MARKETS, BUDGETS, AND HEALTH CARE COST CONTROL

by Joseph White

Prologue: *The Clinton administration's pursuit of a Health care plan has elevated the subject to a level of prominence that is unrivaled in the history of the presidency. But an answer to the most overriding question-How is the United States going to moderate the growth of its spending for personal health services to some politically acceptable level?–remains elusive. Advocates and detractors of managed competition have argued heatedly about the potential of this model to curb the cost spiral. In this essay Joe White analyzes both managed competition and its alternatives us responses to common budgeting dilemmas. He argues that the form of managed competition that makes sense in these terms–"competing Kaisers"–requires a radical transformation of health care delivery that would be very difficult to implement. White suggests that the same budgeting advantages are easier to achieve through more traditional methods, such as all-payer budgeting-for hospitals. But if resources are limited politically, care must be allocated according to professional judgments. "Physicians will not eagerly control costs, but only physicians can implement cost controls in a manner that produces the most quality for our money," he asserts. White holds a doctorate in political science from the University of California, Berkeley. He has been a research associate at The Brookings Institution since 1989. White is coauthor with Aaron Wildavsky of a book entitled* The Deficit and the Public Interest: The Search for Responsible Budgeting in the 1980s. *A recognized expert on the federal budget process and the politics of budget making, he testified before congressional committees several times in 1993 on budget reform legislation. White currently is working on a study of health care systems in Australia, Canada, France, Germany, Japan, the United Kingdom, and the United States.*

Abstract: Health care cost control is often debated in terms of markets versus bureaucracies. Market restraints are limited in practice by the goal of providing access to care. Therefore, effective cost control requires budgeting. Experience from budgeting for other services should put health care cost control in perspective: The goal should not be rational and efficient allocations, merely better ones. The important choice is not between markets and bureaucracy, but rather which decisions should be made by physicians and which by budgeters, and how to ensure that professional judgment is applied where most important.

The debate about health care cost control often poses a false choice between bureaucratic and market-oriented approaches. The choice is false because the key elements of market approaches are actually bureaucratic, and the best way to allocate care, given fiscal constraint, is to rely on neither markets nor bureaucrats, but on professionalism. The market as normally understood is not allowed to function for health care. That does not mean that market forces have no effect, but rather that there are intelligible reasons why their effects will be limited. The alternative to market control is political and bureaucratic-in particular, budgeting.

Arguments about managed competition and other theories of cost control miss the mark if they pose the issue as markets versus bureaucracy. The flaws of managed competition theories lie less in the competition than in the management. Their theoretical advantages have more to do with budgeting than with markets.

Health care is provided by people whose special expertise makes them hard to regulate and who want more resources than society, or at least somebody worried about a budget, wants to provide. This is a common budgeting problem. Whoever is trying to control such systems rarely knows enough about the work the providers do, can rarely measure the work that they do understand, and when they do have measures are often overwhelmed by data. The providers have political power and often can rally the public against the controllers. Almost everybody believes money could be saved by eliminating "waste, fraud, and abuse," but one person's waste is another's vital service, and the administrative costs of controls on undisputed waste may approximate the savings.

Societies never quite solve these problems when trying to control the police or firefighters or generals or college professors, so we should be modest in our expectations about managing doctors and hospital administrators. No reform will work in the terms that are posed continually by both health care and budget reformers: a "rational and efficient" allocation of resources. Impossible standards can lead only to rejection of all alternatives or to disappointment in practice. The key difference here is that the cost of most other social functions is not out of control. The issue is how to resolve for health care the common problems of limiting totals while overseeing performance and still allowing service providers to do their jobs.

Why Markets Are Not The Answer

The United States could allocate health care services through a market. Total spending would be constrained to the sum of constraints on individuals, namely, their incomes and the opportunity costs of forgoing other consumption. There would be mismatches between individual desires and abilities to consume, but that is fundamental to markets that allocate scarce goods by prices. Instead, the United States and all other advanced nations finance medical services largely through insurance (national health services represent the same principle of shared saving to finance unpredictable risk). Insurance of any type means that at the time a person receives a service, it need not be traded off against some other desire. That may be a problem with insurance, but it is certainly the *point* of insurance.

Individuals insure because they want to ensure that they can receive care when they need it, they cannot predict that need, and the usual alternatives for funding unexpected large expenses-delay, saving, and borrowing-are not viable. Health insurance could follow the casualty model, which allows for risk rating and differences in ability to purchase, or the social model, which greatly restricts both.[1] In almost every country that can afford modem health services, however, insurance is basically social.[2] Partly from empathy, partly as a matter of covering bets in case they run into economic bad luck, and partly from being outvoted, people who face less economic constraint subsidize those with greater risk or fewer resources.

In the United States the social aspects are largely separated from the rest of the structure in government programs-Medicare and Medicaid. Yet those programs would not exist if the market's discipline were morally and practically accepted. Nor would the elimination of risk rating have become one reform supported by virtually all political forces, save smaller insurers. Social insurance reduces price constraints even for insurance, never mind for direct health services.

Limiting insurance. No policy insures every imaginable cost, and many use copayments to limit consumption somewhat. A number of U.S. reform proposals rely in part on reduced insurance to reduce costs.[3] Yet they face practical and political obstacles. Price constraints have little effect once a patient enters the medical process, because then he or she mainly does whatever the physician recommends.[4] Many people value health care so highly that they do not want copayments even if they are economically rational. If a national system requires high copayments, most people buy supplementary insurance-in France, 80 percent of the population belongs to the private *mutuelles*.[5] Less insurance does mean less care, and societies fear that the greatest impact will be on the poor.[6] So they pay deductibles for the poor, cover some conditions (like pregnancy) fully, and/or create

maximum copayments.[7]

The debate about such choices is more telling than the details. The extent of cost constraints is itself a social choice, made through politics and budgeting. It reflects notions of equity, political pressures, and cultural predispositions. In the United States the copayments and coverage in the standard package will affect the total cost of reform. But limits on insurance are highly unlikely to be the major source of cost control, because to voters the point of cost control is to make health care available, not to deprive them of care.

Increasing efficiency and managing competition. Markets also might limit total costs through competition that reduces prices.[8] Yet while patients can judge the physician's manner or the hospital's amenities or location, they cannot know much about particular treatments and cannot be protected by devices common in other markets, such as *warranties*.[9]

There are many proposals to redress the imbalance between buyers and sellers. Yet in trying to replace the judgments from experience and transactions that drive a market, these proposals in fact give authority to bureaucracies. Thus states have created health data organizations to gather data that patients or insurers and employers could use to choose among providers, mainly hospitals. But since all measures are blunt at best, the assessments are determined largely by a political/administrative struggle over rules and exceptions for assessment.[10] A similar difficulty occurs with the use of prices to encourage or discourage treatments. The price is set not by market bargaining, but by administrative procedure. It is a rule meant to encourage the "right" kind of care for conditions defined in advance. A price is less rigid than a rule simply forbidding a particular treatment but can have almost the same constraining effect. It is subject to the same objection as other rules, for preventing some people from receiving what is for them, even if not for everyone, the best treatment.[11]

Managed competition is another way to dress up bureaucratic control in market garb. However the competing plans are constructed or governed, and however they compete, the plans must manage cost and quality. Otherwise they will have no predictable product, making consumer choice meaningless, and could not control their own expenses, and thus would not lower social costs.

Plans can manage care through regulations to try to control the practice of dispersed doctors—third-party managed care. Or plans can set up group- or staff-model health maintenance organizations (HMOs) (individual practice associations [IPAs] are a version of third-party management). Either way, patients and providers are not in a market relationship at point of service, but a regulated one. Regulation is merely private rather than public.[12]

How Budgeting Works (More Or Less)

In bureaucratic systems, resources are allocated not by markets but by budgeting. The market link by payment between seller and buyer is replaced by budgeting by a third-party payer. Public and private organizations may differ in how they make budgets, but the problem of control is essentially the same.

Two types of budgeting. The classic works of public budgeting emphasize control of bureaus, such as the Soil Conservation Service or the Federal Bureau of Investigation or the National Institutes of Health.[13] The common term, traditional budgeting, has meaning only within that discourse. I call it instead bureau budgeting. Examples in health care include the public Department of Veterans Affairs (VA) hospitals and staff-model HMOs such as Kaiser Permanente. What both have in common is that payers fund an organization to serve the customers. Since funds are provided to the organization, rather than being paid per service, the services themselves are not defined exactly and depend on the organization's performance.

The alternative is that scourge of the federal accounts, *entitlement budgeting.*[14] Instead of financing an organization, the payer promises reimbursement for customers' purchase of services from a variety of providers. Medicare and the fee-for-service version of Blue Cross are entitlements.

The fundamental difference between bureau and entitlement budgeting is that the promises for an entitlement are much more specific: defined services or payments to defined eligibility categories, with rules as to allowable fees. Costs are controlled more easily in a bureau because breaking (modifying) the promise is easier. Results are less visible, and blame is more easily avoided. Administrative costs usually can be reduced without immediate, obvious effects upon care. Maintenance and capital investment can be deferred.[15] And politicians can claim that the bureau could provide just as much service for less money if only it were operated more efficiently-transferring the hot potato to the administrators.

Payers also have an extra set of levers when trying to control an organization: the hierarchical power of position. If Prudential thinks a doctor at Stanford University Hospital is doing too many tests, it may threaten not to pay for tests. If Kaiser thinks one of its doctors is doing too many tests, it may fire that doctor. But it also can have the doctor's supervisor discuss the problem with the doctor, or exercise myriad gradations of sanctions and reward. The variety of levers within an organization make control both more severe and more flexible than is possible when the payers and providers are separate.

Fortunate payers can combine the seemingly contradictory advantages of

blame avoidance and hierarchical control by a system in which owners or politicians provide a budget to administrators, who use hierarchical control to meet the budget, and take the blame for the consequences. But the undoubted advantages of the bureau form are not without costs.

Objections to bureau budgeting. First, control of bureau budgets need not make allocations wise or "efficient" in any common sense. Bureau budgets are easier to cut because there are accounts where cuts do not have immediate consequences. That hardly means that the consequences are ideal. Second, bureau budgeting often seems irrational because it focuses on inputs instead of outputs. That has provoked wave after wave of reform such as program budgeting and the program planning budgeting system (PPBS). It is unavoidable because inputs are much easier to measure, and harder to justify, than outputs. In practice, after all, overseers are buying inputs and only hoping that they turn into outputs.[16] People within the organization consider the focus on inputs absurdly detailed and invasive.

Third, budgeting is incremental, and bureau budgeting is especially so because of the organizational cost of change. Since output is hard to measure, government budgeteers use the "scream test." They cut and see who screams. People who are not there yet do not scream as loudly, so existing spending is favored over new proposals. Last but not least, control of bureaus through their budgets is a blunt instrument at best. It can be hard to tell what is going on within a bureau. The budget office or legislature never knows for sure that it has provided the "right" amount of money, in part because there is no "right" amount. What people want and what they need are never quite the same. So budgeteers ask for strong justifications for new inputs and watch for warning signs of an excessive squeeze. Administrators, in turn, may try to generate those warnings-for example, waiting lists.

Entitlement budgeting. The main difficulty with a bureau form is political. Therefore, entitlements exist because either the customers will not accept or the providers will not work for a bureau. The preference for fee-for-service medicine over clinics around the world is a fine example. Entitlements are more difficult to control, yet most other countries in the Organization for Economic Cooperation and Development (OECD) have fee-for-service medicine, and all have lower costs than the United States. They do so either by adjusting the rules of operation or by making their entitlements operate more like bureaus.

In health care the major rules involve eligibility, prices, or allowable treatments. Eligibility limits are a form of limiting insurance itself and thus are not the main solution to the problem of controlling costs while maintaining access.

The federal government limits prices for Medicare through the prospec-

tive payment system (PPS) and the resource-based relative value scale (RBRVS) physician fee schedule. States set Medicaid rates. The Blues set rates, and other private insurers attempt to do so by constructing panels of providers who accept lower fees. Although fee controls are ubiquitous, their effectiveness is a matter of virtually theological dispute. On balance the evidence suggests that, for a very large payer, fee controls do reduce costs, in spite of physicians' and hospitals' interests in raising volume in response ("quantity rebound").[17] For fee controls to work they must be easily monitored (as in a centralized payment system) and accompanied by some limit on quantity rebound. One approach is to make the prices so low that providers cannot possibly create enough volume to make up the difference, which seems to be part of the story in Japan.[18] Another approach is to automatically reduce prices in response to increases in volume, as is done in Quebec and Germany. A third is to limit prices to a provider that cannot quite create its own volume. While diagnosis-related group (DRG) systems are subject to "creep," hospitals cannot easily manipulate admissions to counter the lower prices, because doctors, more than hospitals, produce admissions.

When payers do not have the market power to negotiate better prices, then, as in U.S. private health insurance, they are often reduced to interference with particular episodes of treatment. That approach is not only unique in health care policy but also quite unusual in the wider world of entitlement control. The difficulty is that "managed care" of this sort presumes that the overseer can make the same kinds of decisions as the providers. Audit procedures are common, but direct oversight is not. The federal government, for example, is not about to review every Aid to Families with Dependent Children (AFDC) eligibility determination made by every state. Medical services involve far more specific decisions and much more technical knowledge, making review less promising.

The major form of effective cost control in entitlement systems is to make the entitlement look more like a bureau. In essence, someone is made to be a manager. Hospital administrators are given a budget and told to make it work. The recent German pharmaceutical cost measures mix price regulation (a 5 percent cut followed by a freeze) with a budget: Physicians are given prescribing limits based on their number of patients, and if those limits are exceeded, the physicians can be penalized.[19] Although expressed as a market-oriented reform, creation of general practitioner (GP) fundholders in the United Kingdom makes those GPs responsible for expenses that previously were not cash-limited.

There is little doubt that such measures increase budget controllers' ability to limit spending. They also create all of the worries that accompany bureau budgeting. Innovation may be limited, as managers of hospitals limit

their political risks. Budget controllers worry especially about their inability to observe output. Rather than fearing that lesser information might lead to underfunding-although that may be true-treasuries and ministries in typical bureaucratic fashion believe that if they had more data they could make more rational allocation decisions and thus could increase efficiency by shifting resources between institutions. Thus British reformers claim that a "purchaser-provider split" will reveal efficiencies. In Germany and Australia bureaucrats look to development of DRG-analogue systems so that they can monitor output and better control the hospitals.

Yet it is no accident that systems that set budgets for hospitals, just like other budgeting systems, have tended to focus on input line items.[20] Possible changes in task load must be estimated and accounted for, and input line items are roughly related to levels of output (such as patient days). But since taking resources away from people is hard, output-oriented information is more likely to be used to justify adding where that is indicated than reducing where that seems called for.

Managed competition as a budgeting strategy. Within the framework of this paper, managed competition is an effort to displace blame from politicians to the managers of the plans. "Managed competition with a global budget" has extremely attractive political attributes. The obvious way to enforce a global budget is to set premiums. How the plans then meet the targets would be, at least in the short run, the insurers', patients', and providers' problem. Politicians could blame the insurers, as they could blame the administrators of a bureau, for any difficulties.

Unfortunately, one cannot run a budgeting system with no concern for the details of service provision. Managed competition per se provides none of the powers, such as cartelized bargaining over rates and hospital budgets, centralized billing, and capital controls, that other countries use to limit their health care costs. Instead, it relies on managed care and thereby on those forms of control that are most likely to produce politically unacceptable delivery of services.

While any judgment of this issue is ultimately speculative, it is hard to credit a notion that providers and patients will move quickly into competing Kaiser-type plans because of any plausible incentives in a new system. The capital costs of creating the new networks, and physicians' reluctance to give up their sunk investments and referral patterns, might be obstacles enough. But many patients clearly value their choice of physician and are willing to pay a premium to preserve it. Reform that relies on managed campetition, whatever its short-run advantages for reducing blame, therefore is likely to implement the least efficient possible form of entitlement budgeting: third-party managed care.

We have lots of experience with detailed regulation of large numbers of

transactions, and it is rarely successful. One need only consider the example of Pentagon procurement regulations. Third-party managed care is a particularly unpromising example, because it attempts to reduce a profession to rules. Medical care does not work that way. Diagnosis is hard, patients have combinations of maladies, their underlying physical state may allow different treatments, and we often do not know much about which treatments work best. Third-party management proliferates hassles, substitutes nonphysicians' judgment for physicians' judgment, and spends an increasing share of medical resources on something other than medical services.

Since there are severe obstacles to moving providers and patients into the form of managed care that is somewhat effective (group- or staff-model HMOs), and since the other main form (third-party managed care) does not work, it is hard to see how managed competition could control costs, except by reducing coverage.[21] Instead, in return for the chimerical promise that entire networks could be treated like bureaus (HMOs), it forgoes the reality, available in other reforms, of bureau budgeting for hospitals. Global budgets for hospitals may be criticized for forcing physicians to allocate limited resources. But that is no different from what happens in group- or staff-model HMOs. Both are defended on the grounds that physicians will allocate according to relative need based on professional judgment. Consciously or not, opponents and the more optimistic proponents of managed competition are on the same grounds: The real issue is how to impose limits on physicians and then get them to ration care.[22] The major difference is, proponents of managed competition claim they can create bureaus-a system of HMOs–for which to budget; proponents of more traditional regulation want to budget for bureaus that already exist: the hospitals.

Professionalism Within A Budget

As stated at the beginning, in many budgeting systems the people who understand the details of service do not want fiscal control, and the people who do not understand, if they try to enforce fiscal control through the details, might make bad decisions. The trick is to devolve control of details to the people who know, without losing control of the totals. Along the way, the budgeteers must audit enough of the details to recognize when the funding level is squeezing services unacceptably.

Systems such as negotiated budgets for entire hospitals or setting an HMO premium rate or capping German prescription totals per physician operate in large part by not specifying how the providers will meet the target. All of these systems, as in the British National Health Service, rely on providers to allocate their limited resources.[23] The limits are created by severely constraining all other sources of income. If a global budget means

anything, it is this combination of centralized control of the total and decentralization of the details.

Some functions, such as processing Social Security benefits, can be reduced to regulations and allow very little discretion for functionaries. Medicine, in contrast, is a professional activity requiring technical work in a nonroutine manner. It requires putting an important part of one's life-possibly whether one will live at all-in somebody else's hands. We do not have the information to guarantee quality by rules and regulations, nor can we rely on market forces either to provide quality or at least to deny services on some morally acceptable grounds.

Only physicians can train, license, and socialize new physicians. Physicians are the best judges of other physicians' performance. Professional norms will always be the largest influence on medical practice. Physicians will not control costs eagerly, but only physicians can implement cost controls in a manner that produces the most quality for our money.

Encouraging Medical Professionalism

What kind of system, then, is most likely to control costs without interfering with, and preferably by enhancing, professionalism? The first point should be obvious: Regulation of fees is better than regulating treatment decisions.

Beyond a preference for rate regulation, the basic principle should be to have decisions made by those with appropriate knowledge. Many physicians view any constraint on resources as in some sense a violation of their trust. Nevertheless, making physicians allocate some resources does not reduce their professionalism, but relies on it. Trusting the providers may seem risky. But even when responding to financial incentives, physicians strive to provide adequate care.[24]

Professionals' understandings of proper practice can be wrong, and that is a strong argument for more outcomes research. But attempts by nonphysicians to create incentives for predefined proper practice are wrongheaded. Nonphysicians cannot know enough, and if physicians can agree on such guidelines, they should implement the standards themselves. Instead, policymakers should take care that the economic incentives of the medical system are treatment- and (largely) patient-neutral. Sometimes those choices are difficult, as in the American controversy over physician-owned pathology labs. In other cases the right approach is clear. Systems that pay physicians extra for practice in private hospitals, while reducing capacity in public hospitals, will create waiting lists in public hospitals and favor patients who can afford to pay. Correcting that situation is a problem of will and finance, not evaluation.

We also have to distinguish two sets of choices: operations and capital. Spending will burgeon in the long run without limits on the adoption of new technology. That is not something that depends on providers' assessment of individual patients. It clearly is not something that can be controlled by market competition. The only way anybody has controlled the proliferation of new equipment is through bureaucratic methods-in essence, planning backed up by limits on investment funds.

Capital budgeting involves two questions: how much, and what. In general, politicians or whoever runs the system should decide the total. Providers cannot do so because they have no sense of other needs. There is never a "right" total, so politicians will make that decision in the normal ways: by popular moods and standard decision rules.

Capital budgets for most programs are relatively easy to underfund, and health care is no exception.[25] A reform package therefore should enunciate some protective decision rule. For example, the United States, with its bias toward greater investment than other countries, might find substantial savings simply by committing to spending no less than the wealthiest OECD nations' average share of gross domestic product (GDP) for capital projects. If politicians set the total capital budget, other people should allocate much of the money. In the U.S. context it is necessary to imagine a set of nested decision processes. Some things should be planned at the state level, some at the regional level, and some left to individual hospitals or medical groups.[26]

The design of a fee schedule is another example of how responsibility must be divided. Physicians are best able to judge the value of procedures. But a purely physician-dominated process may lead to logrolling, majorities exploiting minorities, or rigidity. Physicians should have a majority voice, but public or government representatives should be given a share in the process large enough to represent other perspectives and to break deadlocks.

Physicians also should be in charge of utilization review. Professional associations should take a bigger role in ensuring both quality and reasonable cost. However a fee schedule is worked out, there could be an adjustment for the effort each medical specialty puts into clinical review, midcareer training, careful licensing, and development of clinical protocols. If the orthopedists do more and ear, nose, and throat specialists less, the former could have their fees multiplied by 1.1 and the latter have theirs multiplied by 0.9. We might want to consider similar measures for allocations to hospitals: To the extent that they clarify internal responsibility for performance, including redress of grievances, they could be allowed to charge a little more.

Conclusion

These may be some answers to the question of how to encourage professionalism within a system that controls costs through budgeting. The main purpose of this paper, however, is to convey the importance of the question.

As of this writing, it is impossible to predict what the Clinton administration will recommend, never mind what, if anything, Congress will enact. The administration seems caught in the contradictions inherent in managed competition. It was attracted to the idea of a market-oriented approach, but not to reduced access in terms of either the amount of coverage or choice of doctor-both of which were central to some versions of the theory. The administration also has wrestled with how to control costs sufficiently to pay for extended coverage and save money for citizens and government in the long run, given the difficulties of managed care.

From a comparative perspective the answer is clear: Institute reforms that allow the United States to budget effectively, such as concentrating funds in an all-payer mechanism, eliminating antitrust laws that prevent coordinated bargaining, and gaining control of capital investment funds so as to allow planning and budgeting of system capacity. Whether the administration will find a way to merge the lessons of experience with managed competition theory remains to be seen.

However, two predictions seem safe. First, cost control by reduced insurance is more likely to occur because reform fails than as its explicit mechanism. And second, if reform is to succeed, the United States must learn that, in William Glaser's words, "organizing stable relations with the medical profession is one of the principal tasks in creating statutory health insurance."[27] We will have to budget, and physicians should have a substantial part in that process.

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NOTES

1. V.R. Fuchs, "National Health Insurance Revisited," *Health Affairs* (Winter 1991): 10-11.
2. Switzerland does not adjust premiums for income, but the system is community rated, and there are government subsidies. See W.A. Glaser, *Health Insurance in Practice* (San Francisco: Jossey-Bass, 1991), 168-171. The United States, as noted below, is a partial exception.
3. This may be expressed as "tighter definitions and restrictions to reduce costs" with

elimination of excess tax subsidies to discourage purchase of more extensive coverage. AC. Enthoven and R. Kronick, "A Consumer-Choice Health Plan for the 1990s," The *New England Journal of Medicine* 320 (1989): 29-37, 94-101. An alternative is to have higher deductibles and out-of-pocket limits for persons who can afford to pay more out of pocket. M.V. Pauly et al., "A Plan for 'Responsible National Health Insurance'," *Health Affairs* (Spring 1991): 5-25. A similar approach involves tax credits. S.M. Butler, "A Tax Reform Strategy to Deal with the Uninsured," *Journal of the American Medical Association* (15 May 1991): 2541-2544.

4. This pattern, shown in the RAND Health Insurance Experiment, might be modified in a system in which physicians were systematically aware of patients' insurance status. In Australia general practitioners know if a person has extra private insurance, and I have been told by a number of sources that they will choose to whom they refer a patient on that basis.
5. Glaser, *Health Insurance in Practice,* 508-509.
6. J. Hadley, E.P. Steinberg, and J. Feder, "Comparison of uninsured and Privately Insured Hospital Patients: Condition on Admission, Resource Use, and Outcome," *Journal of the American Medical Association* (16 January 1991): 374-379. Also see K.E. Thorpe, "Health Care Cost Containment: Results and Lessons from the Past Twenty Years," in *Improving Health Policy and Management: Nine Critical Research Issues for the 1990s,* ed. S.M. Shortell and U.E. Reinhardt (Ann Arbor, Mich.: Health Administration Press, 1992), 260-261.
7. The United States, for example, pays Medicare Part B premiums for impoverished elderly through Medicaid. The French have a long list of diseases, such as cancer, that have no copayments, and most European nations provide full pregnancy care-often with special incentives to use services. Even the United States provides more extensive ostensible coverage for Medicaid patients than for most others. The Japanese system is an example of one with a maximum copayment.
8. Competition may do more to create price discrimination, with higher quality receiving more and lower quality less, than to reduce the average price. And in competing to increase sales, institutions may generate demand and increase total costs.
9. See L.R. Burns and D.R. Wholey, "Differences in Access and Quality of Care across HMO Types," *Health Services Management Research* (March 1991): 32-45. The most common surrogate for real quality judgment may be prestige, as shown in Japan by the growth of outpatient clinics at the university hospitals.
10. See E.S. Overman and A.G. Cahill, "Market Government, Information, and Health Policy: A Study of Health Data Organizations in the States" (Paper presented at the annual meeting of the Association for Public Policy Analysis and Management, Denver, Colorado, 30 October 1992).
11. A good example is N.M. Kane and P.D. Manoukian, "The Effect of the Medicare Prospective Payment System on the Adoption of New Technology: The Case of Cochlear Implants," *The New England Journal of Medicine* (16 November 1989): 1378-1383.
12. One argument for managed competition emphasizes how large insurers can win discounts from providers. One wonders how much of the market each insurer must have if they are all to get discounts–or, if market power is the question, why either a single payer or a cartel of payers is not the answer.
13. See A. Wildavsky, The *Politics of the Budgetary Process* (Boston: Little Brown, 1964); J. Burkhead, *Government Budgeting* (New York: John Wiley and Sons, 1956); and R.F. Fenno, Jr., *The Power of the Purse* (Boston: Little Brown, 1966).
14. The term should be familiar to any reader of the American press, in which "control of entitlements" has become the mantra for deficit reduction. For a lengthier discussion of entitlements and the federal budget, see J. White and A. Wildavsky, *The Deficit and*

the Public Interest: The Search for Responsible Budgeting the 1980s (Berkeley: University of California Press and The Russell Sage Foundation, 1991).

15. A squeeze on capital expenditures is the standard response to budget constraints for service delivery organizations. Budgeting does not necessarily squeeze capital if capital spending is the main point of a program-such as building roads or dams, or, in some circumstances, military spending. My thanks to Amy Searight for forcing me to think this through.
16. By *outputs* I mean levels of service, not health care outcomes. Outcomes, of course, depend on far more than the organization's performance.
17. See, among others, R. Evans et al., "Controlling Health Expenditures: The Canadian Reality," *The New England Journal of Medicine* (2 March 1989): 571-577; V.R. Fuchs and J.S. Hahn, *"How Does Canada Do It? A Comparison of Expenditures for Physicians'* Services in the United States and Canada," *The New England Journal of Medicine* (27 September 1990): 884-890; M. Schneider, "Health Care Cost Containment in the Federal Republic of Germany," *Health Care Financing Review* (Spring 1991): 87-101; and U.S. General Accounting Office, *Health Care Spending Control: The Experience of France, Germany, and Japan* (Washington: GAO, November 1991).
18. Other reasons for the relatively low cost of Japanese health services must include much fewer amenities, some cultural distaste (reinforced by the fee schedule) for surgery, less intensive care in hospitals, and a substantial amount of expenses, such as nursing by families and "gifts" to doctors, off the books.
19. The results to date have been devastatingly successful: a 30 percent reduction in the value of prescriptions between February 1992 and February 1993. S.D. Moore, "European State-Funded Health Systems Come under Fire for Skyrocketing Costs," *The Wall Street Journal,* 4 May 1993, A14.
20. Glaser shows the basically input-oriented nature of the process. W.A. Glaser, "Hospital Rate Regulation: American and Foreign Comparisons," *Journal of Health Politics, Policy and Law* (Winter 1984): 720-722.
21. See the exchange between Stanley Jones and Alain Enthoven in *Inquiry* (Summer 1990): 361-375.
22. "To be sure," *Victor Fuchs writes,* "this inevitably involves limitation of some services, but most health professionals prefer having some control over the allocation of the scarce resources available to them." Fuchs, "National Health Insurance Revisited," 13.
23. The classic description of the British National Health Service is H.J. Aaron and W.B. Schwartz, *The Painful Prescription: Rationing Hospital Care* (Washington: The Brookings Institution, 1984).
24. Thus the claims about "defensive medicine" are about unnecessary, not damaging, use of resources. Hadley et al., "Comparison of Uninsured and Privately Insured Hospital Patients," provides strong evidence that physicians indeed practice triage according to medical need when dealing with uninsured patients.
25. Since there are no measures of appropriate capacity, underfunding cannot be objectively defined. Even obvious demand proves nothing, since the money might be being used for something even more important. But it would be hard for any student of the British or Australian system to resist concluding that the treasuries have found reducing hospital capital budgets a bit too easy.
26. Any capital control system should remember the fundamentally incrementalist nature of budget processes. It is much, much easier to prevent adoption of new technology than to eliminate existing capacity.
27. Glaser, *Health Insurance in Practice,* 251.