute (RUPRI) for the RUPRI Center for Rural Health Policy Analysis. RUPRI provides objective analyses and facilitates dialogue concerning public policy impacts on rural people and places.

The RUPRI Center for Rural Health Policy Analysis is one of eight Rural Health Research Centers funded by the Federal Office of Rural Health Policy (Grant #1U1C RH03718-02-00). The mission of the Center is to provide timely analysis to federal and state health policy makers, based on the best available research.

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Methodology

Medicare patient volume and Current Procedural Terminology (CPT) service distributions vary widely among rural primary care practices. Therefore, we constructed a prototypical rural primary care practice for a 1.00 FTE family physician to simulate the effect of changes in Medicare payment. Our model assumes the following distribution of Medicare services provided in one year (which add up to slightly more than 50% of all services provided by the physician):²

- 2,000 established patient office visits
- 251 new patient office visits
- 84 non evaluation and management (E&M) services
- 41 hospital observations
- 60 initial hospitalizations
- 120 subsequent hospital care visits
- 60 hospital discharge days
- 8 critical care (first hour) services
- 50 established (Medicare) nursing home and/or swing bed visits

Family practices vary, and the representative nature of this prototypical practice is completely dependent on the assumptions stated above. When the prototypical practice assumptions remain constant across geographic regions (Medicare payment localities), the model provides valuable insight regarding primary care physician practice income effects due to legislative changes in the CF, relative value units (RVUs), and GPCIs.

We applied the distribution of services to the relevant RVU and calculated payment for that service, then summed all services to calculate total Medicare payment for 2002 and 2004 (before and after changes in the MMA) (Table 1a). We selected Mississippi as a payment area for illustration because the work GPCI was 0.957 in 2003, and the effect of the GPCI change on payment was apparent.

Results

Table 1a shows the results of calculations for the prototypical practice in 2002 and 2004. From total payments, physicians would pay practice expenses (e.g., employee compensation, rent, etc.) and professional liability insurance premiums. Total Medicare payment for the prototypical practice increased from \$148,645 in 2002 to \$157,989 in 2004, an increase of 6.3%. Table 1b shows changes for the prototypical practice that resulted from increasing the CF, changing RVUs, and changing GPCIs.

In the Mississippi prototypical practice, total Medicare payment increased by \$9,338 from 2002 to 2004. Half of that increase was attributable to change in the CF from \$36.20 to \$37.34, which becomes substantial when applied to all services provided (\$4,832). Nearly 40% of the increase was due to changing the calculation of the GPCIs, principally the floor payment in the work GPCI (the liability GPCI changed between the two time periods but affects a small portion of the payment, and in the case of Mississippi it actually declined). Applying the prototypical practice distribution in all payment areas results in the 2002-2004 changes shown in Table 2. With the exception of Alaska and Puerto Rico as outliers (due to dramatic changes in their respective practice expense GPCIs), the MMA legislation's greatest impact on payment was in the South Dakota Medicare payment locality (+\$10,989), and the least impact on payment was in the Rest of New York Medicare payment locality (+\$5,994). The relationship between the floor payment and increased physician payment is obvious and substantial, including six payment areas (excluding Alaska and Puerto Rico) in which the GPCI change accounted for over 40% of the increase in physician payment.

The MMA included two other payment policy changes designed to boost incomes of rural physicians. Section 413(b) requires automatic payment of the 10% MIP to physicians providing services in whole-county health professional shortage areas. Previously, physicians providing services in such areas were required to specifically bill for the MIP. Furthermore, Section 413(a) creates a 5% bonus payment (in addition to the MIP) for physician services provided in areas that have the fewest physicians to serve beneficiaries (areas totaling 20% of Medicare

beneficiaries who are affected by the lowest ratios of physicians to beneficiaries). If the prototypical practice were in an area qualifying for these bonuses, the additional payment would be \$16,324 and \$8,162, respectively (assuming all services qualified) (Table 1c). These amounts exceed the 2002 to 2004 gains due to updating the CF (\$4,832), the change in RVUs (\$1,127), or the change in GPCIs (\$3,612).

Implications for Rural Payment Policy

This analysis demonstrates that one small change in the GPCI formula (changing the work GPCI to 1.00) generates additional Medicare payment in a significant majority of Medicare payment localities, while maintaining increases in other payment areas due to CF increases and RVU value changes. However, in comparison to total practice income, the payment increases mandated by the MMA are likely to be small (e.g., the increase would be roughly \$8,000 from the CF and GPCI changes in a practice that generates \$300,000 annually). Furthermore, the increases vary geographically. Thus, although the increase in payments to physicians as a whole may be substantial, the impact on an individual physician's practice may be less significant.

If the policy goal is to ensure access to services in underserved areas, a more direct approach than adjusting a payment formula might be used. The MMA did so both by ensuring the payment of the MIP and by adding another 5% in physician scarcity areas. This analysis presents a comparison between payment formula changes and bonus payments. When applied, targeted bonus payments increase practice income substantially more than the MMA-mandated payment formula changes. It is yet unclear if the MMA-mandated changes to physician payment have positively impacted physician satisfaction with the Medicare program and access to services for beneficiaries. Other reports indicate that beneficiary access to services has at worst not deteriorated in recent years³ and in some measures has improved.⁴

Table 1a. Gross Medicare Physician Payment: Prototypical 1.0 FTE Family Physician, Mississippi

CPT Codes	Descriptor	Service Volume	2002		2004	
			Total RVUs	Total Payment	Total RVUs	Total Payment
-	Non-E&M procedures	83	139.58	\$5,053	134.00	\$5,003
99201-05	Office/outpatient visit, new	250	606.53	\$21,956	626.84	\$23,405
99211-15	Office/outpatient visit, est	2,000	2,706.45	\$97,971	2,796.11	\$104,399
99217-20	Observation care	40	94.32	\$3,414	98.32	\$3,671
99221-23	Initial hospital care	60	188.55	\$6,825	193.87	\$7,239
99231-33	Subsequent hospital care	120	153.11	\$5,542	156.89	\$5,858
99238-39	Hospital discharge day	60	107.43	\$3,889	112.81	\$4,212
99291	Critical care, first hour	8	40.47	\$1,465	41.51	\$1,550
992311-13	Nursing fac care, subseq	50	69.89	\$2,530	70.89	\$2,647
TOTALS		2,770	4,106.32	\$148,645	4,231.25	\$157,989

Table 1b. Payment Formula Change Results

	Increase in Payment	Percentage of Total Increase
Conversion factor	\$4,832	50%
Relative value units	\$1,127	13%
Geographic practice cost indexes	\$3,612	37%
TOTALS	\$9,338	100%

Table 1c. Shortage Area Bonuses

	Bonus Payment
Medicare incentive payment	\$16,324
Scarcity area payment	\$8,162
TOTAL	\$24,486

Table 2. Percentage of Physician Payment Increase Attributable to Changes in GPCIs, 2002 to 2004

Medicare Payment Locality	Increase in Payment	% of change due to:			Medicare Payment Locality	Increase in Payment	% of change due to:		
		CF	RVU	GPCI			CF	RVU	GPCI
ALABAMA	\$ 7,648	63%	16%	21%	METROPOLITAN ST. LOUIS, MO	\$ 6,850	73%	18%	9%
ALASKA (a)	\$ 102,348	6%	1%	93%	REST OF MISSOURI*	\$ 10,647	43%	11%	45%
ARIZONA	\$ 6,919	74%	17%	8%	MONTANA	\$ 10,559	45%	11%	44%
ARKANSAS	\$ 9,613	48%	12%	39%	NEBRASKA	\$ 10,046	47%	12%	41%
ANAHEIM/SANTA ANA, CA	\$ 6,989	82%	17%	1%	NEVADA	\$ 6,445	83%	19%	-1%
LOS ANGELES, CA	\$ 6,917	82%	17%	1%	NEW HAMPSHIRE	\$ 7,584	69%	16%	15%
MARIN/NAPA/SOLANO, CA	\$ 6,729	86%	18%	-4%	NORTHERN NJ	\$ 7,235	80%	17%	3%
OAKLAND/BERKELEY, CA	\$ 6,762	86%	18%	-4%	REST OF NEW JERSEY	\$ 6,934	80%	17%	3%
SAN FRANCISCO, CA	\$ 7,440	86%	16%	-3%	NEW MEXICO	\$ 8,379	58%	14%	27%
SAN MATEO, CA	\$ 7,288	87%	16%	-3%	MANHATTAN, NY	\$ 7,972	80%	15%	5%
SANTA CLARA, CA	\$ 7,169	87%	17%	-4%	NYC SUBURBS/LONG I., NY	\$ 7,934	77%	15%	8%
VENTURA, CA	\$ 6,525	85%	18%	-3%	POUGHKPSIE/N NYC BURBS, NY	\$ 6,711	81%	18%	1%
REST OF CALIFORNIA*	\$ 6,240	84%	19%	-4%	QUEENS, NY	\$ 7,770	77%	15%	7%
COLORADO	\$ 7,454	69%	16%	15%	REST OF NEW YORK	\$ 5,994	84%	20%	-4%
CONNECTICUT	\$ 6,800	84%	18%	-1%	NORTH CAROLINA	\$ 8,519	58%	14%	28%
DELAWARE	\$ 6,706	79%	18%	3%	NORTH DAKOTA	\$ 9,937	48%	12%	40%
DC + MD/VA SUBURBS	\$ 6,963	82%	17%	1%	OHIO	\$ 7,326	69%	16%	15%
FORT LAUDERDALE, FL	\$ 7,367	72%	16%	11%	OKLAHOMA	\$ 8,121	59%	15%	27%
MIAMI, FL	\$ 7,652	72%	16%	12%	PORTLAND, OR	\$ 6,319	83%	19%	-2%
REST OF FLORIDA	\$ 8,758	58%	14%	29%	REST OF OREGON	\$ 9,031	54%	13%	33%
ATLANTA, GA	\$ 6,621	81%	18%	1%	METRO PHILADELPHIA, PA	\$ 7,133	77%	17%	6%
REST OF GEORGIA	\$ 8,748	56%	14%	31%	REST OF PENNSYLVANIA	\$ 7,032	71%	17%	12%
HAWAII/GUAM	\$ 6,779	81%	18%	2%	PUERTO RICO	\$ 15,134	27%	8%	65%
IDAHO	\$ 8,941	53%	13%	33%	RHODE ISLAND	\$ 6,596	82%	18%	0%
CHICAGO, IL	\$ 7,794	72%	15%	13%	SOUTH CAROLINA	\$ 7,923	61%	15%	24%
EAST ST. LOUIS, IL	\$ 8,160	62%	15%	23%	SOUTH DAKOTA	\$ 10,989	42%	11%	47%
SUBURBAN CHICAGO, IL	\$ 7,362	74%	16%	10%	TENNESSEE	\$ 7,985	61%	15%	24%
REST OF ILLINOIS	\$ 9,508	51%	13%	36%	AUSTIN, TX	\$ 7,792	66%	15%	19%
INDIANA	\$ 7,203	68%	17%	15%	BEAUMONT, TX	\$ 7,103	70%	17%	13%
IOWA	\$ 9,197	52%	13%	35%	BRAZORIA, TX	\$ 7,344	70%	16%	13%
KANSAS*	\$ 9,006	54%	13%	33%	DALLAS, TX	\$ 6,879	78%	17%	4%
KENTUCKY	\$ 7,871	61%	15%	24%	FORT WORTH, TX	\$ 7,752	66%	15%	19%
NEW ORLEANS, LA	\$ 6,563	78%	18%	4%	GALVESTON, TX	\$ 7,662	67%	16%	17%
REST OF LOUISIANA	\$ 8,900	54%	13%	32%	HOUSTON, TX	\$ 6,778	78%	18%	4%
SOUTHERN MAINE	\$ 7,826	65%	15%	19%	REST OF TEXAS	\$ 9,445	51%	13%	36%
REST OF MAINE	\$ 9,139	53%	13%	34%	UTAH	\$ 8,012	62%	15%	23%
BALTIMORE/SURR. CNTYS, MD	\$ 6,578	81%	18%	1%	VERMONT	\$ 8,182	62%	15%	24%
REST OF MARYLAND	\$ 7,471	68%	16%	16%	VIRGIN ISLANDS	\$ 9,539	54%	13%	33%
METROPOLITAN BOSTON	\$ 7,059	83%	17%	0%	VIRGINIA	\$ 7,306	68%	16%	16%
REST OF MASSACHUSETTS	\$ 6,677	82%	18%	0%	SEATTLE (KING CNTY), WA	\$ 6,567	83%	18%	-1%
DETROIT, MI	\$ 8,551	66%	14%	20%	REST OF WASHINGTON	\$ 7,851	64%	15%	20%
REST OF MICHIGAN	\$ 7,022	73%	17%	10%	WEST VIRGINIA	\$ 10,047	48%	12%	40%
MINNESOTA	\$ 6,542	77%	18%	4%	WISCONSIN	\$ 7,468	67%	16%	17%
MISSISSIPPI	\$ 9,338	50%	13%	37%	WYOMING	\$ 8,846	55%	14%	31%
METRO KANSAS CITY, MO	\$ 7,462	68%	16%	16%					

(a) The payment change for Alaska, although large, is accurate and reflects an earmarked change that was specifically written into the legislation.

References

- ¹ Data are from the 2000/2001 Community Tracking Study Physician Survey of the Center for Studying Health System Change, available through the Inter-University Consortium for Political and Social Research. Rural is defined as non-metropolitan.
- ² These estimates are based on the 2002 national Medicare distributions for family physician visits, as reported by the American Academy of Family Physicians.
- ³ U.S. Government Accountability Office. (2006). Medicare physician services: Use of services increasing nationwide and relatively few beneficiaries report major access problems. GAO-06-704.
- ⁴ Cunningham, P., Staiti, A., & Ginsburg, P. B. (2006). *Physician acceptance of new Medicare patients stabilizes in 2004-05* (Tracking Report 12). Washington, DC: Center for Studying Health System Change.