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Assessing the Impact of Rural Provider Service Mix on the Primary Care Incentive Payment Program

Dan Shane, PhD; A. Clinton MacKinney, MD, MS; Fred Ullrich, BA; Keith J. Mueller, PhD; Paula Weigel, MS

Key Findings

- Based on analysis of 2009 Medicare claims data, more than 70% of rural primary care physicians (PCP) and non-physician practitioners (NPP) qualify for payments under the Primary Care Incentive Payment Program (PCIP) threshold (i.e., meet the $\geq$ 60% of allowable Medicare charges).
- The average incentive payment for qualifying rural PCPs would result in an additional $8,000 in Medicare patient revenue per year. For qualifying NPPs, the result is an additional $3,000 in Medicare patient revenue per year.
- Only 9% of non-qualifying rural primary care providers were within 10 percentage points of the minimum threshold (60%) of Medicare allowed charges to qualify for PCIP payments.

Background

The Patient Protection and Affordable Care Act of 2010 (ACA section 5501(a)) created the Primary Care Incentive Payment Program (PCIP). The program's intent is to strengthen the role of primary care in a new, high-performing health system.[1] For the years 2011 through 2015, if certain evaluation and management services represent 60% or more of Medicare allowable charges, then the provider qualifies for a 10% bonus calculated on the primary care portion of allowable charges. A concern in terms of the fairness of the PCIP to rural providers is the differing mix of services provided in rural primary care practices. Whereas in urban areas a patient is more likely to be referred to a specialist to handle the majority of procedures, referrals may not be an option in rural areas. As a result of handling a more comprehensive set of services, the proportion of non-primary care services as part of a rural practice's total Medicare allowable charges may result in the ratio of primary care services below the 60% threshold necessary to qualify for the bonus. In this brief, we evaluate rural provider service mix and the impact of that mix on PCIP qualifications and payments among rural primary care providers.

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RUPRI Center for Rural Health Policy Analysis, University of Iowa College of Public Health, Department of Health Management and Policy
http://www.public-health.uiowa.edu/rupri
E-mail: cph-rupri-inquiries@uiowa.edu

Methodology

The PCIP program defines *primary care provider* as a physician with a Medicare specialty designation of family medicine, geriatric medicine, internal medicine, or pediatric medicine (Medicare Specialty Codes 08, 38, 11, and 37, respectively). The program also includes clinical nurse specialist (CNS), nurse practitioner (NP), and physician assistant (PA) professionals practicing as primary care providers (Medicare Specialty Codes 50, 89, and 97, respectively). We randomly selected primary care physicians (PCPs) and non-physician practitioners (NPPs) practicing in rural areas from National Provider Identification data. NPPs include CNSs, NPs, and PAs. We categorized all providers geographically based on the Rural Urban Commuting Area codes, resulting in large rural, small rural, and isolated rural categories of providers.[2] Any provider who had been active less than 18 months, indicated student status, or was affiliated with a Rural Health Clinic or a Federally Qualified Health Center was removed from the sample. We submitted the sample to the Centers for Medicare & Medicaid Services (CMS) and obtained 2009 claims for providers seeing a minimum of 100 beneficiaries. After exclusions for conflicting specialty status and non-rural practice region, the final data contained claims records for 1,019 PCPs and NPPs.

Primary care providers are eligible for the incentive payment when allowed charges for primary care services meet or exceed 60% of all allowed charges for Medicare services. The ACA defines primary care services as the following ranges of Current Procedure Terminology (CPT) codes:

- 99201 through 99215 for new and established patient office or other outpatient evaluation and management (E/M) visits;
- 99304 through 99340 for initial, subsequent, discharge, and other nursing facility E/M services; new and established patient domiciliary, rest home (e.g., boarding home), or custodial care E/M services; and domiciliary, rest home (e.g., assisted living facility), or home care plan oversight services; and
- 99341 through 99350 for new and established patient home E/M visits.

When calculating a provider's primary care percentage, CMS excludes emergency, hospital inpatient, and drug/laboratory charges from total allowed charges, in addition to claims not covered based on the Physician Fee Schedule. A detailed explanation of PCIP qualification guidelines based on claims classification is available in the final rule published in the *Federal Register.*[3]

Rural Provider Service Mix

Table 1 documents service mix among all rural providers, displaying PCPs and NPPs separately. The service mix patterns do not change appreciably when levels of rurality are examined separately. Office visits account for about one-third of the volume of rural PCP practices and nearly half of the total allowable Medicare charges. Hospital and nursing home visits add another 15% of the total volume of services and about 30% of allowable charges. While procedures such as endoscopy or dialysis have much higher average per service charges compared to office visits, these services contribute to a small percentage of rural practice Medicare volumes and total allowable charges. Minor procedures, major procedures, ambulatory procedures, and endoscopies/dialysis combine to represent only 5% of a rural PCP's total volume and 6 % of total allowable charges Lab charges, by contrast, constitute 25% of a rural PCP's volume of Medicare services, but 5% or less of allowable Medicare charges. For NPPs, the more rural the practice's site the higher the %age of allowable charges from office visits. NPPs in isolated rural areas have 55% of allowable charges from office visits, while NPPs in large rural areas have 46 % from office visits. A detailed table showing service mix among rural providers is available at the RUPRI Center website, http://ruprihealth.org/publications/policybriefs/2013/PCIP Tables.pdf.

PCIP Qualification Estimates

Table 2 lists the results of analyzing the provider sample for PCIP qualification. Based on 2009 service mix, 75% of rural primary care providers (74% of PCPs, 76% of NPPs) qualified for the incentive payment. CMS expected 80% of family practitioners and 60% of general internists to qualify for bonus payments.[3] In our sample, 80% of family practitioners and 64% of general internists qualified.

Table 1. Rural Primary Care Service Mix Summary by Provider Type (based on calendar year 2009 Medicare claims)*

	PCPs**						NPPs**					
BETOS Category* **	Service Volume	Volume as % of Total	Mean Provider Volume (N=658)	Total Allowed Charges	Allowed Charges % of Total	Mean Allowed Charges per Service	Service Volume	Volume as % of Total	Mean Provider Volume (N=361)	Total Allowed Charges	Allowed Charges % of Total	Mean Allowed Charges per Service
E&M Categories												
Office Visits	570,300	31%	867	$ 35,584,767	47%	$ 62	140,347	33%	389	$ 7,146,135	51%	$ 51
Hospital Visits	199,305	11%	303	$ 16,873,367	23%	$ 85	11,774	3%	33	$ 725,270	5%	$ 62
Nursing Home Visits	74,027	4%	113	$ 4,741,730	6%	$ 64	31,570	7%	87	$ 1,846,261	13%	$ 58
Specialists Visits	93,122	5%	142	$ 174,983	0%	$ 2	21,911	5%	61	$ 149,676	1%	$ 7
Emergency Room Visits	21,065	1%	32	$ 2,065,579	3%	$ 98	8,093	2%	22	$ 579,805	4%	$ 72
Other												
Immunizations	90,107	5%	137	$ 1,385,839	2%	$ 15	16,978	4%	47	$ 245,288	2%	$ 14
Other drugs	83,710	4%	127	$ 1,014,342	1%	$ 12	24,012	6%	67	$ 496,431	4%	$ 21
Imaging	45,956	2%	70	$ 2,325,492	3%	$ 51	10,026	2%	28	$ 448,961	3%	$ 45
Lab Tests	470,276	25%	715	$ 3,255,254	4%	$ 7	115,205	27%	319	$ 878,886	6%	$ 8
Other Tests (CV, EKG, oth	71,440	4%	109	$ 1,214,717	2%	$ 17	8,869	2%	25	$ 139,405	1%	$ 16
Ambulatory Procedures	17,014	1%	26	$ 1,037,698	1%	$ 61	3,078	1%	9	$ 125,308	1%	$ 41
Minor Procedures	74,564	4%	113	$ 2,527,799	3%	$ 34	24,702	6%	68	$ 658,637	5%	$ 27
Oncology/Endoscopy/Dialy	4,704	0%	7	$ 764,239	1%	$ 162	732	0%	2	$ 56,107	0%	$ 77
Major Procedures	980	0%	1	$ 263,457	0%	$ 269	363	0%	1	$ 39,073	0%	$ 108
Consultation	7,957	0%	12	$ 1,035,196	1%	$ 130	2,195	1%	6	$ 215,725	2%	$ 98
DME	1,117	0%	2	$ 819	0%	$ 1	882	0%	2	$ 2,546	0%	$ 3
Other	36,552	2%	56	$ 673,936	1%	$ 18	8,772	2%	24	$ 249,309	2%	$ 28
Total	1,862,196	100%	2,830	$ 74,939,214	100%	$ 40	429,509	100%	1,190	$ 14,002,822	100%	$ 33

*Based on sample of 1,019 rural primary care providers: 658 physicians and 361 non-physician practitioners.
**PCP: Primary Care Physicians; NPP: Non-Physician Practitioners.
***BETOS: Berenson-Eggers Type of Service.

Table 2. Rural Provider Primary Care Incentive Program (PCIP) Evaluation Summary

	# of Providers		Total Allowable Charges*		Primary Care (PC) Charges*		Mean PC Charges as % of Total Allowable		% of Providers above 60%		Mean PCIP Payment	
Rural Classification**	**NPP*****	**PCP*****	**NPP**	**PCP**	**NPP**	**PCP**	**NPP**	**PCP**	**NPP**	**PCP**	**NPP**	**PCP**
Rural - Isolated	121	222	3,220,416	15,175,613	2,643,804	11,651,073	82%	77%	71%	72%	2,978	7,056
Rural - Small	117	208	3,568,589	15,415,579	3,203,252	12,147,234	90%	79%	80%	72%	3,405	7,690
Rural - Large	123	228	4,025,837	20,387,024	3,099,411	16,299,947	77%	80%	78%	77%	2,994	8,965
Total	361	658	10,814,842	50,978,216	8,946,467	40,098,254	83%	79%	76%	74%	3,129	7,941

*See Appendix for complete PCIP guidelines for establishing relevant primary care and total allowable charges.
**Based on primary practice location ZIP code, classified by Rural Urban Commuting Area (RUCA) code.
***NPP: Non-Physician Practitioners; PCP: Primary Care Physicians.

For providers qualifying for PCIP payments, primary care charges averaged 86% of total allowable charges. For rural primary care providers not qualifying for PCIP payments, primary care charges averaged less than 30% of total allowable charges. Moreover, only 9% of non-qualifying providers were within 10 percentage points of the 60% threshold.

The financial impact of PCIP payments on individual qualifying providers appears modest. Incentive payments for qualifying providers averaged nearly $8,000 for PCPs and just over $3,000 for NPPs. Bonus payments represented 6.5% of total Medicare allowable charges for PCPs and 8.0% for

NPPs. CMS estimated that "potentially eligible primary care specialties designated under the statute (including family practice and geriatric medicine), are expected to experience an estimated aggregate increase in payment of between 4 and 9%."[3] Our results affirm CMS estimates of increased payment percentages as a portion of primary care providers' total Medicare revenue.

Discussion

We evaluated PCIP qualifications for a sample of more than 1,000 rural primary care providers. We found that 75% of rural PCPs and NPPs would qualify for bonus payments. Further evaluation of non-qualifiers reveals that only 9% of non-qualifying providers were within 10 percentage points of the necessary primary care threshold. Average primary care charges were only 29% for non-qualifiers versus 85% for qualifiers. These results suggest that the 60% threshold for primary care charges as a percentage of total Medicare allowable charges is a reasonable benchmark for rural primary care providers. Incentive payments appear to be reaching their intended targets. Average annual incentive payments are $8,000 for PCPs and $3,000 for NPPs.

Context is important in answering the question of whether the PCIP program will have an impact on patients' access to primary care services. The trend away from single and small practices may increase the impact of PCIP payments. Taking a hypothetical large group practice consisting of 15 PCPs and 7 NPPs, the PCIP would result in average additional practice revenue of $141,000. For regional systems employing a large number of PCPs and/or NPPs, the bonus payment could provide enough additional revenue to expand access by hiring additional clinicians. For small or solo practices, the bonus payment would not be adequate to hire additional providers. The program's impact on individual practitioner decisions to deliver primary care services is uncertain.

Text References

1. Baucus, Max (2008) "Call to Action: Health Reform 2009." US Senate Finance Committee. November 12.
2. Based on primary practice location ZIP code, classified by 2006 Rural Urban Commuting Area (RUCA) code. RUCA coding:
   Large Rural City/Town (micropolitan) focused: 4.0, 4.2, 5.0, 5.2, 6.0, 6.1
   Small Rural Town focused: 7.0, 7.2, 7.3, 7.4, 8.0, 8.2, 8.3, 8.4, 9.0, 9.1, 9.2
   Isolated Small Rural Town focused: 10.0, 10.2, 10.3, 10.4, 10.5, 10.6
3. Federal Register, Vol. 75, No. 228. Monday, November 29, 2010. Rules and Regulations.

Appendix. Primary Care Incentive Payments (PCIP) Evaluation Summary

Our analysis was based on 2,291,707 claims submitted to Medicare in 2009 by primary care practitioners who met the criteria for the Primary Care Incentive Payment Program (PCIP), including physicians from family medicine, geriatric medicine, internal medicine, pediatric medicine, and nurse practitioners, clinical nurse specialists, and physician assistants. Based on PCIP eligibility rules from the Federal Register/Vol. 75, No. 228,[i] the practitioners' service claims were grouped into one of the following four categories:

1. Primary care services eligible for PCIP and included in the numerator and denominator of the PCIP primary care percentage calculation (Table 66, Federal Register).
2. Primary care services ineligible for PCIP due to explicit exclusion criteria (Table 67, Federal Register) or services not covered by Medicare on the Physician Fee Schedule (PFS). The non-covered services are indicated by a status code on the 2009 National Physician Fee Schedule Relative Value File.[ii] These claims are excluded from both numerator and denominator of the PCIP primary care %age calculation.
3. Non-primary care services included in the denominator of the PCIP primary care percentage calculation based upon the service coverage status code defined in the 2009 National Physician Fee Schedule Relative Value File.[ii] Medicare covers practitioner services associated with status codes of 'A', 'R', or 'T'.
4. Non-primary care services excluded from the denominator of the PCIP primary care percentage calculation based upon the service coverage status code in the 2009 National Physician Fee Schedule Relative Value File (status codes other than 'A', 'R', 'T').

The 2009 claims were merged with the 2009 National Physician Fee Schedule RVU file by the first Healthcare Common Procedure Coding System (HCPCS) code designated on the claim and the first modifier to obtain the status codes associated with each HCPCS service. Once each service claim had a status code, we were able to identify those service claims covered by the PFS (and included in the PCIP calculation) versus those that were not (excluded from the calculation). After the claims were identified for inclusion or exclusion in the PCIP primary care percentage calculation, we calculated the total allowed charges for primary care services (numerator, $), the total allowed charges for primary and non-primary care covered services combined (denominator, $), and the total allowed charges associated with the two remaining categories of services excluded from the bonus calculation due to either being Hospital Evaluation and Management services or non-PFS covered services. These totals were determined for each provider in the dataset, which were further classified into provider type categories (primary care physicians vs. nurse practitioners and physician assistants) and provider type-rural characteristics (provider type by large, small, or isolated rural location) for additional analysis.

Providers were classified as qualifying for the bonus if their PCIP %age calculation exceeded a threshold of 59.5%, a level explicitly defined in the Federal Register for rounding reasons. If a provider qualified, then bonus amounts were determined by multiplying each provider's total allowed charges for primary care services by 10%.

For summary purposes we report our analyses by Berenson-Eggers Type of Service (BETOS) codes.[iii] We consolidated several of the BETOS subcategories into groups that reflect the place and/or type of service provided. The classification scheme is in Appendix Table 1 below. We further grouped our BETOS categories into PCIP Inclusion and Exclusion categories so that service differences between bonus qualifiers and non-qualifiers could be considered.

Appendix Table 1. BETOS Code Combinations for PCIP Summary

Category	BETOS Codes in Category	Description
Office Visits	M1A, M1B	Evaluation and Management (E&M) for new and established office visits
Hospital Visits	M2A, M2B, M2C	E&M Hospital visits, including initial, subsequent, and critical care
Emergency Room Visits	M3	E&M Emergency room visits
Nursing Home and Home Visits	M4A, M4B	E&M Home and Nursing Home visits
Specialist Visits	M5A, M5B, M5C, M5D	E&M Specialist visits, including pathology, psychiatry, ophthalmology, and other
Consultations	M6	E&M consultations
Influenza Immunization	O1G	Influenza immunizations
Other Drugs	O1E	Administration of other drugs
Imaging	All codes starting with 'I' (18)	Standard and advanced imaging, echography, imaging/procedure (including cardiac catheterization)
Lab Tests	T1A, T1B, T1C, T1D, T1E, T1F, T1G, T1H	Venipuncture, automated general profiles, urinalyses, blood counts, glucose, bacterial cultures, and other
Other Tests	T2A, T2B, T2C, T2D	Electrocardiograms, cardiovascular stress tests, EKG monitoring, and other
Ambulatory Procedures	P5A, P5B, P5C, P5D, P5E	Ambulatory procedures, including skin, musculoskeletal, inguinal hernia repair, lithotripsy, and other
Major Procedures	P0, P1A, P1B, P1C, P1D, P1E, P1F, P1G, P2A, P2B, P2C, P2D, P2E, P2F, P3A, P3B, P3C, P3D, P4A, P4B, P4C, P4D, P4E	Anesthesia, and major procedures including breast, colectomy, cholecystectomy, turp (prostate), hysterectomy, other, cardiovascular, orthopedic, and eye procedures
Minor Procedures	P6A, P6B, P6C, P6D	Minor procedures, including skin, musculoskeletal, other (Medicare fee schedule and non-Medicare fee schedule)
Oncology/Endoscopy/Dialysis	P7A, P7B, P8A through P8I, P9A, P9B	Radiation therapy, arthroscopy, upper GI, sigmoidoscopy, colonscopy, cystoscopy, bronchoscopy, lap chole, laryngoscopy, and other; Dialysis (Medicare and non-Medicare fee schedule)
Durable Medical Equipment (DME)	All codes starting with 'D' (7)	Medical/surgical supplies, hospital beds, oxygen, wheelchairs, orthotic devices, drugs administered through DME, and other
Other	O1C, O1D, Y1, Y2, Z2	Enteral and parenteral services, chemotherapy, other exceptions/unclassified (Medicare and non-Medicare fee schedule), undefined codes

Appendix References

i. Federal Register/Vol. 75, No. 228/Monday, November 29, 2010/Rules and Regulations http://www.gpo.gov/fdsys/pkg/FR-2010-11-29/html/2010-27969.htm.

ii. 2009 National Physician Fee Schedule, file RVU09C. http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Relative-Value-Files.html.

iii. Berenson-Eggers Type of Service (BETOS) Codes. http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareFeeforSvcPartsAB/downloads/betosdesccodes.pdf.