# HEALTH CARE FINANCING AND ORGANIZATION

## Health Care Rationing: Inevitable but Impossible?

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TABLE OF CONTENTS



### INTRODUCTION

If past trends continue, total health care spending will claim more than 30% of gross domestic product (GDP) not long after 2030.[1] Unless benefits are

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1. Author's calculations based on data supplied by RICHARD KOGAN & MATT FIEDLER, CTR. ON BUDGET & POLICY PRIORITIES, THE TECHNICAL METHODOLOGY UNDERLYING CBPP'S LONG-TERM BUDGET

curtailed, spending on Medicare, Medicaid, and other federal health care programs will rise to about 12% of GDP over the same period, nearly the current yield of income tax and payroll tax combined.[2]

Normally, when spending on a commodity rises, it is a cause for celebration because increased spending indicates that consumers value that good more than the alternatives on which they could have spent their incomes. In the case of health care, however, increased spending elicits considerable hand-wringing. Two factors explain this angst. First, current methods of paying for health care create powerful incentives for individuals to demand services, some of which generate benefits much below their production cost.[3] Furthermore, methods of paying health care providers give them powerful economic incentives to gratify excessive demands by patients.[4] Second, the increase in public spending on health care, if historical trends continue, will necessitate large and disruptive tax increases. The increases in total health care spending will absorb much—and eventually all—economic growth, leaving ever smaller amounts to pay for increases in purchases of everything else.[5]

These two factors will create increasing pressure in the United States to ration care, which means barring even the well-insured from securing all beneficial health care. The pressure to ration will affect all developed nations—indeed, some rich nations currently ration care—but pressure will be particularly intense in the United States because this nation spends far more on health care than do other nations—about twice as much per capita, on the average, as the average of the ten richest countries other than the United States.[6]

Part I below presents data on the growth of health care spending, its causes, and the problems for public and private budgets that continuation of past trends will generate. Part II presents and explains a paradox: that total health care spending generates benefits far in excess of total cost at the same time that billions of current expenditures go for services that are worth far less than they

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PROJECTIONS (2007), *available at* http://www.cbpp.org/1-29-07bud-meth.pdf; CTRS. FOR MEDICARE & MEDICAID SERVS., NATIONAL HEALTH EXPENDITURE DATA: NHE HISTORICAL AND PROJECTIONS, 1965–2016 (2007), *available at* http://www.cms.hhs.gov/NationalHealthExpendData/03_NationalHealthAccounts Projected.asp [hereinafter CMS]; CONG. BUDGET OFFICE, THE LONG-TERM BUDGET OUTLOOK 31–32 (Dec. 2005) [hereinafter CBO, LONG-TERM OUTLOOK]; CONG. BUDGET OFFICE, UPDATED LONG-TERM PROJECTIONS FOR SOCIAL SECURITY (June 2006) [hereinafter CBO, UPDATED PROJECTIONS]; OFFICE OF MGMT. & BUDGET, HISTORICAL TABLES, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2008, 322 tbl.16.1 (2007) [hereinafter OMB].

2. *See* OMB, *supra* note 1, at 34 tbl.2.3. *See generally* sources cited *supra* note 1.

3. *See* Kenneth Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941, 961 (1963) (discussing insurance and noting that "[i]t is frequently observed that widespread medical insurance increases the demand for medical care").

4. *See id.* at 961–62 ("[I]t may be convenient for [physicians] or pleasing to their patients to prescribe more expensive medication, private nurses, more frequent treatments, and other marginal variations of care.")

5. *See* Henry J. Aaron, *Budget Crisis, Entitlement Crisis, or Healthcare Financing Problem: Which Is It?*, 26 HEALTH AFF. 1622, 1622–23 (2007).

6. HENRY J. AARON & WILLIAM B. SCHWARTZ WITH MELISSA COX, CAN WE SAY NO? THE CHALLENGE OF RATIONING HEALTH CARE 6–7 (2005).

cost. Part III reviews a number of commonly proposed methods of slowing growth of health care spending that are widely endorsed but that would be ineffective.

Part IV describes how health care spending could be effectively, efficiently, and equitably curtailed—that is, how health care could be rationed—but explains why the information necessary to ration rationally will be hard to develop. Health care rationing will generate a variety of analytical, political, legal, and ethical challenges. The principle analytical challenge will be to develop information on the expected medical benefit of various treatments for particular conditions and to place values on those benefits. The political challenge will be to develop methods of enforcing limits that can be enacted and sustained politically.

Numerous legal issues will arise. Among the more important will be how to redefine malpractice law. Under current doctrine, providers are not guilty of malpractice if they treat patients with a given condition according to prevailing norms for treatment of that condition. In general, medical norms currently call for providing all care that promises net medical benefits. Under efficient health care rationing, some care will *not* be provided even if it is beneficial when benefits per dollar of cost fall below some threshold. By definition, therefore, care that provides positive benefits below that threshold will not be offered. Because community tastes differ, some services that are deemed to generate sufficient benefits to justify provision in one community may be found not to provide sufficient benefits in another. Furthermore, judgments about medical benefits are often imprecise and probabilistic. Ethical challenges will arise from attempts to justify denial of care in one community that is available in others, or denial of care with a probability of success (or cost-effectiveness) only marginally lower than that of another service that is available.

Determination of medical malpractice, difficult enough under current norms of "if it helps, do it," will become vastly more complex in the presence of health care rationing. Sustainable health care rationing will require the development of new legal doctrine and procedures to determine when malpractice occurs and what should be done about it.

## I. TRENDS IN HEALTH CARE SPENDING

From 1965 through 2005, health care spending grew faster than GDP.[7] The difference averaged 2.6 percentage points annually since 1965—3.2 percentage points except for the period from 1993 through 2000, when a variety of special factors temporarily held growth of health care spending to just under one

7. *See* CTRS. FOR MEDICARE & MEDICAID SERVS., NATIONAL HEALTH EXPENDITURE DATA: NHE SUMMARY INCLUDING SHARE OF GDP, CY 1960–2005 (Jan. 8, 2007), http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp [hereinafter CMS]; BUREAU OF ECON. ANALYSIS, CURRENT-DOLLAR AND "REAL" GROSS DOMESTIC PRODUCT (Sept. 27, 2007), http://www.bea.gov/national/xls/gdplev.xls.

percentage point a year more than GDP.[8] Because total health care spending cannot exceed GDP, it is obvious that at some point this gap must disappear.[9] But two considerations indicate that the gap is unlikely to narrow significantly in the near future unless methods of paying for health care change.

The first consideration is that the average age of the population is increasing. Per capita health care spending tends to rise with age.[10] Population aging therefore will tend to increase the share of income spent on health care. The second consideration, and a far larger force inflating health care spending, is technological advance, which lengthens the menu of beneficial interventions and increases the proportion of sick people who can be successfully treated.[11]

Technological advance routinely boosts spending wherever it occurs, even as it reduces unit prices. Thus, the advent of the automobile and the airplane reduced the per-mile cost of moving merchandise and people, but vastly increased expenditures on transportation. The computer vastly reduced the cost of performing a single floating-point mathematical operation, but hugely increased expenditures on computation and data processing. The impact of technological advance on the price of health care is less clear. Official price indexes report that health care prices have increased. But they do not, for the most part, adequately account for improvements in the quality of care.[12] In the case of two conditions, heart disease and mental illness, careful studies have shown that the quality-adjusted price of treatment has fallen even as total spending on these conditions sky-rocketed.[13] Whether this conclusion applies more generally is not clear.

The key point for projections of health care spending is that recent advances in medical technology, such as the sequencing of the human genome and the related prospect of personalized medicine, applications of nano-technology, and micro-arrays for drug development, are likely to continue to drive up total health care spending, whatever their impact on prices may be.

To illustrate the impact on public budgets of continued rapid increases in per capita health care spending, the Congressional Budget Office has projected

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8. *See* sources cited *supra* note 7; *see also* CMS, *supra* note 7.

9. This textual statement is practically correct, but technically false. It would be arithmetically possible for a component of GDP to exceed GDP indefinitely by a small amount if the nation was prepared to steadily increase debt and if the gap were such that debt did not rise faster than GDP.

10. *See, e.g.*, David M. Cutler & Ellen Meara, *The Concentration of Medical Spending: An Update*, *in* THEMES IN THE ECONOMICS OF AGING 217, 220–21 (David Wise ed., 2001) ("The trend toward greater spending increases with age is generally true for most of the age groups . . . .").

11. *See* Joseph P. Newhouse, *Medical Care Costs: How Much Welfare Loss?*, J. ECON. PERSP., Summer 1992, at 3, 11.

12. *See* Ernst R. Berndt et al., *Medical Care Prices and Output*, *in* HANDBOOK OF HEALTH ECONOMICS 119 (Anthony Culyer & Joseph Newhouse, eds., 2000).

13. *See* David M. Cutler & Mark McClellan, *Is Technological Change in Medicine Worth It?*, HEALTH AFF., Sept.–Oct. 2001, at 11, 18 (finding that although spending for heart attacks has risen steeply, "for every $1 spent, the gain has been $7"); *id.* at 20–21 (examining the impact of technological change on treatment of depression and finding that "for roughly the same cost, treatment efficacy has improved").

federal spending on health care if the gap between growth of per capita health care spending and growth of per capita GDP narrows to 2.5 percentage points a year.[14] Under this "high-spending" projection, federal health care spending will grow from 5% of GDP in 2005 to 8% in 2020, 11.5% in 2030, and 20.3% in 2050.[15] Since growth of per capita private and public health care spending move in parallel, it is easy to show that total health care spending will absorb half of total increase in economic output by 2018 and all of it by 2044.[16] Thereafter, projected non-health per capita GDP declines. This projected decline in non-health GDP, more than anything else, indicates why the pressure to curtail growth of health care spending will intensify.

## II. IS ADDED SPENDING WORTH WHAT IT COSTS?

A growing body of research underscores three paradoxical facts regarding past growth of health care spending. First, *total* health care spending has generated benefits well in excess of *total* cost. Second, much of health care spending goes for services that are not worth what they cost. Third, when U.S. patients see a doctor or enter a hospital they are nearly as likely to receive too much, too little, or the wrong care as they are to receive indicated care.

### A. TOTAL BENEFITS EXCEED TOTAL COSTS

Several recent studies have estimated the value of improved health outcomes and the contribution that health care has made to those improvements. The conclusion of these studies is that the value of improved health outcomes approximates the value of all measured economic growth since about 1970.[17] Improved outcomes are measured by the increase in life expectancy and reductions in morbidity.[18] The value of these improvements is estimated in various ways, including the wage premiums that people demand to work in jobs that result in increased risk of injury or death.[19] Real per capita GDP in 2006 was roughly twice what it had been in 1970.[20] Total GDP was $13.2 trillion.[21] Thus, the increment from 1970 (measured in 2006 dollars) was about $6.6 trillion.

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14. *See* CBO, LONG-TERM OUTLOOK, *supra* note 1, at 31.

15. *See id.* at 32.

16. *See* sources cited *supra* note 1.

17. *See* William D. Nordhaus, *The Health of Nations: The Contribution of Improved Health to Living Standards*, *in* MEASURING THE GAINS FROM MEDICAL RESEARCH: AN ECONOMIC APPROACH 9, 37–38 (Kevin M. Murphy & Robert H. Topel eds., 2003) ("[T]he economic value of increases in longevity in the last hundred years is about as large as the value of measured growth in non-health goods and services.").

18. *See, e.g.*, Cutler & McClellan, *supra* note 13, at 13; Nordhaus, *supra* note 17, at 33.

19. *See* Nordhaus, *supra* note 17, at 30, 35–36.

20. Author's calculations based on data from Bureau of Economic Analysis, *supra* note 7; *see also* U.S. BUREAU OF THE CENSUS, STATISTICAL ABSTRACT OF THE UNITED STATES 2007, tbl.2 & tbl.3, *available at* http://www.census.gov/prod/2006pubs/07statb/pop.pdf.

21. *See* sources cited *supra* note 20.

Total health care spending in 2006 was $2.1 trillion.[22] If all improvements in health outcomes were attributable to improved health care, simple arithmetic would show that health care spending was a real bargain.

The same conclusion holds if even half of the improvement in health outcomes is attributable to health care. This standard is easily met. Most of the improvement in longevity is attributable to reduced infant mortality and deaths from heart disease, and most of these reductions in mortality can be linked directly to improvements in medical care.[23] Thus, the total benefits of health care vastly exceed the total cost.[24]

### B. MARGINAL BENEFITS ARE WORTH LESS THAN THEY COST

For decades, health economists have worried that incentives generated by health insurance lead people to demand care that, at the margin, generates benefits smaller than the incremental cost resulting from those services.[25] On the one hand, insurance raises welfare by spreading the risks of expensive (and often unaffordable) treatments for serious illnesses. Protecting people from financial ruination and enabling them to buy vital, but otherwise unaffordable, services generates large benefits. But by reducing price at time of use, insurance also encourages patients to seek care the benefits of which exceed the small share of total cost that they bear at time of use but that are smaller than the total cost to society. In the extreme case, the patient who bears no cost for added care at time of illness has an economic incentive to demand all care that promises any benefit at all, however expensive it may be. Nor is that the end of the problem. Providers paid on a fee-for-service basis have every economic incentive to oblige these patients and even to offer care that provides no benefits at all.

The result of these insurance-based incentives is that some fraction of health care costs more than it is worth. The social loss from such "excess consumption" offsets at least some of the welfare gain that insurance provides by spreading risks. Note that this argument is not based on the proposition that the insurance-induced health care is worthless; merely, that its benefits are smaller than its costs. Many studies indicate that the expected value of some care is in fact zero or even negative, but that is a different matter.[26]

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22. *See* CMS, *supra* note 1.

23. *See* Cutler & McClellan, *supra* note 13, at 24 ("If one takes just the medical component of reduced mortality for low-birthweight infants and ischemic heart disease, medical care explains about one-quarter of overall mortality reduction.").

24. *See* David M. Cutler et al., *The Value of Medical Spending in the United States, 1960–2000*, 355 NEW ENG. J. MED. 920, 926 (2006) ("[A]lthough medical spending has increased substantially during the past 40 years, the money spent has provided good value.").

25. *See, e.g.*, Arrow, *supra* note 3, at 961; Mark V. Pauly, *The Economics of Moral Hazard: Comment*, 58 AM. ECON. REV. 531, 535 (1968) ("It has been recognized in the insurance literature that medical insurance, by lowering the marginal cost of care to the individual, may increase usage . . . .").

26. *See, e.g.*, ROBERT BROOK ET AL., CORONARY ANGIOGRAPHY RATINGS OF APPROPRIATENESS AND NECESSITY BY A CANADIAN PANEL (1993); ROBERT BROOK ET AL., CORONARY ARTERY BYPASS GRAFT

### C. TOO LITTLE, TOO MUCH, OR THE WRONG CARE

Recent research shows that patients receive roughly half of all recommended care when they see a doctor or enter a hospital.[27] The odds improve with the number of conditions a patient has, possibly because physicians cross-check each other or because patients with multiple conditions are more likely to see specialists who may be better than nonspecialists at delivering recommended care.[28]

The deviations from recommended care take various forms. Patients may not receive services that research has shown to be effective or that most physicians believe to be effective based on longstanding experience and custom. A standout example is the failure of many physicians treating victims of heart attacks to prescribe beta-blockers to reduce the load on the heart and aspirin both to reduce the likelihood that additional clots will form and to counter vascular irritation.[29] In other cases, physicians prescribe procedures that research has shown are not indicated or that are less effective than alternative procedures that could have been prescribed.[30]

### D. THE PARADOX

Thus, a paradox: total benefits from health care vastly exceed total cost, but much spending on health care costs more than it is worth. The total benefits from diagnostic radiology, interventional radiology, treatments for coronary disease, joint replacement, multiple pharmaceutical products, and the vast panoply of other health care advances of recent decades strongly suggest that the excess of total benefits over total costs has grown. But the scope for well-insured patients to demand and financially self-interested providers to offer services worth less than they cost has also risen. As total spending increases, there is therefore good reason to think that both gains from risk-spreading and losses from excessive use increase. Future advances hold out the hope that net total benefits will continue to increase, but they carry the threat that excessive use will also grow.

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SURGERY AND PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY RATINGS OF APPROPRIATENESS AND NECESSITY BY A CANADIAN PANEL (1993); Jonathan S. Skinner, Douglas O. Staiger & Elliott S. Fisher, *Is Technological Change in Medicine Always Worth It? The Case of Acute Myocardial Infarction*, 25 HEALTH AFF. w34, w43 (2006), http://content.healthaffairs.org/cgi/content/abstract/25/2/w34 (pointing to tremendous variation in survival rates following acute myocardial infarction across regions and over time, with regional gains being negatively related to costs).

27. *See* Elizabeth McGlynn et al., *The Quality of Health Care Delivered to Adults in the United States*, 348 NEW ENG. J. MED. 2635, 2643 (2003) (reporting results from a study examining "the extent to which standard processes involved in health care . . . are delivered in the United States").

28. *See* Takahiro Higashi et al., *Relationship Between Number of Medical Conditions and Quality of Care*, 356 NEW ENG. J. MED. 2496, 2501–03 (2007) (finding positive relationship between number of conditions and quality of care).

29. *See* Skinner et al., *supra* note 26, at w40 (finding regional lags in use of beta-blockers and aspirin).

30. *See generally* sources cited *supra* note 26.

This paradox indicates that health care is a good buy overall, but that net benefits to society would be increased with less of some forms of care and more of others. A critical task for health care policy is to identify ways to curtail excess use of health care—that is, to ration—without blocking care where benefits exceed costs.

This challenge is formidable for several reasons. First, a large proportion of what doctors do has never been subject to "gold-standard" evaluation by double-blind random-assignment experimentation to test whether each intervention is better than a placebo. Many procedures will never be so tested because physicians have become so confident of the value of the interventions that it would be regarded as unethical to deny the control group access to these services. Even where such tests are impracticable, however, it would be possible to test rigorously which alternative treatments for a given condition in particular classes of patients are best or most cost-effective, in the sense of delivering the biggest bang or the biggest bang for the buck.

Second, many tests focus on easy-to-measure intermediate indicators rather than the more difficult-to-measure ultimate goal: improved health and functioning of the patient.[31]

Third, benefits from health care are probabilistic. Even when solid evaluations of a particular intervention have been done, the best that one can say is that the expected benefits exceed expected risks. In these situations two sorts of errors are possible: providing a service where it is not indicated or not providing

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31. U.S. analysts have suggested a six-level framework with which to evaluate improved technology such as diagnostic imaging.

First, does the test perform as intended in a physical sense? For example, can a newer CT scanner distinguish tumor from normal tissue more effectively than an older model did? The second level of evaluation refers to diagnostic accuracy: is the test sensitive and specific? For example, does a stress test accurately show heart disease when it is present and clearly indicate its absence when it is not? Third, does the test alter the clinician's diagnosis? When simple methods work, sophisticated techniques may add nothing but cost. Fourth, does the test affect the patient's treatment? Accurately diagnosing a condition for which no effective treatment is available has little value. Fifth, do the test and associated changes in treatment improve patient health? Finally, what are the social consequences of the test as measured, for example, by cost effectiveness when compared to another procedure?

This six-level framework for evaluation is based on methods applied in the U.S. Agency for Healthcare Research and Quality as described by Athina Tatsioni et al., *Challenges in Systematic Reviews of Diagnostic Technologies*, 142 ANNALS OF INTERNAL MED. 1048, 1048 (2005), *available at* http://www.annals.org/cgi/reprint/142/12_Part_2/1048.pdf. This paper, in turn, applies analytical methods developed in earlier papers. *See, e.g.*, H. V. Fineberg, R. Bauman & M. Sosman, *Computerized Cranial Tomography: Effect On Diagnostic and Therapeutic Plans*, 238 J. AM. MED. ASS'N 717 (1977); Barbara J. McNeil & S. James Aldestein, *Determining the Value of Diagnostic and Screening Tests*, 17 J. NUCLEAR MED. 439 (1976); John R. Thornbury, Dennis G. Fryback & Ward Edwards, *Likelihood Ratios as a Measure of the Diagnostic Usefulness of Excretory Urogram Information*, 114 RADIOLOGY 561 (1975).

Level-one and level-two evaluations are most common. A count of studies of magnetic resonance spectroscopy for brain tumors through 2004 revealed eighty-five level-one studies and eight level-two studies had been performed, but only two level-three studies, two level-four studies, and no level-five or level-six studies. *See* Tatsioni et al., *supra*, at 1048. Yet it is level-five and level-six studies that are most relevant for decisions of any group, private or public, responsible for administering limited health budgets.

a service where it is indicated. How one weights these two errors is subjective and influences whether services should be rendered. Thus, people may agree on the evidence about medical consequences of an intervention but disagree on whether it is desirable. In such cases, it may be necessary to rely on judgments of representative panels to set rules. The corollary, given the high and emotionally freighted stakes involved, is that controversy and disputes are inescapable if rules or funding do not permit the provision of everything that is beneficial.

Fourth, much of the advance in health care is clinical in the sense that physicians and others who use a procedure learn over time how to do it cheaper and better. They also often discover new applications of the procedure—these are sometimes loosely called "off-label" uses, by analogy to uses of drugs in conditions for which they were not initially approved. Thus, rationing is likely to *directly* slow or redirect the progress of medical science.

It may also *indirectly* slow or redirect the progress of medical science. Investments in research and development (R&D) are subject to the same sorts of probabilistic judgments about the chances of success and possible returns as are medical treatments. By curtailing the size of the market for medical innovation, rationing would alter the financial incentives that guide investments in medical R&D.

The challenge in designing sustainable and socially beneficial control of health care spending is to find ways of reducing spending on services where benefits are less than total social cost without at the same time reducing spending on services that produce benefits greater than cost. The fact that judgments of efficacy of health care spending are probabilistic means that any method of rationing is likely to reduce services of both kinds, at least to some extent.

## III. STEPS TO CURTAIL GROWTH OF HEALTH CARE SPENDING: EASY AND INEFFECTIVE

Expressions of concern about excessively rising health care spending have provided good applause lines in political speeches at least since the 1970s, when health care outlays claimed half of the share of GDP that they absorb today.[32] Critics have pointed to particular villains or causes responsible for excessive spending. Limit abuses or implement easy fixes, critics claim, and the problem of excessive spending will be solved.

Abuse of malpractice insurance often heads the list of causes of excessive spending. Premiums are huge, it is alleged, and defensive medicine adds to total spending. If officials cap damages, shift the venue for such litigation, or make other changes, a large part of the health care cost problem will end—or so advocates claim.[33]

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32. *See* sources cited *supra* note 7.

33. *See, e.g.*, Catherine T. Struve, *Improving the Medical Malpractice Litigation Process*, 23 HEALTH AFF., 33, 37 (2004) ("Prominent commentators . . . advocate the creation of a special court to hear

Malpractice insurance suffers from many genuine flaws—costly dispute resolution, failure to compensate most victims of medical negligence, and weak incentives for negligent physicians to mend their ways or stop practicing—but significantly boosting growth of medical spending is not among them. Malpractice premiums account for less than 2% of total health care spending, and the share has fallen in recent years, not risen.[34] Physicians doubtless perform some procedures at least in part to forestall charges of negligence. Past research found that such behaviors did not add significantly to total spending.[35] However, more recent work indicates that Medicare spending increased more in those states in which malpractice premiums and awards increased more.[36]

Next on the list come drug companies that charge allegedly excessive prices for highly successful drugs. Drug spending as a share of total health spending declined from 1966 to 1982.[37] Since then, the share has risen in every year other than 1992, 1993, and 2005.[38] The share rose from a low of 4.54% in 1982 to 10.2% in 2004.[39] Although drug spending has grown as a share of total health care spending after decades of decline, blaming drug companies for increasing health care spending is not justified. First, careful studies have found that increasing drug outlays have reduced other forms of health care spending, notably on hospitalization and physician services.[40] Second, even if drug spending claimed the same share of total health care spending as it did in 1982, the

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medical liability claims."); Don Young, Republican Nat'l Comm., Patient Access to Affordable Health Care is Becoming More Limited as a Culture of Fear Causes Doctors To Close Their Doors, http://www.gop.com/News/RisingTideRead.aspx?ID=26 (last visited Oct. 24, 2007) (advocating "a reasonable cap on non-economic damages").

34. *See* PERRY BEIDER & STUART HAGEN, CONG. BUDGET OFFICE, ECONOMIC AND BUDGET ISSUE BRIEF: LIMITING TORT LIABILITY FOR MEDICAL MALPRACTICE 1 (2004), *available at* http://www.cbo.gov/ftpdocs/49xx/doc4968/01-08-MedicalMalpractice.pdf; CMS, *supra* note 7; Kevin Bingham, *2006 Rate Survey Shows Rates Leveling Off and the Early Signs of a Softening Market*, MED. LIABILITY MONITOR, Oct. 2006.

35. *See* BEIDER & HAGEN, *supra* note 34, at 6–7 ("CBO believes that savings from reducing defensive medicine would be very small.").

36. *See* Katherine Baicker, Elliott Fisher & Amitabh Chandra, *Malpractice Liability Costs and the Practice of Medicine in the Medicare Program*, 26 HEALTH AFF. 841, 841 (2007) ("We found that higher malpractice awards and premiums are associated with higher Medicare spending . . . ."). *But see* Katherine Baicker & Amitabh Chandra, *The Effect of Malpractice Liability on the Delivery of Health Care,* 8 F. FOR HEALTH ECON. & POL'Y Art. 4, 21 (2005) (noting that increase in malpractice premiums resulted in little overall increase in Medicare spending).

37. *See* CMS, *supra* note 7.

38. *See id.*

39. *See id.*

40. *See* Frank Lichtenberg, *Benefits and Costs of Newer Drugs: An Update* 5 (Nat'l Bureau of Econ. Research, Working Paper No. 729, 2002) *available at* http://www.nber.org/papers/w8996 ("[T]he estimated reduction in total non-drug expenditure is 7.2 times as large as the estimated increase in drug expenditure."); *see also* Frank Lichtenberg, *Are the Benefits of Newer Drugs Worth Their Cost? Evidence from the 1996 MEPS*, 20 HEALTH AFF. 241, 247–48, 250 (2001) (finding that the use of more costly newer drugs reduces overall healthcare spending). *But see* Yuting Zhang & Stephen B. Soumerai, *Do Newer Prescription Drugs Pay for Themselves? A Reassessment of the Evidence*, 26 HEALTH AFF. 880, 884 (2007) (critiquing Lichtenberg's findings and concluding that "neither the original papers nor our reanalysis represents adequate evidence that newer drugs cause overall reduction in use of non-drug

year when it was at a modern low, total health care spending would be only 6% lower than it is, a difference that is made up by about one year's growth of spending.[41] Finally, public policy encourages drug companies to charge prices well above production cost by providing patents in order to encourage R&D investments. Without such profits on successful drugs, the capacity of private, profit-oriented, shareholder-owned companies to engage in research would be significantly reduced.

A third alleged cause of excessively rapid increases in health care spending is the Byzantine administrative complexity of the U.S. system of paying for health care.[42] This charge of cumbersome and costly administration is clearly valid, but blaming administration for the growth—or even the level of—U.S. health care spending is not. The highest estimates place U.S. administrative costs at about a third of total spending.[43] Some administrative spending is necessary, and more of some sorts of non-patient-care outlays—notably evaluation of health care effectiveness, collection of data on outcomes, and measures to improve provider skills—than are now made would be desirable. There is another reason administrative costs cannot explain the growth of U.S. health care spending: though it may be higher than desirable, the share of administration in total spending has not materially grown.[44] Furthermore, there is good reason to think that the estimate of one-third is too high.[45] The verdict: streamlined administration would save money, and lots of it. Simplification of the health care payment system merits high priority. But the savings would be achieved gradually over time and would not solve the long-term problem that health care spending is going to squeeze public and private budgets.

A recent addition to the menu of panaceas for rising health care spending is

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services"). For Lichtenberg's response, see Frank Lichtenberg, *Effects of New Drugs on Overall Health Spending: Frank Lichtenberg Responds*, 26 HEALTH AFF. 887 (2007).

41. *See* CMS, *supra* note 7.

42. *Cf.* Steffie Woolhandler, Terry Campbell & David U. Himmelstein, *Costs of Health Care Administration in the United States and Canada*, 349 NEW ENG. J. MED. 768, 772–73 (2003) (discussing differences in Canadian and U.S. healthcare systems that may account for higher U.S. administrative costs).

43. *See id.* at 772 ("After exclusions, administration accounted for 31.0 percent of health care expenditures in the United States . . . .").

44. In their 1991 article on the administrative inefficiency of the U.S. health care system, Woolhandler and Himmelstein found the upper bound of health care administration cost in 1987 to be $120.4 billion, or approximately 24.1% of total health care spending. Steffie Woolhandler & David U. Himmelstein, *The Deteriorating Administrative Efficiency of the U.S. Health Care System*, 324 NEW ENG. J. OF MED. 1253, 1255 (1991). Their follow-up 2003 piece dubiously estimated a 1999 administration cost of $294.3 billion or 31% of total health care spending during that year. Woolhandler et al., *supra* note 42, at 772. Recalculating the percentages using the costs estimated by Woolhandler and Himmelstein and National Health Expenditure data produces administrative costs as 23.5% of total health care spending in 1987 and 23.3% of total health care spending in 1999. *See* CMS, *supra* note 7.

45. *See generally* Henry J. Aaron, *The Costs of Health Care Administration in the United States and Canada—Questionable Answers to a Questionable Question*, 349 NEW ENG. J. MED. 801 (2003) (arguing that the methodology used by Woohandler and Himmelstein led them to overestimate administrative costs).

health information technology (health IT). To some degree, health IT would save money by streamlining billing and therefore simply reprises the issue of excess administrative costs. But health IT would also facilitate communication among physicians caring for patients with multiple conditions who account for most health care outlays, thereby avoiding duplicative tests, prescription of harmful combinations of drugs, and other medical errors. Whether the result would decrease total spending is not clear—sizeable initial investments would be necessary and physicians have been loathe to make them—but even bullish estimates of total savings put the total gain at about 2% of total health care spending, and that gain only after fifteen years.[46] The greatest gains from health IT are likely to come from improved quality of care because of enhanced coordination among providers and because all caregivers would have ready access to medical information and guidance regarding best practices.

Last among the appealing ways to curb excessively rapid growth of health care spending is increased use of market forces.[47] Current tax laws encourage people to carry more insurance than is economically optimal.[48] Standard insurance theory indicates that people should insure themselves against risks that threaten large temporary or permanent reductions in consumption. Because insurance is costly to administer, however, they should not insure themselves against routine or small outlays that they can easily pay without threatening customary living standards. Furthermore, insured patients pay only a fraction of charges at the time of illness. Because charges on the average cover production cost, insured patients pay less than production cost and therefore consume some health care that is worth more than it costs.

The exclusion of employer-financed health insurance from both income and payroll taxes violates fundamental tax principles by leaving untaxed an increasingly important component of labor income. As a result, people are encouraged to insure risks that would be better left to individual payment. Without special tax breaks, the argument runs, the amount of insurance people choose to buy would be closer to optimal.[49] That is, excessive insurance would be reduced because people would buy insurance up to the point of equivalence between the cost of administration and the loss from insurance-induced purchases of care that is worth less than it costs.

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46. *See* Richard Hillestad et al., *Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, and Costs*, 24 HEALTH AFF. 1103, 1114–15 (2005) (finding cumulative net savings of $413 billion over fifteen years from adoption of health IT).

47. *See, e.g.*, JOHN F. COGAN, R. GLENN HUBBARD & DANIEL P. KESSLER, HEALTHY, WEALTHY, AND WISE: FIVE STEPS TO A BETTER HEALTH CARE SYSTEM 2–4 (2005) (arguing that current healthcare policy interferes with markets and contributes to high healthcare costs, high rates of uninsurance and reduced quality and efficiency, and advocating for reforms that allow market forces to lower costs and improve quality).

48. *See, e.g.*, Mark Pauly, *The Tax Subsidy to Employment-Based Health Insurance and the Distribution of Well-Being*, 69 LAW & CONTEMP. PROBS. 83, 83 (2006) (explaining that "the additional coverage induced by the tax subsidy leads to inefficiently high levels of health care spending").

49. *See* COGAN ET AL., *supra* note 47, at 2.

The solution to these problems is terminating the exclusion of employer-financed health insurance from income and payroll taxes and encouraging people to buy so-called high-deductible insurance. Evidence that these reforms would lower health care spending comes primarily from the RAND Health Insurance Experiment (HIE), which was completed in the 1980s. That experiment showed that insurance with a sizeable deductible resulted in spending about 30% lower than occurs under insurance with no cost sharing at all.[50]

For several reasons, that estimate cannot be used directly to estimate savings from a shift to so-called high-deductible insurance today, although analysts agree that boosting deductibles would reduce spending. Increased deductibles would not eliminate the tendency of well-insured patients to demand care that costs more than it is worth because most health care outlays occur during episodes of care that cost far more than the high deductibles currently advocated—$2,500–$5,000 per person.[51]

Each of the measures listed in this Section holds out some promise for reducing health care spending. Each has other merits as well. But most would take years to implement fully. Meanwhile, the forces pushing up health care spending—technological advance and population aging—would continue to drive up health care spending and to generate pressures to ration care.

## IV. STEPS TO CURTAIL GROWTH OF HEALTH CARE SPENDING: DIFFICULT AND PROMISING

In order to create a system within a decentralized political democracy that can curtail spending on health care services in an efficient, sustained, and politically acceptable way, several conditions must be satisfied simultaneously. One condition necessary to curtail the growth of health care spending is the creation of a political body that is prepared to enforce an overall spending cap that the electorate is willing to sustain.

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50. *See* ROBERT BROOK ET AL., THE HEALTH INSURANCE EXPERIMENT: A CLASSIC RAND STUDY SPEAKS TO THE CURRENT HEALTH CARE REFORM DEBATE 2 (2006), http://www.rand.org/pubs/research_briefs/RAND_RB9174.pdf.

51. *See* Jason Furman, *Two Wrongs Do Not Make a Right*, 59 NAT'L TAX J. 491, 497 (2006); *cf.* Tom Miller, *A Five-Step Health Spending Diet: More Homeopathy than Free-Market Therapy*, 25 HEALTH AFF. 875, 876 (2006) (challenging the assertion that allowing tax deductibility for patients' out-of-pocket costs would result in net savings on healthcare spending). In regards to the book by COGAN ET AL., *supra* note 47, Miller writes:

> Although some limited theoretical work supports this general proposition [that expanded deductibility will reduce spending], the authors have stretched most of the much older tax policy literature they cite beyond its original limits to exaggerate its current level of predictive precision and the overall impact of their policy recommendation . . . . Given the authors mildly annoying tendencies to tilt or nudge far too many quantitative findings and data points beyond their original parameters and unerringly in the same direction, a careful reader soon grows inclined to discount further the already modest gains promised by their health reform plan.

Efficient limits on health care spending also require that the expected marginal value of each service that *is* provided exceed the expected marginal value of all services that are *not* provided. To achieve the goal of efficient and sustainable rationing, it is first necessary to have a solid informational base on the expected medical benefit of major health care interventions in each major class of patients. Second, it is necessary to have a set of socially acceptable weights to make such medical benefits commensurable and additive. Third, one must have data on provider performance, showing whether they are selecting the best treatments for patients and producing those treatments at the least cost. Fourth, one must have politically and legally effective and ethically acceptable mechanisms for helping poorly performing providers to improve or to weed them out. Satisfying each of these conditions is formidably difficult; none of them is even close to being satisfied today.

### A. FILLING THE DATA GAP

Humans suffer from hundreds of named illnesses. But many of these names encompass scores of medically distinct conditions. Leukemia, for example, is a single disease category for numerous distinct conditions that depend on which of many relevant genes is malfunctioning; each form of leukemia calls for a distinct treatment. Furthermore, particular illnesses present in people with different biological characteristics and histories cause patients to respond differently to particular drugs or other treatments. If one multiplies the number of diseases by the number of plausible treatments and again by the range of possible responses to those treatments, it may be impossible, even in principle, to discover the full range of expected physical benefits from available medical interventions. But the task of writing this possibly infinite medical text has barely begun.[52] Most of what doctors do has not been carefully evaluated. Except for new drugs and some devices, which are tested for safety and medical efficacy compared with a placebo (rather than alternative, currently standard treatments), no program currently exists for evaluating the myriad medical and surgical methods now in use. Other countries have programs to carry out such research, although with resources that force analysts to focus on only a few interventions.[53] The United States has used short-lived agencies to evaluate various health procedures, but their lives have been snuffed out or their research wings clipped by political backlash from groups offended by negative or

52. For a fictional depiction of an infinite library, see Jorge Luis Borges, *The Library of Babel*, *in* FICTIONS (Calder Publ'ns Ltd. 1998) (1965).

53. At least forty-five health technology assessment (HTA) agencies from twenty-three countries currently exist. *See* INAHTA, Global Networking for Effective Healthcare, http://www.inahta.org/Members (last visited Oct. 24, 2007). Nearly every Western European country has an HTA agency that is also a member of the Health Evidence Network of the European block of the World Health Organization. Notably, Japan (the world's second largest health care market), like the United States, lacks a national agency devoted to health technology appraisals. *See* Health Evidence Network, Current Technical Members, http://www.euro.who.int/HEN/Network/Partners (last visited Oct. 24, 2007).

equivocal findings of the offending agency.[54]

A number of U.S. analysts have called for the creation of an agency to resume that research in the United States.[55] As important as the creation of such an agency is, designing it so that it can withstand political attack is equally important. Such attacks are inevitable as soon as the agency disparages some new drug, device, or procedure with a strong political constituency. The Federal Reserve system provides a model: a body ruled by appointees nominated for staggered terms and removable only for cause, financed by a revenue stream independent of annual appropriation, and organized under a law that does not require periodic reauthorization.[56]

### B. MEASURING MEDICAL BENEFITS

Determining the benefits of a particular medical intervention is not simply a matter of measuring impact on vital signs or even of subjective responses from patients. If not all beneficial procedures can be performed because resources are limited, a social judgment must be made about which interventions have highest priority. Should scarce outlays for drug products go primarily for drug *X* or drug *Y*, which serve different patient groups? Such judgments can be made in various ways, ranging from control over budgets of hospitals and regulations governing the number of practitioners who can be trained in different specialties, to guidance from public agencies or professional organizations on how best to treat specific conditions, down to the bedside decisions of individual practitioners.

Decisions of this sort are not merely matters of physical or biometric measurement, difficult and under-researched though the technical metrics may be. These decisions involve the amalgamation of individual preferences and values. The processes of combining preferences are subject to inescapable complexities and indeterminacy.[57] People rank outcomes differently. They have different toler-

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54. *See* John Eisenberg & Deborah Zarin, *Health Technology Assessment in the United States: Past, Present, and Future*, 18 INT'L J. TECH. ASSESSMENT HEALTH CARE 192, 192–93 (2002). Failed United States HTA agencies that have advised the Health Care Financing Administration/Centers for Medicare and Medicaid Services include the Health Program of the Congressional Office of Technology Assessment, 1972–95; National Center for Health Care Technology, 1978–81; Office of Health Technology Assessment, 1981–89; and Council on Health Care Technology, 1984–89.

55. *See generally* Victor R. Fuchs & Alan M. Garber, *Health and Medical Care*, *in* AGENDA FOR THE NATION 145, 177 (Henry J. Aaron, James M. Lindsay & Pietro S. Nivola eds., 2003) (recommending "the creation of a National Center for the Assessment of Medical Technologies" with "a secure and adequate funding base, accountable to the public yet . . . insulated from excessive pressure from interest groups"); Sean R. Tunis et al., *Federal Initiatives To Support Rapid Learning About New Technologies*, 26 HEALTH AFF. w140–49 (2007) (calling for federally funded health research programs); Gail R. Wilensky, *Developing a Center for Comparative Effectiveness Information*, 25 HEALTH AFF. w572, w579 (2006) (suggesting creation of an agency "responsible for comparative effectiveness information").

56. *See* Fuchs & Garber, *supra* note 55, at 177.

57. *See generally* KENNETH J. ARROW, SOCIAL CHOICE AND INDIVIDUAL VALUES (Yale Univ. Press 1963) (1951) (exploring these complexities).

ances for risk and uncertainty. Thus, the process of determining health care resource allocation is inherently political and, like all political matters, may be decided at various levels of government or left for private negotiation.

### C. THE CHALLENGE OF *USING* DATA

Systematic collection of data on the performance of hospitals and physicians remains spotty and controversial. Various organizations have begun to issue summary data on overall performance of the U.S. health care system. The National Healthcare Quality Report presents the latest available findings on nearly 200 indicators of health care inputs and results, focusing on effectiveness, patient safety, timeliness, and patient centeredness.[58] The Commonwealth Fund issues annual reports comparing availability of health care and health outcomes in various states and between the United States and other nations.[59] Most health maintenance organizations have their performance evaluated using the National Committee for Quality Assurance's (NCQA) Health Plan Employer Data and Information Set (HEDIS) instrument.[60] Some health plans evaluate new technologies for cost and efficacy and use this information to decide what to cover and to inform providers. Health Grades, a publicly traded company, evaluates individual hospitals based on survival, recovery, and complications for thirty different procedures.[61] The Leapfrog Group, an organization started by major corporations to encourage providers to improve quality, reports on selected hospitals for four broad categories of services, but many hospitals are not listed.[62]

Evaluations of individual physicians or physicians' groups are virtually nonexistent. Gathering data on inputs and outcomes is difficult or impossible. Indi-

58. *See* AGENCY FOR HEALTHCARE RESEARCH AND QUALITY, NATIONAL HEALTHCARE QUALITY REPORT (2005), *available at* http://www.ahrq.gov/qual/nhqr05/nhqr05.pdf.

59. These report cards are available through the Commonwealth Fund's website, http://www.commonwealthfund.org/annualreport/ (last visited Oct. 24, 2007).

60. The NCQA's HEDIS instrument measures many dimensions of performance such as the percentage of women ages forty to sixty-nine who received a mammogram with the past two years and the percentage of adult women who received a pap smear within the past three years. *See* NCQA, HEDIS and Quality Measurement, http://web.ncqa.org/tabid/59/Default.aspx (last visited Nov. 2, 2007).

61. These evaluations are available through the Health Grades website, http://www.healthgrades.com (last visited Sept. 17, 2007).

62. *See* The Leapfrog Group, http://www.leapfroggroup.org/cp. The four categories are: Computerized Physician Order Entry—do physicians enter patient prescriptions and other orders into computers linked to error prevention software?; Intensive Care Unit Physician Staffing—are intensive care units staffed by trained ICU specialists?; Evidence-Based Hospital Referral—how well do hospitals perform five high-risk procedures and care for two high-risk neonatal conditions?; Leapfrog Safe Practices Score—how well are hospitals progressing on twenty-seven other practices endorsed by the National Quality Forum? For example, does the hospital have a policy to vaccinate their employees against the flu? In 2006, survey results from over 1,300 hospitals (over half of all Americans live within twenty-five miles of three or more of these hospitals) revealed significant findings about the state of health care quality and safety in the nation's hospitals. For instance, five in ten hospitals did not have a protocol to ensure adequate nursing staff, and three in ten lacked a policy to vaccinate their health care workers against the flu. *See* The Leapfrog Group, For Hospitals, http://www.leapfroggroup.org/for_hospitals (last visited Nov. 2, 2007).

vidual physicians usually see a small number of patients, and the mix of patients seen varies so widely that inferring physician quality from services and outcomes would be extremely difficult.

Perhaps the best hope for improved evaluation of hospitals and physicians resides in the files of the Medicare program.[63] Until recently, Medicare did little to monitor the quality of health care or influence its delivery. In the 1960s, when Medicare was enacted, insurers simply determined what services to cover and how much to pay for them. Insurers did not pay much attention to whether providers chose the right services or produced them efficiently. Even if private payers had tried to promote quality improvement, Medicare would have had to tread lightly. Many conservatives feared that Medicare might seduce the nation into "socialized" medicine. No politically acceptable program could second-guess physicians. The Medicare law bluntly declared: "Nothing in this title shall be construed to authorize any Federal officer or employee to exercise any supervision or control over the practice of medicine."[64] Furthermore, Medicare had to pay any willing provider—that is, any licensed doctor, hospital, or clinic that agreed to abide by Medicare's rules, accept its payment rates, and serve Medicare beneficiaries.[65]

In 1982, Congress created the Medicare Quality Improvement Organization Program. This group subjected case records to peer review and other retrospective forms of use management by contracted physician-run groups, quality improvement organizations (QIOs). In the 1990s, the program began to try to measure program quality but initially employed crude outcome measures. In recent years, it has turned to measures based on processes of care. But QIOs have been criticized for being too narrow in their focus on process measures and too removed from providing the type of technical assistance needed to improve quality.[66]

This hands-off policy is changing. Private and public payers alike now recognize that U.S. health care is inferior to the best that modern medicine can deliver and that there are practical ways to close that gap. Experts have come to believe that major improvements in quality require changes in how health care is delivered. Such changes include increased use of health information technology and added collaboration among the progressively narrower specializations involved in delivering modern health care.[67]

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63. The rest of this section draws on HENRY J. AARON & JEANNE LAMBREW, REFORMING MEDICARE: OPTIONS, TRADEOFFS, OPPORTUNITIES (forthcoming).

64. Social Security Act, Pub. L. No. 89-97, Title I, § 102(a), 79 Stat. 286, 291 (codified as amended at 42 U.S.C. § 1395 (2000)).

65. *See* 42 U.S.C. § 1395cc (2000).

66. *See* INST. OF MED., MEDICARE'S QUALITY IMPROVEMENT ORGANIZATION PROGRAM: MAXIMIZING POTENTIAL 7–11 (2006).

67. *See, e.g.*, Thomas H. Lee & James J. Mongan, *Are Healthcare's Problems Incurable? One Integrated Delivery System's Program for Transforming Its Care*, HEALTH POL'Y, Dec. 2006 v.1, at 1; James J. Mongan, Robert E. Mechanic & Thomas H. Lee, *Transforming U.S. Health Care: Policy Challenges Affecting the Integration and Improvement of Care*, HEALTH POL'Y, Dec. 2006 v.2, at 1.

Medicare currently bases payments on procedures and inputs. Some analysts have urged that payments be linked instead to outcomes or to specific services that research has shown to be beneficial and cost-effective—so-called "pay-for-performance" or P4P. Medicare is undertaking several pilot programs to test payment of hospitals and physicians based on objective measures of medical practice. It is also carrying out demonstrations that involve coordination of care for patients with particular conditions, such as diabetes, congestive heart failure, and end-stage renal disease.[68]

Efficient rationing requires that care that is actually provided be worth more per dollar of cost than care that is not provided. Since the efficacy of providers varies, static efficiency requires that care be rendered by those providers that generate greatest benefits per dollar spent. That is only possible, however, if the quality of providers is measured. Such measurement promises a possibly larger dividend: showing providers themselves and the public which doctors and hospitals do the best jobs will create formidable incentives to upgrade performance.

### D. MALPRACTICE LAW[69]

Malpractice law is intended to provide redress to victims of avoidable medical error and to create incentives for poorly performing providers to improve or stop practicing. While reform of malpractice law is unlikely materially to slow growth of health care spending, spending limits that cause palpable rationing would raise new and extremely troubling problems for medical liability litigation. Courts would be forced to find a new basis for determining medical liability. Paradoxically, this search could jeopardize the viability of spending limits.

Historically the courts have almost always found health care providers nonculpable if they complied with "customary standards of medical practice."[70] This rule is coherent and enforceable if a health care system provides all beneficial care. It is also coherent in a budget-limited system if some central body establishes uniform standards of treatment. It is not coherent if separate elements of the health care system are free to use limited resources in different ways, reflecting diverse judgments of physicians and other providers or varying tastes of patients.

If spending limits force the denial of some beneficial care to some patients, there can be little doubt that some of those who are denied care and suffer adverse outcomes will sue and point to standards of practice in other areas where the care they were denied is available. Because of the enormous variation

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68. *See* Press Release, Ctrs. for Medicare & Medicaid Servs., Medicare "Pay for Performance (P4P)" Initiatives (Jan. 31, 2005), http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=1343.

69. This section draws on AARON et al., *supra* note 6.

70. William B. Schwartz & Neil K. Komesar, *Doctors, Damages and Deterrence: An Economic View of Medical Malpractice*, 298 NEW ENG. J. MED. 1282, 1283 (1978).

of medical practices, it is likely that various communities would adopt different standards for treating pregnant women diagnosed for fetal anomalies, providing palliative care for children borne with irremediable defects, and using treatments that could slow or arrest the consequences of aging. Would courts in city *X*—where, say, MRIs come to be regarded as inappropriate for lower-back pain but essential for diagnosing arthritic knees—sustain such practices if in city *Y* physicians reach reverse priorities? Absent a degree of centralized decision-making that seems fanciful in the United States, disparate responses to limited resources are inescapable. Because different hospitals and doctors would choose to cut back different services, therapies unavailable in one place might be plentiful elsewhere. Patients denied a service available at one institution would allege that arbitrary decisions had violated their right to equal protection under the law. Procedures for allocating budgets would be challenged on similar grounds. What would be judged "customary practice?" What would the courts do?

Such litigation could threaten the sustainability of expenditure controls unless agreed national criteria for judging medical negligence emerged. The redefinition of negligence would be slow and contentious. Litigation over the myriad medical decisions appealable under current law could both choke the courts and paralyze medical practice. The desirability of shifting most disputes regarding alleged malpractice from the courts to a non-adversarial venue would be magnified. Avoidance of this deplorable outcome is yet another of the intellectual challenges that must be surmounted before rational and sustainable rationing becomes feasible.

## CONCLUSION

Current financial arrangements place few effective constraints on the incentives for well-insured patients to demand all beneficial care and for hospitals, physicians, and others to provide it. Given population aging and a continuation of rapid technological advance, continued rapid growth of health care spending in excess of income is probable. Such growth will require massive tax increases and eventually foreclose increases in other forms of private consumption. The result is bound to be increasingly powerful incentives to limit availability of care that provides few benefits relative to cost—that is, to ration.

If this collision of forces does not rise quite to the level of "irresistible force meets immovable object," it still portends immensely difficult tradeoffs between strongly held values—low taxes and small government versus sustaining commitments to health care for the elderly, disabled, and poor; and, in the private sector, between increasing take-home pay and sustained access to a growing menu of highly beneficial medical interventions. Unfortunately, the conditions for reconciling these conflicts are not in place. The key will be intelligent health care rationing. The medical profession and the public lack sufficient information about the effects of various medical interventions on patients with different conditions and medical histories necessary to ration rationally. No consensus

exists and no mechanism has been fashioned to discover a consensus on the relative value of different improvements in health for different people. Data on the relative performance of hospitals, physicians, and other providers is fragmentary and controversial. Rules for resolving the inevitable bitter disputes governing the denial of care do not exist.

It is time to face the need for additional information about what works and at what cost, on which providers deliver care efficiently, on how best to manage the delivery of health care, and for the American public to begin what will doubtless be a wrenching debate on how to reconcile the conflict between health care spending and everything else that Americans want. This is a political problem of the most complex sort, but it has been treated so far as an issue that is too important for politics.