



Foreword

Health care reform is likely to be hailed as the single biggest accomplishment of the first year of President Obama's administration—at least that is what the political pundits are saying. But Victor Fuchs has been thinking, writing and speaking about health policy longer than anyone involved in the current reform process and his articles show that much more can and should be done. Victor is the Stanford economics professor who is the dean of American health economists and is best known for his thoughtful book Who Shall Live? In just the past two years he has written 12 short articles that have appeared in such prestigious publications as the Journal of the American Medical Association (JAMA), New England Journal of Medicine and Health Affairs. These 12 articles, combined, are maybe one-hundredth as long as the bills being voted on in Congress, but they contain more ideas to bring about true improvements in the way we allocate health care and steps that we need to take to control spending on health. They also have the advantage that they can be comprehended by mere humans in finite time, unlike the proposed legislation. This booklet reprints the 12 articles to shed light not only on what might have been but also on what is left to be done in the process of health policy reform.

Restructuring health care is far from over. In fact, the true task of accomplishing universal coverage, putting health spending on a budget, and reducing economically and medically wasteful procedures and treatments has hardly been dented. While implementing all of Victor's ideas would take years, some of them can and should be accomplished sooner rather than later. Health reform is a work in progress and much can be gained by studying the wisdom of Victor Fuchs.

Just read Victor's papers. They are short, so summarizing all of them is unnecessary. Instead, I am going to focus on part of one of the articles "Health Reform: Getting the Essentials Right." Victor proposes that serious health policy reform

needs to pay attention to the four C's (coverage, cost control, coordinated care and choice). It will probably take several years to assess what has been accomplished in the legislation that passes, but my early take on it is that there remains a lot to be done regarding the four C's, particularly with respect to cost control and coordinated care.

Cost control is imperative—not only for the federal government but also for state governments and the economy as a whole. In another of Victor's articles ("Three 'Inconvenient Truths' "), he points out that health spending has grown 2.8 percent per year faster than the rest of the economy for the past 30 years. If we stay on that path and don't "bend the curve" in the next 20 years, then we will be devoting fully 30 percent of the GDP on health care by 2030. A huge fraction of all of the economic growth of the next 20 years will go to health, and it just gets worse after that. We have to get off this path, particularly since there is guite a bit of evidence that most of the extra spending on health care won't deliver much in the way of improved health. But, how should we/can we control health spending? Victor's first idea is to end open-ended entitlements and create a defined budget for government-funded health programs. This could involve creating a dedicated tax to fund all of the federal government's health spending. In a way, it is just common sense—the first step in getting spending under control is to put the spending on a budget.

The second part of the cost control piece is to set up a process to evaluate new health technologies and to compare costs and outcomes. What health return are we getting for the extra resources consumed by new medical technologies? In most markets, informed consumers decide whether new technologies are worth their incremental cost. Furthermore, in order to get widespread adoption of new technologies, in most markets costs have to be brought down to a level that promotes high demand. Medical care is different. The costs are far from transparent;

the effectiveness of new treatments is hard to evaluate; and no one is doing the "value for money" calculation. One of the primary goals of health policy reform should be cost control. We haven't really gotten serious about that yet.

These examples are only a small sample of Victor's ideas. He makes the point that cost shifting is not the same as cost control; he cuts through the haze of incidence of who actually pays for health insurance today; he clarifies the nature of waste in health care and describes the difficulty in curtailing it. I have known Victor for more than 35 years. We are the best of friends and colleagues. He is a delightful person who has a penchant for stand-up comedy; at the same time he takes economic policy seriously. It is not enough to work on hard problems for Victor. It isn't enough to get it right in theory. He admires people who work on important economic problems and who do so with reference to the appropriate information, who analyze the data carefully and who conclude with policy advice. His own career embodies the approach.

Over the last several years, Victor has led a research program in health policy that he terms "FRESH Thinking." Ezekiel Emanuel co-directed the effort until he joined the Obama administration. The program brought together some of the brightest minds in the broad field of health policy. The work was generously supported by The Blue Shield of California

Foundation and by The Robert Wood Johnson Foundation. Victor wrote the 12 articles of this volume as part of the output of the FRESH Thinking research program. I participated in several of the workshops of the FRESH Thinking endeavor and have agreed to direct a follow-on effort through SIEPR, called FRESH Thinking 2.0 in the best Silicon Valley tradition. Victor Fuchs will continue to be involved, this time as chairman of the group's steering committee.

These 12 articles represent the thoughts of the leading health economist in America—on one of the most important subjects of the next couple of decades.

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In A Streetcar Named Desire, Blanche DuBois said that she always depended on the kindness of strangers. In my work on health care I go further—I have depended on the kindness of strangers and friends and have had the pleasure of seeing the former become the latter. For their assistance with this collection of reprinted articles on health care reform, I gratefully acknowledge financial support from The Robert Wood Johnson Foundation and The Blue Shield of California Foundation. I also thank Catherine D. DeAngelis, MD, MPH, editor in chief, and Phil B. Fontanarosa, MD, MBA, executive deputy editor, The Journal of the American Medical Association; Debra Malina, PhD, "Perspective" editor, The New England Journal of Medicine; and Donald E. Metz, executive editor, Health Affairs, for their encouragement and advice. My colleagues Ezekiel J. Emanuel, MD, PhD, and Alan M. Garber, MD, PhD, have generously shared their knowledge of health care with me, sometimes as co-authors. For several decades, my understanding of health economics has been enhanced by frequent interactions with my Stanford colleagues, Kenneth Arrow and Alain Enthoven. My longtime assistant, Rossannah Reeves, deserves special thanks for her patience in helping me work through many drafts and seeing each through publication. I am grateful to Michelle Mosman, director of communications, Stanford Institute for Economic Policy Research, for turning individual articles into this booklet. Finally, I thank John Shoven for his gracious "Foreword," one that would have met my mother's hearty approval.

Victor R. Fuchs

Henry J. Kaiser Jr. Professor Emeritus Stanford University January 2010



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Eliminating "Waste" in Health Care

By Victor R. Fuchs, PhD

President Obama is the most recent in a long line of US presidents to seek reductions in health care spending through elimination of "waste." However, the stakes this time are unusually high—the president has reported that eliminating waste is needed to fund two-thirds of the approximately \$900 billion needed (over 10 years) for expanded health care coverage.\(^1\) To achieve this goal requires defining waste, identifying contexts in which it occurs, determining why it occurs, and implementing policies that prevent reoccurrence.

Defining waste in medical care is not simple. Consider, for example, a patient who has experienced frequent, intermittent headaches for several weeks. Her physician thinks it is unlikely that the headaches are caused by a brain tumor or lesion (less than 1 chance in 10). A magnetic resonance imaging scan would provide more definite information. If the physician orders the scan, is that waste? What if the chances were 1 in 100 or 1 in 1000? What if the patient is so anxious about the headaches that she has difficulty with daily functions? Should that affect the definition of waste? As another example, consider 10 members of a college football team who are found to have a disease that has 2 possible interventions. Bed rest, fluids, and over-the-counter medications for relief of symptoms would result in recovery of all 10 patients in about 2 weeks; administration of a new, expensive drug would likely cure 7 patients within 2 or 3 days, send 1 patient to the hospital, and have no effect on the others. Is it wasteful to give the drug—or not to give it?

These examples lead to considering 2 possible definitions of waste in medical care. Medical waste is defined as any intervention that has no possible benefit for the patient or in which the potential risk to the patient is greater than potential benefit. Economic waste is defined as any intervention for which the value of expected benefit is less than expected costs. The proportion of care deemed wasteful using the medical definition is much smaller than that deemed wasteful using the economic

definition. Medical waste could occur only if the physician is misinformed, if the patient is misinformed and the physician succumbs to patient demands, or if the physician behaves unethically. Economic waste is much more common because of third-party payment. A conscientious clinician treating an insured patient would tend to recommend any intervention with a potential benefit greater than the potential risk.

Two ubiquitous aspects of medical care make identification of waste particularly problematic. First, there is little certainty in medicine. Implicitly, if not explicitly, physicians are usually dealing with probabilities. Many interventions appear to have been wasteful in retrospect, but that is not the correct criterion; only prospective probability of success is relevant. The oft-heard promise "we will find out what works and what does not" scarcely does justice to the complexity of medical practice. Some interventions are undoubtedly useless, but those that might help some patients are much more common. Second, patients differ in unpredictable ways. The same drug given to patients with the same diagnosis often has different effects, ranging from rapid cure to serious adverse reaction.

Any effort to reduce costs on a large scale requires consideration of economic waste. Where in medical practice is economic waste likely to be found? Almost everywhere. Some patients do not receive sufficient screening because of lack of insurance, inertia, or fear, but for the US population as a whole, the error is probably on the side of excess screening. On a per capita basis, patients in the United States receive almost 3 times as many magnetic resonance imaging scans as those in Canada.2 Are the benefits of extra scans enough to justify the extra cost? Repeated testing is another area with high potential for economic waste. There is usually little scientific foundation for the appropriate interval between tests and even less economic analysis of benefits and costs of alternative intervals.

For a variety of reasons, including pressure from patients,

physicians prescribe brand-name drugs when generic medications would be as effective or no drug at all would be best. An analogous situation may be the choice between a high-cost device or procedure and a less expensive alternative. For example, high-cost drug-eluting stents may be the better choice for some patients, but others would do just as well with less expensive bare-metal stents.^{3,4}

Some patients are hospitalized for what might be wasteful reasons. For example, the patient's insurance coverage might be better in hospital, compensation to the physician for dealing with a complex case on an outpatient basis may be inadequate, or readmission may occur because of poor coordination between inpatient and outpatient care or because the discharged patient lacks social support. Another example is the excess ordering of tests because of "defensive medicine" practiced out of fear of litigation for missing a diagnosis.

Identification of waste is difficult, but eliminating it is more difficult. Every dollar of waste is income to some individual or organization. Insured patients want all the care that might do some good; fee-for-service payment to clinicians also can lead to economic waste.⁵ The combination of insurance and fee-for-service can be wasteful because neither the patient nor the physician has an incentive to consider cost. Some see the solution in making the patient cost conscious through large deductibles and co-payments. That may work for high-income individuals, but the average person who lives from paycheck to paycheck could not handle the typical medical bill. Moreover, the average patient in the United States is a poor judge of what care is needed and the quality of that care. The idea of sick patients shopping for the lowest-price medical care (the way they buy automobiles) is a fantasy that will not contribute to informed elimination of waste. There seems to be no alternative to relying on physicians to practice more cost-effective care.

There are 3 requirements for physicians to practice cost effective care. First, physicians need information about effectiveness and costs; the range of possible diagnostic and therapeutic interventions available in all but the simplest cases is staggering. The provision of such information in a timely and easily accessible form is a public good that

can only be provided by a large, publicly funded but quasi independent organization. Second, physicians require access to an infrastructure that provides specialized technology and personnel appropriate for cost-effective care, for example, a multidisciplinary, team approach to the care of patients with diabetes. Third, information and infrastructure will often be wasted unless physicians are provided with incentives that reward cost-effective decisions.

President Obama is correct about possible cost reductions through elimination of waste—if the economic definition is what he has in mind. But the president should not underestimate the challenge of implementing policies that lead to such elimination.

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References

- Obama seeks out skeptics at Montana town hall. CNN Web site. http://www.cnn.com/2009/POLITICS/08/14/obama.health.care/index.html. August 18, 2009. Accessibility verified November 10, 2009.
- Medical Imaging in Canada 2007. Canadian Institute for Health Information Website. http://secure.cihi.ca/cihiweb/products/MIT_2007_ e.pdf. Accessed October 7, 2009.
- Bertrand OF, Faurie B, Larose E, et al. Clinical outcomes after multilesion percutaneous coronary intervention: comparison between exclusive and selective use of drug-eluting stents. J Invasive Cardiol. 2008;20(3):99-104.
- Yan BP, Ajani AE, New G, et al; Melbourne Interventional Group Investigators. Are drug-eluting stents indicated in large coronary arteries? insights from a multicentre percutaneous coronary intervention registry. J Cardiol. 2008;130(3):374-379.
- Emanuel EJ, Fuchs VR. The perfect storm of overutilization. JAMA. 2008;299(23):2789-2791.
- Emanuel EJ, Fuchs VF, Garber AM. Essential elements of a technology and outcomes assessment initiative. JAMA. 2007;298(11):1323-1325.

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Four Health Care Reforms for 2009

By Victor R. Fuchs, PhD

Prospects for the enactment of comprehensive, sustainable health care reform this year look increasingly bleak. Republican support for President Barack Obama's ambitious agenda is fading fast, if it ever existed. An imaginative, truly bipartisan approach that moves the system away from employer-sponsored insurance — the Wyden–Bennett plan — has failed to gain any traction. Within the Democratic majority, sharp disagreements in each house, and between the House and Senate, do not augur well for coherent legislation, even if political compromises can be struck.

Disappointment with the reaction of some of the public and gridlock in Congress might lead to the abandonment of reform this year. With the need so great, and with so much effort having been put forth by so many people, that would be a crime. Almost everyone agrees that the present U.S. health care system is dysfunctional: it is too costly, too incomplete in coverage, and too prone to avoidable lapses in quality of care. A true remedy would require major changes in the financing and organization of care; such changes currently have little support from either politicians or the public. But a start must be made.

Although comprehensive change is probably beyond reach this year, several specific reforms should and could be enacted: the creation of insurance exchanges, the elimination or limitation of the tax exemption of employer-sponsored health insurance, the appointment of an expert commission to devise changes to the way Medicare pays providers, and the provision of ensured funding for a quasi independent institute for technology assessment. Each of these changes alone has a high probability of doing some good. Taken together, they reinforce each other and lay a foundation for further reforms.

Insurance exchanges that bring together insurance companies and potential buyers have lower administrative costs than does a system in which numerous sellers and buyers of insurance have to make separate deals. Exchanges are particularly valuable for

individual buyers, for persons who are self-employed, and for small firms; they would also be an excellent alternative to employer sponsored insurance. To succeed, the exchanges must attract large numbers of enrollees — healthy persons as well as sick persons — and must have risk-adjustment rules to protect insurance companies that enroll a disproportionate number of sick beneficiaries.

Insurance exchanges that attract large numbers of participants benefit from economies of scale, eliminate the cost of brokers, and can offer a wide choice of insurance policies. From the point of view of insurance companies, a well-functioning exchange is beneficial because it permits them to add large numbers of customers at a relatively low cost. Alain Enthoven has pointed out that the Federal Employees Health Benefits Program is a kind of insurance exchange.¹ Although it is not called an insurance exchange, it works similarly to one, and it functions well for both government employees and the companies that insure them. The California Public Employees' Retirement System (CalPERS) performs a similar function for employees of California's state and local governments.

The revelation that top Goldman Sachs executives are given a tax-free \$40,000-per-year health insurance policy highlights what is arguably the most regressive feature of the entire federal tax code: the tax exemption of employer contributions to health insurance premiums. This exemption confers huge subsidies on high-income Americans and small or no subsidies on those with low incomes. There are three reasons that the exemption has this effect: first, the higher a person's marginal tax bracket, the larger the subsidy he or she receives; second, on average, higher-income workers tend to have more generous insurance policies; and third, the proportion of people who receive employer-sponsored insurance rises dramatically with family income, from approximately one in four among those with incomes under \$30,000 to more than four in five among those with incomes above \$75,000.² Elimination of the subsidy

would not only make the tax system fairer, but it would also provide more than \$200 billion of additional federal revenue annually. If Congress did nothing else for health care this year, this reform would accomplish a great deal.

Some observers believe that loss of the tax exemption would cause a large decrease in employer-sponsored insurance coverage. No one knows the extent or timing of this effect; it might occur quickly, or it might occur over the course of several years. Well-functioning insurance exchanges would ease the transition from employer-sponsored insurance; synergistically, the removal of the tax exemption would spur the growth of exchanges. Thus, these two reforms would reinforce each other. Sooner or later, the country must wean itself from employer-sponsored insurance if it is to achieve universal coverage with equitable and adequate financing and lower administrative costs.

Most observers are convinced that reform of Medicare's payment system for providers is a good place to start in reducing health care expenditures without jeopardizing the public's health. Not only does Medicare spending account for a significant portion of total health expenditures (approximately 20%), but changes that are initiated by Medicare are often adopted subsequently by private insurers. Expert advisors have recommended useful reforms in the past, but the pressure that special interest groups place on Congress usually blocks implementation. The United States needs an independent commission of physicians and other experts to devise payment reforms, including realignment of reimbursement rates to more accurately reflect the value of services, some bundling of payments to provide an incentive for efficient use of resources, and new benefit designs. Recommendations should be submitted for Congressional approval, but they must be adopted or rejected as a package, rather than picked apart piece by piece. The latter approach provides maximal opportunity for lobbyists for special-interest groups to determine the outcome, whereas a congressional "yes" or "no" vote on a total reform package would allow the public interest to play a larger role.

Congress usually blocks implementation. The United States needs an independent commission of physicians and other experts to devise payment reforms, including realignment of reimbursement rates to more accurately reflect the value of services, some bundling of payments to provide an incentive for efficient use of resources, and new benefit designs. Recommendations should be submitted for Congressional approval, but they must be adopted or rejected as a package, rather than picked apart piece by piece. The latter approach provides maximal opportunity for lobbyists for special-interest groups to determine the outcome, whereas a congressional "yes" or "no" vote on a total reform package would allow the public interest to play a larger role.

Health care spending has grown 2.7% faster than the rest of the economy over the past 30 years, primarily as a result of new technology.³ Some of the new drugs, tests, and procedures have contributed to longer, high-quality lives. Many have not. Currently, there is no institution that has been established with the specific aim of evaluating the value of new technologies (or of new applications of older technologies). It is not feasible for individual physicians or physician groups to carry out the necessary analyses and disseminate findings throughout the health care community. To accomplish this task, Congress should create a quasi-independent institute for technology assessment with steady, ensured funding, such as a fixed percentage of annual Medicare expenditures.⁴ The assessments performed by this institute will initially be particularly valuable to the expert commission that is charged with making Medicare payment methods more efficient and more equitable.

One omission from these recommended reforms is a proposal for dramatically increasing the number of insured Americans. I favor increased coverage and have advocated universal coverage, financed by a value-added tax that is dedicated to funding basic health care for all. To be sustainable, expanded coverage must be accompanied by adequate new revenues and by changes in the organization and delivery of care that will predictably lower costs. The proposals that are currently being considered for expanding coverage do not meet that test. Indeed, I believe the proposed expansion of employment-based insurance (through employer mandates) and the expansion of income-tested insurance such as Medicaid (through raising the income threshold for eligibility) are the wrong way to go. These inefficient and inequitable methods contribute to our present problems and must eventually be replaced.

I believe that the four reforms proposed here have more chance of doing good than harm, will lower rather than increase the deficit, and will reinforce one another. Given the complexity of health care, that's the most that we can expect until comprehensive change in the financing and organization of care becomes politically possible.

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References

- Enthoven AC. Building a health marketplace that works. Health Affairs blog, July 31, 2009. (Accessed September 9, 2009, at http://healthaffairs. org/blog/2009/07/31/building-a-health-marketplace-that-works/.)
- Employee Benefits Research Institute estimates from the Current Population Survey. March 2009 supplement. Washington, DC: Employee Benefits Research Institute.
- Pauly MV. Competition and new technology. Health Aff (Millwood) 2005;24:1523-35.
- Emanuel EJ, Fuchs VR, Garber AM. Essential elements of a technology and outcomes assessment initiative. JAMA 2007;298:1323-5.

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Cost Shifting Does Not Reduce the Cost of Health Care

By Victor R. Fuchs, PhD

Almost every political pronouncement now emphasizes cost reduction as a central object of health care reform. The policy recommendations that follow, however, frequently aim at cost shifting rather than cost reduction. Shifting has popular appeal while reduction usually requires painful choices. To see the irrelevance of shifting for cost reduction, consider the proposal to prohibit health insurance companies from varying premiums according to enrollee's health status. This obviously reduces premiums for the sick but, not so obviously, also increases premiums for the healthy. Such a shift may be desirable on equity grounds but does nothing to reduce the real cost of care. Also, unless accompanied by a strict mandate, these shifts may lead to an increase in the uninsured because some healthy individuals will discontinue their health insurance coverage in response to higher premiums.

A subsidy is another example of a so-called cut in the cost of care, but also is just cost shifting. A subsidy reduces the cost for low-income eligible individuals by shifting the cost to higherincome taxpayers. Again, this may be desirable policy, but it is not a reduction in real costs. When eligibility for a subsidy includes those individuals and families with incomes up to 500% of the poverty level (approximately \$110 000 for a family of 4) as in one senate proposal, even the shifting of costs is an illusion. It is impossible to collect enough taxes from those with incomes of more than \$110 000 to subsidize the poor and the sick and also help the numerous middle and upper middle income households. The latter will have to pay for their own health care one way or another. Also misleading is the claim that government is cutting the cost of care to families and individuals by requiring employers to provide health insurance (ie, an employer mandate). Abundant theoretical and empirical research shows that although employers appear to pay, the cost is actually passed on to workers through foregone wage increases or to consumers through higher prices.²

To prescribe policies that would result in cost reduction instead of cost shifting, it is useful to know why Americans will spend more than \$8000 per person this year for health care while the next highest spending country (it will probably be Switzerland) will spend about \$5500, and the average Organization for Economic Co-operation and Development country will spend less than \$4500 per person.³ There are many explanations for the differentials, some more applicable when comparing the United States to one country and some to another. The following generalizations, however, hold on average for comparisons between the United States and other high-income countries.

Higher Administrative Costs

The United States has a highly complicated inefficient system for funding health insurance and paying physicians, hospitals, and other providers of health services that relies primarily on employment-based insurance and incometested insurance (eg, Medicaid). As long as the United States has hundreds of insurance companies competing for the business of millions of individual firms, 50 state bureaucracies administering complex rules governing subsidies, and hundreds of thousands of physicians and other clinicians having to bill for every individual service, US administrative costs will remain abnormally high.

Higher Ratio of Specialists to Primary Care Physicians

Specialists are more expensive to train and they make more use of expensive technologies and procedures. In Canada, one-half of all physicians are in family or general practice⁴; in the United States, fewer than one-third are primary care physicians (even including all pediatricians, all obstetricians/gynecologists, and one-half of all internists).⁵ A high ratio

of specialists to primary care physicians might contribute to better health outcomes in some cases, but a significant overall effect has not been demonstrated. A decrease in the number of specialists and an increase in the number of primary care physicians results in delays and inconvenience for some patients in obtaining specialty care, but improves access to primary care and keeps costs down.

More Stand-by Capacity

Related to the higher ratio of specialists to primary care physicians is the greater investment in the United States in stand-by capacity. Expensive equipment and personnel are not used as intensively in the United States; this raises the cost per use. For example, compared with Canada, the United States has 4.22 times as many magnetic resonance imaging scanners per million persons, but performs 2.85 times as many scans. On average, each Canadian magnetic resonance imaging scanner accounts for 48% more scans than each US machine.⁶

Open-Ended Funding

Most private and public insurance in the United States is open-ended (ie, benefits are broadly defined), but there is no limit set on how much spending can result. An alternative, pursued in some other countries, is to define a fixed budget for health care, which clearly has a restraining effect on expenditures.

More Malpractice Claims

In the United States, more resources are devoted to the administrative, legal, and judicial costs arising from the malpractice insurance system. Defensive medicine also takes its toll. Legal limits on awards and an alternative dispute resolution system could lower these costs.

Less Social Support for the Poor

The poor usually have more health problems and lower education. Without adequate social support, it is difficult to take care of the poor who are sick on an outpatient basis. The result is a higher rate of hospital utilization, especially readmission after discharge.

Higher Drug Prices

The United States has been subsidizing the rest of the world by allowing the drug companies to practice price discrimination by charging higher prices in the United States than in other countries for the same drug. It would not be difficult to stop this practice, but some analysts argue that this would result in a reduction in drug company research and development.

Higher Physician Incomes

After adjustment for the higher proportion of specialists and the cost of training, the difference between physician incomes in the United States and other countries is smaller than first appears, but relative to other occupations, US physicians still make more money.⁷ Reducing fees is an option that Medicare often tries to exercise, but frequently backs off under political pressure. Moreover, reducing fees does not necessarily reduce expenditures because physicians can respond by recommending more visits and tests. Amore fruitful approach would recognize that physicians' incomes after deducting practice expenses amount to only approximately 10% of total health expenditures,8 but physicians' decisions determine most utilization of care. The challenge to health reform is to implement systems in which physicians have the information, infrastructure, and incentive to practice cost-effective medicine. In such a system, highphysician income would be of minor importance as long as total spending was under control.

Conclusions

After considering the reasons health care spending is so much higher in the United States than in other countries, it seems that only large-scale reform of the way the country funds health insurance and organizes and pays for care will make a substantial, sustainable difference in the level of spending. Ost shifting does not solve the problem.

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REFERENCES

- Connolly C. Kennedy details vision for health care. Washington Post. June 7, 2009.
- Emanuel EJ, Fuchs VR. Who really pays for health care? the myth of "shared responsibility." JAMA. 2008;299(9):1057-1059.
- Organisation for Economic Co-operation and Development (OECD) StatExtracts. OECD Health Data 2008: Selected Data. http://stats.oecd. org/index.aspx?DatasetCode=HEALTH. Accessed June 25, 2009.
- Canadian Institute for Health Information. Canada's Health Care Providers, 2007. http://secure.cihi.ca/cihiweb/products/HCProviders_07_ EN_final.pdf. Accessed July 31, 2009.
- US Bureau of the Census. Statistical Abstract of the United States, 2009;
 USPO, Table 157, p 110. http://www.census.gov/prod/2008pubs/09statab/health.pdf. Accessed July 29, 2009.

- Canadian Institute for Health Information. Medical Imaging in Canada, 2007. http://dsp-psd.pwgsc.gc.ca/collection_2008/cihi-icis/H118-13-2007E. pdf. Accessed July 31, 2009.
- 7. Fujisawa R, Lafortune G. The remuneration of general practitioners and specialists in 14 OECD countries: what are the factors influencing variations across countries? OECD Health Working Papers No. 41. http://www.oecd.org/dataoecd/51/48/41925333.pdf. Accessed July 31, 2009.
- 8. Centers for Medicare & Medicaid. Historical National Health Expenditure Data. http://www.cms.hhs.gov/NationalHealthExpendData/02_National HealthAccountsHistorical.asp. Accessed July 29, 2009.
- 9. Emanuel EJ, Fuchs VR. A Comprehensive Cure: Universal Health Care Vouchers, Discussion Paper 2007-11. Washington, DC: Brookings Institution; 2007.

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The Proposed Government Health Insurance Company — No Substitute for Real Reform

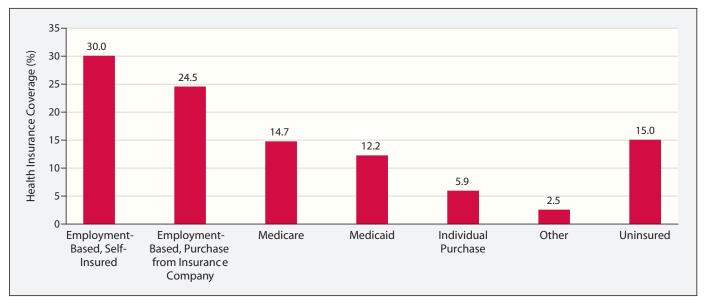
By Victor R. Fuchs, PhD

As pressure builds on the White House and Congress to deliver on their promise of health care reform, the idea of a government health insurance company to compete with forprofit and not-for-profit private companies is gaining political momentum. Advocates claim that this new company would be more efficient, honest, and successful in forcing lower reimbursement rates on physicians and hospitals. However, a close look at how the present health care system functions, what its major problems are, and what reforms are needed to solve them suggests that this new idea is not the answer. The three major problems of the current U.S. system are that 45 million to 50 million people have no health insurance, the cost of care is high and rapidly increasing, and there are gross lapses in the quality of care. There is no reason to think that a government insurance company would make a significant dent in any one of these problems, let alone all three. To do that would require real reform in the financing, organization, and delivery of care.

The United States currently has a complex combination of private and public health insurance coverage, including selfinsurance and policies purchased from insurance companies (see graph). What role might a government insurance company play in this system? If it sold policies only in the individual market (which now covers 5.9% of the population, approximately 18 million people), its effect would probably be minimal: Medicare and Medicaid would not change, and employmentbased insurance would continue to be the primary source of coverage. If the government company intended to compete in the employment-based insurance market, it would have to recognize that the largest source of coverage in the United States (accounting for 30% of the population) is employers that selfinsure. The only thing these employers buy from socalled insurance companies is administrative services, which are in fact the main product that many insurance companies provide.² If the government company also sold administrative services, is there any reason to think that it would be more efficient than WellPoint, Aetna, Cigna, UnitedHealth Group, Blue Cross and Blue Shield Association, and other major companies that compete vigorously for that business? In the largest current government health care program, Medicare, administrative services have always been outsourced to private companies.

Approximately one fourth of the population obtains coverage through an employer that buys insurance from an insurance company. But in most cases, the premium that employer pays is "experience rated" — that is, adjusted every year on the basis of the previous year's utilization. Would a new government company also experience rate premiums, or would it "community rate," charging the same premium regardless of an employer's utilization? If it used community rating, the government company would lose money rapidly because of adverse selection: firms with low utilization would opt for self-insurance or insurance companies that experience rate; those with high utilization would flock to the government company for the community rating.

As for the 15% of Americans who are currently uninsured, approximately three quarters of them are too poor or too sick to acquire insurance on their own; the other quarter are unwilling to buy insurance. The first group requires subsidization, which can be accomplished in a variety of ways, including incometested programs such as Medicaid, single-payer plans such as Medicare, or a taxfinanced universal-voucher approach. The government company could also be a vehicle for subsidies, but it would bring nothing special to the problem. Covering those who have been unwilling to buy insurance requires some form of compulsion — either an individual mandate or some form of taxation. A government insurance company is neither necessary nor sufficient for dealing with this segment of the population.



Sources of Health Insurance Coverage for the U.S. Population, 2007.

The sum of the percentages exceeds 100% because some persons have insurance from more than one source. "Other" includes special programs for military retirees, military families, and disabled veterans. Data are from the Employee Benefit Research Institute (www.ebri.org/pdf/FFE114.11Feb09.Final. pdf) and the Statistical Abstract of the United States, 2009 (www.census.gov/compendia/statab).

On the cost front, knowledgeable observers of Medicare from both inside and outside the program believe that it could obtain a substantial return on an increased investment in cracking down on fraud and reducing overuse of services. The failure to strictly monitor utilization is a result partly of regulatory and budgetary restrictions on Medicare and partly of political pressures. Surely a government insurance company would be handicapped by similar restrictions and pressures. The other part of the cost problem — rapid growth of expenditures over time — is attributable primarily to the adoption of new technology. Many policy experts believe that the solution is to create an independent institute for technology assessment.³ A government insurance company would not help or hinder such an institute.

As for quality of care, improvement can occur in two ways. First, the level of "best practice" medicine can be raised by introducing new drugs, devices, and procedures and improving the understanding of diseases. Such advances are highly dependent on basic-science research and clinical research. The existence of a government insurance company would be largely irrelevant to the pace of medical progress. There is also great potential for improving the quality of care by bringing more of the country's actual practice closer to "best practice." But neither public plans (Medicare and Medicaid) nor private insurance companies have been able to accomplish this.

Real reform begins by acknowledging that the three major problems — coverage, cost, and quality — must be attacked simultaneously. The United States has ample resources to

provide the entire population with basic coverage for health care if we accept the necessity of subsidies for the poor and sick and compulsion for people who are otherwise unwilling to acquire insurance. Cost control requires fixed budgets for basic coverage so that expenditures and revenues are in balance, as well as a payment system for providers that gives incentives for cost-effective care. It also requires an independent institute for technology assessment to provide physicians with needed information and to create a value-conscious environment for future biomedical innovations. Also, the average quality of care could be raised appreciably if every patient had access to an accountable care organization that used electronic health records effectively, provided coordinated care, and monitored processes and procedures.⁵

Supporters of a government health insurance company often point to Medicare as a model, noting its low overhead and high beneficiary satisfaction. But a new company would face a very different situation from that of Medicare, which has a captive audience and doesn't have to sell insurance and administrative services in competition with other companies. The new company would have to worry about adverse selection, and it presumably wouldn't have Medicare's access to the federal treasury to cover deficits. Moreover, Medicare, despite its assured market and huge buying power, is headed for insolvency; thus, it is a poor model for a new program that would be dependent on voluntary enrollment in a competitive marketplace.

Simply adding a government insurance company to the present mix would not result in universal coverage, bring costs

under control, or materially improve the quality of care. Real reform requires replacing our inefficient, inequitable financing system with a simple, straightforward approach that subsidizes the poor and the sick and requires everyone to pay their fair share. It also requires changes in the organization and delivery of care that provide physicians with the information, infrastructure, and incentives they need to improve quality and control costs. A government insurance company is no substitute for real reform.

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References

- A public plan for health insurance? New York Times. April 7, 2009:A28.
- 2. Robinson JC. Consumer-directed health insurance: the next generation. Interview with John Rowe. Health Aff (Millwood) 2005;Suppl Web Exclusives:W5-583–W5-590. (Accessed May 7, 2009, at http://content.healthaffairs. org/cgi/search?andorexactfulltext=and&resou rcetype=1&disp_type=&author1=&fulltext=John+Rowe&pubdate_year=2005&volume=&firstpage=.)
- Emanuel EJ, Fuchs VR, Garber AM. Essential elements of a technology and outcomes assessment initiative. JAMA 2007;298:1323-5.
- 4. Kohn L, Corrigan J, Donaldson M, eds. To err is human: building a safer health system. Washington, DC: National Academy Press, 2000.
- Shortell SM, Casalino LP. Health care reform requires accountable care systems. JAMA 2008;300:95-7.

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Reforming US Health Care Key Considerations for the New Administration

By Victor R. Fuchs, PhD

The election of President Barack Obama has set in motion high expectations that he will undertake systematic reform of the US health care system in his first term. Such reform must address 3 persistent problems: the uninsured, the high and rapidly increasing cost of care, and significant lapses in quality. Having studied these problems for more than 40 years, I would like to share in this Commentary some conclusions about reforming health care in the United States. Before suggesting what should and should not be done, however, it is important to learn from the failure of the proposed health reform in 1993.

Sixteen years ago a bright, young, charismatic Democratic politician entered the White House with a high priority of reforming US health care. The First Lady, Hillary Clinton, led the effort; a 500-person task force worked on the plan for more than a year; and Democrats controlled both houses of Congress. Nevertheless, the Clinton plan never reached either house for a vote. What went wrong?

Articles and books dissecting the Clinton plan's failure are enough to fill a small library.¹⁻³ Their discussions of political missteps, design complexity, and misleading arguments by opponents are instructive. They do not, however, get to the heart of the matter. Although public opinion polls reported clear majorities in favor of health care reform, support for substantial change was weak and divided. In an article directed to then President Clinton in April 1993, I pointed out that "[m]ost Americans have health insurance. Most Americans are satisfied with their doctor. . . . "4(p678) More generally, numerous individuals and organizations preferred the status quo, and the political system gave them many opportunities to block change. Most critics of US health care incorrectly focused on "greedy" drug companies and "overpaid" physicians rather than on systemic problems in funding, organization, and delivery of care. Most workers mistakenly thought that their insurance was a gift from their employer rather than an offset to higher wages. The Clintons never rose to the challenge of explaining these problems to the public.

Most importantly, the Clintons were not alone in failing to achieve reform. The experienced and influential Rep Pete Stark (D, California) submitted a bill calling for greater reliance on government than the Clinton plan. Rep Jim Cooper (D, Tennessee) put together a bipartisan group of 80 representatives in support of a more market-friendly plan, and Senators Breaux (D, Louisiana) and Durenberger (R, Minnesota) authored a similar bill in the Senate. Significantly, no reform plan was ever reported out of committee. Weak, divided, uninformed public support combined with failure of reformers to unite behind a single plan doomed the effort.

What is different this time around? Not so much. Public opinion polls in 2008 show support for health care reform at levels somewhat below those in 1992.⁵ Public understanding of the problems still misses the mark; this time insurance companies are now the favorite villains. Few critics realize that insurance companies are usually only providing administrative services. Employers are typically self-insured, and most workers still do not understand the connection between insurance and wages. The major problems are as great or greater now than they were in 1993, but individuals and organizations who like the status quo are also still numerous. Furthermore, the inability of reformers to unite behind a single approach remains a major obstacle.

The biggest difference is the economic climate. In 1993, the economy was on the rise after a mild recession in 1991. Now the economy is headed downward. The recession that began in December 2007 shows no sign of ending and may turn out to be the worst since the 1930s. Advisors to the president will probably differ on how the overall economy affects the prospects for health care reform. Some will say that declines in employment and employment-based insurance strengthen the pressure for bold new

approaches to coverage. Others will argue that because the federal government already faces a large and increasing budget deficit, this is not an opportune time to increase government spending on health insurance. These conflicting views can be reconciled if reform addresses coverage and cost issues simultaneously. The need to control costs strengthens the case for universal coverage instead of targeting particular groups. Anincremental strategy may have a shortrun political payoff, but as long as millions are uninsured, poverty health clinics and public hospitals will still be needed. Also, uncompensated care by physicians and hospitals will still be inefficient and inequitable. Universal coverage creates opportunities for significant improvements in the organization and delivery of care.

What about reducing cost? There is a great deal of waste, fraud, and abuse in the present health care system, but there also was a great deal of waste, fraud, and abuse in the system 40 years ago. There is no evidence that these issues account for a larger share of spending today than they did then—or that they will be any easier to eliminate. Every dollar of waste, fraud, and abuse is a dollar of income to someone in the system. Lord Acton's famous aphorism, "Power tends to corrupt; absolute power corrupts absolutely," can be paraphrased: absolute cuts in spending will be resisted absolutely.

The best chance for a sizable one-time reduction in the level of costs is through a reduction in administrative expenses. Employment-based insurance and income-tested insurance (eg, Medicaid) both require costly administration. Universal coverage, funded in a straightforward manner, would result in administrative savings large enough to pay for most of the additional utilization by those previously uninsured.⁶

One-time savings are welcome, but the most important goal should be to slow the growth of health care expenditures. To that end, an independent institute for technology and outcomes assessment is warranted.^{7,8} Physicians and hospital administrators need reliable information about the cost effectiveness of alternative interventions. Such information, especially when combined with appropriate incentives and easy access to supporting technology and nonphysician personnel, can slow the growth of health care spending.

Another important tool to slow spending growth is to discontinue open-ended funding. This method of finance, which characterizes most public and private insurance today, contributes to the rapid escalation of expenditures. Fixed budgets have much the same effect as Samuel Johnson's observation: "when a man knows he is to be hanged in a fortnight it concentrates his mind wonderfully."

Apart from reduced administrative costs, there should be no rosy promises of lowering costs from other popular recommendations. For example, some argue that more preventive medical care such as screening and testing will reduce expenditures. While such interventions may contribute to better health outcomes, they usually increase total health expenditures.¹⁰ A review of 599 articles on preventive interventions published between 2000 and 2005 concluded, "Although some preventive measures do save money, the vast majority . . . do not."11(p,662-663) Widespread use of electronic medical records reduces costs and improves quality of care when introduced in appropriate settings such as the Veterans Affairs hospitals and other coordinated health care organizations. But requiring or subsidizing electronic medical records in the present fragmented system will not have the same effect. For example, Leonard Schaeffer, former chairman of WellPoint, wrote that his company gave away \$42 million worth of hardware and software to doctors with little success because "it doesn't add value to them personally." 12

There should also be caution in adopting a seemingly innocuous plan to include uninsured 55- to 64-year-olds in Medicareatafairpremium. Because enrollment will be voluntary, it would attract a disproportionate number of less healthy individuals. The resulting deficit would bring unwarranted disrepute to all plans for public funding of insurance, including those not subject to selective enrollment.

Going forward, several essential points must be kept in mind. First, there is no quick or easy fix. A sustainable reform package will probably take several years to put together, to muster public understanding, and to gain the necessary political support. Second, because the problems of coverage, cost, and quality are interrelated, the reforms must reinforce one another. Third, the goal of seeking wide support for reform is commendable, but there should be no settling for appearance over substance. Any reform plan not controversial is certain to be inconsequential.

Fourth, several short- and intermediate-term actions and initiations can help lay the groundwork for long-term sustainable reform. Examples include capping or eliminating the tax-exemption of employer contributions to health insurance, developing demonstration projects by Medicare for payment alternatives to current fee-for-service methods, and creating an institute for technology assessment.

Finally, and most importantly, the importance of comprehensive, sustainable reform of health care should not be underestimated. The long-run fiscal stability of the country depends on it. But the experience of 1993 shows the difficulty of achieving such reform. It will take skill, determination, and exceptional leadership—the very qualities President Obama demonstrated in reaching the White House.

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References

- Johnson H, Broder DS. The System: The American Way of Politics at the Breaking Point. Boston, MA: Little Brown & Co; 1996.
- 2. Skocpol T. Boomerang: Health Care Reform and the Turn Against Government. New York, NY: WW Norton & Co; 1997.
- Rushefsky ME, Patel K. Politics, Power and Policy Making: The Case of Health Care Reform in 1990s. Armonk, NY: ME Sharpe Inc; 1998.
- 4. Fuchs VR. Dear President Clinton. JAMA. 1993;269(13): 1678-1679.
- Blendon RJ, Altman DE, Benson JM, et al. Voters and health reform in the 2008 presidential election. N Engl J Med. 2008;359(19):2050-2061.
- Emanuel EJ, Fuchs VR. A comprehensive cure: universal health care vouchers. Washington, DC: The Brookings Institution; July 2007. Hamilton Project discussion paper 2007-11. http://www.brookings.edu/ papers/2007/07useconomics_emanuel.aspx. Accessed January 30.
- Emanuel EJ, Garber AM, Fuchs VR. Essential elements of a technology and outcomes assessment initiative. JAMA. 2007;298(11):1323-1325.
- Orszag P. The high price of the lack of evidence. In: Evidence-Based Medicine and the Changing Nature of Health Care: 2007 IOM Annual Meeting Summary. Washington, DC: National Academy Press;2008.
- Boswell J. The Life of Samuel Johnson. Vol 3. 2nd rev ed. Powell LF, ed, of Hill GB, ed. Oxford, England: Clarendon Press; 1934–1964:167.
- Russell LB. Preventing chronic disease: an important investment, but don't count on cost savings. Health Aff (Millwood). 2009;28(1):42-45.
- Cohen JT, Neumann PJ, Weinstein MC. Does preventive care save money? health economics and the presidential candidates. N Engl J Med. 2008;358 (7):661-663.
- 12. Schaeffer LD. Leading the way: a conversation with HHS Secretary Mike Leavitt. *Health Aff.* 2008;27(1):w52-w59. doi:10.1377/hlthaff.27.1.w52.

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Health Reform: Getting The Essentials Right

By addressing the essentials—coverage, cost control, coordinated care, and choice—policymakers can take important first steps toward health system reform, with details to be worked out along the way.

By Victor R. Fuchs

ABSTRACT: As the ninety-year history and failure of health care reform illustrates, it is easy for policymakers to disagree about the details of any new plan. In this Perspective, the author suggests trying a new approach this time: enacting a plan that encompasses four essential principles and then making midcourse adjustments later to get the details right. He defines the essentials as the Four Cs: coverage, cost control, coordinated care, and choice. [Health Affairs 28, no. 2 (2009): w180–w183 (published online 16 January 2009; 10.1377/hlthaff.28.2.w180)]

A common phrase states that "the devil is in the details." Many groups claiming to support health reform use this phrase when they wish to conceal opposition to substantive change—or establish their expertise in some small facet of reform. Doubtless, details are important. But as the debate proceeds, Congress and the incoming Obama administration must remember that "God is in the essentials." Without the essentials, no reform plan can succeed. What are the essentials? They are coverage, cost control, coordinated care, and choice—the "Four Cs."

The Four Cs

Coverage. First, truly universal coverage—100 percent of Americans—is essential. Pressure will intensify to settle for increasing coverage for one group or another. "Cutting the number of uninsured people by half" will be hailed as a great victory for reform. But leaving millions of Americans without coverage is not only unfair, it is also inefficient. The remaining uninsured people will still get some care, albeit haphazard and uncoordinated, and their care will still be paid for by the insured or providers.

Furthermore, Americans left out of the insurance pool are likely to belong to two groups: low-wage workers and healthy people in their twenties. It is unfair to leave out of the social compact Americans who work hard and pay taxes. Young, healthy Americans should not become habituated to being free riders. To demand that insurance companies guarantee issue and not exclude pre-existing conditions requires that everyone be in the insurance pool—including the young and healthy, who are cheap to cover. Universal coverage can actually result in lower total spending because it can eliminate the high administrative costs that are now necessary to determine who is eligible for coverage and who isn't. Also, universal coverage facilitates the possibility of cost-saving changes in the organization and delivery of care.

Cost control. Politically, cost control is necessary because insured Americans will be more likely to support reform if it moderates the burdensome growth in their premiums and deductibles. It is also necessary because, as the Massachusetts experiment seems to be demonstrating, failure to control costs makes coverage gains unsustainable.

Coordinated care. Coordinated care is essential for both improvement in quality and elimination of unnecessary costs. Coordination requires some reform in how physicians, hospitals, and the entire health care system get paid and deliver care. This is especially true for management of chronic illnesses, which account for 75 percent of all health care spending. Coordination produces wins in two areas: quality and cost. It can curb the excessive use of expensive high-technology interventions that are used inappropriately to produce little or no health improvement. Coordination that improves care for diabetes, congestive heart failure, emphysema, and other chronic conditions also can reduce or eliminate avoidable hospitalizations.

Choice. Finally, choice is a fundamental American value, and choice of insurance plans as well as networks of physicians and hospitals is essential for successful reform. Perceived restrictions on patient choice were used effectively in the "Harry and Louise" ads of the 1990s to help rally opposition to the Clinton reform proposal. Furthermore, for the many Americans who now have no choice of plans or providers, expanding choice could be an incentive to support reform.

How To Achieve The Goals

When we think of reform, we must think of what Congress can embody in legislation. But laws can't always mandate that these objectives will be achieved. For instance, Congress cannot mandate that physicians coordinate care with hospitals and other providers. Legislation can, however, change the incentives, infrastructure, and information systems to move providers toward greater coordination.

Let's examine how the Four Cs should be dealt with, one by one.

Coverage. There are two reasons why people don't have health insurance: They are unable to acquire it, or they are unwilling to do so. The first group (about three-quarters of all uninsured people) are too poor or too sick to get insurance without financial assistance.² The unwilling include young, healthy people who think they can do without coverage and others who "ride free" in the expectation that if they run up large medical bills, the system will take care of them.

The essentials for universal coverage, therefore, are subsidies for those who cannot acquire insurance on their own and requirements for those who are unwilling to do so. There are several methods for achieving these goals. For example, a combination of individual and employer mandates combined with generous subsidies will come close, as the Massachusetts plan is demonstrating. A single-payer "Medicare for All" approach will also do it, as demonstrated by the current Medicare program for those age sixty-five and older. And a universal voucher approach leaving people free to choose among competing health plans will also work, as demonstrated by the current Dutch and Israeli health care systems. Selecting among these methods should be based primarily on their ability to control costs and improve coordination of care.

Cost control. There is no single "magic bullet" for cost control. Multiple forces will have to pull in the same direction to restrain cost increases.

Entitlements and budgets. One of the essential means is to eliminate open-ended entitlements and create a defined budget for government-funded health programs. Such a budget will provide a strong incentive for insurers and health care providers to focus on high-value interventions and redesign delivery systems to improve efficiency and quality.

Technology/outcomes assessment. According to multiple studies, including most recently those of the Congressional Budget Office, development and diffusion of new technologies drive increases in medical care costs.³ There is growing agreement that the nation needs some kind of comparative assessment process and increasing likelihood that this will soon be enacted. Such assessments are essential to inform both coverage decisions by health plans and treatment decisions by physicians. Most importantly, these assessments will signal drug and device manufacturers and procedure-oriented providers that interventions will be evaluated for coverage and payment based on effectiveness and cost. Today, pharmaceutical and other companies can charge top dollar for interventions that offer few improvements in quality of life and little additional survival.

Of equal importance is systematic outcomes assessment. Technology assessments typically rely on data from clinical trials with highly selected patients, but they cannot give an accurate picture on how tests and treatments work in "real life," where they are used in combination with other tests and treatments for patients with multiple chronic conditions. A health information superhighway is an essential piece of outcomes assessment, and it seems to be part of President-elect Obama's recovery plan. This infrastructure should be deployed in conjunction with a plan for the systematic collection of data. Combining information from medical records with information on drug usage, laboratory results, and payments can create a "real-time" national database on patient outcomes, the use of services, costs, and the use of technologies in the "real world." This database should be open to all researchers who promise to publicly disseminate their methods and results. The data would facilitate pay-for-performance (P4P) and other methods for holding both insurers and providers accountable for the quality, cost, and efficiency of care.

Payment reform. We know the worst way to pay health care providers: fee-for-service. That is what we mostly do today. We do not know the best way to pay. And there probably is not a single best way. Hence, we need experimentation and innovation in payment, whether more P4P with bonuses for good performance, bundled payments, or partial or full capitation. To control costs, it is essential that payers have the freedom to experiment in rewarding value rather than volume.

Competition. If insurers have to provide a standard benefit package with guaranteed issue and no pre-existing disease exclusions, receive risk-adjusted premiums, and have their outcomes monitored, they will have a strong incentive to change their business model from excluding sick patients to actually managing care for efficiency and value. This is how competition can work to control costs.

Sensitivity to cost and value. One way to make the public more sensitive to the cost and value of medical services is for people who want more services of small marginal value to pay with their own after-tax dollars for coverage that is above the standard benefit package. For example, wider selection of physicians or hospitals should require a supplemental fee. A complementary approach is using value-based insurance so that patients face higher copayments for more expensive services when cheaper interventions are just as effective, or when the indications for the tests or treatments are more tenuous.

There is no guarantee that these measures working together will restrain costs, but they have a better chance than any other approach—especially efforts to simply lower unit reimbursement to providers.

Coordinated care. The health care system is a fragmented, nineteenth-century cottage industry in which fee-for-service payment inhibits coordination. Payment reform that rewards coordination and patient outcomes should improve care. Similarly, a national database for outcomes assessment would provide data to rapidly refine guidelines and transform them into physician reminders and templates for ordering tests and treatments. Such a database would also help identify which providers are achieving good patient outcomes and how they are doing it.

Perhaps most important, legal and regulatory reform is essential. There are a myriad of laws that inhibit the financial and administrative relationships among providers that are essential to clinical coordination. For instance, "Stark II" self-referral prohibitions and the federal antikickback laws are meant to ensure that patient care decisions are based on medical need, not providers' financial interest. These rules are overly broad. While prohibiting self-enrichment, they also inhibit using financial incentives to facilitate the collaboration between physicians and other medical providers that improves coordinated care for patients with chronic conditions. They need to be amended, and safe harbors more uniformly defined, to permit closer financial, administrative, and clinical relationships between physicians and hospitals. As suggested by Timothy Jost and Ezekiel Emanuel, establishing a Commission for Innovation in Delivery Systems in the federal government to provide rapid "onestop" review and authorization of proposals for new payment and delivery system arrangements could facilitate essential innovation.4 Antitrust and tax laws also need reform to permit combinations that facilitate the coordination of care.

Obviously, there needs to be oversight to ensure that these links improve the quality of care, rather than merely serving as a cover for provider enrichment. Similarly, reform of scope-of-practice laws is essential to permit the more-flexible use of advanced practice nurses and other health care professionals, especially in the primary care setting.

Many providers also want tort reform. Although that would probably not have a significant impact on health care delivery or cost control, it is highly desired by physicians and would be helpful in securing their support for a far broader reform plan.

Choice. Choice is a desirable feature of any reform proposal. The public values choice as a good thing in itself because it confers a sense of power and control. Also, choice is essential to control costs through competition. But too much choice can be counterproductive in health. If the range of choice in insurance is unlimited, insurance companies can manipulate differences in an attempt to cherry-pick. To maintain equity and avoid adverse selection, some limits on choice are necessary. With regard to the organization and delivery of care, some restrictions on choice may be necessary in the interest of quality and cost. For example, "any willing provider" laws can inhibit the formation of efficient medical groups.

Anything that substantially changes 16 percent of U.S. gross domestic product will necessarily be complex. It is easy to disagree about the details of any plan. Failure because of such disagreements is always the easiest course, as the ninety-year history of health reform has demonstrated. But policymakers should keep the focus on the essential objectives and means. They must recognize also that reform of anything as complex as health care will not be perfect the first time. Unintended consequences will occur, and intended consequences will fail. Enactment of the essentials with a flexible framework that permits easy midcourse corrections and adjustments can, by successive approximation, get the details right.

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Notes

- Centers for Disease Control and Prevention, "Chronic Disease Prevention and Health Promotion—Chronic Disease Overview," 20 November 2008, http://www.cdc.gov/nccdphp/overview.htm (accessed 6 January 2009).
- P. Fronstin, "Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2008 Current Population Survey," EBRI Issue Brief no. 321, September 2008, http://www.ebri.org/pdf/briefspdf/EBRI_IB_09a-2008.pdf (accessed 6 January 2009).
- See, for example, Congressional Budget Office, "Technological Change and the Growth of Health Care Spending," January 2008, http://www. cbo.gov/ftpdocs/89xx/doc8947/01-31-TechHealth.pdf (accessed 6 January 2009); and Peter Orszag, CBO, "The Long-Term Budget Outlook and Options for Slowing the Growth of Health Care Costs," Testimony before the Senate Finance Committee, 17 June 2008, http://www.cbo.gov/ftpdocs/93xx/doc9385/06-17-LTBO_Testimony.pdf (accessed 6 January 2009).
- T. S. Jost and E. J. Emanuel, "Legal Reforms Necessary to Promote Delivery System Innovation," *Journal of the American Medical Association* 299, no. 21 (2008): 2561–2563.

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Health Care Reform — Why So Much Talk and So Little Action?

By Victor R. Fuchs, Ph.D.

As promised during his campaign, and under pressure from many quarters, President elect Barack Obama may seek badly needed changes in the way the United States finances and delivers health care. Responding to public interest and perceived need, several previous presidents have attempted to enact some kind of national health insurance: Harry Truman in the 1940s, Richard Nixon in the 1970s, and most recently Bill Clinton in the 1990s. These attempts went nowhere. In pursuing comprehensive health care reform, President-elect Obama should be aware of four major reasons why, in the past, we heard so much talk and saw so little action.

First, many organizations and individuals prefer the status quo. This category includes health insurance companies; manufacturers of drugs, medical devices, and medical equipment; companies that employ mostly young, healthy workers and therefore have lower health care costs than they would if required to help subsidize care for the poor and the sick; high income employees, whose health insurance is heavily subsidized through a tax exemption for the portion of their compensation spent on health insurance; business leaders and others who are ideologically opposed to a larger role of government; highly paid physicians in some surgical and medical specialties; and workers who mistakenly believe that their employment-based insurance is a gift from their employer rather than an offset to their potential take-home pay. These individuals and organizations do not account for a majority of voters, but they probably have disproportionate influence on public policy, especially when their task is simply to block change.

Second, as Niccoló Machiavelli presciently wrote in 1513, "There is nothing more difficult to manage, more dubious to accomplish, nor more doubtful of success ... than to initiate a new order of things. The reformer has enemies in all those who profit from the old order and only lukewarm defenders in all those who would profit from the new order." This keenly

observed dynamic, known as the "Law of Reform," suggests that a determined and concentrated minority fighting to preserve the status quo has a considerable advantage over a more diffuse majority who favor reform but have varying degrees of willingness to fight for a promised but uncertain benefit.

Third, our country's political system renders Machiavelli's Law of Reform particularly relevant in the United States, where many potential "choke points" offer opportunities to stifle change. The problem starts in the primary elections in so-called safe congressional districts, where special-interest money can exert a great deal of influence because of low voter turnout. The fact that Congress has two houses increases the difficulty of passing complex legislation, especially when several committees may claim jurisdiction over portions of a bill. Also, a super majority of 60% may be needed to force a vote in the filibuster-prone Senate.

Fourth, reformers have failed to unite behind a single approach. Disagreement among reformers has been a major obstacle to substantial reform since early in the last century. According to historian Daniel Hirshfield, "Some saw health insurance primarily as an educational and public health measure, while others argued that it was an economic device to precipitate a needed reorganization of medical practice ... Some saw it as a device to save money for all concerned, while others felt sure that it would increase expenditures significantly." These differences in objectives persist to this day.

Currently, many health care reformers favor an approach based on comprehensive mandates and generous subsidies. This approach would leave in place employment based insurance and income-tested insurance, such as Medicaid, attempting to shore up these systems rather than replace them with a more unified method of financing care. Other reformers favor "Medicare for all," an approach that is often referred to as "single payer." Still others want to combine the single-payer approach with choice

and competition through a system of universal vouchers for enrollment in competing health plans that take responsibility for the care and costs of their enrollees. These approaches, and others that have been proposed, vary in their objectives and in the methods they would use to achieve those objectives. Differences among approaches are not easily reconciled, because they reflect differences in values and analyses. Even if a substantial majority of the public and legislators favors some kind of reform, we will continue to witness much talk and little action unless they can unite behind a single approach.

This type of review of the obstacles to health care reform is of more than theoretical or historical interest. It could help the Obama administration find a successful path to reform. Consider the groups that seem to prefer the status quo. They may not be as unified as they first appear. Some individuals and organizations might realize that they could benefit from changes in the health care system. For example, some of the large health care insurers or managers, such as Anthem, UnitedHealth, and Aetna, would flourish in a system where relatively few competing health plans are equipped to assume responsibility for large numbers of enrollees in return for riskadjusted capitation payments. Reformers need to try to secure their support or, at a minimum, to blunt their opposition. Similarly, though some physicians would probably see their income fall under comprehensive reform, others might see an increase, and all would probably prefer a system in which no one is uninsured. Even in the pharmaceutical industry, where opposition to reform is traditionally strong, some firms are beginning to embrace a goal of high-value innovation; such companies would move to the head of the industry under a well-designed new system.

Under the best of circumstances, however, a major Obama reform initiative will still face strong defenders of the status quo. Machiavelli's Law of Reform highlights the importance of galvanizing those who favor reform into a more vigorous, aggressive source of political pressure. The success of Obama's campaign team in involving millions of supporters through the Internet points the way toward such an outcome. The U.S. political system will still have its numerous choke points, but

skill and determination on the part of leaders in the executive and legislative branches may prevail, especially if high unemployment, a financial squeeze on Medicaid, an influenza pandemic, or some other crisis increases the political dangers for legislators who oppose reform.

One argument against comprehensive reform that is sure to surface is that it is not politically feasible. That may well be true, for the reasons mentioned above. But U.S. history is studded with major policy changes that were not politically feasible — until they were. Examples include the emancipation of slaves, the creation of a strong and independent central bank, the establishment of Social Security, the fluctuation of foreign exchange rates, and most recently, more than \$1 trillion devoted to bailing out large financial institutions. Six months ago, a bailout of this nature and size was not even close to being politically feasible. Comprehensive health care reform must happen, if for no other reason than to avert a national fiscal crisis. The big questions are when it will happen and what form it will take.

In my judgment, it is far more important to get the right answer to the question of "what" than "when." It would be a shame to let short-term political feasibility dominate the discussion. Political leaders who aspire to greatness first decide what needs to be done and then set about making it politically feasible. If the current health care reform initiative is limited to questions of coverage, without serious attention to cost control and coordination of care, the "crisis" in health care will continue to plague us for years to come.

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References

 Hirshfield DS. The lost reform: the campaign for compulsory health insurance in the United States from 1932-1943. Cambridge, MA: Harvard University Press, 1970.

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Three "Inconvenient Truths" About Health Care

By Victor R. Fuchs, Ph.D.

A strong case for comprehensive reform of the U.S. health care system has been made many times. The high cost of care, the large number of uninsured people, and the rapid increase in expenditures year after year have convinced many that our system is a mess. The obstacles to reform, however, are numerous and complex and have thus far proved insurmountable. The present impasse must give way to recognition that major change will not be an option much longer: it will be a necessity. Divergent interests and values must find some common ground, and all sides must acknowledge that the status quo is no longer sustainable, given three "inconvenient truths" about health care.

1. Over the past 30 years, U.S. health care expenditures have grown 2.8% per annum faster, on average, than the rest of the economy. If this differential continues for another 30 years, health care expenditures will absorb 30% of the gross domestic product — a proportion that exceeds that of current government spending for all purposes combined.

The negative implications of such increases for the support of education, infrastructure, national security, capital investment, and ordinary consumption would be huge. Alice Rivlin, who served as director of the Congressional Budget Office, director of the President's Office of Management and Budget, and vice-chair of the Federal Reserve Board, has written, "The principal challenge to achieving a sustainable long-run fiscal policy turns out to be reducing the rate of growth of health spending — all health spending, not just the federal or the federal/state portion."

Much discussion of reform concentrates on covering the uninsured. This is a worthy goal, but without sustained attention to the cost of care, gains in coverage will not be sustainable. At present, the United States spends about twice as much per person on health care as the average high-income country. An absolute reduction in that level of spending would be desirable but is not likely. The most tempting targets —

"waste," "fraud," and "abuse" — have proven remarkably resistant to attack.

A major reason why it is so difficult to reduce costs is that every dollar of health care spending is a dollar of income to someone involved in providing health insurance or health care. Administrative costs are undoubtedly too high, and insurance companies taking excess profits and executives with high salaries are frequently blamed. But they are only a small part of the story. The biggest part consists of payments to tens of thousands of telephone and computer operators, claim payers, insurance salespersons, actuaries, benefit managers, consultants, and other low- and middle-income workers. Overutilization of care is another problem that is not easily solved, partly because unnecessary or marginally useful tests, prescriptions, operations, and visits generate income for providers.

More regulation won't do much to reduce administrative costs or overutilization. On the contrary, in most industries, regulation has usually raised costs. The only way for the country to restrain costs without hurting quality is to make major changes in the way health insurance is financed and the way health care is organized and delivered. A realistic — and over the long run the most important — goal for health care reform is not to reduce costs but to slow their rate of growth.

2. Advances in medicine are the main reason why health care spending has grown 2.8% per annum faster than the rest of the economy.³

But advances in diagnostic and therapeutic interventions have been largely responsible for increases in the length and quality of life. How can we retain most of the health benefits of future medical advances while slowing the rate of growth of health care expenditures?

Part of the answer lies in the creation of a large, semiindependent organization — something like Britain's National Institute for Health and Clinical Excellence — to evaluate the benefits and costs of new medical interventions. Such an organization must have a substantial budget, because new interventions flood the market every year and new applications of older technologies add to this problem. It is not feasible for individual physicians or even large groups of physicians to carry out the necessary analyses, especially when estimates of costs and benefits are indispensable. Furthermore, the funding for such an organization must be relatively steady over time; funding based on the vagaries of annual Congressional appropriations have doomed previous governmental initiatives for technology assessment.

The other part of the answer is for health care organizations to be willing and able to incorporate the assessments into their daily practice. They must have the information, infrastructure, and incentives to deliver high-quality, cost-effective care. This does not mean that they must be fully integrated group practices. It does mean that they must create mechanisms, relationships, and processes to achieve the coordination of care that today's patients and today's health care technologies require.

3. Universal coverage requires subsidies for the poor and those too sick to afford insurance at an actuarially appropriate premium; it also requires compulsion for those who don't want to help pay for the subsidies or who want a "free ride," expecting that they will get care if they need it.

No country achieves universal coverage without subsidization and compulsion, but U.S. politicians tie themselves and the health care system in knots by proposing reforms designed to conceal these realities. Politically, the most appealing plans are those that mislead people into thinking that someone else is paying for their insurance. Currently more than half of insured Americans obtain their coverage through employment, and workers have been led to believe that their employer bears most of the cost of their care — a belief that labor-market experts have concluded is invalid.⁴ When a firm pays \$3,000 to \$7,000 per worker per year for health care, it can get that money in only three ways: reducing potential wage increases, increasing prices for what the firm sells (which means lower real wages for workers everywhere), or lowering profits.

During the past three decades, health insurance premiums have increased about 300% (after adjustment for general inflation). Where did the money come from for higher premiums? Out of wage increases that would normally accompany growth in productivity. During these three decades, the average worker has not received any increase in inflation- adjusted wages. Corporate

profits, by contrast, have in creased by 232% before taxes (284% after taxes), adjusted for inflation.⁵ The belief that employer contributions to health insurance come out of corporate profits rather than workers' real wages reflects the triumph of hope over experience — and represents a tremendous obstacle to gaining public support for a more efficient, more equitable way to pay for health insurance. The confusion about employers' role is paralleled by confusion about government's role. Politicians often claim that the government is "giving" people health insurance. In fact, every dollar the government spends on health insurance must come out of the public's pocket. If the government is acting responsibly, the money will come in the form of taxes. If irresponsibly, it will be borrowed, creating debts for which future generations will have to tax themselves in order to pay interest and principal.

The most efficient, equitable way to achieve universal coverage is to make basic health insurance available to everyone regardless of income, employment status, family circumstances, or other characteristics and to pay for it with a tax roughly proportional to income or consumption. In such a system, the wealthy and the healthy would subsidize insurance for the poor and the sick. Persons of average income and average health would pay enough to cover the cost of their own insurance.

The long-running debate about health insurance and health care that is continuing this fall will be more constructive, and possibly more fruitful, if all the participants would take these "inconvenient truths" as a starting point.

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- The long-term outlook for health care spending. Washington, DC: Congressional Budget Office, November 2007. (Accessed October 3, 2008, at http://www.cbo.gov/ftpdocs/87xx/doc8758/11-13-LT-Health.pdf.)
- Rivlin AM, Boskin MJ. Perspectives on the long-run fiscal outlook. SIEPR policy brief. Palo Alto, CA: Stanford University, July 2007:4.
- Pauly MV. Competition and new technology. Health Aff (Millwood) 2005;24:1523-35.
- Gruber J. Health insurance and the labor market. In: Culyer AJ, Newhouse JP, eds. Handbook of health economics. Vol. 1. New York: Elsevier Science, 2000:645-706.
- Statistical tables relating to income, employment, and production. In: Council of Economic Advisers. Economic report of the president. Washington, DC: Government Printing Office, February 2007:Tables 3, 47,90.

The Perfect Storm of Overutilization

By Victor R. Fuchs, Ph.D. and Ezekiel J. Emanuel, MD, PhD

A "perfect storm" occurs when a confluence of many factors or events—no one of which alone is particularly devastating—creates a catastrophic force. Such confluence is rare and devastating. Over time and through disconnected events, US health care has evolved into a "perfect storm" that drives overutilization and increases the cost of health care.

Higher Costs in the United States

The United States spends substantially more per person on health care than any other country, and yet US health outcomes are the same as or worse than those in other coutries. In 2005, the last year for which comparative statistics are available, the United States spent \$6401 per person, whereas the next highest spending was in Norway and Switzerland, \$4364 and \$4177, respectively (TABLE).3,4 Overall, US health care expenditures are 2.4 times the average of those of all developed countries (\$2759 per person), yet health outcomes for US patients, whether measured by life expectancy, disease-specific mortality rates, or other variables, are unimpressive (Table). 1,3,4

There are many explanations for the higher costs of US health care. Because health insurance must be underwritten and sold to individual employers and self-insured individuals, administrative costs exceed \$145 billion. This does not include employers' costs for purchasing and managing employees' health insurance. One estimate suggests that the private employer insurance market wastes more than \$50 billion in administrative costs.⁵

A second factor is higher prices in the United States for important inputs to health care, such as physicians' services, prescription drugs, and diagnostic testing. US physicians earn double the income of their peers in other industrialized countries (Table). Similarly, prices to the public for drugs in the United States are 10% to 30% higher than in other

developed countries.⁶ Disparities in prices of inputs to health care account for at least \$100 billion annually of higher spending in the United States.⁵

A third contributor to US costs is the abundance of amenities. Hospital rooms in the United States offer more privacy, comfort, and auxiliary services than do hospital rooms in most other countries. US physicians' offices are typically more conveniently located and have parking nearby and more attractive waiting rooms.

Overutilization of Health Care

The most important contributor to the high cost of US health care, however, is overutilization. Overutilization can take 2 forms: higher volumes, such as more office visits, hospitalizations, tests, procedures, and prescriptions than are appropriate or more costly specialists, tests, procedures, and prescriptions than are appropriate.

It ismorecostly care, rather than high volume, that accounts for higher expenditures in the United States. The volume of services is not extreme. Ahospitalization rate of 121 per 1000 US patients is higher than that of Japan (106) but considerably lower than the rate in Switzerland (157), Norway (173), and France (268) and lower than the Organisation for Economic Cooperation and Development (OECD) average (163) (Table). The UShospitalization rate is 21stof 30OECD countries. Similarly, US patients have 3.8 physician visits annually per capita, fewer than the OECD average of 6.8-3.4.6

In contrast with volume, in which the United States is not the leader, there are almost 3 times as many magnetic resonance imaging scanners in the United States as the OECD average, higher only in Japan.^{3,4} US patients receive considerably more cardiac revascularization procedures (579 per 100 000 population)—coronary artery bypass grafts, angioplasties, and stents—45% more than patients in Norway, the country with

the next highest number (Table).^{3,4} The United States has the fourth highest per capita consumption of pharmaceuticals. US patients utilize many more "new drugs"—those on the market 5 vears or fewer—than patients in other countries.⁶ For instance, ezetimibe, which decreases lowdensity lipoprotein cholesterol level and was approved in October 2002, is not recommended by major guidelines⁷ as first-line therapy. Nevertheless, the use of ezetimibe in the United States is about 5 times higher than it is in Canada, constituting more than 15% of prescriptions for lipidlowering agents.8 Greater use of new, more expensive pharmaceuticals, as well as higher prices both for older and newer drugs, helps explain why the United States spent \$752 per capita (2005) on drugs, whereas France, with the next highest expenditure, spent \$559 and Japan just \$425.3,4,6

The Ingredients of the Perfect **Health Care Storm**

At least 7 factors drive overuse, 4 related to physicians and 3 related to patients. First, there is the matter of physician culture. Medical school education and postgraduate training emphasize thoroughness. When evaluating a patient, students, interns, and residents are trained to identify and praised for and graded on enumerating all possible diagnoses and tests that would confirm or exclude them. The thought is that the more thorough the evaluation, the more intelligent the student or house officer. Trainees who ignore the improbable "zebra" diagnoses are not deemed insightful. In medical training, meticulousness, not effectiveness, is rewarded.

This mentality carries over into practice. Peer recognition goes to the most thorough and aggressive physicians. The prudent physician is not deemed particularly competent, but rather inadequate. This culture is further reinforced by a unique understanding of professional obligations, specifically, the Hippocratic Oath's admonition to "use my power to help the sick to the best of my ability and judgment" as an imperative to do everything for the patient regardless of cost or effect on others.

Second, fee-for-servicepaymentmisaligns incentives; it creates a big incentive for overutilization. Although most physicians are not income maximizers, they know that it is better to be paid to do something, and the higher the payment the better. Paying for doing more adds a strong financial motivation to what is often a slim clinical rationale for an intervention. Furthermore, the current system's bias toward paying significantly more for procedures rather than for evaluation and management reduces physicians' inclination to watch, wait, and communicate and increases their propensity to order a test.

This financial incentive for physicians to order and perform more expensive procedures is compounded by marketing. Physicians face a paradoxic situation. They are flooded with information; each month there are hundreds of publications on cancer alone. Simultaneously, there is a paucity of data comparing different treatments and interventions. It is time consuming and difficult for physicians to judiciously incorporate new data into their practices. This creates a powerful role for physician-directed pharmaceutical marketing, which expends

Indicator ^b	United States	Norway	Switzerland	France	Japan	OECD Average
Health care expenditures per capita (2005), US \$	6401	4364	4177	3374	2249	2560
Infant mortality, per 1000 births (2005)	6.8	3.1	4.2	3.6	2.8	5.4
Cancer mortality, per 100 000 population (2004)	203	201	186	244	208	227
Ischemic heart disease mortality, per 100 000 male patients (2004)	170.3	120.7	95.2	64.2	42.0	141.6
Life expectancy at age 65, female patients (2005), years	20.0	20.1	21.0	21.4	23.2	19.6
Hospital discharges, per 1000 population (2005)	121	173	157	268	106	163
Annual physician office visits per capita (2004)	3.8	NA	3.4	6.6	13.8	6.8
Physician salaries, specialists/general practitioners, US \$	230 000/161 000	77 000/ NA	130 000/116 000	149 000/92 000	NA	113 000/83 000
Pharmaceutical spending per capita (2005), US \$	752	375	424	559	425	383
Use of new pharmaceuticals (No. of drugs released in last 5 y relative to US per capita) (2005)	100	NA	NA	65	40	NA
Coronary revascularization procedures (bypass, percutaneous transluminal coronary angioplasty, stenting) per 100 000 population	579	320	134	196	NA	245
Cesarean deliveries, % of births (2004)	29	15	26	18	NA	28

Abbreviations: NA, not available; OECD, Organisation for Economic Co-operation and Development.

^a All dollar figures adjusted for US dollar purchasing power parity.
^b Sources: OECD, ^a Congressional Research Service, ⁴ and Danzon and Furukawa.

more than \$7 billion annually—about \$10 000 per physician.⁹ Companies can selectively highlight favorable studies from the mass of research, confident that there are few comparative effectiveness data for physicians to put the marketers' desired conclusions into a proper context.

Medical malpractice laws and the resultant defensive medicine also contribute to overutilization. There is controversy about whether malpractice litigation and concomitant real cost of premiums are increasing or decreasing. There is no doubt, however, about the increase in physicians' concern about malpractice suits and their inclination to do more.

Then there is the patient side. US patients prefer high technology over high touch. As the energy crisis highlights, Americans tend to embrace technologic fixes for problems. US culture emphasizes the new and the fancy; old and plain is equated with deprivation.² In the medical sphere, this cultural value informs a patient perception that doing more tests and receiving more treatments and interventions is receiving better care. This helps to explain inappropriate prescribing of antibiotics for viral infections.

A sixth contributor is direct-to-consumer marketing. Pharmaceutical companies spend more than an estimated \$4 billion annually advertising prescription drugs, with the concluding advice of "talk to your doctor about..." These ads drive patients' requests for new and more costly medications.

In normal markets, demand is modulated by cost. But thirdparty payment for patients attenuates this control. Although patients experience deductibles, co-payments, and other out-ofpocket expenses, health insurance and gov ernment programs significantly shield patients' decisions from the true costs of health care.

Alone, each of these factors would induce some overutilization. When they coincide, however, they amplify and reinforce each other to create a perfect storm of "more": more referrals to specialists, expensive tests, procedures, and treatments. For instance, patients' desires for "peace of mind," physicians' training to be thorough, and worries about malpractice suits coalesce to induce more testing and treatments. When physicians make money on interventions and patients pay little for them, cost becomes largely irrelevant. The relative costunconscious environment augments the incentive for drug, device, and other manufacturers to develop more new expensive tests and treatments, even when they provide small marginal benefits to patients.

Policy Implications of the Perfect Storm

Some elements in the perfect storm are difficult or impossible to change; some, arguably, should not change. Changing Americans' affinity for new technology is somewhere between difficult, impossible, and undesirable.²

Calls for changing physician training and culture are perennial and usually ignored. However, the progression in end-oflife care mentality from "do everything" tomorepalliative care shows that change in physician norms and practices is possible. The escalation in health care costs poses a great challenge to the leaders of US medicine to recognize the gravity of the situation and to move toward more socially sustainable, cost-effective care. Rapid reforms of medical education and training, even when widely acknowledged as essential, are uncommon.

Another potential policy change is to curb aggressive marketing to physicians and consumers. After recent problems with new, heavily promoted pharmaceuticals, there is increasing pressure to reduce or eliminate direct-to-consumer advertising. Simultaneously, there are credible calls for restricting the access of "pharmaceutical" representatives to physicians. ¹⁰ Although laudable, such changes alone are unlikely to have a large effect on overutilization. Similarly, changes in malpractice law could help: Some experts estimate defensive medicine adds 5% to 9% to health care expenditures, ¹¹ but reform would affect only some defensive practices.

Realistically, the most effective policy change would be to alter how insurance pays for medical services. One step is for more value-based co-payments, modeled on current tiered pharmaceutical benefits, that link the amount patients pay to effectiveness and cost of alternatives.¹² For instance, men with early stage prostate cancerwhochoose radiation therapy might have no co-payment for 3-dimensional conformal radiation but might have to cover the marginal cost if they want more expensive intensity-modulated radiation therapy. Valuebased co-payments would promote high-value interventions and discourage use of marginal medicine. It would help if patients were financially sensitive to the cost of care, but not if out-ofpocket costs inhibit use of needed services, resulting in higher costs later. This is not an all-or-nothing rationing scheme, but rather an ethical way to have patients experience costs but not at the expense of important outcomes.12

Finally, private and public payers for health care must work on developing better financial incentives for physicians and hospitals to provide more cost-effective care. Many more experiments are needed with pay for performance, bundled payments, partial capitation, value-based payment, or other payment methods that promote prudent use of resources. Such experiments with different ways of paying for health care services must be combined with careful monitoring of utilization, cost, and quality.

Conclusion

The United States has created the perfect storm for overutilization of health care. Costs cannot be controlled unless overutilization is substantially reduced. Many physician and patient factors—ingrained values, physician culture, advertising, payment—drive and synergistically intensify overutilization. The best hope for reining in costs is to devise financial incentives for physicians and patients that result in greater health care value.

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References

- American College of Physicians. Achieving a high performance health care system with universal access: what the United States can learn from other countries. Ann Intern Med. 2008;148(1):55-75.
- Emanuel EJ. What cannot be said on television about health care. JAMA. 2007; 297(19):2131-2133.
- Organisation for Economic Co-operation and Development. Health at a glance 2007: OECD indicators. http://oberon.sourceoecd.org/vl=1643589/ cl=22/nw=1/rpsv/health2007/index.htm. Accessed May 30, 2008.
- Congressional Research Service. US health care spending: comparison with other OECD countries. September 17, 2007. http://assets.opencrs. com/rpts/RL34175_20070917.pdf. Accessed May 30, 2008.
- Angrisano C, Farrell D, Kocher B, Laboissiere M, Parker S. Accounting for the Cost of Health Care in the United States. San Francisco, CA: McKinsey Global Institute; 2007. http://www.mckinsey.com/mgi/rp/ healthcare/accounting_cost_healthcare.asp. Accessed May 30, 2008.
- 6. Danzon PM, Furukawa MF. International prices and availability of pharmaceuticals in 2005. Health Aff (Millwood). 2008;27(1):221-233.
- Grundy SM, Cleeman JI, Merz CN, et al. Implications of recent clinical trials for the National Cholesterol Education Program Adult Treatment Panel III guidelines [published correction appears in Circulation. 2004;110:763]. Circulation. 2004;110(2):227-239.
- Jackevicius CA, Tu JV, Ross JS, Ko DT, Krumholz HM. Use of ezetimibe in the United States and Canada. N Engl J Med. 2008;358(17):1819-1828.
- General Accountability Office. Prescription Drugs: Improvements Needed in FDA's Oversight of Direct-to-Consumer Advertising. Washington, DC: US Government Printing Office; 2006. http://www.gao.gov/htext/d0754. html. Accessed May 30, 2008.
- Association of American Medical Colleges. Report of the AAMC Task Force on Industry Funding of Medical Education to the AAMC Executive Council. Washington, DC: AAMC; 2008. http://www.aamc.org/ research/coi/industryfunding.pdf. Accessed May 30, 2008.
- Kessler D, McClellan M. Do doctors practice defensive medicine? Q J Econ. 1996;111:353-390.
- Denny CC, Emanuel EJ, Pearson SD. Why well-insured patients should demand value-based insurance benefits. JAMA. 2007;297(22):2515-2518.

Who Really Pays for Health Care? The Myth of "Shared Responsibility"

By Ezekiel J. Emanuel, MD, PhD and Victor R. Fuchs, Ph.D.

When asked who pays for health care in the United States, the usual answer is "employers, government, and individuals." Most Americans believe that employers pay the bulk of workers' premiums and that governments pay for Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), and other programs.

However, this is incorrect. Employers do not bear the cost of employment-based insurance; workers and households pay for health insurance through lower wages and higher prices. Moreover, government has no source of funds other than taxes or borrowing to pay for health care.

Failure to understand that individuals and households actually foot the entire health care bill perpetuates the idea that people can get great health benefits paid for by someone else. It leads to perverse and counterproductive ideas regarding health care reform.

The Myth of Shared Responsibility

Many sources contribute to the misperception that employers and government bear significant shares of health care costs. For example, a report of the Centers for Medicare & Medicaid Services states that "the financial burden of health care costs resides with businesses, households, and governments that pay insurance premiums, out-of-pocket costs, or finance health care through dedicated taxes or general revenues." A New America Foundation report claims, "There is growing bipartisan support for a health system based on shared responsibility—with the individual, employers, and government all doing their fair share."

The notion of shared responsibility serves many interests. "Responsibility" is a popular catchword for those who believe everyone should pull their own weight, while "sharing" appeals to those who believe everyone should contribute to meeting common social goals. Politicians welcome the opportunity

to boast that they are "giving" the people health benefits. Employers and union leaders alike want workers to believe that the employer is "giving" them health insurance. For example, Steve Burd, president and chief executive officer of Safeway, argued that decreasing health care costs is critical to his company's bottom line — as if costs come out of profits.³ A highly touted alliance between Wal-Mart and the Service Employees International Union for universal coverage pledged that "businesses, governments, and individuals all [must] contribute to managing and financing a new American health care system."

The Massachusetts health care reform plan is constructed around "shared responsibility." The rhetoric of health reform proposals offered by several presidential candidates helps propagate this idea. Hillary Clinton, for instance, claims that her American Health Choices plan "is based on the principle of shared responsibility. This plan ensures that all who benefit from the system contribute to its financing and management." It then lists how insurance and drug companies, individuals, clinicians, employers, and government must each contribute to the provision of improved health care.

With prominent politicians, business leaders, and experts supporting shared responsibility, it is hardly surprising that most Americans believe that employers really bear most of the cost of health insurance.

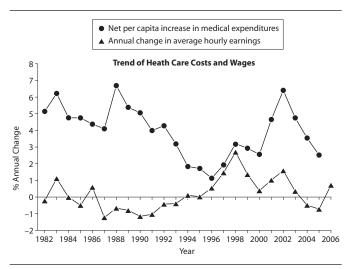
The Health Care Cost–Wage Trade-off

Shared responsibility is a myth. While employers do provide health insurance for the majority of Americans, that does not mean that they are paying the cost. Wages, health insurance, and other fringe benefits are simply components of overall worker compensation. When employers provide health insurance to their workers, they may define the benefits, select the health plan to manage the benefits, and collect the funds

to pay the health plan, but they do not bear the ultimate cost. Employers' contribution to the health insurance premium is really workers' compensation in another form.

This is not a point merely of economic theory but of historical fact. Consider changes in health insurance premiums, wages, and corporate profits over the last 30 years. Premiums have increased by about 300% after adjustment for inflation. Corporate profits per employee have flourished, with inflation-adjusted increases of 150% before taxes and 200% after taxes. By contrast, average hourly earnings of workers in private nonagricultural industries have been stagnant, actually decreasing by 4% after adjustment for inflation. Rather than coming out of corporate profits, the increasing cost of health care has resulted in relatively flat real wages for 30 years. That is the health care cost—wage trade-off.⁶

Figure. Changes in Per Capita Health Expenditures and Average Hourly Earnings (Adjusted for Inflation), 1982-2005



Data are from the Council of Economic Advisers 6 and Catlin et al. 7

Even over shorter periods, workers' average hourly earnings fluctuate with changes in health care expenditures (adjusted for inflation) (FIGURE). During periods when the real annual increases in health care costs are significant, as between 1987 and 1992 and again between 2001 and 2004, inflation-adjusted hourly earnings are flat or even declining in real value. For a variety of reasons, the decline in wages may lag a few years behind health care cost increases. Insurance premiums increase after costs increase. Employers may be in binding multiyear wage contracts that restrict their ability to change wages immediately. Conversely, when increases in health care costs are moderate, as between 1994 and 1999, increases in productivity and other factors translate into higher wages rather than health care premiums.

The health care cost—wage trade-off is confirmed by many economic studies.⁸⁻¹¹ State mandates for inclusion of certain health benefits in insurance packages resulted in essentially all

the cost of the added services being borne by workers in terms of lower wages.¹² Similarly, using the Consumer Expenditure Survey, Miller¹³ found that "the amount of earnings a worker must give up for gaining health insurance is roughly equal to the amount an employer must pay for such coverage." Baicker and Chandra¹⁴ reported that a 10% increase in state health insurance premiums generated a 2.3% decline in wages, "so that [workers] bear the full cost of the premium increase." Importantly, several studies show that when workers lose employer-provided health insurance, they actually receive pay increases equivalent to the insurance premium.^{8,12}

In a review of studies on the link between higher health care costs and wages, Gruber¹⁵ concluded, "The results [of studies] that attempt to control for worker selection, firm selection, or (ideally) both have produced a fairly uniform result: the costs of health insurance are fully shifted to wages."

The Cost-Public Service Trade-off

A large portion of health care coverage in the United States is provided by the government. But where does government's money for health care come from? Just as the ultimate cost of employer-provided health insurance falls to workers, the burden of government-provided health coverage falls on the average citizen. When government pays for increases in health care costs, it taxes current citizens, borrows from future taxpayers, or reduces other state services that benefit citizens: the health care cost—public service trade-off.

Health care costs are now the single largest part of state budgets, exceeding education. According to the National Governors Association, in 2006, health care expenditures accounted for an average of 32% of state budgets, while Medicaid alone accounted for 22% of spending. Between 2000 and 2004, health care expenditures increased substantially, more than 34%, with Medicaid and SCHIP increasing more than 44%. These increases far exceeded the increase in state tax receipts. In response, some states raised taxes, others changed eligibility requirements for Medicaid and other programs, and still others reduced the fees and payments to physicians, hospitals, and other providers of health care services.

However, according to a Rockefeller Institute of Government study of how 10 representative states responded, probably the most common policy change was to cut other state programs, and "the program area that was most affected by state budget difficulties in 2004 was public higher education ... On average, the sample states projected spending 4.5% less on higher education in FY 2004 than in FY 2003, and raised tuition and fees by almost 14% on average." In other words, the increasing cost of Medicaid and other government health care programs are

a primary reason for the substantial increase in tuition and fees for state colleges and universities. Middle-class families finding it more difficult to pay for their children's college are unwittingly falling victim to increasing state health care costs. Not an easy—but a necessary — connection to make.

Policy Implications

The widespread failure to acknowledge these effects of increasing health care costs on wages and on government services such as education has important policy implications. The myth of shared responsibility perpetuates the belief that workers are getting something while paying little or nothing. This undercuts the public's willingness to tax itself for the benefits it wants.

This myth of shared responsibility makes any reform that removes employers from health care much more difficult to enact. If workers and their families continue to believe that they can get a substantial fringe benefit like health insurance at no cost to themselves, they are less likely to consider alternatives. Unless this myth is dispelled, the centerpiece of reform is likely to be an employer mandate. This is regrettable and perpetuates the widely recognized historical mistake of tying health care coverage to employment. Furthermore, an employer mandate is an economically inefficient mechanism to finance health care. Keeping employers in health care, with their varied interests and competencies, impedes major changes necessary for insurance portability, cost control, efficient insurance exchanges, value-based coverage, delivery system reform, and many other essential reforms. 18,19 Employers should be removed from health care except for enacting wellness programs that directly help maintain productivity and reduce absenteeism. Politicians' rhetoric about shared responsibility reinforces rather than rejects this misconception and inhibits rather than facilitates true health care reform.

Not only does third-party payment attenuate the incentive to compare costs and value, but the notion that someone else is paying for the insurance further reduces the incentive for cost control. Getting Americans invested in cost control will require that they realize they pay the price, not just for the deductibles and co-payments, but for the full insurance premiums too.

Sustainable increases in wages require less explosive growth in health care costs. Only then will increases in productivity show up in higher wages and lower prices, giving a boost to real incomes. Similarly, the only way for states to provide more support for education, environment, and infrastructure is for health care costs to be restrained. Unless the growth in Medicaid and SCHIP are limited to — or close to — revenue increases, they will continue to siphon money that could be

spent elsewhere.

Conclusion

Discussions of health care financing in the United States are distorted by the widely embraced myth of shared responsibility. The common claim that employers, government, and households all pay for health care is false. Employers do not share fiscal responsibility and employers do not pay for health care — they pass it on in the form of lower wages or higher prices. It is essential for Americans to understand that while it looks like they can have a free lunch — having someone else pay for their health insurance — they cannot. The money comes from their own pockets. Understanding this is essential for any sustainable health care reform.

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References

- Centers for Medicare & Medicaid Services. Health expenditures by sponsors: business, household and government. http://www.cms.hhs.gov/ NationalHealth ExpendData/downloads/bhg08.pdf. Accessed February 6, 2008
- Gallagher C, Harbage P. Growing Support for Shared and Personal Responsibility in Health Care. Washington, DC: New America Foundation; June 2007. http://www.newamerica.net/publications/policy/growing_support_shared_ and_personal_responsibility_health_care. Accessed February 6, 2008.
- Burd S. Meeting the US health care challenge. US Chamber of Commerce CEO Leadership Series: event summary. September 7, 2006. http://www.uschamber.com/NR/rdonlyres/ekv73cduc6ygrheay ctrps464scv17isnos4gi3zpp4vadkukz7ycircw3mwiey5qvh5 nlisfeq3pgtj7nns7xrslhg/CEOSeriesSafeway.pdf. Accessed February 6, 2008.
- Kavilanz PB. Wal-Mart, union push universal health care. February 7, 2007. http://money.cnn.com/2007/02/07/news/companies/walmart_ healthcare/index.htm. Accessed February 6, 2008.
- 5. Hillary Clinton for President. American Health Choices plan. http://www.hillaryclinton.com/feature/healthcareplan/americanhealthchoicesplan.pdf. Accessed February 6, 2008.

- 6. Council of Economic Advisers. *Economic Report of the President*. Washington, DC: US Government Printing Office; February 2007. Appendix B: tables 3, 47, and 90. http://www.whitehouse.gov/cea/pubs.html. Accessed February 6, 2008.
- Catlin A, Cowan C, Hartman M, et al. National health spending in 2006: a year of change for prescription drugs. Health Aff (Millwood). 2008;27(1):14-29.
- Eberts R, Stone J. Wages, fringe benefits, and working conditions: an analysis of compensating differentials. South Econ J. 1985;52:274-280.
- Sheiner L. Health Care Costs, Wages, and Aging. Washington, DC: Federal Reserve Board of Governors; April 1999. http://www.federalreserve.gov/ pubs/feds/1999/199919/199919pap.pdf. Accessed February 6, 2008.
- Royalty AB. A Discrete Choice Approach to Estimating Workers' Marginal Valuation of Fringe Benefits. Indianapolis: Indiana University-Purdue University; June 2003. http://liberalarts.iupui.edu/~anroyalt/wfdiscch_ j03.pdf. Accessed February 6, 2008.
- Madrian BC. The US Health Care System and Labor Markets. Cambridge, MA: National Bureau of Economic Research; January 2006. NBER Working Paper No. 11980. http://www.nber.org/papers/w11980. Accessed February 6, 2008.
- 12. Gruber J. The incidence of mandated maternity benefits. *Am Econ Rev.* 1994; 84(3):622-641.

- Miller RD. Estimating the compensating differential for employerprovided health insurance. Int J Health Care Finance Econ. 2004;4(1):27-41
- Baicker K, Chandra A. The Labor Market Effects of Rising Health Insurance Premiums. Cambridge, MA: National Bureau of Economic Research; February 2005. NBER Working Paper No. 11160. http://www.nber.org/ papers/w11160. Accessed February 6, 2008.
- Gruber J. Health insurance and the labor market. In: Culyer AJ, Newhouse JP, eds. Handbook of Health Economics. Vol 1. New York, NY: Elsevier Science; 2000.
- 16. The Fiscal Survey of States. Washington, DC: National Governors Association and National Association of State Budget Officers; June 2007. http://www.nasbo.org/Publications/PDFs/Fiscal%20Survey%20 of%20the%20States%20June%202007.pdf. Accessed February 6, 2008.
- Fossett JW, Burke CE. Medicaid and State Budgets in FY 2004: Why Medicaid Is so Hard to Cut. Albany, NY: Rockefeller Institute of Government; 2004. http://www.nysl.nysed.gov/scandoclinks/ocm56501455.htm. Accessed February 6, 2008.
- Blumenthal D. Employer-sponsored health insurance in the United States—origins and implications. N Engl J Med. 2006;355(1):82-88.
- 19. Galvin RS, Delbanco S. Between a rock and a hard place: understanding the employer mind-set. *Health Aff (Millwood)*. 2006;25(6):1548-1556.

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What Are the Prospects for Enduring Comprehensive Health Care Reform?

Over the long term, major reform is practically inevitable.

By Victor R. Fuchs

ABSTRACT: Enduring reform must cover the uninsured, reduce inefficiency in funding and delivery of care, improve quality, and tame but not destroy the development of new medical technologies. Obstacles to reform include "special interests," especially as they exploit the U.S. political system; Machiavelli's Law of Reform, which favors the status quo; and the inability of reformers to agree on a common approach. Short-term prospects for enduring comprehensive reform are virtually nil. Over five to ten years, prospects are fifty-fifty unless there were a major economic, political, social, or public health crisis. In the long run, major reform is inevitable. [Health Affairs 26, no. 6 (2007): 1542–1544; 10.1377/hlthaff.26.6.1542]

Enduring reform of health care must be comprehensive. It must cover the uninsured without exceptions or conditions. It must reduce the huge inefficiencies in the way the country funds health care by eliminating employment-based insurance and income-tested subsidies. It must improve efficiency in medical practice by providing physicians with the information, infrastructure, and incentives they need to deliver costeffective care. Reform must also eliminate gross lapses in quality and must tame but not destroy the development and diffusion of expensive new medical technologies. This is a tall order. A century of failed attempts at major reform tells us that these goals will not be easily attained.

Obstacles To Reform

Special interests. What are the obstacles? First, and in many observers' view, foremost, are "special interests." Who are they? At one time, organized medicine played a leading role in blocking change. That is less true today; indeed, many physicians are among the leading advocates of reform. The insurance industry now spearheads the opposition, with drug, device, and equipment manufacturers also being major defenders of the status quo. "Special interests" is an easy answer—perhaps too easy. After all, every country has "special interests." Why are they so much more effective in the United States? I believe that the explanation lies at least in part with the U.S. political system, which creates so many opportunities for "special interests" to exert disproportionate influence.

In comparison with those of other developed nations, the U.S. political system is notable for the importance ofmoney for campaigns and the importance of the primaries in creating partisan politics in Congress. Also important is the division of power among the administration, the House of Representatives, the Senate, and the numerous committees in each House. From the primaries to the elections to the hearings to the passing and signing of legislation, there are numerous "choke" points where well-organized "special interests" can block the will of the majority.

Machiavelli's (and others') law. A second important obstacle is what should be called "Machiavelli's Law of Reform." In The Prince, Machiavelli'smasterpiece of shrewd political observations, he wrote, "The reformer has enemies in all those who profit from the old order and only lukewarm defenders in all those who would profit from the neworder." Thomas Jefferson

expressed a similar idea in the Declaration of Independence: "All experience hath shown that mankind are disposed to suffer, while evils are sufferable than to right themselves by abolishing the forms to which they are accustomed." In recent times, the psychologists Daniel Kahneman and Amos Tversky have formulated this idea more rigorously in their "prospect theory." After numerous experiments with human subjects, they concluded that most people attach more weight to fear of loss than they do to hope of gain. Most of the time, inertia rules.

Lack of unity. A third major obstacle has been health care reformers' inability to unite behind a single approach. This is not a new phenomenon. In commenting on the failure of health care reform efforts early in the past century, Daniel Hirschfield in The Lost Reform wrote, "Some saw health insurance primarily as an educational and public health measure, while others argued that it was an economic device to precipitate a needed reorganization of medical practice.... Some saw it as a device to save money for all concerned, while others felt sure that it would increase expenditures."²

Consider the present situation. Suppose as much as 75 percent of the public favors universal coverage (probably an overestimate). If 25 percent want mandates, 25 percent favor Medicare for all, and 25 percent strongly prefer a voucher system, prospects for reform are dim unless the three groups can unite behind a common approach.

Prospects For Reform

In the short term. Given these and other obstacles, what are the prospects for enduring comprehensive health care reform? In the short term, the chances are virtually nil. Until 2009 the United States willbe ruledby anunpopular, doctrinaire Republican president and a narrowly elected Democratic congress with no clear mandate except opposition to the Iraqwar. Divided government is unlikely to enact anything so complex and controversial as comprehensive health care reform. Even the next administration, be it Democratic or Republican, will have its hands full with foreign policy problems: withdrawal from Iraq and Afghanistan, containment of Iran and North Korea, negotiations with Russia, and rebuilding alliances with friendly nations. The executive and legislative branches will have little time or political capital to spend on major health care reform for the rest of this decade.

Over the intermediate term. Over the intermediate

term—say, five to ten years—it is more likely that health policy will come to the fore, but even then the prospects for enduring comprehensive reform are no better than fiftyfifty unless the nationwere to face amajor economic, political, social, or public health crisis. In that case, the chances for reform would rise dramatically. The danger is that a reformpackage hastily crafted and enacted in a time of crisis might not have the ingredients to make it enduring.

One development that would make reform more attainable is a split among the "special interests." There may come a time when the large integrated health plans and major insurance companies will see no advantage in fighting to preserve the opportunity for hundreds of small insurance companies to continue in business. A split in the business community (of which signs are already appearing) will produce many leaders who see little point in trying to preserve employment-based insurance. There may also come a time when most physicians and hospital administrators, fed up with the present chaotic, costly system, will say, "There must be a better way to pay for health care."

Long-term prospects. Over the long term,major reformis practically inevitable. No nation can continue to allow health care to drain away resources that would be more socially productive in education, the environment, security, and other policy areas. It will come sooner rather than later if policymakers recognize that the United States must find its own approach, one that is congruent with basic American values: equality of opportunity combined with exercise of personal freedom.

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NOTES

- D. Kahneman and A. Tversky, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* 46, no. 2 (1979): 263–292.
- D.S. Hirschfield, The Lost Reform: The Campaign for Compulsory Health Insurance in the United States from 1932 to 1943 (Cambridge, Mass.: Harvard University Press, 1970).

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Essential Elements of a Technology and Outcomes Assessment Initiative

By Ezekiel J. Emanuel, MD, PhD, Victor R. Fuchs, PhD, and Alan M. Garber, MD, PhD

The mismatch between us health expenditures and the resources devoted to learning which health interventions are most effective is both striking and unwise. Each year US individuals spend more than \$2 trillion on health care. More than \$100 billion is spent for research and development and for regulatory approval of new technologies. Yet total spending on technology assessment almost certainly falls short of \$1 billion per year—0.05% of all US health care spending.

Some of the \$2 trillion in health care expenditures buys services of little or no value. This waste has been attributed to misleading advertisements, media hype, misguided state and federal mandates, fear of malpractice litigation, misaligned reimbursement incentives, and generous insurance that encourages patients to ignore the cost of services.²⁻⁴ Efforts to curb the inappropriate use of medical technologies, however, can have only limited success unless they address the paucity of reliable information about their benefits, cost, and value.

For decades, calls for more systematic assessment of medical technologies and outcomes have gone unheeded.⁵⁻⁷ Recently, however, federal legislators and officials have recognized that better information is imperative. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 mandated research on "outcomes, comparative clinical effectiveness, and appropriateness of health care." The former Medicare administrator, Gail Wilensky, has described alternative structures for a technology assessment organization. Representatives, senators, and presidential candidate have supported legislation to fund comparative effectiveness initiatives.¹⁰

Renewed interest in technology and outcomes assessment efforts can be traced to several factors: disillusionment with traditional cost-containment approaches, deepening anxiety about the safety and effectiveness of drugs and medical care, recognition that little is known about the optimal use of existing diagnostic procedures and treatments, and the explosion in

health care expenditures anticipated as baby boomers age. By 2015, the number of US individuals in their 60s—a decade of heavy use of medical care—will increase by nearly 50%. Simultaneously, because of scientific advances, many new technologies will enter clinical practice. The combination of new technologies and greater use of older medical interventions are the fundamental drivers of increasing health care costs.

Increasing health care costs have induced employers and insurance companies to shift more financial responsibility onto individuals through "consumer-directed" health plans and health savings accounts.¹¹ In addition, private health plans, Medicare, and Medicaid are likely to urge hospitals and clinicians to become agents of cost control. Essential to these efforts to enhance quality and lower costs is comprehensive, objective information about the absolute and relative costs and benefits of medical interventions.

Technology assessment in the United States has been hampered by pressure and limited resources. In the early 1990s, key federal agencies dedicated to technology assessment, such as the Congressional Office of Technology Assessment, were eliminated. Efforts by other federal agencies are fragmented and underfunded. The Department of Veterans Affairs, the National Institutes of Health, and the Centers for Medicare & Medicaid Services have little money for technology assessment.¹²

The mission of the Agency for Healthcare Policy and Research (AHCPR) was technology and outcomes evaluation. But, in 1994, when the AHCPR sponsored research showing that there was inadequate evidence to support commonly performed back operations, its funding was almost eliminated at the behest of disgruntled orthopedic and neurosurgeons and congressional critics of the Clinton health plan.¹³ While AHCPR survived, it was chastened. Its name was changed to the Agency for Healthcare Research and Quality and it has generally avoided controversial issues. Most importantly, little of its small

budget—\$320 million—is dedicated to evaluative research.¹²

State and private technology evaluation activities supplement federal efforts. In 1985, the Blue Cross and Blue Shield Association established the Technology Evaluation Center "for assessing medical technologies through comprehensive reviews of clinical evidence." The Drug Effectiveness Review Project "is a collaboration of organizations [including 13 states] that have joined together to obtain the best available evidence on effectiveness and safety comparisons between drugs in the same class, and to apply the information to public policy and decision making" especially for Medicaid coverage. Private corporations provide similar information for purchasers. Physician specialty societies undertake increasingly sophisticated medical technology assessments and issue rigorous guidelines.

While commendable, these efforts are not equal to the problem. Their sponsors understandably focus on their own needs and priorities, which are largely uncoordinated and far from comprehensive. That is to be expected. Technology evaluations are a public good—they can benefit everyone, not only the organizations that bear the costs—creating disincentives for groups to invest in them.

Essential Elements of an Effective Medical Technology and Outcomes Assessment Initiative

Technology evaluations in health care can provoke controversy, anger, and hostility. A suggestion that a popular or expensive treatment is minimally effective or lacks data on long-term risks could be inimical to the interests of manufacturers, advocacy organizations, physician groups, or other groups, and will be received accordingly. To avoid political opposition, any agency concerned about its future might eschew analysis of topics that affect powerful companies or a large number of patients or clinicians and about which there is considerable uncertainty. In other words, it might avoid the very questions that most need answering.

To mitigate such concerns and facilitate the creation of objective information, any new technology assessment initiative must include 6 features: administrative independence; dedicated funding; production of objective and timely research; use of reliable methods; widespread dissemination; and a governance and organizational structure that lend it legitimacy. 16-18

Administrative Independence. Any technology and outcomes assessment initiative must balance accountability with the ability to pursue the long-term good of the public without inappropriate interference. The Federal Reserve Board is the preeminent model for such administrative independence.¹⁹ It conducts monetary operations and is often considered to

be the federal agency with the most significant influence on the economy. Because it creates winners and losers, the Fed's decisions are inevitably controversial. Yet the Fed generally avoids the perception of favoritism.

What generates the Fed's independence? It is a semiautonomous agency whose leaders are appointed for multiyear terms and cannot be removed at will; its staff are highly trained professionals who conduct independent, objective research to inform decisions; and its leaders regularly brief Congress. These characteristics are essential for a technology assessment initiative.

Dedicated Funding. Annual congressional appropriations, which determine the budgets for most federal agencies, are discretionary. Such funding makes agencies vulnerable to political retaliation whenever they issue controversial decisions.¹³ Conversely, the Fed does not depend on annual congressional appropriations.¹⁹ Similar dedicated funding is necessary to ensure that a program on technology and outcomes assessment could pursue research without fear of intimidation by powerful interest groups.

Funding obtained by imposing a fee on all health expenditures would offer not only stability but fairness, placing the cost for such an initiative on the beneficiaries of its work. Such a fee could be imposed only on health expenditures that are not subject to other taxes—employer-based insurance, Medicare and Medicaid benefits.

Moreover, a substantial funding commitment is needed to conduct a comprehensive set of rigorous assessments rapidly, and to be able to undertake original research and clinical trials. Britain's National Institute of Health and Clinical Effectiveness (NICE) is often lauded as a model of rigorous evaluation of technologies but is also criticized for its slow pace. In part, this is a consequence of NICE's limited size and budget—little more than 200 employees with a budget of just over \$50 million. High-quality work can be done quickly only if the resources equal the task.

High-Impact Research. A credible technology and outcomes assessment initiative must have a well-defined mission: to assess the effectiveness, comparative effectiveness, cost, and cost-effectiveness of drugs, devices, diagnostic tests, medical practices, and procedures as actually implemented in the real world. The technologies being evaluated should be commonly used, of high individual or aggregate cost, subject to rapid change, or for which there are many alternatives and substantial uncertainty about which intervention should be used for which patient population. Topics that might be pursued include the best treatments for metastatic colorectal cancer and multiple sclerosis.

Any initiative should systematically and comprehensively assemble and analyze published and unpublished data, including population and clinical databases. Assessing the overall effect of different care processes as actually practiced also will be important. However, it will often be necessary to sponsor clinical trials and other types of research to generate new data for evaluations.

Trustworthy Methods. A permanent advisory board of distinguished methodologists is necessary to ensure the adherence to validated research methods and dissemination of objective results. A methodology advisory board would be able to resolve methodological controversies and oversee the refinement and development of new methods when appropriate.

Dissemination. Effective communication—of both cost and effectiveness information—is necessary to ensure the widespread and appropriate implementation of the results of technology and outcomes evaluations.^{15,17} The initiative must integrate diverse evaluations and communicate well with professional stakeholders, industry, physicians, and the general public. This requires the development of a standard reporting format for effectiveness evaluations, and the implementation of a formal review process before the final release of official reports. The review should include both internal evaluations and external commentaries.

In Britain, the results of NICE evaluations are binding on the National Health Service. In the current US health care system, binding coverage or medical necessity determinations from a new assessment initiative are neither feasible nor desirable. However, technology and outcomes assessments must directly address the key questions faced by government payers, such as the Centers for Medicare & Medicaid Services, health plans, and professional societies. The evaluations will be particularly important because they are objective and authoritative, and are not produced by a body with direct financial interest in the findings. A critical test is whether practices consistent with the evaluations are sustained as standard of care in litigation.

Legitimacy. Critical to ensuring independence, objectivity, relevance, wide dissemination, and especially legitimacy of the process is a permanent stakeholder advisory board that includes representatives of patients, insurers, employers, physicians, other clinicians, and federal agencies, as well as drug and device manufacturers. Important stakeholders must be engaged in selecting technologies for evaluation, designing studies, and interpreting and disseminating results. Having key stakeholders involved in a transparent process, even one that may generate research results contrary to their interests, will foster greater support for the process, methods, and results.

Technology Assessment and Innovation

Manufacturers of medical technologies, along with many physicians, frequently criticize systematic technology assessment initiatives as a barrier to medical innovation. Their concerns often find expression in rhetoric that conflates new with *innovative* and *latest* with *best.*²⁰ However, novelty cannot be equated with benefit. An intervention's value resides in its ability to reduce mortality, morbidity, or save money, not in its unique mechanism of action. What is needed is better information on whether new tests and treatments really do improve health, how the improvement compares with the effects of currently available tests and treatments, and at what incremental cost.

Better information about effectiveness and costs will almost certainly redirect manufacturers' research and development activities. But *redirection* is not *restriction*. New interventions that offer substantial value will be rewarded with high demand and prices commensurate with their benefits—providing strong incentives for research and development. Conversely, new products that offer no or only incremental benefits will not command high prices. In medical care, as in other industries, new products that cannot prove their worth should not be assured of market success. Those that can should be rewarded generously.

Anewtechnologyassessmentinitiative built on administrative independence, dedicated funding, reliable research, trustworthy methods, wide dissemination, and legitimacy will offer a solid foundation for efforts to balance the benefits of medical technologies and the costs that result from their adoption. But information alone will not be sufficient. Information must be tied to appropriate infrastructure and financial incentives to affect medical practice. Health plans need appropriate incentives to use the information in their coverage decisions. Hospitals and physicians will need incentives to use the information in their treatment decisions. Simultaneously, evaluative research can guide incentives, insurance benefits, and the organization of care, ensuring that efforts to control costs and improve care are firmly grounded in the best evidence. In an era of increasing costs and growing complexity of care, few health initiatives are as important as a substantial program in the evaluation of medical technology and outcomes.

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References

- Borger C, Smith S, Truffer C, et al. Health spending projections through 2015: changes on the horizon. Health Aff (Millwood). 2006:25(2):w61-w73.
- Kessler D, McClellan M. Do doctors practice defensive medicine? Q J Econ. 1996;111(2):353-390.
- Wilkes MS, Bell RA, Kravitz RL. Direct-to-consumer prescription drug advertising. Health Aff (Millwood). 2000;19(2):110-128.
- Sharma V, Dowd MD, Swanson DS, Slaughter AJ, Simon SD. Influence of the news media on diagnostic testing in the emergency department. Arch Pediatr Adolesc Med. 2003;157(3):257-260.
- Bunker JP, Fowles J, Schaffarzick R. Evaluation of medical-technology strategies. N Engl J Med. 1982;306(11):687-692.
- Fuchs VR, Garber A. The new technology assessment. N Engl J Med. 1990; 323(10):673-677.
- Reinhardt U. An information infrastructure for the pharmaceutical market. Health Aff (Millwood). 2004;23(1):107-112.
- Medicare Prescription Drug, Improvement, and Modernization Act of 2003. http://www.medicare.gov/medicarereform/108s1013.htm. Accessibility verified August 22, 2007.
- Wilensky GR. Developing a center for comparative effectiveness information. Health Aff (Millwood). 2006;25(6):w572-w85.
- Medicare Payment Advisory Commission. Report on Medicare payment policy [news release]. http://www.medpac.gov/documents/June_07_ News_release.pdf. Accessibility verified August 22, 2007.

- 11. Robinson JC. Health savings accounts—the ownership society in health care. N Engl J Med. 2005;353(12):1199-1202.
- Coalition for Health Services Research. Federal funding for health services research, December 2005. http://www.academyhealth.org/ publications/fundingreport.pdf. Accessed October 13, 2006.
- Gray BH, Gusmano MK, Collins S. AHCPR and the changing politics of health services research. Health Aff (Millwood). 2003;22:w283-w307.
- Oregon Health & Science University. Drug effectiveness review project. http://www.ohsu.edu/drugeffectiveness/description/index.htm. Accessed May 29, 2007.
- 15. BlueCross BlueShield Association. What is TEC? http://www.bcbs.com/tec/whatistec.html. Accessed October 13, 2006.
- Velasco M, Perleth M, Drummond M, et al. Best practice in undertaking and reporting health technology assessments: working group 4 report. Int J Technol Assess Health Care. 2002;18(2):361-422.
- Hailey D. Health technology assessment. Singapore Med J. 2006;47(3):187-193.
- 18. Pearson SD, Rawlins MD. Quality, innovation, and value for money. JAMA. 2005;294(20):2618-2622.
- Fischer S. Central-bank independence revisited. Am Econ Rev. 1995;85(2):201-206.
- 20. Emanuel EJ. What cannot be said on television about health care. JAMA. 2007; 297(19):2131-2133.





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