Achieving Value in Healthcare

Michael E. Chernew, PhD

In the United States, almost half of healthcare spending is paid for by public funds, mostly by the Medicare, Medicaid, and State Children's Health Insurance programs. Since the 1960s, these programs have become a crucial component of the social safety net and an increasing burden on state and federal budgets. Medicare spending is already approaching 2% of US Gross Domestic Product (GDP), which is more than 10% of federal outlays. By the end of 2080, Medicare spending is projected to rise, under current law, to almost 14% of GDP. Increased Medicaid spending has provoked even more immediate financing concerns, as increased spending growth contributes to state budgetary woes.

There are no easy solutions to the challenges posed by rising public healthcare spending. Advances in medical technology and the aging of the population will continue to put financial pressure on Medicare and Medicaid. Appropriate policy will balance program costs with the benefits gained. This balancing act is complex because the individuals paying (taxpayers) are generally not the direct beneficiaries of the care. Ideally, we would like to create a system that promotes value for each dollar spent. To this end, the articles in this issue of the *Journal* present research that informs managers of interventions to improve the value of care and informs policy makers of issues that may lead to more effective benefit design for public programs.

In most economic sectors, we trust the market to yield economically efficient outcomes (ie, ensure value). Consumers are assumed to make purchasing decisions that reflect the benefits of consumption, relative to costs, and competition among producers is relied on to hold prices to appropriate levels. Yet we've known at least since Arrow's seminal 1963 study that healthcare markets are different.[1] Information problems and the prevalence of insurance weaken, if not sever, the connection between consumers' valuation of medical services and the provision of care. These issues, as well other institutional details such as consolidated provider networks in some markets, also dampen the extent to which competition constrains prices.

Healthcare policy has largely attempted to mitigate these problems while still fundamentally relying on a system of markets (for medical services and insurance) to allocate resources. Even our public system has moved to incorporate market features. Yet considerable disagreement exists regarding how best to make healthcare markets work. One school of thought emphasizes competing plans. The Medicare Modernization Act has revamped and renamed the Medicare+Choice program (now Medicare Advantage) and touts new choices for consumers. Similarly, the new Medicare prescription drug benefit relies on competition among Part D plans to constrain costs. These systems require consumers to be informed about health plans (or prescription drug plans) and make their plan choice prior to making their specific decisions regarding care. In these models, the plans have at least some influence regarding the care delivery process, and enrollees are at least to some extent locked into the systems they have chosen. Once the plan choice is made, consumers are constrained in their behavior.

Another model of competition relies on greater consumer cost-sharing at the point of service delivery with fewer nonfinancial constraints on their behavior. This model relies on products such as consumer- driven plans and health savings accounts. In some cases these products rely on organized systems (eg, preferred provider organizations), to bargain with providers for low prices, but the systems have a considerably reduced role relative to traditional models of managed care plans. Most important decisions are made by patients, with whatever advice they receive from their provider. In theory, such a model could lead to more efficient outcomes because consumers are not constrained by plans at the time they consume care, and they can weigh the costs and benefits of different treatment options or healthcare providers themselves without distortions that plans may generate. This model more closely resembles the functioning of markets in other economic sectors.

Although we cannot be sure exactly which benefit packages consumers will favor, a successful healthcare system will promote care in cases when it yields sufficient value to justify the expense and limit care in cases when the costs outweigh the benefits. Systems that rely on consumers to make choices assume that patients can appropriately weigh costs and benefits of different care options and different providers if faced with the full price of care. Existing evidence gives us cause to doubt such claims. When faced with cost-sharing, patients cut back equally on care deemed appropriate and on care deemed inappropriate.[2-4] They are less likely to take critical preventive medications.[5] Essentially, when left on their own, healthcare consumers do not ration well, at least in the opinion of outside observers. Can these consumers be informed? Will they make better decisions? The evidence is not yet in.

From the School of Public Health, University of Michigan, Ann Arbor, Mich.

Address correspondence to: Michael E. Chernew, PhD, Health Management and Policy, University of Michigan, 109 South Observatory, Room M3118, Ann Arbor, MI 48109-2029. E-mail: ggbz@umich.edu.

It may be that cost-sharing provisions can be designed in a more efficient manner such as that advocated in Benefit-Based Copay (BBC) designs.[6] In BBC models, copays are kept low for patients who would receive the most benefit from the intervention. Increases in copayments for drugs are common in today's marketplace and they typically exemplify the distinction between standard models of increased copays and value-based models. If copays are raised for all drugs for all patients, some will undoubtedly opt not to adhere to clinically appropriate prescription regimens, the benefit of which would be deemed by many to justify the cost. A better value creation strategy would shield subsets of patients from higher copays.

At the same time as these new high deductible plans have been evolving, organized systems of care that actively intervene to promote delivery of beneficial care have become much better at targeting care, which in turn contributes to value. Disease management companies typically stratify consumers based on risk. Interventions such as that outlined by Stankaitis et al in this issue of the *Journal* involve stratification and management of a subset of high-risk patients.[7] This report illustrates the potential that intensive use of information technology and intervention can have on improving care and generating value. Information systems implemented at a systems level, such as that explored by Rask et al, attempt to identify situations in which system level interventions can prevent harm (adverse drug reactions) and create value.[8] Coverage policy, discussed by Foote et al, although a blunt tool, can also help target care.[9]

Organized systems of care can also offer advantages in terms of price negotiations. If left on their own, healthcare consumers would likely face much higher prices than those received by large care systems. Even many consumer-driven plans, in which patients face the cost of care at the time of service, rely on systems to negotiate prices. Given the importance of the institutional details surrounding payment systems, research that investigates the ramifications of different payment systems, such as that by Danzon and Wilensky, is crucial.[10]

Ultimately, we will likely end up with a combination of the high-deductible plans and more traditional managed care plans. The ideal situation may be one in which consumers can choose the approach they prefer, although the institutional details governing choice of plan types and the spillovers between plan types will be important. For example, if consumers can choose between different types of plans (or even different plans of similar types), we must worry about adverse selection. If we move away from pooling, some individuals will benefit and others will lose. More generally, because patients with different benefit designs or covered by different managed care organizations will be seeking care from a similar set of providers, we must also understand better how different systems of care affect each other. For example, as Avery et al note in this issue, when physicians serve patients from different systems, the actions of one system may affect care delivered to enrollees of another system.[11] This may be good or bad, but understanding the extent of spillovers is important.

One strength of competition is the immense creativity that it allows regarding plan design and product creation. New types of firms, such as disease management companies, will emerge when the need and profit opportunities arise. Similarly, new products will be developed that experiment with how the basic building blocks of the system are combined. They will determine how risk is apportioned across individuals and firms, how prices are negotiated, and how care is managed. They will establish how much autonomy patients and physicians will have and when individuals must commit to different care networks.

Because new systems of care are likely to have a crucial role in the future of our healthcare system, we must have a better understanding of what information consumers need to make their choices. The Agency for Healthcare Research and Quality has been a leader in funding development of plan performance measures, funding work to examine methods of disseminating information, and funding evaluations of responses to information. Support for research is crucial if we are to understand how to inform consumers, improve the functioning of markets, and promote value.

Given the march of medical progress and an aging population, these issues are only going to become more salient over time. The clinical, economic, and distributional consequences of different choices could be staggering. Hopefully research such as that presented in this and other issues of the *Journal* can contribute to better decision making at all levels of the healthcare system.

REFERENCES

1. Arrow K. Uncertainty and the welfare economics of medical care. *Am Econ Rev.* 1963;53:941-973.

2. Sui AL, Sonnenberg WG, Manning WG et al. Inappropriate use of hospitals in a randomized trial of health insurance plans. *N Engl J Med.* 1986;315:1259-1266.

3. Rice T, Lohr KN, Brook RH, et al. Effect of cost sharing on use of medically effective and less effective care. *Med Care.* 1986;24(suppl):S31-S38.

4. Heisler M, Langa KM, Eby EL, Fendrick AM, Kabeto MU, Piette JD. The health effects of restricting prescription medication use because of cost. *Med Care.* 2004;42:626-634.

5. Ellis JJ, Erickson SR, Stevenson JG, Bernstein SJ, Stiles RA, Fendrick AM. Suboptimal statin adherence and discontinuation in primary and secondary prevention populations. *J Gen Intern Med.* 2004;19:639-646.

6. Fendrick AM, Smith DG, Chernew ME, Shah SN. A benefit-based copay for prescription drugs: patient contribution based on total benefits, not drug acquisition cost. *Am J Manag Care.* 2001;7:861-867.

7. Stankaitis JA, Brill HR, Walker DM. Reduction in neonatal intensive care unit admission rates in a Medicaid managed care program. *Am J Manag Care.* 2005;11:166-172.

8. Rask KJ, Wells KJ, Teitel GS Hawley JN, Richards C, Gazmararian JA. Can an algorithm for appropriate prescribing predict the incidence of adverse drug events? *Am J Manag Care.* 2005;11:145-151.

9. Foote SB, Halpern R, Wholey DR. Variation in Medicare's local coverage policies: cost analysis of local medical review policies. *Am J Manag Care.* 2005;11:181-187.

10. Danzon PM, Wilensky GR, Means KE. Alternative strategies for Medicare payment of outpatient prescription drugs – Part B and beyond. *Am J Manag Care.* 2005;11:173-180.

11. Avery G, Wholey DR, Christianson JB. Physician evaluations of care management practices in Medicaid programs. *Am J Manag Care.* 2005;11:156-164.