Commentary: The Impact of Medicare Coverage Policies on Health Care Utilization

Alan M. Garber

Traditional fee-for-service Medicare, by far the most popular choice of Medicare beneficiaries, lacks many of the tools that commercial health insurance and Medicare Advantage plans can use to control health care utilization. Prior authorization, selective contracting, utilization review, and capitation are generally absent from traditional Medicare. Furthermore, most beneficiaries are covered by supplemental health insurance. Supplemental plans cover many out-of-pocket payments, depriving Medicare of the ability to use cost-sharing to discourage overuse of medical services. Reimbursement can be an effective tool to control both utilization and expenditures. With Medicare's enormous market power, providers usually must accept the reimbursements it offers. As important as the ability to set reimbursement levels would seem to be, however, it is not a tool that the officials of the Centers for Medicare and Medicaid Services (CMS) can apply at will. CMS sets inpatient and outpatient reimbursement levels by formulas that it cannot easily modify or abandon (Medicare Payment Advisory Commission 2007). Congress, not CMS, sets basic parameters for provider reimbursement levels, and in recent years has chosen not to implement scheduled cuts in reimbursement. This experience has led to skepticism about the ability of reimbursement policy to control expenditures in the Medicare program.

Coverage policy offers an important alternative means of controlling expenditures. In its simplest form, it determines which medical products and services a health insurer will reimburse, usually based on an evaluation of the evidence establishing effectiveness (Garber 2001). A decision not to cover is a decision to pay nothing for the intervention in question, and would be expected to markedly diminish utilization, even as the insurer avoids financial liability for any remaining utilization. Application of coverage policy should therefore be a potent tool for controlling expenditures, and if coverage policy

is well-designed, it should promote the use of effective forms of medical care while avoiding ineffective, inappropriate care.

As self-evident as the power of coverage policy seems to be, its effects are complex. Most Medicare coverage policy is local; in fiscal year 2005, for example, CMS only implemented 15 national coverage decisions (Norwalk 2007), while literally thousands of coverage decisions were made locally. This decentralized approach leads to large regional variation in the coverage of specific services and procedures. One might argue that regional variation in coverage is appropriate if, for example, the low prevalence of a particular disease means that providers in some regions cannot achieve adequate volumes of related treatments to achieve acceptable outcomes. In that case, local carriers in regions with low potential procedure rates might simply decide against coverage. But little evidence has been put forward to suggest that volume concerns and health characteristics of local Medicare populations are responsible for variable coverage decisions. Furthermore, there are other, potentially more effective mechanisms to ensure that procedures are only eligible for reimbursement when the providers are capable of meeting quality standards, such as the designation of Centers of Excellence. In fact, the quality of coverage decision making may vary across different parts of the country; some regions use formal, evidence-based processes, while others use more ad hoc, informal approaches (Foote et al. 2004). The variation in coverage policy may be one of the causes of inefficient regional variation in patterns of care for Medicare beneficiaries (Fisher et al. 2003). But this regional variation also offers an important empirical benefit to researchers. It provides an opportunity to learn what effects coverage policy has on utilization, a feature that the authors of the current paper have cleverly taken advantage of.

Because so many decisions are made at the local or regional level, one region might initiate Medicare coverage for a specific intervention before or after another region, or not at all. This paper uses difference-in-difference methods to determine whether regional variation in the timing of coverage policy changes leads to the expected changes in utilization. The basic logic is compelling, but determining the expected change in utilization is surprisingly complex. For a procedure that had already been covered, a decision to restrict

Address correspondence to Alan M. Garber, M.D., Ph.D., Staff Physician, VA Palo Alto Health Care System, Palo Alto, CA. Dr. Garber is the Henry J. Kaiser, Jr. Professor, and Director of the Center for Health Policy/Center for Primary Care and Outcomes Research, Stanford University, Stanford, CA; e-mail: garber@stanford.edu.

coverage to a narrow set of medical indications would be expected to lead to a drop in utilization. But if coverage is ambiguous—for example, if a procedure receives reimbursement on a case-by-case basis, or is sometimes reimbursed under a code for a similar procedure that is formally covered, issuance of a formal coverage determination might actually lead to increased utilization.

The authors of this article address the ambiguous potential effects of coverage policy by identifying three types of coverage determinations: new technology (NT) policies and technology extension (TE) policies, both of which might be expected to increase utilization, by identifying initial or expanded uses for a procedure or other technology; and utilization management (UM) policies. As the name implies, UM policies are explicitly targeted toward reducing the use of specified procedures and services. The authors explore three examples of NT policies, three TE policies, and two UM policies, and find that the effect of coverage policy on utilization is statistically insignificant in each case, with the exception of transesophageal echocardiography, in which a TE policy appears to have reduced utilization. Furthermore, although pooling the cases within the NT and TE coverage categories generally reduced standard errors, the estimated effects of the coverage policies remained far from statistically significant.

Difference-in-difference methods, such as the approach used by the authors, remove much of the variation in explanatory variables by removing fixed and time effects. The resulting loss of statistical power means that negative findings may reflect imprecise estimation rather than no effect. Thus this study does not establish that coverage policy is ineffective. A larger sample size, and perhaps pooled estimation of multiple coverage policies, should improve statistical power, and potentially lead to different findings.

Furthermore, although difference-in-difference estimation removes fixed local effects and general time trends, it cannot fully control for interactions between region and time, and thereby might overestimate or underestimate the “treatment effect”—the consequences of coverage policy—that it purports to measure. Such interactions might occur if a carrier expecting an increase in utilization due to unobserved (by the researcher) factors issued a coverage policy to limit the anticipated increase. For example, a carrier might become aware that several local surgeons have been learning a new technique that they hope to use often, perhaps inappropriately. Then the carrier might issue a UM coverage policy. In an area where surgeons do not plan to use the technique, there would be no reason to issue a UM policy. To the researcher, it might appear that utilization grew no more in the second region than in the first, leading to the conclusion that the UM coverage policy was ineffective.

However, absent the UM policy, the use of the procedure would have grown far more in the first region than in the second.

Furthermore, as the authors acknowledge, the eight case studies may not be representative of the entire range of procedures that Medicare reimburses, and even among the eight the findings were not consistent. And the assignment of a coverage policy to one of the three categories may be imprecise, making the expected effect on utilization uncertain. Thus even with greater statistical power, a negative finding might not mean that coverage policy is ineffective. But if coverage policy were highly effective, one might expect to see it reflected in even an imperfect analysis. Are we expecting Medicare coverage policy to do too much?

As the authors note, “there are significant limitations to enforcement of coverage policies.” Enforcement of many policies is costly because it requires detailed clinical information—for example, under Medicare’s initial coverage decision for implantable cardioverter-defibrillators, some patients were deemed eligible for the procedure based on their ejection fraction, a measure of heart function usually obtained as part of an imaging study. In other cases, symptoms, medical history, assessments of disease severity, and other information not present in a claims file are needed to determine whether coverage criteria are satisfied. Detailed clinical data are not needed for a blanket decision against covering a service or device, but may be needed to ensure that the procedure is not performed under a code for a covered procedure, or to ensure that a covered procedure is being performed in allowable circumstances.

In fact, it may not be feasible to enforce local or regional Medicare coverage policy too vigorously. There is considerable public resistance to nearly any restrictive coverage policy (Tunis 2004), which may be one of the reasons why the Medicare program has been handicapped in its attempts to set such policies (Foote 2002). Furthermore, coverage decisions are most likely to vary when there is no consensus about whether a particular procedure is effective. National coverage determinations are made in an open process that often receives press attention and is followed closely by interested parties, and may well have greater credibility among providers and the public than a set of conflicting local decisions. One would expect Medicare carriers to focus their efforts on the elimination of forms of care that are clearly inappropriate, rather than trying to limit reimbursement for procedures that are covered in other regions of the country.

This paper offers important cautions about the ability of one tool—coverage policy—to resolve Medicare’s challenges in controlling utilization.

It may be time to ask whether Medicare's current coverage policy is up to the task of the program's twenty-first century challenges.

ACKNOWLEDGMENTS

Dr. Garber's work was supported by the U.S. Department of Veterans Affairs and the National Institute on Aging. He benefitted from the comments of Jay Bhattacharya.

Disclosures: None.

REFERENCES

- Fisher, E. S., D. E. Wennberg, T. A. Stukel, D. J. Gottlieb, F. L. Lucas, and É. L. Pinder. 2003. "The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care." *Annals of Internal Medicine* 138: 273–87.
- Foote, S. B. 2002. "Why Medicare Cannot Promulgate a National Coverage Rule: A Case of Regula Mortis." *Journal of Health Political Policy Law* 27: 707–30.
- Foote, S. B., B. A. Virnig, R. J. Town, and L. Hartman. 2008. "The Impact of Medicare Coverage Policies on Health Care Utilization." *Health Services Research*, doi: 10.1111/j.1475-6773.2008.00836.x
- Foote, S. B., D. Wholey, T. Rockwood, and R. Halpern. 2004. "Resolving the Tug-of-War between Medicare's National and Local Coverage." *Health Affairs* 23 (4): 108–23.
- Garber, A. M. 2001. "Evidence-Based Coverage Policy." *Health Affairs* 20 (5): 62–82.
- Medicare Payment Advisory Commission, Report to the Congress. 2007. Medicare Payment Policy, March 2007.
- Norwalk, L. 2007. "Report to Congress: National Coverage Determinations for Fiscal Year 2005," March 2007.
- Tunis, S. R. 2004. "Why Medicare Has Not Established Criteria for Coverage Decisions." *New England Journal of Medicine* 350: 2196–8.

SUPPLEMENTARY MATERIAL

The following material is available for this article online:

Appendix SA1: Author Matrix

This material is available as part of the online article from: <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1475-6773.2008.00852.x>
(this link will take you to the article abstract).

Please note: Blackwell Publishing is not responsible for the content or functionality of any supplementary materials supplied by the authors. Any queries (other than missing material) should be directed to the corresponding author for the article.