

Physicians' and Hospitals' Varied Responses to Changes in Medicare Payment: Findings from HCFO Research

Policymakers are engaged in historic efforts to reduce the nation's growing deficit, thus heightening the scrutiny on escalating health care costs. President Obama, congressional leaders in both parties, and other policymakers and stakeholders have proposed changes to Medicare as part of comprehensive approaches to deficit reduction. Over the next decade, Medicare spending is projected to grow more slowly than private health care spending on a per capita basis, but the retirement of the baby boom generation and subsequent influx of Medicare beneficiaries will create significant policy and fiscal challenges. Efforts to address these and other challenges require timely and policy-relevant research on the impact of changes to Medicare payment.

The Robert Wood Johnson Foundation's **Changes in Health Care Financing and Organization** (HCFO) initiative has explored issues related to the financing and organization of the Medicare program throughout HCFO's 25-year grantmaking history. While the specific issues addressed across HCFO studies vary widely, the work described here examines physician and hospital responses to changes in Medicare payment rates. Though not intended as a comprehensive list of all relevant HCFO-funded work, the synthesis provides a helpful guide for identifying policy-relevant research on the topic. Details about the grants, including study findings and related publications, may be accessed by clicking on the grant titles below. A complete list of HCFO-funded research on Medicare is available [here](#).

Key Findings	
Physician Responses	Physician practice patterns affect Medicare spending, but population health drives the majority of cost variation.
	Unilateral payment changes might affect beneficiaries' access to services, particularly for less profitable services.
	Mandated reductions to Medicare payment may cause physicians to substitute higher-cost therapies to offset decreases in revenue, but results will vary geographically.
Hospital Responses	In response to lower payments from public payers, hospital cost-shifting to private payers may occur but is unlikely to be substantial.
	Financial pressure on hospitals affects quality, particularly in less profitable service lines.
	In response to outpatient payment cuts, substitution from the outpatient to inpatient setting does not pose a serious threat to cost containment efforts.
	Medicare price cuts lead hospitals to reduce capacity and provide fewer services to the elderly rather than increase volume to offset payment reduction.



In the following HCFO-funded studies, researchers examined physician responses to changes in Medicare payment, including shifts in physician practice patterns and the volume of provided services.

Cost and Efficiency in Treating High-Cost Medicare Beneficiaries: The Role of Physician Practice and Health System Factors

James Reschovsky, Ph.D., Center for Studying Health System Change. The researchers examined key physician practice and market characteristics that may contribute to high costs and inefficient care in the Medicare program and sought to identify potential policy levers that could influence cost effectiveness in the delivery of medical care to high-cost Medicare patients. Medicare spending demonstrates substantial geographic variation, but determination of the source and extent of variation requires proper accounting for population health differences. Even though physician practice patterns likely affect Medicare geographic cost variations, Reschovsky and colleagues found that population health explains at least 75 to 85 percent of the cost variations across fixed areas—more than previously estimated. Among high-cost beneficiaries, health status was the predominant predictor of costs. Policy strategies should consider the magnitude of the impact of beneficiary health status on Medicare costs in order to address geographic variation in Medicare spending. The development of interventions tailored to improve care and lower costs for specific types of complex and costly patients may hold greater potential for “bending the cost curve.”²¹



Physicians' Responses to Variations in Medicare Fees for Specific Services

James Reschovsky, Ph.D., Center for Studying Health System Change, and Jack Hadley, Ph.D., George Mason University. The researchers examined how physicians' provision of specific medical services to Medicare fee-for-service beneficiaries responds to variations in Medicare fees for those services, physician characteristics, and local market factors. The results show that procedures with higher Medicare fees are performed at a greater volume. The results also imply that Medicare could influence volume growth for specific services by varying fee changes according to factors such as specialty services and geographic location instead of uniform cuts. Such unilateral payment changes may not achieve the intended cost containment and may create undesirable outcomes, such as restricting access to care for Medicare beneficiaries. Moreover, the results suggest that continued uniform fee cuts eventually could result in significant access difficulties for Medicare beneficiaries because such cuts could disproportionately affect beneficiaries in need of relatively less profitable services.²

Reimbursement Policy and Cancer Chemotherapy Treatment and Outcomes

Joseph Newhouse, Ph.D., Harvard Medical School. The objective of the grant was to assess whether the Medicare Modernization Act-mandated reductions in Medicare payment rates for chemotherapy drugs affect chemotherapy utilization and/or drug choice. Researchers previously hypothesized that the reduction in payment rates would make physicians reluctant to accept Medicare patients while some stakeholders argued that, with Medicare such an important source of physician income, the rate reduction could lead to physician-induced demand. Instead, the researchers found that physicians substituted lower-priced therapies for higher-priced therapies to make up for the reduction in payments. Medicare reimbursement rates could affect Medicare beneficiaries differently based on their state of residence. In other words, results showed that oncologists' responses to payment change varied markedly across states; in fact, some states increased treatment rates while a few actually reduced treatment rates. Given the geographic variation in physician responses, such changes could undermine the goals of the Medicare Modernization Act and other Medicare cost containment efforts.³



In the following studies, HCFO-funded researchers examined hospital responses to changes in Medicare payment, including cost-shifting, impact on hospital profitability, and changes in the volume of services provided or the site of care.

Measuring the Costs and Benefits of Medicare Private Fee-for-Service

Steven D. Pizer, Ph.D., Boston VA Research Institute, Inc., and Austin Frakt, Ph.D., Boston University and Boston VA Healthcare System. The purpose of the grant was to explore how Medicare payment policy affects private fee-for-service plans and beneficiary choices. The researchers conducted an extensive literature review of articles published between 1996 and 2010 and found that lower payments to hospitals by Medicaid and Medicare can cause cost-shifting such that private payers are charged more to recoup losses from public payers. However, although Pizer and colleagues found that cost-shifting does occur, they concluded that it is not as ubiquitous or substantial as many think. Cost-shifting is one of many possible responses to public payers' cost cutting. Moreover, changes in the balance of market power between hospitals and health plans also significantly affect private prices. The development of accountable care organizations may increase hospitals' and health systems' market power and lead to higher private prices. In addition, the expansion of Medicaid, with historically low reimbursement rates, in some states may induce hospitals to shift more costs to private payers. However, hospitals might find ways to cut costs or make up for lost revenue in other ways than simply shifting costs to private payers.⁴

Impact of Profitability on Hospital Responses to Financial Stress

Kevin Volpp, M.D., Ph.D., University of Pennsylvania School of Medicine. The researchers examined the impact of financial pressure on hospitals on the quality of care provided, specifically the effect of reduced reimbursement on the mortality of Medicare patients. They modeled the risk-adjusted 30-day mortality of patients discharged from 21 hospital service lines and found a relationship between reduced payments and increased mortality. Specifically, less profitable hospital service lines were more susceptible to higher mortality rates. The findings raise questions about the trade-offs implicit in universal reductions in Medicare reimbursement. Targeting highly profitable services for lower reimbursement could potentially mitigate the effects of uniform reimbursement cuts and better guide decisions about resource allocation for hospital service lines.⁵

Examining the Impact of the Outpatient Prospective Payment System on Hospitals' Medicare Volume and Outpatient Care

Jennifer Mellor, Ph.D., College of William and Mary. The researchers studied the effects of the Medicare Outpatient Prospective Payment System to determine whether the payment system led hospitals to (1) substitute Medicare patients with greater numbers of individuals with other coverage, and (2) substitute outpatient care with more inpatient care for conditions that may be treated in either setting. The study focused on inguinal hernia repair surgery, one of the most commonly performed surgical procedures in the United States. Results showed that the number of outpatient hernia surgeries declined instead of increasing in response to cuts in the reimbursement rate. The volume of inpatient hernia repair surgeries did not increase in response to reductions in the outpatient reimbursement rate. The findings suggest that potential substitution from the outpatient to the inpatient setting does not pose a serious threat to Medicare's efforts to contain hospital outpatient costs.⁶

How Do Changes in Medicare's Hospital Payment Rates Affect the Volume of Admissions?

Tracy Yee, Ph.D., M.P.H., and Chapin D. White, Ph.D., Center for Studying Health System Change. The purpose of the grant was to examine how a change in the payment rate for Medicare inpatient hospital services affects the volume of inpatient discharges among the elderly. The researchers found that markets facing lower growth in Medicare prices exhibited greater-than-average declines in the number of hospital beds and relatively slow growth in the volume of hospital discharges among the elderly, compared to markets with higher price growth. The results suggest that Medicare price cuts lead hospitals to reduce capacity and provide fewer services to the elderly. Considered in the context of the Affordable Care Act's price cuts, the findings suggest that Medicare savings may be greater than expected because of hospitals' volume response. While it is advantageous that Medicare price cuts do not appear to be offset by volume changes, the results do not reflect how changes in quality of care could affect projected savings.⁷

Conclusion

As implementation of the Affordable Care Act continues, it will be important to remain watchful not only of physicians' and hospitals' responses to changes in Medicare payment but also of how Medicare payment rates affect quality of care and beneficiaries' health outcomes. HCFO-funded research has shown that accounting for beneficiary health status is critical to understanding variations in Medicare spending. Physician responses to changes in Medicare payment suggest that Medicare reimbursement rates drive the volume of physician services provided. Conversely, in the hospital setting, Medicare payment cuts likely do not lead to volume offsets or shifting in the site of care. Furthermore, findings from HCFO-funded research suggest that unilateral Medicare payment reductions may not achieve desired cost containment and may harm quality of care and/or access to care. The Affordable Care Act creates a series of natural experiments to monitor the impact of changes to Medicare payment. It will be important to consider physicians' and hospitals' varied responses to these changes to determine whether value-based programs are achieving their desired effect of cost containment and quality improvement.

Endnotes

1. For complete findings, see Reschovsky, J.D. et al. "Geographic Variation in Fee-for-Service Medicare Beneficiaries' Medical Costs Is Largely Explained by Disease Burden," *Medical Care Research and Review*, Vol. 70, No. 5, May 2013, pp. 1-22; "Following the Money: Factors Associated with the Cost of Treating High-Cost Medicare Beneficiaries," *Health Services Research*, Vol. 46, No. 4, July 2011, pp. 997-1021.
2. For complete findings, see Hadley, J. et al. "Medicare Fees and the Volume of Physicians' Services," *Inquiry*, Vol. 46, No. 4, Winter 2009/2010, pp. 372-90.
3. For complete findings, see Newhouse, J. "Geographic Variation in Physicians' Responses to a Reimbursement Change," *New England Journal of Medicine*, Vol. 365, No. 2, December 2011, pp. 2049-52; and Jacobson, M. et al. "How Medicare's Payment Cuts for Cancer Chemotherapy Drugs Changed Patterns of Treatment," *Health Affairs*, Vol. 29, No. 7, June 2010, pp. 1391-99.
4. For complete findings, see Frakt, A.B. "How Much Do Hospitals Cost Shift? A Review of the Evidence," *Milbank Quarterly*, Vol. 89, No. 1, April 2011, pp. 90-130.
5. For complete findings, see Lindrooth, R.C. et al. "The Impact of Profitability of Hospital Admissions on Mortality," *Health Services Research*, Vol. 48, No. 2, January 2013, pp. 792-809.
6. For complete findings, see He, D. and J. Mellor. "Do Changes in Hospital Outpatient Payments Affect the Setting of Care?" *Health Services Research*, Vol. 48, No. 5, May 2013, pp. 1593-1616; and He, D. and J. Mellor. "Hospital Volume Responses to Medicare's Outpatient Prospective Payment System: Evidence from Florida," *Journal of Health Economics*, Vol. 31, No. 5, September 2012, pp. 730-43.
7. For complete findings, see Yee, T. and C.D. White. "When Medicare Cuts Hospital Prices, Seniors Use Less Inpatient Care," *Health Affairs*, Vol. 32, No. 10, October 2013, pp. 1789-95.