Coalition of Patients and Government-Regulated Private Health Insurance Company in Equilibrium

Sankarshan Acharya[1]
University of Illinois at Chicago
Email: sacharya@uic.edu

First Draft: September 20, 2013. Revised September 25, 2013

Abstract: This paper models a free market economy with coalitions of net-worth maximizing medical doctors, healthcare providers, insurers and patients and a not-for-profit and constitutionally fair government. To reflect the reality, the model considers two groups of patients (including potential patients). The first group is sufficiently endowed to own and operate healthcare providers and insurers. The other group is not endowed enough to own and operate healthcare providers and insurers. The model shows that a *Government-Regulated and Private Health Insurance Company (GRAPHIC)* with private equity and private debt emerges to attain equilibrium (long-term stability) in the economy. The *GRAPHIC* may sound like the "public option" that has been considered but rejected by the US government. But the *GRAPHIC* obviates the entry of government in health insurance business. The recently passed Affordable Health Care Act (AHCA) may have achieved its goal of universal healthcare, but it still cannot restore stability in the economy because the model implicit in AHCA is suboptimal for the less-endowed patients and unsustainable in equilibrium.

The systemic change in medical care proposed in this paper would enhance public health by alleviating the burden on finance (of households, employees and employers) as well as on the medical care system. This will ultimately improve public health and make the system viable in the long-run.

[1] I am thankful to Kalpana Acharya for suggestions and comments. This paper is continually updated at http://pro-prosperity.com/Research/Coalition%20of%20Patients.pdf

I. Model

Consider Model-1 of a free-market economy comprising (a) associations (coalitions) of medical doctors, (b) coalitions of healthcare providers, (c) coalitions of health insurers, (d) a not-for-profit, constitutionally fair government which seeks to minimize its cost of operation and (e) two groups of patients including potential patients–one is endowed sufficiently to own and operate businesses of healthcare providers and health insurers and the other is not endowed enough to own and operate such businesses. We call these groups endowed and less-endowed. Assume that all patients, doctors, healthcare providers and health insurers maximize their respective net-worth, directly and indirectly (via lobbying with lawmakers).

Now introduce Model-2 which does not have coalitions of less endowed patients. This model is a restricted version of Model-1 and does not, therefore, represent a completely free market economy.

Assume that the endowed patients that own healthcare providers and insurers incur no cost of research on medical procedures needed for treatment of their ailments; they obtain all relevant information on their treatments freely. The less endowed patients, however, incur costs of research for relevant information on their treatment. It leads to the following theorem:

<u>Theorem 1</u>: Model-2 will not prevail in equilibrium.

<u>Proof of Theorem 1</u>: Suppose that the cost of research on whether a medical procedure is necessary for treatment of some ailment is x and that the number of less-endowed patients in the economy suffering from this ailment is n. In Model-2, the cost to all the less-endowed patients will be nx, while in Model-1, the cost will be simply x because these patients can form a coalition to incur the cost once. This means that the less-endowed patients will prefer to form a coalition to reduce the cost of their research on the necessity of a medical procedure and Model 1 will prevail in equilibrium. $\blacksquare$

Discussion: Despite the coalition of the less-endowed patients in Model-1, the net-worth maximizing endowed patients who own the healthcare providers will maximize their net-worth by setting as high a price of healthcare as the less-endowed patients can pay, i.e.., up to the last penny of incomes earned by the less-endowed patients. The prices for healthcare thus set will be barely affordable, as the current system in the US shows. The health insurers–owned by the endowed patients–will basically reflect these barely affordable healthcare prices as insurance premiums. Existence of many private insurance companies will still make the healthcare price barely affordable. High healthcare prices will keep the economy perpetually unstable (state of disequilibrium) as the coalitions of less-endowed patients learn more and more about the disadvantage leading to a transfer of most of their incomes and assets to the endowed via rising costs of healthcare. The coalition of less-endowed patients will, therefore, appeal to the not-for-profit government to establish a new government-regulated and private health insurance company (GRAPHIC) as stated in the following theorem.

Theorem 2: In equilibrium within Model-1, (a) the unregulated private insurance companies and healthcare providers will continue to operate and (b) the coalition of less-endowed patients will ask and the not-for-profit government will approve of establishing a government-regulated and private health insurance company (GRAPHIC) with private equity and private debt, at no operating cost to taxpayers (with any initial set-up cost to be recovered duly from the insured) and with regulatory policies to ensure that the company pays (i) no more divided on equity and no more interest on debt and (ii) no more employee compensation than the median among all unregulated private health insurance companies.

Proof of Theorem 2: (a) It is obvious that private health insurance companies and healthcare providers will continue to operate and that the not-for-profit government seeking to minimize cost will not run a for-profit insurance company or a for-profit healthcare provider in equilibrium within Model 1.

(b) A constitutionally fair government will approve of establishment of a new government-regulated and private health insurance company (GRAPHIC) at no cost to taxpayers and under government regulation with the terms stated in the theorem to ensure that it does not pay exorbitant dividends or interest on equity or debt or high salaries and perquisites to executives and employees. The new GRAPHIC is viable because private debt and equity receiving median returns in the industry will gladly flow to this company. Taxpayers will have no qualms about creating the new GRAPHIC that entails no cost to the government exchequer. Endowed patients and owners of private healthcare providers and private health insurers can raise no rational objection to the creation of a GRAPHIC. The GRAPHIC is the best that the less-endowed can fetch without any rational objection from taxpayers, the endowed patients and owners of private healthcare providers and insurers. The GRAPHIC will thus restore equilibrium in the economy. ■

<u>Discussion</u>: The terms for private equity and debt of the government-regulated private insurance company (at the median of the industry) will gradually erode the median profits of the healthcare industry to a level that is competitive across industries. As a result, the cost of healthcare will fall to a level sustainable by the economy.

The idea of a government-regulated and private health insurance company (GRAPHIC) appears to be close to the public option in health insurance that President Obama seemed to favor during his campaign in 2008, but could not muster the votes in the Congress to enact. The objection to the public option was that the government appeared to enter the health insurance business, which is obviated by the GRAPHIC.

The opposition to the public option in health insurance was mainly because it sounded like the government entering the health insurance business. The GRAPHIC obviates government entry into the health insurance business. The GRAPHIC should, therefore, be agreeable to all parties.

There is a lot of public discussion including political rhetoric about public option in health insurance.[2] The public discussion focuses on competition among private health insurers and healthcare providers as the only way to cut the cost of healthcare within a free market economy. But the model implicit in this public discussion is Model 2 which does not allow coalition of patients and, hence, does not attain in equilibrium, as per Theorem 1. But, to the best of my knowledge, there is no academic research based on coalition of patients to show if public option or anything close to the GRAPHIC will attain in equilibrium of an economy. The basic idea of GRAPHIC is, however, similar to the paper on coalition of borrowers (Acharya, S. (2013)).

II. Conclusion

This paper showed that a government-regulated private health insurance company attains in equilibrium of a free market economy that allows formation of coalition of less endowed patients and potential patients. Such a company will make healthcare cost fall to a level consistent with what the economy can afford to maintain equilibrium. "Coalition of Patients" obviously includes the employers that partially bear the cost of health insurance of employees.

The stable and efficient medical care system proposed in this paper has an obviously profound implication on public health as follows: The financial hardship imposed on people (patients, potential patients and employers) by the current medical care system aggravates people's physical stress, which in turn exacerbates public health[3] and, thereby, raises the burden further on the medical care system. The cost of medical care thus escalates, which further raises people's financial stress, physical stress, and burden on the system. This vicious cycle may be the primary cause for why the current medical care system is not sustainable.

The systemic change in medical care proposed in this paper would enhance public health by alleviating the burden on finance (of households, employees and employers) as well as on the medical care system. This will ultimately improve public health and make the system viable in the long-run.

I. References

Acharya, S. (2013), ``Coalition of Patients and Government-regulated Private Insurance in Equilibrium," *Pro-Prosperity.Com*.

[2] See, for example, http://en.wikipedia.org/wiki/Public_health_insurance_option

[3] See Jon Macy (June 12, 2013), "IU studies find workplace and financial stress lead to poor health choices," at http://newsinfo.iu.edu/news/page/normal/24330.html and Laura Choi "Financial Stress and its Physical Effect on Individuals and Communities, Federal Reserve Bank of San Franscico, http://www.frbsf.org/community-development/files/choi.pdf