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HEALTH AND TAXES
The Economic Report of the President on Improving
Incentives for Health Care Spending

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Michael L. Katz*

*Walter A. Haas School of Business
University of California at Berkeley
Berkeley, California 94720-1900
katz@haas.berkeley.edu*

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INTRODUCTION

U.S. health care spending is large (\$6,280 per capita in 2004¹), and health is a critical determinant of the quality of life. Consequently, there are potentially huge gains to policies that significantly improve the workings of the health care sector, and the objective set out in the title of Chapter 4 is an important one: “Improving Incentives in Health Care Spending.”

In brief, the chapter decomposes the much-discussed growth in health care expenditures into several factors and concludes that a significant component represents inefficient expenditures that arise because many consumers are insufficiently cost conscious. The chapter is particularly concerned that the tax system creates incentives to offer insurance contracts with low deductibles² that give rise to moral hazard. The chapter commends three solutions: tax-preferred health spending accounts; direct constraints on the form of insurance contracts; and improved information for consumers.

Sadly, there is little reason to believe that the policies promoted in Chapter 4 will significantly improve incentives. Economic analysis indicates these policies:

- do not create the claimed tax neutrality regarding employer-provided insurance;
- constrain private contracts in ways that maximize moral hazard for expenditures that are a large share of the total and/or are very likely a key source of spending growth; and
- very likely undermine insurance provision by increasing adverse selection problems.

The remainder of this essay examines the *Report*'s analysis of health care consumption incentives and what the economics of information has to say about these issues.

¹ Kaiser Family Foundation, “Trends and Indicators in the Changing Health Care Marketplace,” Exhibit 1.2, available at <http://www.kff.org/insurance/7031/print-sec1.cfm>, site visited March 24, 2006.

² The deductible is the amount that the policyholder must pay for health care before the policy begins to pay.

THE SYMPTOMS: RISING EXPENDITURES

Health care expenditures as a percentage of U.S. GDP have grown rapidly over the past forty years, and U.S. spending is high relative to that of other industrialized countries. The *Report* decomposes the sources of the increase into three components:

- **Changes in the quantity demanded for existing goods and services.** The *Report* (p. 88) suggests that this is the least important of the three factors, dismissing demand shifts due to higher incomes as a significant source of spending growth and summarizing existing research as showing that the aging of the population can account for less than 10 percent of the growth.
- **Changes in the prices of existing goods and services.** The *Report* (p. 89) identifies rising prices as a source of approximately one quarter of the growth in per-capita expenditures. The *Report* observes that it is difficult to measure quality-adjusted prices for health care and has a rather disjointed and unconvincing discussion of international differences in drug prices.
- **Consumption of new goods and services that result from technological change.** The *Report* (p. 90) concludes that the adoption of new health care goods and services has been a “major” source of spending increase and strongly implies that much of the additional consumption is inefficient. The *Report* observes that the U.S. tends to be an early adopter of new technologies and tends to use expensive technologies more intensively than other nations.

Technological change is generally expected to reduce the quality-adjusted prices of goods and services, even if it results in higher total expenditures. For this reason, few people conclude that innovation in the personal computer industry has been harmful, even though there

has been tremendous growth in expenditures on personal computers in the last thirty years. However, as the *Report* observes, technological change in the health care sector can exacerbate problems that arise due to a lack of consumer (by which the *Report* means “patient”) cost consciousness, which can in turn distort innovation incentives.

THE DIAGNOSIS: “FIRST-DOLLAR” COVERAGE

The *Report* largely ascribes the problem of rising health care costs to a lack of consumer incentives to consider costs in their decision making. And, according to the *Report* (p. 91),

A major reason for this lack of consumer incentive is the fact that many health insurance policies provide close to “first-dollar coverage” of health care costs. That is, people with health insurance typical pay only a relatively small portion of the total cost—or in some cases literally none of the cost—of the health care services they receive.

From the perspective of economic analysis, this is an unfortunate characterization of the problem. Fundamentally, incentives issues concern *marginal* costs and benefits, not total. Another way of stating this point is that the substitution effects of pricing policies, rather than the income effects, are critical for understanding equilibrium consumption distortions. The focus on “first-dollar” coverage as the source of inefficiency also misses the mark. Given the prevalence of schemes with co-insurance rates that vary with the expenditure level, it is important to identify marginal expenditures accurately.³ In an efficient system, virtually everyone would spend at least \$50 per year on a wellness check-up, and the first-dollar would be the marginal dollar for almost no one. If this were simply bad terminology, one could write it off to sloppy exposition. However, the *Report* appears to take first-dollar coverage seriously; it focuses on policies that raise an annual insurance deductible by a few thousand dollars. This is

³ The co-insurance rate is the fraction of the marginal dollar of health care expenditure that is paid by the household. The insurance provider pays (1 – the co-insurance rate).

puzzling given that the *Report* is particularly concerned with expenditures on new, high-tech treatments, which often cost thousands and even tens of thousands of dollars.

Notwithstanding the *Report's* poor characterization of the problem, there is a genuine economic issue present. When consumers face only some of the marginal costs of their consumption decisions, they may modify their behavior in inefficient ways that can lead to three related distortions (*Report*, p. 94):

- **Distorted consumption incentives**, which can lead to overuse of medical goods and services, particularly high-quality, high-cost services;
- **Distorted incentives to search for low prices**, which can lead to a lack of competition; and
- **Distorted provider investment incentives**, which arise as providers respond to the first two distortions.

It is useful to examine these distortions in more depth because they are central to understanding why health care markets perform as they do and what might be done to improve that performance. Consider each in turn.

Consumption Distortions. Health insurance coverage can give rise to inefficiently high consumption levels for health care goods and services. In its simplest form, the distortion is the following. A consumer who pays the full marginal cost of his or her treatment will consume health care up to the point at which the expected marginal benefit is equal to the marginal cost. If there are no other social costs or benefits, then this is an efficient outcome.⁴ Now suppose the consumer faces a co-insurance rate of 50 percent and thus pays only half of the cost of his or her

⁴ The prevention and cure of infectious diseases (*e.g.*, vaccinations) do not satisfy this assumption due to externalities.

treatment. Then he or she has an incentive to increase consumption as long as the expected incremental benefits are greater than one half of the marginal cost. This outcome entails inefficiently high consumption—for instance, the expected benefit of the last unit of health care consumed is only half of the cost of that unit.

In some instances, this distortion takes the form of the consumption of additional physical units (*e.g.*, excessive office visits). In others, where the total number of physical units consumed is fixed by medical considerations (*e.g.*, a disease can be treated by one drug or another but not both simultaneously), the distortion can manifest itself as a bias in favor of high-quality, high-cost treatments. As the *Report* (p. 96) observes, if a consumer bears none of the costs of a higher quality treatment, then he has incentives to demand that treatment as long as there are any incremental benefits, regardless of whether they are greater than the incremental costs.

Insurance coverage can also distort consumption in subtle and unpredictable ways. Consider the effects on the consumption of preventative care. By consuming more preventative care, a consumer is less likely to demand acute care. Suppose that \$100 of preventative care reduces the probability of needing \$7,000 of acute care by .05. Suppose that there is also disutility associated with a preventative care visit and treatment equal to \$250 and that the corresponding figure for an acute illness and treatment is \$4,000. An uninsured, risk neutral consumer would choose preventative care because “spending” \$350 reduces the risk of suffering an \$11,000 loss falls by .05 for a net gain in expected dollar benefits of $\$200 = \$550 - \$350$. A fully insured consumer, however, would not consume preventative care because the benefits are

less than the costs: $.05 \times \$4,000 < \250 .⁵ Different parameter values would yield different results but this hypothetical example illustrates the complexity of the incentive effects and the possibility that insurance coverage can actually reduce consumption of some health care goods and services.⁶

Consumer Search Incentives and Provider Competition. A consumer who bears none of the costs of her health care consumption at the margin has no incentive to undertake costly (and un-reimbursed) search to find lower prices. Hence, if heavily insured consumers are the decision makers, then there will very likely be less price competition among health care providers than otherwise. Typically, one thinks of high prices due to the lack of competition as giving rise to deadweight loss because the resulting consumption levels are inefficiently low. But in the present context, the concern is with the behavior of consumers who are insensitive to price and, if anything, the problem is inefficiently *high* consumption levels.

Instead of suppressed consumption, the deadweight loss from distorted incentives takes another form. Although heavily insured patients bear relatively little of the costs of their care, they are directly and fully affected by the quality of their care. Hence, households have strong incentives to base consumption decisions on their perceptions of quality, and suppliers can be expected to compete primarily on the basis of quality rather than price.⁷ There is an interaction between quality competition and the lack of price competition. In the presence of high margins, suppliers have strong incentives to attract additional customers. In many markets, that is done by lowering prices, which results in lower margins. To the extent that lack of consumer price

⁵ To the extent that consumers are systematically shortsighted in making health care decisions, the bias against preventative care would be even stronger.

⁶ For discussion of these issues and a review of the literature, see Zweifel and Manning (2000, Section 4).

sensitivity keep prices from falling in health care markets, providers will instead compete by raising quality, which will lower provider margins by raising costs. Providers' actions will thus reinforce the consumer bias toward high-cost, high-quality treatment.

Innovation Incentives. Because the two insurance-induced distortions just discussed are static effects, they cannot—by themselves—explain why health care expenditures have been rapidly rising over time. This is where provider innovation and dynamic efficiency effects come into play. There are two types of innovation to consider, process (or cost-reducing) innovation and product (or quality-improving) innovation.

Consider the incentives to engage in product innovation. When a new treatment is introduced, a consumer has incentives to demand that treatment as long as the incremental benefits are greater than the fraction of the incremental costs borne by the consumer. This effect is another version of the over-consumption distortion discussed above. It creates incentives for suppliers to create higher quality treatments with relatively little regard for the cost.⁸ Thus, the theoretical analysis predicts that there will be an oversupply of high-quality, high-cost innovations and that the resulting health care goods and services will be consumed beyond efficient levels.

⁷ I will return below to the issue of what constitutes “quality” from the consumer’s perspective.

⁸ For the reasons discussed below, it is incorrect to assert that innovators will have no regard for cost.

Medical Liability Costs

The chapter contains two boxed sections, one of which addresses medical liability costs. The text asserts that the medical liability system imposes substantial costs and inefficiencies on the U.S. health care system. Whether or not this is true is an interesting and important question. The *Report* sheds little light on the answer.

Perhaps the biggest problem is that no supporting empirical studies are summarized or cited. This is a major omission because there are serious questions whether malpractice awards have the claimed effects.⁹ The problem is made worse by the fact that the *Report* (p. 95) confuses transfers with genuine social costs. Although the transactions costs of the legal system are significant (and may have a significant component comprising unproductive rent seeking), the damage awards themselves are pure transfers from one member of society to another and are not social costs.

Damage awards could, however, indirectly generate welfare losses through effects on provider incentives. The *Report* focuses on potentially harmful incentive distortions (*e.g.*, the incentive to practice “defensive medicine”) but ignores potential incentive benefits (*e.g.*, doctors are held responsible for their actions). This omission is ironic given that the central thesis of the rest of the chapter is that the health care system would be improved if doctors and consumers faced the costs of their actions.

The tradeoff between good and bad incentives arises because of limited information. Reforms that improved the accuracy of liability findings (*e.g.*, greater use of court-appointed experts) would make it possible to reduce the incentives to engage in defensive medicine while increasing the incentives to practice sound medicine. In contrast, caps on the size of damage awards, such as those proposed by the Administration,¹⁰ do nothing to improve the tradeoff.

Now consider the incentives for health care service providers and their suppliers to engage in process innovation. The *Report* (p. 96) is on solid theoretical ground when it observes

⁹ See, for example, Baicker and Chandra (2005) and studies cited therein.

¹⁰ See Medical Liability, available at <http://www.whitehouse.gov/infocus/medicalliability/>, site visited March 23, 2006.

that “dulled price sensitivity on the part of consumers reduces the incentive to develop cost-reducing technologies.” There are two reasons to expect insurance to attenuate cost-reduction incentives. First, because consumers are insensitive to prices, producers’ unit sales do not rise much when price falls, so one benefit of lowering costs is lost. Second, consumers are unwilling to accept lower quality even if it comes at a much lower price. This second point is essentially a version of the product-innovation distortion above.

Although insurance reduces the incentives for process innovation, it is important to recognize that they are not eliminated. Even if there is no effect on its unit sales, a provider still benefits from a reduction in its costs. Indeed, to the extent that insurance coverage leads to higher levels of consumption, unit-cost savings are enjoyed over more units, and the incentives for cost-reducing innovation are increased. Moreover, consumption levels must have some price sensitivity; else, providers would charge even higher prices than they do.

A SECOND OPINION: “LAST-DOLLAR” COVERAGE

The *Report* diagnoses first-dollar insurance coverage—through its impact on the three distortions just discussed—as a significant source of inefficient spending on health care goods and services. It is certainly correct that insurance coverage generally leads to moral hazard and may contribute to inefficient consumption. But the degree to which it does so, and whether these distortions are due to first-dollar coverage deserve careful analysis. Unfortunately, the *Report* does not provide that analysis.

First, the *Report* makes little reference to data in support of its diagnosis. For example, the *Report* states that U.S. per-capita health care expenditures are high relative to those of other OECD countries. It would have been useful to see whether American consumers have more or less access to health care goods and services at subsidized prices for low levels of consumption.

For reasons that will become clear below, it would also have been useful to examine differences in access to very costly treatments.

A second shortcoming of the diagnostic analysis is that the *Report* pays relatively little attention to the overall economic system in which households make health care consumption decisions. Distorted household consumption incentives will lead to significant, inefficient increases in health care spending only if other economic agents do not serve as relatively low-cost substitutes for consumer cost consciousness. Specifically, spending distortions will be mitigated if employers (who typically pay the bulk of the bills) or health care and insurance providers (at least some of whom could profit from a more efficient system) steer consumption decisions toward efficient, low-cost care.

The *Report* simply asserts that other parties cannot play a meaningful role in cost containment. The *Report* (p. 91) declares that “physicians are expected to make health care choices for patients, despite the fact that physicians frequently lack the incentives to match the benefits of care with its costs, and may even lack information about the costs themselves.” The incentives of insurers and managed care providers are similarly dismissed with little thought.

The following is the entire discussion of managed care programs in the chapter:

Another factor underlying first-dollar coverage is the increased use of managed care programs, which spread rapidly during the 1990s. Most managed care plans are characterized by minimal cost sharing, relying instead on gatekeepers to regulate use of resources. Interest in managed care programs has decreased recently, because of public backlash against the cost-containment measures used in these programs. (p. 92)

There is no analysis of whether managed care has been effective or is an efficient response to problems of asymmetric information and incentives. This is troubling because, whatever one thinks of managed care, it is an example of market forces in action. Insurance is desirable, but can give rise to incentive problems. Managed care is a market response to those

problems. Moreover, to the extent that managed care is unpopular because people are resistant to cost-containment measures, the backlash against managed care should serve as a warning for other attempts to limit health care consumption.

The first two points indicate that the *Report's* diagnostic analysis is incomplete, but the next point suggests that it is also incorrect. According to the *Report* (88), “about one quarter of health care in a given year is spent on those who die that year.” Presumably, the expenditures on most of these patients are quite large, and first-dollar insurance is very likely not the issue. Similarly, the *Report* (p. 88, 90, and 91) attributes much of the problem of increasing health care expenditures to spending on high-technology, high-cost procedures. Again, first-dollar coverage seems unlikely to be the source of distortion. Other data also indicate that aggregate spending is driven by households with large expenditures. In 2002, the top one percent of health care spenders accounted for 22 percent of all expenditures, and the corresponding figure for the top ten percent of spenders was 64 percent.¹¹ In contrast, the bottom half of the population accounted for only three percent of total expenditures.¹²

To address problems associated with the consumption of expensive treatments (if indeed they are problems), one would have to have co-insurance rates that remain positive even at very high levels of household health care expenditure; what one might call “last-dollar” coverage. The distinction between first and last dollar is more than nit picking over terminology. As discussed below, the *Report* endorses a policy that, in addition to limiting first-dollar coverage, also forces insurers to set co-insurance rates at zero above a governmentally defined household

¹¹ Yu and Ezzati-Rice (2005).

¹² *Ibid.*

expenditure threshold. The proposed cure, which is based on a misdiagnosis, may actually make the problem worse.

THE PROPOSED CURE AND A NASTY SIDE EFFECT

The *Report* proposes three solutions the problem of insufficient consumer cost consciousness: tax-preferred accounts; direct constraints on the form of insurance contracts; and improved information for consumers.

Tax Neutrality. The *Report* observes that tax policy distorts insurance choices and, thus, distorts certain health care consumption decisions in adverse and unintended ways. These distortions arise because employer-paid health insurance is not subject to personal income or payroll taxes but employer payments to cover health care bills directly are. Hence, *ceteris paribus*, employers have incentives to fund low-deductible health insurance policies for their workers. An example illustrates. Suppose consumer always spends at least \$500 per year on health care goods and services. Consider two scenarios:

- The employer pays \$1,500 for a health insurance policy with no deductible. The employee has no tax liability and pays nothing for health care.
- The employer pays \$1,000 to purchase a policy with a \$500 deductible and pays the employee \$500 in wages. The \$500 would be subject to income tax.

For a given total expenditure by the employer, the employee is better off with the no-deductible insurance policy.

A straightforward way to address this problem would be to make health care expenditures fully tax deductible.¹³ There would be a tax wedge between the relative price of health care goods and services and all other goods and services, but there would be no distortion in the relative price of health care goods and services and health care insurance.¹⁴

Congress and the Administration chose a different path: Health Savings Accounts (HSA). With an HSA, an employee contributes pre-tax dollars to an account that can be spent on health care goods and services. Return to the example above, and compare two situations:

- The employer pays \$1,500 for a health insurance policy with no deductible. As before, the employee has no tax liability and pays nothing for health care.
- The employer purchases an insurance policy for \$1,000 that has a \$500 deductible and pays the employee \$500 in wages. The employee deposits the \$500 in an HSA and spends all of the money on qualifying health care goods and services. The employee would have no tax liability and no additional health care costs.

In this simple example, the HSA is equivalent to making health care expenditures tax deductible.

Actual HSAs and households' consumption decisions are more complicated. First, HSA contributions are not exempt from payroll taxes, so distortions remain. Second, a household's demand for health care is typically uncertain. Suppose a household deposited money in an HSA and then turned out to have low demand for health care. If the household was in a use-it-or-lose-it position, the household would effectively face a zero co-insurance rate on marginal

¹³ At present, health care expenditures are deductible only for households that itemize their deductions, and then only expenses in excess of 7.5 percent of adjusted gross income are deductible. Internal Revenue Service, "Tax Topic 502 – Medical and Dental Expenses," available at <http://www.irs.gov/taxtopics/tc502.html>, site visited March 23, 2006.

¹⁴ For a critical assessment of this reform and analyses of several alternatives, see Gruber (2006a).

expenditures, and the distortions associated with first-dollar coverage would remain. Actual HSAs avoid this problem by allowing households to roll unused funds over from one year to the next. The interest and capital gains are not subject to tax. If the money is withdrawn for qualifying health expenditures, it is never taxed. If funds are withdrawn for non-health care expenditures, they are subject to income tax at the time of withdrawal and—if withdrawn for these purposes before the HSA holder is aged 65—are subject to a 10-percent penalty.

The rollover and withdrawal provisions ensure a consumer does not face a zero marginal co-insurance rate. However, these provisions also vitiate the policy as a means of correcting the tax distortion because an HSA can serve as a tax-advantaged savings vehicle. A person wishing to save more money than the maximum allowable HSA contribution would enjoy tax benefits from having his or her employer offer a zero-deductible health insurance policy; it would allow him or her to leave the principal in the HSA to accrue tax-free interest rather than cover out-of-pocket health care expenditures.¹⁵ In short, the availability of HSAs does not eliminate the tax-induced bias toward low-deductible policies.

Mandatory High-Deductible Insurance Policies. Instead of eliminating the tax distortion, the HSA policy directly requires that employees with HSAs hold insurance policies with high deductibles (at least \$1,050 for individuals and \$2,100 for families).¹⁶ The fact that the policy actively shapes private contracts should raise a red flag. Economists are generally cautious about calling for government intervention in specific markets absent evidence of

¹⁵ Some critics of the HSA program contend that it is largely a tax shelter for high-income families and that Administration proposals to raise the contribution limits will make the problem worse. See, for example, Furman (2006 pp. 5-7).

¹⁶ The minimum deductibles are indexed for inflation. The numbers in the text are the 2006 figures.

significant market failure.¹⁷ In large measure this caution is due to concern that government intervention may have adverse unintended consequences, in addition to generating administrative costs that will be borne, at least in part, by consumers. Clearly, there is a *possibility* of market failure in the health care sector due to: (a) tax distortions, and (b) various forms of asymmetric information. As we have just seen, the HSA policy does not eliminate the tax distortions. Counterfactually, suppose that it did. Would there still be an argument for mandatory minimum deductibles? Economic theory and practical experience strongly suggest that the answer is “no.”

In the presence of asymmetric information and uncertainty, there is a tradeoff between incentives and insurance provision. The fact that this tradeoff arises due to asymmetric information establishes neither that markets are failing, nor that government intervention would improve matters. The relevant standard is information-constrained efficiency: are markets doing as well as one could realistically expect given tastes, technology, and the information structure? With respect to moral hazard, it is difficult to see what the government brings to the market that private participants do not.¹⁸ Absent tax distortions, there are strong incentives for competitive employers and insurance providers to seek efficient contracts, at least with respect to moral hazard.

There is thus little reason to believe that governmental intervention will improve matters, and in fact there is reason to believe that political intervention may make the problem worse.

¹⁷ There is also a consensus among economists that market outcomes are not necessarily fair. A common response is to call for a division of labor in policies under which economy-wide tax schemes are used to redistribute income, and market-specific governmental intervention is limited to correcting market failures or ameliorating their effects.

¹⁸ This point is widely understood among economists. See, for example, Cutler and Zeckhauser (2000, p. 588).

Two examples illustrate. One is the stop-loss feature of the HSA policy. In addition to requiring a relatively large minimum deductible, the policy also requires out-of-pocket expenditure limits of \$5,250 for an individual and \$10,500 for a family.¹⁹ In other words, government policy mandates that private insurance policies must have co-insurance rates of zero for expenditures over these limits in order to qualify for the program. In this way, the policy maximizes the degree of moral hazard for precisely those expenditures that the *Report* identifies as significant and/or problematical.²⁰

The recent implementation of Medicare Part D provides another example. Figure 1 graphs the co-insurance rate as a function of total annual health care expenditures. If the camel is a horse designed by committee, then surely this schedule was designed by committee. It is difficult to believe that the varying co-insurance rates represent an optimal solution to the moral hazard problem. For example, once the \$5,100 threshold has been crossed, there is relatively little incentive to avoid expensive treatments even if they have little incremental benefit over less expensive drug therapies, but there are very strong incentives to minimize costs when choosing among a set of less expensive drugs. Political expediency is probably a better explanation of the program's features: the relatively low deductible implies that many potential voters will receive some benefits, the low co-insurance rate above \$5,100 protects people from truly catastrophic bills, and the high co-insurance rate in the middle—known as the “doughnut hole”—reduces the overall cost of the program to a politically acceptable level (although it also reduces benefits).²¹

¹⁹ The caps are indexed for inflation. The numbers in the text are the 2006 figures.

²⁰ For a discussion of optimal co-insurance rates in the face of moral hazard, see Cutler and Zeckhauser (2000, Section 3.1.3).

²¹ Mays et al. (2004, p. v) projected that 64 percent of Part D participants would have expenditures exceeding the \$250 deductible in 2006. Ten percent of the participants, almost a third of those under the \$250 deductible, were projected to have no drug spending at all in 2006 (p. 17).

The fact that governmental intervention is unlikely to solve moral hazard problems does not mean there is no role for government to play in addressing problems that arise due to asymmetric information. It is well known that competitive insurance markets can perform poorly (relative to information-constrained efficiency) in the face of adverse selection.²² Here, unlike the case of moral hazard, the government brings something to the table that private parties cannot replicate on their own: the coercive power of the state. In this sense, the *Report* has things exactly backward; the recommended intervention focuses on moral hazard when it should focus on adverse selection.

Indeed, not only does the HSA program fail to ameliorate adverse selection problems, it is likely to make them worse by encouraging employers to offer high-deductible policies.²³ Relatively healthy workers can be expected to choose high-deductible policies, which will undermine pooling. With the breakdown of pooling, people who are unlucky enough to have predictably high long-term health costs will not be insured against these costs. The *Report* (p. 102) recognizes this problem:

some chronically ill individuals with persistently high spending may be relatively worse off, to the extent that high-deductible policies lead to less cross-subsidization from healthier people in their risk pool. This could be mitigated while preserving the beneficial effects of cost sharing, for example, through improved insurance benefits for the chronically ill, differential premium cross-

Mays et al. (2004, p. v) projected that 24 percent of participants would have 2006 expenditures exceeding the \$2,250 and, thus, would have expenditures falling in the doughnut hole.

²² For a discussion of adverse selection in health insurance markets, see Cutler and Zeckhauser (2000, Section 6).

²³ Encouraging a move away from employer-sponsored health plans and toward individually purchased plans will also worsen the problem. Although it is difficult to construct an argument that employer provision is the optimal means of offering health insurance, employer plans do have an important advantage: they are group plans and thus avoid some selection problems. For a discussion of how Administration proposals to expand the HSA program could hasten the move away from employer-provided insurance and raise the number of uninsured households, see Furman (2006) and Gruber (2006b).

subsidies in employer insurance, or targeted high-risk-pool subsidies in the individual market.

The *Report* (p. 104) notes the Administration's proposal for several steps to assist the chronically ill, including allowing all out-of-pocket expenses to be paid tax-free through an HSA, allowing employers to make larger HSA contributions for their chronically ill employees so that employers can make HSA-qualified plans equally attractive to all employees regardless of health status, and having \$500 million in annual grants to states to experiment with subsidizing insurance for the chronically ill. There is, however, no assessment of whether these measures are likely to be implemented or would solve the problem. For instance, is it reasonable to expect employers to make larger HSA contributions for their chronically ill employees?

Improved Consumer Information. The *Report* (p. 104) correctly observes that stronger consumer incentives are more likely to improve market performance if consumers are well informed. The *Report* (pp. 104-105) also suggests that improvements are needed in several areas but offers little analysis of why valuable information is not already provided. It is useful to consider in turn three types of information identified by the *Report* as being in need of improvement.

One type is provider quality data. As discussed above, consumers have strong incentives today to seek information about provider quality. Yet evidence suggests that consumers make relatively little use of systematic data. Instead they rely heavily on the experience of friends and relatives, who constitute very small samples and cannot provide expert evaluation of the quality of treatment.²⁴ Consumers frequently focus on characteristics that are unrelated to health

²⁴ See, Kaiser Family Foundation et al. (2004), Bigley et al. (undated), and Werner and Asch (2005). There is some indication that consumers are increasingly using more systematic data.

outcomes, such as physician demeanor or the convenience of office hours. Despite consumers' strong incentives to care about quality, many health care analysts consider medical quality to be low, and tens of thousands of people die each year due to medical mistakes.²⁵ The *Report* fails to identify any reason to expect that higher deductibles will lead to improvements in this area.

The *Report* also does not address the powerful selection issues that make objective quality ratings difficult to construct. For instance, does a hospital have a high rate of deaths following heart surgery because it is a poor facility, or because it is so good that all of the most difficult cases are brought to it? When quality indexes do not fully correct for selection problems, which inevitably they will not, incentives are created for health care providers to game the system. At least some studies suggest that public "report cards" based on clinical outcomes have had the unintended consequence of inducing health care providers to turn away or transfer the most severely ill patients.²⁶

The *Report* (p. 105) does offer a theory of why the market equilibrium may entail inefficiently little information on the effectiveness of alternative treatments and technologies. It argues that information about effectiveness will lead to a free-rider problem because of public good aspects, by which the *Report* appears to mean that such information is non-excludable and non-rival. This analysis is correct for technologies or treatments for which there is no holder of proprietary rights (*e.g.*, a generic drug). The situation is very different, however, for a treatment that is provided by a single firm. That firm has strong incentives to disseminate research that shows its treatment is effective. Indeed, because the firm ignores adverse effects on competing

²⁵ In a widely cited review, Kohn et al. (2000) estimated that as many as 98,000 patients a year die from medical errors in American hospitals.

²⁶ See Werner and Asch (2005).

treatments, the firm may have socially excessive incentives. Of course, the firm's incentives to generate and publicize information that its treatment is ineffective are too low from a social perspective. This discussion indicates that the *Report* should adopt a more nuanced or targeted view when calling for governmental provision of cost-effectiveness studies. Specifically, such studies should focus on non-proprietary treatments and technologies. Moreover, for proprietary treatments and technologies, there are interesting policy questions regarding whether to require mandatory disclosure of all studies conducted.

Lastly, the *Report* calls for greater dissemination of pricing information, including the rates negotiated between insurers and health care providers. In doing so, the *Report* ignores the possible problems that increased transparency could create. In other contexts, economists have emphasized that a degree of secrecy about prices and costs may promote competition by creating pressures for special deals and making producer coordination on prices difficult. Making public the results of otherwise private negotiations between insurers and health care providers may limit insurers' abilities to obtain favorable rates and, in some circumstances, may facilitate collusion.

CONCLUSION

Economics can shed considerable light on issues of asymmetric information and incentives that are central to the provision of health care. Two central lessons of information economics are that governmental intervention in health care markets is likely to be relatively ineffective at addressing problems of moral hazard but might contribute to solving problems of adverse selection. Another important lesson derived from both theory and experience is that policies almost inevitably have unintended consequences. Unfortunately, these lessons and others appear to have gone unheeded.

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Figure 1
Co-Insurance under Standard Medicare Drug Benefit (Part D) in 2006

