

## Cost efficiency and coverage problems in US Healthcare

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### Introduction

Experts from both sides of the political spectrum in the United States agree that the healthcare system is in trouble. Overall, the U.S. healthcare system costs more and achieves less, per capita, than systems in other OECD nations. Opinions vary strongly, however, on the best solution to the problem. Some argue that public provision would be best able to provide universal coverage with lower prices. Others argue that only the market could ensure efficiency.

The healthcare debate in the U.S. is further complicated by lobbying activity to protect existing interests. Health insurance companies argue strongly against any form of public provision, claiming such arrangements would make them unable to compete. Doctors' organizations, pharmaceutical companies and hospitals also maneuver to ensure that any new legislation would not hurt them.

Rather than build a full-scale merit comparison between the American and other industrialized countries' approaches to healthcare, we simply argue that the U.S. adherence to private insurance does not address the goal of efficiency either with regard to the objective of the simply understood "economic" cost-benefit calculation, or in terms of maintaining some normatively set level of accessible care at the lowest cost.

The U.S. at present defines its goals insofar as healthcare is concerned not normatively, but via the on-going political process. Currently, the central focus in this process is on cost controls rather than the extent to which politically set standards for care are met. Attempts to create legislation in the U.S. that balances political demands with efficiency are daunting and in practice generally result in sacrificing some of the goals to satisfy

pressure groups. Here we approach the issue of efficiency alone, explicitly ignoring political constraints.

### Healthcare system challenges

The healthcare system in the U.S. seemingly has the mandate to meet the goal of universal provision. However, since it is not defined at the constitutional level mandating implementation, the level of mandated provision remains open to legislative determination even if the current reform law continues to withstand constitutional scrutiny.

There are over 50 million people uninsured in the U.S. (Wolf, 2010), and those who do receive treatment have overall higher costs of care. According to OECD Health Data 2011, in 2009, the U.S. expenditures on healthcare were 17.4% of GDP, more than any other country in the OECD. In terms of total expenditure per capita, the U.S. was again the highest, spending, in 2009, \$7960 per capita. About a third of U.S. health spending was government spending (Wood, 2011).

These high expenditures in the U.S. do not necessarily come with higher returns or even higher provision indicators. The number of doctor consultations per capita in the U.S. in 2008 was at the low end of the OECD countries, with 3.9 per capita, whereas Finland had 4.3 per capita and the Netherlands had 5.9. (OECD Health Data 2011). Additionally, infant mortality rates in 2008 were 6.5 per 1000 live births, whereas they were only 2.6 per thousand in Finland. It is difficult to argue that Americans spend more and also obtain more. Whereas the wealthiest Americans with the best health insurance have high quality coverage, this quality does not extend to the general population.

### Private Coverage

Private coverage is considered the baseline form of healthcare funding in the U.S., even though the most vulnerable populations, the elderly, the disabled, and the economically disadvantaged (when they qualify) are covered via single-payer Medicare and Medicaid. Given the high costs of healthcare, suggestions for curbing expenses with market mechanisms continue to receive substantial political support. However, a closer look at healthcare as an economic sphere exposes what fundamentally is the “market failure,” the inability of traditional market mechanisms to do their magic and generate socially efficient outcomes.

The market approach to healthcare provision (via commercial insurance) was supposed to provide free market efficiencies in controlling costs and in increasing quality in two main ways: 1) through competition, and 2) in avoiding overconsumption. We evaluate these issues to understand the limits of use of the market in health coverage.

### Competition

A common policy error equates privatization with the free market. A free market system has a higher level of efficiency – lower costs and higher quality – than any other system, however many assumptions must hold for a free market to exist. Among these, there must be free entry into and exit from the market, information about all prices, qualities, etc, so that firms and consumers can make informed decisions, and no market power – no firm or consumer has the ability to affect the price. Violations of these assumptions undermine the efficiencies of the free market. Ironically, none of the mentioned assumptions hold for the health insurance market in the United States.

Given the high risks associated with health insurance, due to the presence of extremely high-cost outliers in the risk pool, health insurance firms must have a large risk pool. Thus, health insurance firms have

increased in size. Free entry into this market is prevented by the growing size of the necessary starting insurance pool. This is a problem that is not unique to the US, but one that concerns all health insurance companies.

Insurance companies’ customers’ needs will grow as new medical advances become available and given the legislation that bans exclusion due to pre-existing conditions. Exit becomes socially unacceptable, as insurance companies expand in size, due to the severe social consequences related to this exit. Large numbers of people would be left without insurance coverage, and those who had been employed by the company would be without work. Insurance companies have become ‘too big to fail.’

Information is limited, even where the nature of the insurance product is concerned. Most health insurance in the U.S. is provided by employers. Coverage is generally negotiated with one insurance company. Customers are not given competing bids and information from all possible health insurance companies. Instead, they are usually offered a choice of plans from one company. Even this choice is designed to be complex, so that consumers cannot make price comparisons. Thus, information is reduced, rather than increased.

But even more distorted is the information state with regard to what the consumer’s preferences themselves should be, as neither the future diagnosis nor the optimal treatment – nor what coverage package would be ideal - are within the grasp of the consumer herself. The lack of full information on the part of the customer is a general problem in private health insurance.

The assumption of no market power not only fails to hold, but has been explicitly negotiated away. Health insurance companies have demanded and received provisions from the U.S. government to reduce the effects of competition. Under the 1945 McCarran-Ferguson Act, health insurance companies are exempt from antitrust regulation. (Varney, 2009) The American Medical Association reports that mergers in the health insurance

market have further reduced competition; in most metropolitan statistical areas, one insurance company dominates the market. (Deem et. al, 2007, 1) Given market power, with limited competition, simple economic intuition predicts that insurance companies will take steps, such as increasing prices, to increase profits. This has been the case. Premiums have increased for consumers, without an increase in coverage (Deem et al, 2007, 1).

The profit motive entails further impacts. Health insurance companies sell policies that cover some proportion of a person's medical expenses in the event of need. A sick or injured customer costs more to the company than a healthy one. This is part of the risk-pooling activity involved in insurance. The unused premiums from the healthy fund the excess expenses of the ill. But, a profit maximizing insurance company could reduce costs if it could exclude the most costly cases. When information was available, insurance companies in the U.S. understandably did just that. Companies were able to identify customers with evident long-term expenses and created policies to limit these costs: refusing to cover 'pre-existing conditions' (illness or injury that occurred prior to coverage with a given company), setting lifetime limits or placing arbitrary caps on coverage, and engaging in 'cherry picking' – selecting the lowest-risk customers. All of this activity is consistent with the profit motive and should be expected in the absence of policies to prevent it.<sup>1</sup>

Clearly market incentives cannot both decrease costs and establish universal coverage. Policies that have been enacted to force the companies to accept insures with preexisting conditions or known risks, in turn, are inconsistent with the market-competitive functioning of an insurance firm and require its transforming in a different type of an economic

agent, with unclear properties with regard to its ability to improve efficiency. It remains to be seen whether these types of rules would sufficiently improve the healthcare system. We will return to this issue.

Is Healthcare a Regular Consumption Good?

Incentives to decrease "overconsumption" of healthcare are another motivation behind the use of the market in health insurance. There is evidence that some healthcare (including medication) used in the U.S. is unnecessary, however it is difficult to distinguish whether this excess use is due to 'Cadillac plans' for wealthy insurance holders, or due to doctor incentives to prescribe more treatments, given fee-for-service salaries. The difference is important; the first case entails a consumption problem and the second an information problem. Only the first case can be addressed by passing costs to the customer.

Many economists treat healthcare as a typical consumption good. Articles refer to 'health consumption' (Burtless and Svanton, 2010) and argue that this consumption is exaggerated because part of it is covered by employers and/or tax subsidies (See Burtless and Svanton, 2010; Pauly, 1986, among others.) Given this focus, suggestions for coping with healthcare costs are similar to those for other goods. A person takes price into account when deciding how much of a given good to consume - consuming the good up to the point where the price is equal to his value for the good. Applying this logic, if healthcare costs are increasing, we could raise prices of healthcare services and the consumer will then opt to do without. Evidently, such an approach is hugely problematic given the shown effectiveness of early treatments. Some consumers save money by going without preventative care, resulting in a later need for more expensive care.

Moral hazard is inevitably an issue for cost-minimizing insurance companies. Pauly (1986, 640) defines moral hazard in healthcare as either when the purchase of insurance

<sup>1</sup> Elements in The Affordable Care Act passed by Congress and signed by the President in 2010 should eliminate many of these practices, however, at the time of writing, the future of this law remains unclear.

decreases incentives to take preventative health measures or when the purchase of health insurance leads an individual to spend more resources treating a health problem. To correct for this potential, many insurance companies require customers to bear part of the cost of services, to give them incentives to avoid inefficient use of services.

The suggestion may seem reasonable, but a closer look reveals problems. Evidence shows that many people do not have the medical information necessary to decide for themselves which services are necessary and which are not. Results from a RAND corporation experiment show that high levels of co-pays for health insurance will induce people to use less healthcare, but not necessarily in an efficient way. (Gladwell, 2005) Many of the services neglected were necessary and using them could have decreased, rather than increased, overall costs.

So do people consume too much healthcare if they can? Pauly notes (1986, 636) that people who are insured for only part of the year use ambulatory care twice as much while insured than while uninsured. These results imply excess consumption; however Currie and Gruber's (1996) give a different perspective. They find that given a greater opportunity, via extended Medicaid, to use health services, more people do so, but that the effect was positive – a decrease in child mortality. This potential means that a blunt focus on decreasing overall healthcare consumption is misguided. Increased use may not indicate overconsumption but need.

Consider preventative care, which significantly increases efficiency both financially and in improving the health of the populace – it allows doctors to detect and treat problems early, before they become emergencies. If customers bear co-payments and other costs for preventative and early care, we may discourage its use. A gigantic expense in American healthcare comes from emergency room visits and extended hospital visits. Many of these ailments could have been covered at

lower expense – and suffering – if they had been treated before they became serious.

It is equally obvious that such an approach clashes with the normative aspect of the policy goal: since a healthy population is desirable for the society as a whole, then steps should be taken to ensure that healthcare consumption is not discouraged (and rather is encouraged at the lower cost access point), and instead to focus on discouraging inefficiencies in healthcare provision.

Taking the arguments reviewed above to their logical limit, does the refusal to purchase insurance at the price offered mean that the consumer's value for healthcare coverage is far below that of other possible purchases? Healthcare reform opponents claim that many of the currently uninsured in the U.S are people who would rather purchase other things than health insurance. Such a view sadly distorts the painful choices that consumers are forced to make. Most of the uninsured are the working poor – people who often desire health insurance but either do not have employer-provided health insurance, or who cannot afford it.

#### Information Problems

Cost control is further complicated by the possibility that increased use of services can be motivated by physicians. The literature provides numerous examples of medical services performed without real marginal benefit. Many of these are for services such as coronary angiography, angioplasty, or coronary artery bypass surgery. (Pozen and Cutler, 2009, 5; Glied, 2003, 127) The types listed are dangerous procedures which are also painful. This fact undermines some of the claims of 'consumption enjoyment' obtained by these excess services and highlights a key problem with the policy of passing the costs to the consumer – information asymmetries.

Enthoven (1993), Rossiter and Wilensky (1984) and others note that the fee-for-service salaries of doctors provide incentives for doctors to prescribe excess treatment to

increase their own profits. Doctors have more information than their patients regarding the necessity of these services. Even if doctors' motives are in question, cost mechanisms that force patients to override doctors' recommendations and make uninformed and potentially frightening decisions under financial pressure are unlikely to improve either efficiency or health outcomes.

#### Fixes to the Private System

To maintain a private health insurance system with universal coverage, one could implement rules that would correct the flaws discussed above. One requirement would be to make insurance purchase mandatory for everyone. Another would require that all insurance companies must accept any and all applicants, regardless of risk. All insurance companies would have to provide a basic coverage package.

These changes, however, create new problems that must be addressed. If no insurance company may select customers, some form of compensation must be available to balance for the large risks associated with less healthy customers. This type of support system can be organized by the government or by private reinsurance firms. A third option would be for the government to directly compensate a company for any losses to these companies that occur due to compliance with such restrictions. This can be done through underwriting financial risks or through a per-patient allocation to the insurance companies, adjusted according to the condition and treatment needs of each patient that it covers. Any profits can be kept, and competition in terms of additional insurance packages would be allowed. But since losses will be compensated, the state will also move to cap the potential profits at a regulated level.

In terms of incentives, both underwriting and allocations remove the risks of taking on sick customers, and thereby facilitate universal coverage. However, each provision adds to overall costs and creates almost insurmountable information problems

between the company and the government. Combined with the individual administrative costs per company and the cost of monitoring and regulating the companies, the overall cost of this system is immense.

The mandate for all customers to purchase health insurance also creates problems. Ideally, the market creates efficiency, because customers use information about price and quality of to select a firm that offers the best total package. However, some customers will be unable to afford any insurance package, and must be subsidized. Subsidies can be designed that patients pay only a percentage of their income, and the difference between that percentage and the price of the insurance they wish to purchase can be supplied by the state directly to the insurance provider. This ensures coverage, but decreases incentives to shop around for the best (lowest-price) policy, decreasing efficiency. If addressed by requiring that subsidized individuals select the lowest price insurance, low-income individuals would be clustered in given firms, potentially leading to lower quality coverage for this group.

The above discussion highlights a key point. The regulations, monitoring, and subsidies involved in enforcing universal coverage in a private insurance system are expensive. Thus the goal of universal coverage could be met, but only by sacrificing the goal of efficiency.

#### Single Payer Systems

Single payer systems are premised on the long-term normative mandate to offer care to all without requiring that any given individual would directly engage in arranging for her healthcare coverage. Though the vagaries of the political process still apply on the margins, there is the long-term expectation of some consistent application of the basic principle and entitlement to accessible care. Evidence shows that on the whole and over time the outcomes are not made worse by the use of the single-payer system. Efficiency in provision is

comparable, though mechanisms vary and depart from the market.

Single payer systems are given less positive attention by economists because, being publically funded, they lack the cost-minimizing incentives that exist in private health insurance. This lack has the potential to lead to waste, if the system is poorly managed. Yet single payer systems also have the potential to avoid many of the problems detailed above.

Single payer health systems are generally taxpayer funded and provide universal cradle to grave coverage. These systems can differ with respect to design. Many of them provide a basic package of healthcare services and have a focus on preventative care. These systems have a huge advantage in pooling the costs and risks of the entire population. They also reduce other costs. Reinhardt (2007, 40) notes that single payer systems outperform their counterparts in administrative costs. He notes that in 1999, the U.S. spent \$1059 per person in administrative costs against \$307 per person in Canada.

The single payer system, as in the case of private provision, faces the constant need to manage costs. A variety of mechanisms are created to meet this goal, the most notorious of which are waiting lists and rationing of services. Both mechanisms actually exist, in some form, in private systems also. The term 'waiting list' is not used in private insurance systems, but patients nonetheless must wait for available appointment times in their doctors' schedules. Additionally, rationing exists in the private insurance system. Many patients without health insurance simply do not receive care, without waiting lists and even though the care is available. Reinhardt (2007) highlights that rationing in the single-payer system is done on the basis of need, whereas in the private market, it is done on ability to pay, and need does not play a role.

If universal provision is a goal, then, Summers notes, the alternatives to public provision are likely to fall short. (Summers, 1989, 181) Mandating the level of benefits may avoid some inefficiencies, and may yield a

better match to true preferences. Summers, however, notes that these would only cover the insured (in this case, the insured would be mainly those who were insured through their employers.)

### Conclusion

The discussion that we offer is intended to demonstrate the disparity between free market assumptions in healthcare and realities. There is no free market in US healthcare, and free market assumptions will not hold in private health insurance. Attempts to regulate the market while ensuring universal coverage are possible, but are expensive.

Our discussion regarding organization of the public health sector is intended to raise more questions than it answers. Despite traditional economic doubts regarding public provision, single payer drawbacks are avoidable and could be reduced through design of intra-organizational incentives in the industry.

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