

Variation in Health Care Spending

Target Decision Making, Not Geography



Health care in the United States is more expensive than in other developed countries, costing \$2.7 trillion in 2011, or 17.9 percent of the national gross domestic product. Increasing costs strain budgets at all levels of government and threaten the solvency of Medicare, the nation's largest health insurer. At the same time, despite advances in biomedical science, medicine, and public health, health care quality remains inconsistent. In fact, underuse, misuse, and overuse of various services often put patients in danger.

Many efforts to improve this situation are focused on Medicare, which mainly pays practitioners on a fee-for-service basis and hospitals on a diagnoses-related group basis, which is a fee for a group of services related to a particular diagnosis. Research has long shown that Medicare spending varies greatly in different regions of the country even when expenditures are adjusted for variation in the costs of doing business, meaning that certain regions have much higher volume and/or intensity of services than others. Further, regions that deliver more services do not appear to achieve better health outcomes than those that deliver less.

Proposals within the Patient Protection and Affordable Care Act call for renewed examination of the role of geography in how Medicare reimburses hospitals, physicians, and other providers. As a result, in 2010 the Department of Health and Human Services (HHS), which oversees Medicare, commissioned the Institute of Medicine (IOM) to carry out two related studies. The first assessed the data sources and methods for making geographic adjustments in Medicare payments to providers and offered recommendations for improving access to efficient and appropriate levels of care. The results appear in two related reports, *Geographic Adjustment in Medicare Payment, Phase I:*

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Improving Accuracy (second edition, September 2011) and *Geographic Adjustment in Medicare Payment, Phase II: Implications for Access, Quality, and Efficiency* (2012).

For the second study, the Centers for Medicare and Medicaid Services (CMS) asked the IOM to convene a committee to investigate geographic variation in health care spending and quality for Medicare beneficiaries as well as other populations, and to analyze Medicare payment policies that could encourage high-value care. In particular, the IOM committee considered the adoption of a geographically based value index that would account for both the health benefits and costs of health services delivered in each area. Provider reimbursements, in turn, would be linked to the indexed performance of an area.

In its report, *Variation in Health Care Spending: Target Decision Making, Not Geography*, the IOM committee concludes that regional differences in Medicare and commercial health care spending and use are real and persist over time. Furthermore, there is much variation within geographic areas, no matter how broadly or narrowly these areas are defined. The IOM committee recommends that Congress not adopt a geographically based value index for Medicare payments, because the majority of health care decisions are made at the provider or health care organization level, not by geographic units. Adjusting payments geographically based on any aggregate or composite measure of spending or quality would unfairly reward low-value providers in high-value regions and punish high-value providers in low-value regions. Rather, to promote high-value services from all providers, CMS should continue to test payment reforms that offer incentives to providers to share clinical data, coordinate patient care, and assume some financial risk for the care of their patients.

Assessing Geographic Variation

In a series of studies spanning three decades, experts at the Dartmouth Institute for Health

Policy have documented significant variation in Medicare spending and quality across geographic regions in the United States. To supplement the existing literature, the IOM committee commissioned extensive new research on geographic variation in health care spending, use, and quality. The statistical analyses examined these areas for the overall population as well as for populations with specific diseases or clinical conditions. They drew from large public and commercial claims databases and included analyses of Medicare and Medicaid populations as well as those who are privately insured and uninsured in the United States.

The committee's empirical analyses confirm that regional differences in both Medicare and commercial spending and use of services are large. For example, hospital referral regions whose spending was at the 90th percentile spent 42 percent more per Medicare beneficiary each month than regions at the 10th percentile, without adjustments for any differences between regions. Such differences persist over time and across geographic areas and health care services.

However, an overall explanation for geographic variation remains elusive. The statistical analyses accounted for factors such as beneficiary health status and demographics, insurance plans, and factors related to health care markets; however, the committee could not explain a large amount of variation. Variation in patient preferences, provider discretion, and other differences in health status and market factors that are not captured in the data could be responsible for the unexplained variation, the committee concludes.

Differences in the use of post-acute care (PAC) and acute care services stood out as key drivers of variation in Medicare spending. If there were no variation in PAC spending, variation in total Medicare spending would fall by 73 percent. If there was no variation in both acute care and PAC spending, total Medicare spending variation would drop by 89 percent. In the commercial insurance market, regional differences in price markups, rather than the utilization of

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health care services, are the prime influence on geographical variation in spending.

A Geographically Based Value Index

Medicare fee-for-service reimbursement rates historically have accounted for geographic differences in the price of business expenses such as staff compensation and rent. The IOM committee investigated whether geographically based measures of health care value also should be linked to Medicare reimbursement rates. Health care value, for the purposes of this study, was defined as the equivalent of net benefit: the amount by which overall health benefit and/or well-being produced by the care exceeds (or falls short of) the costs of producing it.

However, the IOM committee's research revealed a breadth and depth of geographic variation at all levels of measurement that rendered a value index impractical. For example, hospitals within one hospital referral region do not tend to be uniformly high- or low-cost. In addition, variation in practice patterns among physicians working in the same group practice—such as primary care physicians referring individuals with knee pain to an orthopedist—is as great as variation among comparable specialists at a state level. The IOM committee concludes that

- substantial variation in spending and utilization exists within progressively smaller units of analysis;
- quality across conditions and treatments varies widely within hospital referral regions,

and utilization and spending across conditions is moderately correlated within hospital referral regions; and

- in Medicare and the commercial sectors, quality at the level of hospital referral regions is not consistently related to spending or level of use.

The IOM committee recommends against adoption of a geographically based value index for Medicare. Because geographic units are not where most health care decisions are made, a geographic value index would be a poorly targeted mechanism for encouraging value improvement—it would be neither fair nor likely to improve the value of services offered by individual providers.

Reforms to Improve Value

To improve value, the IOM committee recommends that CMS continue to test payment reforms such as value-based purchasing, patient-centered medical homes, bundled payments, and accountable care organizations. These reforms are directed at decision-making entities and provide incentives for health care providers to integrate care delivery, coordinate care with other providers, and share data on service use and health outcomes in real time. CMS also should pilot programs that allow beneficiaries to share in the savings for higher-value care.

Furthermore, the IOM committee recommends that during the transition to new payment models, CMS should evaluate the impact of reforms on value and use the findings to make



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ongoing improvements in these models. Congress should give CMS the flexibility to accelerate its transition from traditional Medicare to new payment models if evaluations demonstrate that these reforms improve care value.

Finally, to carry out these tasks, the IOM committee recommends that Congress encourage CMS to make Medicare and Medicaid data more accessible for research purposes and provide CMS with resources to carry out this task. CMS also should collaborate with private insurers so that new payment models can be evaluated across payers.

Conclusion

Medicare covers more than 47 million Americans, including 39 million people age 65 and older and 8 million people with disabilities. Medicare payment reform has the potential to improve health, promote efficiency in the U.S. health care system, and reorient competition in the health care market around the value of services rather than the volume of services provided. The IOM committee's recommendations are designed to help CMS encourage providers to efficiently manage the full range of care for their patients, thereby increasing the value of health care in the United States. 

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