

Regulations and Regulation Mechanisms in Health Care: An Exploration of Possible Effects in Private Health Care Market in Thailand

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Abstract: Improvements in private health care market of the country encourage the society to produce competitive human resources, medical products and equipment, and health technology. The effects of regulations can be measured in terms of costs and benefits to society. Regulations and regulation mechanisms interact with other policies and can make adverse effect on private health care market. This paper seeks to provide the assessment of possible effects of regulation in health care market thorough review of various documents related to regulation in Thai health care system and supplemented by in-depth interviews with experts. The regulations and regulation mechanisms interact with behavior of private health care market. The interactions that may create desirable or undesirable effects are found in various levels of the private health care market. No adverse effects of regulations and regulation mechanisms in expansion of private health care market are found in Thailand.

Key words: regulation; health care market; desirable and undesirable effects; Thailand

JEL codes: I, Y

1. Introduction

Economic prosperity of a country, like Thailand, has been improved by the private health care market through its forward and backward linkages (Lahiri & Banerjee, 2013). Improvements in private health care market of the country encourage the society to produce competitive human resources, medical products and equipment, and health technology. There are input-output relationships between medical schools, pharmaceutical companies, or other firms and the health care market. Health care market has forward linkages for example, medical tourism, quality of health services, productive inputs for development of other market. On the other hand, health care market has connections with some special features such as right to health, public goods, skewed information to supply side, monopoly behavior of the providers, externalities among others. In this situation, we can categorize the health care market into groups: public health care providers and private health care providers. Public health care provides focus on the issues related to health right, public goods, and universal health coverage among others; however, private health care providers serve as to provide the choices for people, expansion of medical hubs, public private partnerships (Pocock & Phua, 2011). Public health care services contribute to economic development through producing healthy manpower to the country. In addition to this, private health care services

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can contribute directly to economic growth through exporting the health care services.

In Thailand, we can see two parallel markets in the health sector. The government is investing a huge amount of money to maintain the universal health coverage for the Thai citizens. The government engaged the private health care providers to support for universal health coverage through public private partnership mechanism at some levels. The intentions of regulations and regulation mechanisms are to engage the private health care market to improve welfare of Thai people; however, there may be adverse effects in expansion of health care market due to unnecessary provisions and regulations. The regulation and its mechanisms are important to move the right direction to the private health care market and to encourage exporting the services.

There are many types of regulations (Guasch & Hahn, 1997); however, we are focusing on mainly two types of regulation: economic and social regulation in the health sector. Economic regulation has economic rationale behind the provision of regulation and includes direct restrictions on prices, quantity, reducing monopoly power and supply induced demand, and entry and exit conditions in the market. Social regulation has social rationale or societal values behind the provision of regulation and includes a wide array of provision such as benefits to workers and consumers, environmental, public health and safety regulation, among others. Economic and social regulations are complementary rather than competitive while designing and implementing regulations in health care market. Social regulations have dominant roles than economic regulation in health sector. Regulation doesn't mean the restriction to expand the activities; it does mean that to expand the activities through changing behavior of health care providers. However, the regulation can increase transaction cost for the providers. A huge debate on the effects of regulation in health care market is found in literature. Some of the papers (Guasch & Hahn, 1997; Sloan & Steinwald, 1980) demonstrated that costs of health care are increased due to regulations. Some other papers (Guasch & Hahn, 1997) suggested that regulations have both costs and benefits; however, effective implementation of regulations has higher benefits to the society. Regulations and government policies are main barriers of development medical tourism in Hong Kong (Heung, Kucukusta & Song, 2011). A paper (Teerawattananon et al., 2003) described the situation of health sector regulation in Thailand; however, the paper did not explore the possible effects on expansion of health care market. Regulations and regulation mechanisms in health sector are complex issues that are related to health policies, economic policies, education policies, relation among the organizations, governance, financing, incentive, registration and licensing, actors among others. There may be tradeoff between provisions of regulation in health care market and provisions of incentives to expansion of health care services (Smith et al., 2009). Due to interrelationships among sectors, different policies of other sectors may create the barriers to expand the health sector. Similarly, different policies and provisions of the health sector may produce undesired effects to expand the health sector. The key research issues of this paper include: what are the key existing regulations and regulation mechanisms in health sector in Thailand; and what are the possible effects of existing regulations and regulation mechanisms in private health care market in Thailand?

The objective of the paper is to provide the assessment of possible effects of regulations and regulation mechanisms to expand private health care market in Thailand. The paper reviews various documents related to regulation in Thai health care system and supplemented by in-depth interviews with experts to meet the given objective. The results suggested that no negative impacts of existing regulations and regulation mechanisms to expand the private health care market in Thailand.

2. Method and Materials

2.1 Sources of Data and Sample Size

This study adopts exploratory research design because regulation in health care market in Thailand remains a new area that has not yet been fully explored. The qualitative approach was employed. Both secondary and primary sources were used to collect the data. The secondary data were collected to identify the key issues. The key issues were identified through an extensive review of the literature, analysis of existing regulation act, rules and regulation and provisions. These key issues primarily involve the existing regulation provisions and mechanisms and their interactions with health care market and effects on forward and backward linkages of health care market. To supplement the desktop review information, qualitative data from primary sources were collected through key informant interview. Key informant interviews were conducted with (1) current and former policymakers who have played roles in developing regulatory framework for private hospitals and (2) private hospital providers in each selected jurisdiction, (3) academics/experts. A list of the key informants was prepared based on collected information from different sources such as head of the health related government institutions; health related private institutions, university or research institutions. Heads of the health related institutions that involved to design or implement the policies and provisions were included in the list of key informant. The purposive sampling was adopted and designed to recruit the interviewees for interviews from each categories because to take time of the high level policy makers is difficult. At the time of interview, the policymakers or experts who can give the time immediately are included in the sample of the study. Five key informants from each group, a total of 15 key informants were selected to conduct the interview. Face to face or telephone interviews based on choice of the key informants were conducted to verify the information and to understand the regulation mechanisms and practices. The key points for the interviews include (1) seek further detailed information about the current regulation of private hospitals in each jurisdiction, (2) identify key factors required for successful implementation of regulatory framework, (3) effect of regulation on healthcare system, and (4) confirm/clarify issues found in the desktop searches.

2.2 Conceptual Framework to Explore the Effects

A conceptual framework that describes the regulatory system and the effectiveness of existing regulatory mechanisms was developed and based on extensive review of literature and expert interviews. The exploration of possible effects of regulations and regulation mechanisms on health care market is based on the conceptual framework. The conceptual framework has two parts: (a) regulations and regulation mechanisms; (b) effects. The first part of the framework serves as inputs in the health care system particularly related to private health care. The second part of the framework exhibits the outputs or outcomes of the health system in terms of effects in private health care market.

2.3 Methods of Analysis

The conceptual framework gives a clear picture of how the inputs and effects are interrelated. The four components: instruments, channels, intermediate effects and final effects in the conceptual framework reveal the results chain in the health system. Key elements of issues under each component were mentioned. Based on these key elements and results chain, the paper describes and explores instruments, channels, intermediate effects and final effects in private health care market in Thailand.

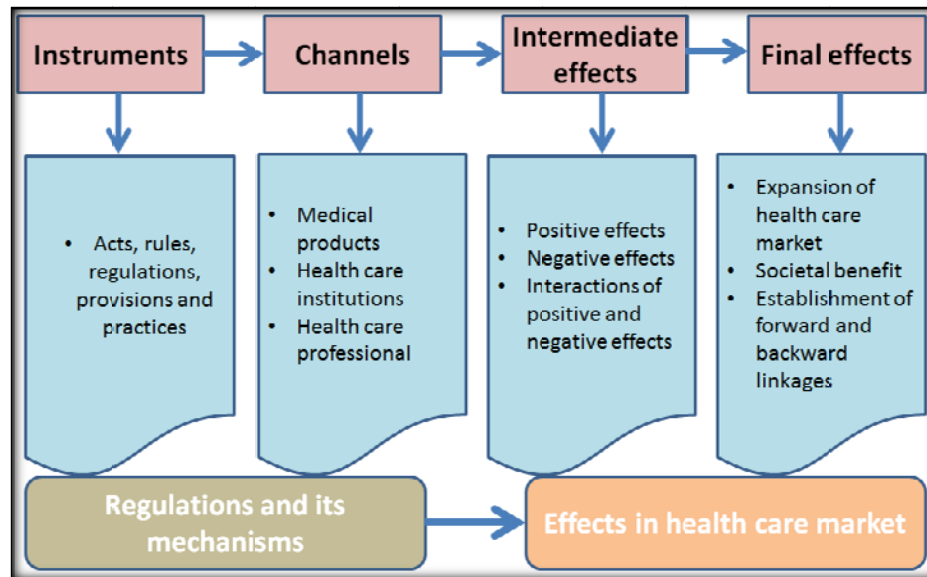


Figure 1 Conceptual Framework

Source: Author

3. Results

3.1 Instruments

Regulations are formal mechanisms by which governments influence the behaviour of various actors within the health sector. Regulations and mechanisms of regulations in health sector are primarily determined by the National Health Act B.E. 2550; Sanatorium Act B.E. 2541, Thailand Medical council Regulations on Surrogacy and IVF and all the Ministerial Regulations or Notifications issued under these Acts. In addition to these, some other acts such as Food act B.E. 2522, Investment promotion acts B.E. 2520 have influenced the regulation mechanisms. Medical equipment and supplies are regulated under the Food and Drug administration (Government of Thai, 2007). Investment opportunities in hospitals are determined by the Board of Investment. Some policies implemented by the government influence the regulation in health sector. For example, The Thai Government has been promoting Thailand as the Asian medical hub. Regulations potentially impose significant costs and benefits on actors within the health sector; they can affect the performance of various organizations or actors and health programmes (Pocock & Phua, 2011; Smith, 2004). A range of instruments may influence entry to market, quality and safety, quantity and distribution, price, public information and advertising among others. As mentioned earlier, there two separate health care market: for Thai citizen and foreigners. Regulation itself doesn't discriminate public and private health care services; however, in practice, as experts said, regulations are particularly for private health care providers. Private health care providers are also related to public service provision through public private partnership. This paper concerns with effects of regulations on private health care market.

3.2 Channels

The mechanisms and regulations determine the distribution, classifications of medicines and medical supplies. Different categories of medicines and medical supplies are legally distributed through different channels. Prices of medicines and some medical supplies are controlled various ways (Teerawattananon et al., 2003). For example, essential medicines are purchased by the Ministry of Public Health (MOPH). Similarly, prices of

purchased medicine by the Civil Servant Medical Benefit Scheme are determined by the MOPH.

Benefit packages of the various types insurances influence the price of medicines and quantity of medicines. Licensing and renewal provisions restrict the entry of new firms in the medical products; however, supplies of medicines and medical devices are dominated by the private sector. Private clinics and hospitals are required license to entry in the health care market.

Prices in private clinics and hospitals are determined by market forces as said by the experts; however, exploitation, induced demand can be found because of existence of information skewed to supply side. As much as possible, perfect information for both demand and supply side is required to make welfare society; however, effective monitoring mechanism is rarely found (Peters & Muraleedharan, 2008).

Professional organizations such as medical council play the roles in regulations in the new entry of the health professional. The government allocates the human resources throughout the country; however, the mechanism is found ineffective (as per experts' opinion). Internal brain drain, private practices, and absenteeism of health professional in the rural areas are some examples of ineffectiveness of right allocation of health professional.

Behaviors of the private hospitals and the physicians are almost similar to provide the health care services; however, the government encourages the hospitals through various provisions such as board of investment, to improve the health industry in the country (Na Ranong & Na Ranong, 2011). Various regulation provisions and policies for promoting Thailand as the Asian medical hub are shaping health care market in Thailand.

3.3 Intermediate Effects

Intermediate effects can be measured in terms possible costs and benefit of regulations and regulation mechanisms in the health care (Guasch & Hahn, 1997). Regulation provisions are designed to provide the economic and social welfare to the consumers and producers in the health care market. However, intended and unintended effects of provisions of regulation and mechanisms can be found in the health care market. Provisions of regulation may increase the transaction costs and paper works to meet the various requirements to make functional in the health care market. It may create the bottlenecks to expand the health care market, such as restriction of new entry in the market, unseen quota system in the distribution of medicines and medical supplies (as said by the experts). The distribution and advertisement of pharmaceutical products are controlled by regulatory provisions. As the results of these, access to information may be limited for the people. The people have to pay to get the information another channel.

Provisions of regulations and regulation mechanisms create the aggregate benefits to the society particularly related to reduction of possible exploitation due to monopoly market and induced demand. If there are no regulation provisions, there is possibility of application of the first degree price discrimination monopoly in the health care market where every consumer is charged his or her willingness to pay (as said by the experts). There is no consumer surplus in the transaction. The demand curve of the consumers for health care services becomes marginal revenues curve of health care providers. Willingness to pay to restore his or her health is not only determined by the affordable capacity but also determined by the pain, suffering, and value of life, among others. In this case, people are forced to sell their productive assets or to borrow the loan to get treatment for health care services (as said by the experts).

The intended effects of the provisions of regulation in health care market or corrections of market failure are the benefits for society. On the other hand, unintended effects of the provisions of regulations in health care market are the costs of regulations. No doubt, benefits are higher than the costs of design with economic and social rationality and implementation of regulations (Guasch & Hahn, 1997). However, ineffective regulation

mechanisms impose the higher costs in the society. If the current regulations don't have capacity to change the behavior of the health care providers due to weak designing or lack of implementation and monitoring mechanisms in system, the aggregate benefits to the society are reduced (as said by the experts). After interacting with behaviour of private health care market, existing regulations and regulation mechanisms don't create the negative effects on health care market or the society. We can see positive effects. Various studies confirmed that the universal health coverage is almost achievable for the Thai citizens (NSO, 2013). Similarly, some other studies show that healthcare costs in Thailand are 50% cheaper than in Singapore, three times cheaper than in Hong Kong, and five to 10 times cheaper than in Europe and the United States (Heung, Kucukusta & Song, 2011). Provisions of regulations and regulation mechanisms are in right direction in aggregate terms; however, for the micro-level, further studies need to be conducted (as per expert's opinion). The rules and regulations are subject to change over time. Then the effects of these regulations will be changed as change in provisions of regulations and mechanisms. Therefore, costs and benefits are frequently changed over time. The size of the benefits to the society is heavily influenced by the effectiveness of regulation mechanisms.

3.4 Final Effects

The final effects of regulation in health care market can be measured in terms of expansions or contraction of health care market. Provisions of regulation, regulation mechanism and practices of implementation encourage to expansion of the health care market in Thailand (as per expert views). The growth of health care market has both forward and backward linkages. It encourages in use of advanced technology with better infrastructure and manpower, technology transfer, to engage in exporting in more revenue- generating services such as surgeries in cardiology, oncology, neurology, etc. It requires very highly skilled and experienced doctors along with other matching resource personnel in the hospitals. Input-output table can show the clear picture of backward and forward linkages of health care sector; however, to provide the complete table is the out of scope of this paper.

Anecdotal evidences show the positive effects of regulations and regulation mechanisms in Thai health care market. The results of recent survey showed that the population receiving health insurance increased continuously from 96.0 per cent in 2006 to 98.3 percent in 2013 (NSO, 2013). Existing regulations have positive impact on salary and compensation of employees. Recent survey suggested that private hospital provided the highest average monthly compensation compared to other private firms (NSO, 2011).

Thailand's health-care sector is attaining new heights under the current rules and regulation. For example, the growth rate of number of foreign patients is 16% per year and medical tourism contributed almost 0.4% of GDP of Thailand (Na Ranong & Na Ranong, 2011). In fact, existing regulations and regulation mechanisms are not protecting and not encouraging in establishing the new health care industry. After enabling to export health care services, the health industry can be able to see the incentives provided by the government. The time lag is the discouraging factor to expand the Thai health care market (as per expert views). Rigorous analysis at micro-level is required to examine how the provisions of regulation and regulation mechanism are playing the roles to create the societal benefits and to make the burden in terms of cost in the society.

4. Discussions

The Thai Ministry of Public Health cooperates with the Thai Ministry of Tourism to promote medical travel to Thailand. The private healthcare sector pays their effort to provide the health care services to the foreigners. The Thai Government encourages to the private sector through providing various incentives to export the health

care services. These incentives interact with the existing provisions of regulation and regulation mechanisms in the health care market. As the results of this, it may not have expected or desired capacity to expand the health care market in Thailand. The regulations in health care market changes the behavior of the health care provider and may create the transaction cost for the providers, resulting that cost of exporting services may increase. This is an appropriate time to evaluate the situation. This paper explores the possible effects of existing regulations in health care and its mechanism by utilizing available literatures. It contributes to open the eyes of the policy makers to look the possible consequences of regulation in expansion of health care market. It provides the aggregate perspective to measure the possible effects of regulations; however, micro-level study provides better understandings and visibility of interactions between the incentives and regulations to make the shape of the health care market both public and private. A lack of micro-data analysis may be the major limitation of this study.

Various types of regulations in health sector are found in East Asian countries such as Singapore, Malaysia and Hong Kong. Some of them have very clear regulation provisions with strong mechanisms such as Singapore and Hong Kong (Heung, Kucukusta & Song, 2011). The behavior of health service providers is not only determined by the regulations. Some other factors such as culture, health care system, practices, and legal literacy among the consumers determine the behavior of health service providers. The paper focuses on possible effects of regulations and its mechanisms on the expansion of health care market. Domestic rules and regulations in the health care market determine the export of health services (Heung, Kucukusta & Song, 2011). Existing provisions of regulation in health care market interact with the provisions and policies to encourage the hub for the respective countries. In fact, Thailand, Malaysia, Singapore and Hong Kong have competition to export the health care services to the foreigners. The comparisons of health export related indicators give some ideas of measuring the effects of existing provisions of regulation in the expansion of Thai health care market. The evidences show that the healthcare costs in Thailand while exporting health care services are 50% cheaper than in Singapore, three times cheaper than in Hong Kong (Heung, Kucukusta & Song, 2011). Overall doing business indicator can be used to make the counterfactual for this measurement. Singapore, Malaysia and Hong Kong have better doing business indicators than Thailand as suggested by World Bank, (2014). Modern healthcare facilities, qualified medical experts, and low prices are the chief characteristics of Thailand medical tourism market. The government's strategy is to increase marketing and public relations activities directed at foreigners, improve management, and develop healthcare products and services. The main medical tourism spots are increasing in Thailand, for example, Bangkok, Chiang Mai, KohSamui, and Phuket.

5. Conclusions

Regulations and regulation mechanisms in health care market are primarily related to private health care market. The effects of regulations can be measured in terms of costs and benefits to society. Effective regulation mechanisms may have more benefits to the society; however, regulations may affect on the expansion and competitiveness of private health care market. Regulations seem barriers for some other countries such as Hong Kong to expand the health care market. No undesired effects of regulations and regulation mechanisms in expansion of private health care market are found in Thailand; however, micro-level analysis may provide in-depth understanding the possible effects.

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