Reading Notes 2

Medical spending in the United States is high and rising. Currently, the United States has full-coverage medical insurance, where consumers don't have to pay more for expensive treatments. However, this paper argued that such a policy may not be optimal and proposed an insurance method called “top-up”, where the cost of basic treatment would be covered by insurance, and patients would have the option of paying for the increased cost of more expensive treatment. In addition, "no top up" medical insurance is used in the UK, which only covers medical expenses of basic treatment. For above three types of insurance policies, this article calculated the social efficiency in terms of breast cancer treatment. Authors found that in some cases "top up" policies seemed better.

There are usually two treatments for breast cancer -- lumpectomy and mastectomy. The health benefit is similar between the two treatments, but lumpectomy is much more expensive. The objective of this paper is to describe the willingness of breast cancer patients to pay for more expensive treatments, which is the lumpectomy. In order to describe the patient's preference, authors made a revealed preference assumption. More importantly, authors assumed that travel time can be monetized: the difference in distance between patients and two different treatment sites reflects the difference in the price they pay for treatment. It is worth noting that this assumption is not new and has been implicated in previous studies. In addition, authors made an econometric assumption: there are no variables that are correlated with both distance and demand for lumpectomy. Based on these assumptions, authors drew the willingness to pay curve for lumpectomy of breast cancer patients. After that, authors used this curve to estimate the social benefits generated by the three health insurance policies and drew some conclusions. This article is based on data from two California cancer databases: CCR and IMV. The former includes data on breast cancer patients, while the latter includes data on radiotherapy centers. CCR contains detailed patient addresses, and data in IMV are widely used in many studies, which increases the reliability and comprehensiveness of the data in this paper.

In the first half of this paper, authors analyzed data from breast cancer patients and made a framework to illustrate welfare of three different policies based on ex post efficiency. In the second half, however, authors focused on ex ante efficiency and continued to compare the benefits of three policies. Moreover, other potential insurance designs policy (The “first best” and related

policies) were introduced and analyzed. Authors found: (1) The closer a breast cancer patient's home is to the radiation site, the more likely she is to choose lumpectomy (this conclusion is applicable to a variety of models); (2) Compared with the other two policies, the "top-up" policy added $700 to $2,500 in social welfare per patient; (3) Under different risk aversion levels, "no top up" is always dominated. The “top-up” policy is better than “full coverage” policy unless risk aversion level is high enough; (4) The “first best” policy is impractical because it creates an adverse selection problem. While a similar “partial top-up coverage” policy is much better.

In conclusion, this paper took breast cancer as an example to compare the American medical insurance policy, the British medical insurance policy and a more flexible insurance policy. Authors demonstrated that the “top-up” policy brought the most benefits when considering ex post efficiencies. When considering ex ante efficiency, however, “top-up” policy is optimal only at a low level of risk aversion. In my opinion, this is a good micro economic paper. First, authors correlated patients' distance from different treatment sites with their willingness to pay for different treatments. This method is clever and used by other studies. In addition, authors estimated the demand curve of different treatments for breast cancer patients, and analyzed the benefits generated by different policies, which is conducive to medical insurance policy reform. But this paper also has limitations. First, the example of breast cancer is not necessarily representative. There may be more treatments for other diseases and their effects can vary. So the method in this paper may not be applied to other diseases. Moreover, it seems too strong to assume that the two treatments produce similar results. Although the survival effect is similar, the pain caused by the treatment process and the effect on body aesthetics should also be taken into account. Therefore, policy makers should not deny "full coverage" policy only based on the theoretical loss of social welfare.