Health care reform or more affordable health care?

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ABSTRACT

This article investigates the impact on the U.S. economy of making health care more affordable. We compare health care cost reductions with the Patient Protection and Affordable Care Act (ACA) using a rich life cycle general equilibrium model with heterogeneous agents. We evaluate a wide range of cost reductions ranging from 0.64% (realistic and feasible) to 29.5% (equivalence with OECD). Our results show that the ACA is more effective in reducing uninsured population than all cost reductions considered. This result holds throughout the life cycle and for the most fragile part of the population: the poorest, the less educated, and those with bad health. Realistic and feasible cost reductions are less welfare improving than the ACA. The increase of welfare induced by the reform is around 7.8 times higher than the increase provided by cost reductions. Besides, the poorer are more benefited than the richer after the reform, while the opposite occurs after cost reductions. Finally, to obtain the same welfare increase of the ACA, medical costs have to decrease by 5.21%, a very hard task. These results provide support for the ACA against opponents who might present cost reductions as alternatives.

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1. Introduction

Health care costs in the U.S. are very large compared to other OECD countries and have been growing very rapidly.[1] Several possible explanations for this fact have been studied in the literature: aging population and expansion of health insurance (Newhouse, 1992), growth of income per person (Hall and Jones, 2007), medical malpractice and defensive medicine (Mello et al., 2010), administrative complexity of the health care sector (Cutler and Ly, 2011), and technological growth in health care (Chandra and Skinner, 2012). Although there is no consensus about what causes the problem, a very well documented fact is that prices of health care goods and services in the U.S. are high, continue to grow, and can explain most of the total spending (Aaron and Ginsburg, 2009; Anderson et al., 2003; Keehan et al., 2008; Koechlin et al., 2010; Moses et al., 2013; Squires and Anderson, 2015).

A negative side effect of high medical costs is the financial damage due to health problems. This issue is amplified in the U.S. because of its historical high share of uninsured population: 13.1% in 2010, according to the Medical Expenditure Panel Survey (MEPS). Medical bills are often reported as the main cause of personal bankruptcies, and accounted for about half of

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[1] See Section 2 for detailed stylized facts.

all bankruptcies in 2001 (Himmelstein et al., 2005) and about 62% in 2007 (Himmelstein et al., 2009). Therefore, estimating the welfare benefits associated with health care cost reductions is of fundamental importance for policy.

To address this issue, on March 23, 2010, President Barack Obama signed into law the Patient Protection and Affordable Care Act (ACA). The primary objective of the bill is to increase health insurance coverage in the U.S. by making health insurance more affordable. To achieve this goal, among many features, the ACA created a health insurance marketplace where Americans can purchase federally regulated and subsidized health insurance, expanded the Medicaid program, and introduced a mandate where Americans are required to be covered by some health insurance. However, this reform does not directly deal on making health care goods and services more affordable. Instead of increasing public expenditures on health insurance, regulating the private insurance market, and forcing Americans to purchase insurance, the reform could have focused on policies that would reduce health care costs.

In addition, the ACA is not capturing the important link between high health care costs and high share of uninsured population. After all, higher costs are reflected in higher insurance premiums, leading to a high share of individuals without insurance. By this reasoning, cost reductions could increase the share of covered population, and increasing the share of insured people without dealing with cost reductions may be a way of acting on the consequences of the problem, and not on the cause. Besides, cost reductions can have a potential positive welfare effect by alleviating the budget of individuals.

Therefore, a comparison between the ACA and cost reductions is necessary in order to shed light if the implemented reform was indeed the best solution. Important questions with respect to public policy can be raised. Which would further reduce the uninsured population, the ACA or more affordable health care? In addition, which would be better in terms of the welfare of individuals? What is the long run impact of these policies on government budget? Which cost reduction would be equivalent to the ACA regarding the welfare of individuals?

To answer these questions, we build and simulate a life cycle general equilibrium model with heterogeneous agents. This economy consists of a large number of heterogeneous agents, competitive production and health insurance sectors, and a government. Agents differ by age, education level, health status, asset holdings, medical expenditures, labor productivity, average lifetime earnings, employer-sponsored health insurance (EHI) offer, and health insurance coverage. There are uncertainties regarding the age of death, health status, medical expenditures, labor productivity, and EHI offer status. Agents choose consumption, labor time, next period's asset holdings, and next period's health insurance coverage. Medical expenditures are costly relative to consumption. Five types of health insurance coverage are available: Medicare, Medicaid, employer-sponsored health insurance (EHI), individual health insurance (IHI), and no insurance. Premiums of private insurance contracts are endogenous. Retirement is exogenous and income tax is progressive and follows the current law for tax benefits on health insurance and medical expenditures.

The model is calibrated to the U.S. economy before the introduction of the ACA, and is able to reproduce very closely the health insurance coverage and some key macroeconomic variables. In particular, the model reproduces the high share of uninsured population and the fact that most of the population purchases health insurance through the employer. We then simulated the model considering five changes introduced by the ACA: premium tax credits, individual mandate, Medicaid expansion, individual health insurance regulation, and the increase in income threshold for claiming deduction of medical expenses in income tax. These changes were simulated individually, to capture the net effect of each one, and then together, to capture the effect of the reform as a whole.

Cost reductions were implemented through exogenous decreases in the relative price of medical expenses to consumption, a strategy similar to Attanasio et al. (2010).[2] This choice is a compromise between evidence and model complexity, and can be justified as follows. As shown in Section 2, prices seem to be the main driver of medical expenses' growth over time. Furthermore, following most of the quantitative macro-health literature (see below), we modeled medical expenses as exogenous shocks, abstracting from the fact that individuals have some degree of control over their medical expenses. This creates no room for endogenous health care prices. We did so because medical expenses to a significant extent represent exogenous shocks. Preventive medicine, the portion that people really choose, has a low rate of use.[3] Besides, costs are not the only or main reason for this low usage.[4] Our goal here is to quantify the effects of more affordable health care using the relief in the budgets of individuals and government as the main mechanism.

To carry out a realistic and politically feasible cost reduction experiment, we implemented the estimates calculated by Liu et al. (2014), which is a Rand Corporation project that identified fourteen ideas for relatively focused changes that would generate health care cost savings at the national level. Their estimates amount to an annual cost reduction of 0.64%. Then, as a benchmark to compare the U.S. with other OECD countries, we applied the reduction in per capita health care expenditures required to bring the U.S. to the OECD trend in 2010. This amounts to a reduction of 29.5%. We call these

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[2] Attanasio et al. (2010) also exogenously changed the relative price of medical expenses to consumption in order to simulate, using a general equilibrium model, how the growth projections of health care costs affect alternative funding schemes for Medicare.

[3] Using MEPS data, and controlling for income quintiles, Tables 1 and 12 of Ozkan (2014) show that the average number of years since respondents' last usage of some forms of preventive care is high. For additional references, see Partnership for Prevention (2007), Maciosek et al. (2010), and America's Health Rankings (2016).

[4] According to Partnership for Prevention (2007), other important factors are the failure of providers to manage their patients regarding preventive medicine, limited investment in developing a prevention-oriented health care workforce, limited training for doctors and other health care providers in delivering preventive care, and lack of information from the public about what preventive services are recommended.