Study on the World's Health Financial Models and Vietnam's Health Financial Model

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Abstract: The article has presented the theoretical basis of health finance, health finance sources, health finance models, health financial performance, and equity. Based on the time of birth, characteristics and correlation of the world and Vietnam health financing models, we have selected four typical world health finance models to conduct our research and included in this post. The four models referred to are the British Beveridge Model, Russia's Semashko Model, Germany's Bismarck Model, and the US private insurance-based health financing model. Through the method of meta-analysis, the authors assess the development process of Vietnam's health finance model from a centralized economy to a change to a socialist-oriented market economy. Identify some limitations of the world financial model compared to the economic and political situation in Vietnam. The research results also give us a better understanding of the importance of a health financing model that is suitable for their social security and economic development. The article also makes the assessment that the mixed health financing model is the best model for the economy and politics of Vietnam. However, this model cannot avoid some shortcomings such as the high cost of generating resources, the unsecured fairness of budget allocation for the health system, and direct out-of-pocket payments making low-income people unable to access high-quality healthcare services.

Keywords: Equity, Financial Resources, Health financial model, Performance, Vietnam. **JEL Classification Codes:** H51, I13.

1. INTRODUCTION

According to the International Labor Organization [ILO] (1999), a country's health system affects economic growth and labor productivity. This is because people's health affects the workforce, which is an important determinant of its productivity. At the same time, productivity has a strong influence on economic growth (p.34). After officially reestablishing peace in 1975, Vietnam faced economic challenges, in terms of health and malnutrition rates among the Vietnamese people. Until 2000, after 25 years of liberation, we were still a poor country with a per capita income of about 400 USD a year. The risk of falling back into poverty of households is high, 28 million Vietnamese people have a total income that is not enough to ensure a living. The income distribution gap between the richest and poorest groups increased from 4.9 times in 1992 to 8.9 times in 1999 (Chuc, 2007, p.79). Along with that, the cost of direct payment for health care services in Vietnam is still high, leading to the situation of the poor restricting the use of medical services through health insurance cards. They often self-medicate, self-medicate, or wait for the illness to clear up on its own. This fact makes the health of the Vietnamese people slow to improve, the labor force is not healthy, leading to labor productivity being also affected. In addition, arbitrarily buying drugs without a doctor's guidance also causes many

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public health consequences due to antibiotic resistance. This information once again confirms the importance of health financing models in each country. A suitable health financing model will help people have the fastest access to healthcare services at the lowest cost. Thereby, the quality of workers' health is improved, labor productivity and economic development are improved. The purpose of the article is to understand and evaluate the health financing models in the world and in Vietnam. What are the limitations of applying the world health finance model to Vietnam? Is the health financing model deployed by Vietnam appropriate? All these issues will be clarified and presented in this article by the author team.

2. THEORETICAL BASIS

2.1. Medical Finance

In the book Health Finance, An Introduction to Financial Accounting and Management, Gapenski & Reiter (2012) argue that health finance does not have a single answer and that the definition of health finance depends on the context usage scene (p.4). According to Chuc (2007), health finance does not have a uniform definition, but basically, health finance refers to the source of funds to pay for health activities, to allocate existing funds to health facilities in the region health care system and payment of wages and salaries to individuals participating in the health care system (p.74). The document on health financing of the World Health Organization [WHO] (2023) states that Vietnam's health financing is a basic and important function in the health sys-

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tem. Health finance includes two main contents: attracting and concentrating money sources into a fund and using the health financial fund to pay for all people's health care services (paragraph 1). Research by Hai (2016) states that Health finance is an important part of the health system with the goal of mobilizing financial resources for the development of the health sector, taking care of people's health, allocating public resources to equalize and improving professional quality in health service delivery (p.6). Thus, health finance does not have a unified definition, but we can see that health finance is an important part of the health system.

2.2. Medical Financial Resources

Health financing is formed from four sources: direct payment, private health insurance, social health insurance and taxes. Direct payment is the cost that people have to spend their own money to buy medical services according to their needs. Direct payment with partial support from health insurance is a common form in medical examination and treatment facilities in Vietnam. Private health insurance is the amount of money a health service user buys private health insurance. The amount to buy private health insurance depends on the risk of disease of the policyholder. With private health insurance, the purchaser of health insurance is provided with services in the package of services purchased and agreed with the private insurance provider. The operation of a private insurance company is a profitable one, so the elderly and high-risk patients must purchase health insurance with higher premiums than the younger, more likely to be infected with low disease. However, in many developed countries and regions, private insurers may also charge a certain amount of money to all subjects of different ages based on the incidence of the disease that region or country. The third source is social health insurance, which is collected based on people's monthly income. This rate is made continuously whether the participant uses or does not use health care services. Finally, the health finance source from Tax, this source is collected in two forms: direct and indirect. The source of the direct tax is the income-based tax and is usually the progressive, indirect tax source of consumption.

2.3. Medical Finance Model

The ILO (1999) argues that finance is an important factor in determining the quantity, distribution and quality of health services. Financing also has a large impact on operational efficiency and the ability to provide needed health services according to need rather than the ability to pay (p.34). Health financing has a large impact on citizens' health, so governments will have to take action through the use of models of health financing systems. The health financing model reflects the financial statistics, distribution and financial structure of the system (ILO, 1999, p.34). According to Chuc (2007), the health finance model represents the formation of financial funds for health, the management and distribution of these funds to users and beneficiaries (p.76). There are many health finance models in the world, but the most influential ones are the Beveridge model applied in the UK, the Semashko model of Russia, the Bismarck model of Germany and the health finance model based on the UK. private insurance of the United States (Chuc, 2007, pp.76-79). In our opinion, building a health finance model should be based on

many factors such as the ability to mobilize financial resources to form the fund and health policy. More or less financial resources will determine the quantity and quality of healthcare services that people enjoy. The health policy applied in each region and the country will determine how health care is managed, operated and equitable with its people. The goal of health financing modeling is to improve health financing performance and equity in health financing.

2.4. Medical Financial Performance

Financial performance describes the extent to which appropriate medical services are provided to patients equitably, met patient expectations and improved their level of health, regardless of payment and payment method contribute to society (Vu, 2013). According to Chuc (2007), when it comes to economic and financial performance, it is to evaluate two aspects of administrative costs related to resource generation and economic performance related to efficiency costs (p.75). Generating health financing through private health insurance is more administratively costly than generating it through tax collection. When it comes to cost performance, private health insurance is theoretically more efficient because it has a face value that reflects an individual's ability to use health care. To clarify this content, the author Chuc gives an example that the risk of illness of the elderly group is 4 times higher than that of the young group, but the contribution to the health financial fund of the young group is higher. Therefore, if the source of health financial funds is taxed, in a fixed or progressive form, it also reduces efficiency because it does not reflect the use of health services by subjects with different health conditions (Chuc, 2007, p.75).

2.5. Equity in Health Financing

According to the ILO (1999), at a time of rising incomes, aging populations and urbanization in most countries, health system equity will have a significant impact on society and its overall welfare. Many factors related to health care services will have a significant impact on health financing models such as the quantity and quality of services, the method of service delivery and the level of access by the population. (p.34). According to Chuc (2007), health financing determines the level of equity. Direct financing and private health insurance impose a burden on low-income people in society (p.76). To clarify this content, let's take a look at the health insurance premiums compared to the average income of Vietnamese people. According to the survey results of Vietnam's population living standards by the General Statistics Office of Vietnam [GSO] (2022), 20% of the richest population groups have an average income of 10.23 million VND/person/month, 20% of the population The poorest have an average income of 1.35 million VND/person/month (para.6). The income difference between the two groups is up to 7.6 times. Thus, if the current health insurance premium for the first person in the household is VND 972,000 (Decree 146/2018/ND-CP), the high-income group will lose 0.8% of their total income year while the low-income group lost up to 7% of their total income a year. Thus, low-income people must spend nearly 10 times more money to buy health insurance cards than people in the rich population. This method of payment is applied by many countries, including Vietnam, and is called a proportional contribution of income. There is

also a method of contribution taxed according to income tax, people with higher income will pay more and vice versa, this method of contribution is applied by some developed countries such as Germany. According to Chuc (2007), both direct payment and private health insurance are considered obsolete forms. Research in developing countries shows that direct payments are more backward than private health insurance and private health insurance is more backward than social insurance. However, private health insurance in poor countries is considered progressive because only highincome groups can afford it (p.75). We can see that equity in health financing depends on many factors in addition to income level, economic situation, and the appropriateness of form, coverage rate and contribution rate.

3. METHODS

The authors use three common research methods in science, namely the methodology to build a theoretical foundation for the article, and the analytical and synthesis method to analyze the results and arguments obtained in the process of research and analytical methods summarizing the experience. Through the methodology, the authors have studied the literature on health financing models in the world, selected typical models that are influential and related to the health finance model in Vietnam. male presented in the article. At the same time, the authors' group, through relevant documents, learns the concept of health finance, financial sources and health financial models to build a theoretical basis for the article. Based on the theoretical basis, the authors have used the method of meta-analysis to evaluate the health financing model of Vietnam. Finally, through the method of summarizing experience, the research team evaluates the process of change and improvement of the Vietnamese health system, thereby drawing out the remaining limitations and the basis for improvement in building, renovating and perfecting the health financing model for Vietnam.

4. RESULTS

4.1. Medical Finance Models

Model Semashko

The introduction of the Semashko model after the Russian October Revolution with the goal of the State subsidizing the entire cost of medical care of the people. This proposal of Mr. Semashko was accepted by the Government of the Soviet Union and was the premise for a mass response from the socialist group countries following this model. The feature of the Semashko model is the sociality of medical services, all people who need medical examination and treatment do not have to pay any fees when using medical services. Medical services are only permitted to be provided by competent and responsible levels of government. The Semashko model emphasizes disease prevention and integrates two programs of treatment and prevention together to avoid pandemic risks. In the centralized economic system after the Russian October Revolution, all financial resources for health care and medical services were planned. Health policy is planned with the participation of the people, and they are also consulted in decisions at the central level. In addition to the above characteristics, the Semashko model also targets children and workers in factories. The Ministry of Health and relevant agencies have the right to control and direct all components of the health system and the private health sector, although not strictly prohibited, is placed under the strict supervision of the Government. Semashko Model financing is tax-based, but general, not just income tax. The medical finance system following the Semashko model is managed by the State administrative system.

Beveridge Model

The Beveridge model was proposed by William Henry Beveridge in 1942 with the theory that social security must be comprehensive, centrally managed, and equally enjoyed among all people. This view was made by him in the context of reform and restructuring of the social security system and was approved in 1946, becoming the main content of the National Insurance Law in England. The financial source of this model for health spending is largely based on the state budget from tax revenue. All people receive free medical examination and treatment, and people receive medical care from birth to death. The system of health service delivery is not limited by the State but also includes the participation of the private sector is a feature of the Beveridge model. Although it is a model of the welfare state, it is difficult to apply this model for countries outside the UK because applying this model requires a large enough state budget, a developed economy and a high-income system tax is complete because this model requires income tax rates of 30-50% and a proportion of public expenditure on health in the range of 60-90%.

Bismarck Model

German Chancellor Otto Von Bismarck proposed the compulsory social insurance policy in 1881. Based on that proposal, in 1883, the first legal document was born, the Health Insurance Law. Then in 1884, the Labor Accident Insurance Law with mandatory participation requirements for employers came into effect. Finally, in 1889, Pension Insurance was adopted to become the main pillar of social security to support workers and their families in cases of incapacity or death. This model is applied and implemented by several countries such as France, Belgium, Japan, Austria, Peru, and Brazil because its outstanding features are that social policies are applied to all people. Financial sources are contributed by three parties: individuals, employers and the state. The rights of participants are to be enjoyed according to the needs of each individual, not equally among everyone. Social health insurance is a not-for-profit agency, although the provision of medical services is mainly undertaken by the private sector. Later, health insurance expanded to include private, for-profit organizations. The insurance coverage rate of social health insurance in Germany is constantly increasing and reaching 100% of Germans have social health insurance in 1995. With the Bismarck model, Germany was the first country to issue and implement the social insurance regime. Although Bismarck's proposals for the state to fully fund medical expenses were not accepted, the German government has a policy to guarantee people when the funds become insolvent.

Health Financing Model Based on Private Insurance

The last model we mentioned is the health financing model based on private insurance. This model is deployed in the United States, which has the largest medical expenditure in the world. However, this cost is covered through Commercial Health Insurance or in other words, financing is mainly through private health insurance companies and these companies operate for profit. Private insurance companies will pay the cost of medical services provided to the facilities on behalf of the patient. This model makes it difficult for lowincome people to access health insurance because only people with above-average incomes can afford health insurance in the United States and those who cannot afford Health Insurance will have to pay a very high cost to access health care. According to Chuc (2007), in 2003 in the United States, about 15% of the population could not afford health insurance. The US Health Insurance Fund covers 30 million elderly (Medicare) and 30 million poor (Medicaid) (p.78).

In addition to the four outstanding health financing models mentioned above, there are also some other models in the world such as the one proposed by Tommy Douglas in Canada in 1944. The feature of this model is the health service provided by the privately. Therefore, in this article we do not mention this in detail because these models are not popular in the world and have no correlation with the health financing model in Vietnam.

4.2. Limitations of Typical World Financial Models if Applied to Vietnam

Social security has developed in most countries around the world with many different health financing models. The construction of a health financing model in each country depends on many factors such as living characteristics, and economic, social and cultural situations. There is basically no government that has developed a social security system that prototypes the basic models outlined above for a variety of reasons. Let's look at the limitations of these models when applied in Vietnam to clarify this. The first limitation to mention is the Semashko model. This model has been fully applied in Vietnam for about 20 years. At the time of application, this health financing model is quite suitable for our situation after liberation due to the underdeveloped economy and financial distress of the people. However, its limitation is that the expenditure from the state budget on health finance from taxes is not guaranteed to be enough to provide health care services to all people. The private health sector is closely monitored, making healthcare services undeveloped, and the provision of health services is managed and controlled by different levels of government, causing many problems to arise. When applying the Semashko model, people who are not in the priority group can find ways to get medical care. With the Beveridge Model, this model, if applied in Vietnam, is completely inappropriate because this model requires an extremely large budget while the budget in Vietnam is still quite limited, and we have just escaped from the group of poor countries in recent years. In addition, Vietnam's tax collection has many loopholes leading to many tax evasion cases and law evasion causing a loss of tax revenue of the State. In addition, the two models, the Bismarck Model and the Health Financing Model based on private

insurance, are also not suitable when applied in Vietnam because according to Bismarck, social security is implemented based on the main pillar of social insurance associated with employees. The social insurance regime in which health insurance is compulsory with a specific salary; Since then, the level of contribution and payment is calculated based on the salary level. Meanwhile, in Vietnam, the informal labor force accounts for a high proportion of workingage workers, with a high-income gap between urban and rural areas. Therefore, when applying the compulsory collection on the salary level, it causes difficulties for many labor groups in society.

4.3. Health Financing in Vietnam

As the mainstay of Vietnam's social security, Social Insurance, in which health insurance is one of the areas of concern of the Party, State and people. In the years following the October Revolution, Russia, like a series of socialist countries, also applied the Semashko model, where all medical financing costs are derived from taxes and health care services are provided. Granted to objects in order of precedence and free of charge. From the 1970s to before 1986, private healthcare was unsupported and developed slowly. After the renewed 1986, Vietnam's economy developed rapidly from a centralized economy to a socialist-oriented market economy. The private health sector has grown rapidly and provides many healthcare services to people in need. During this period, Vietnam began to apply a mixed health financing model including the participation of the state budget, direct payment and social health insurance. This hybrid model helps everyone to have access to health care and eliminates the limitation when applying the Semashko financial model that leaves many people without health care due to insufficient tax finance to meet the needs of all populations.

As we have shown, currently, financial resources in Vietnam are formed from three main components. The first is the State budget, which is allocated to all levels from central to local levels based on the number of hospital beds (Resolution No. 266/2016/UBTVQH14). In Vietnam, budget spending on health insurance is among the lowest in the world and in Asia (Workbank, 2019). According to Chuc (2007), the level of expenditure from the budget for health financing in 2001 was about 20% of the total health expenditure. Specifically, with this level of expenditure, each Vietnamese citizen is entitled to about 3 USD/year (p.83). In 2011, Vietnam belongs to the group of developing countries with a per capita income of 1393 USD/year. Currently, the proportion of state budget spending on health is 38 USD/person/year. State budget spending on health accounts for 9.4% of total government spending (WHO, 2012, pp.123). Thus, after 10 years, from 2001 to 2011, the level of state budget expenditure per capita in Vietnam increased about 12 times a year, which shows that the government has focused on giving priority to the healthcare activities of the Vietnamese people. However, up to now, the level of expenditure from the state budget for the health sector has not been improved. The level of health spending in our country has decreased since 2019 due to the impact of the covid-19 pandemic, which has reduced the affected state budget and reduced spending from the state budget on health. In 2022, recurrent expenditure from the budget for health will account for 9.6% of government spending with about VND 20,611 billion and the average health expenditure per person with medical examination and treatment in 2022 will also decrease compared to 2020. Specifically, in 2022 it is 2.5 million VND while in 2020 is more than 3 million VND. In 2022, the average expenditure per person with inpatient medical care is approximately VND 9 million and outpatient treatment is nearly VND 1.4 million (GSO, 2022, para.8).

The second is the financial source from direct payment. According to Chuc (2007), the average direct payment from people's pockets in 2001 was 23 USD/person/year. This outof-pocket amount is calculated on the total of official costs such as co-payments with health insurance funds and informal costs including private medical expenses, selfprescription and drug purchases not prescribed by a doctor at a private pharmacy (p.84). According to WHO (2012), the proportion of self-paying people in Vietnam in 2011 was 56.1% of total health costs (p.123). According to Hoang (2021), Vietnam's out-of-pocket spending on health services is about 43% (para.1), while WHO's recommended level is about 20% (Dung, 2021, para.6). Thus, by 2021, Vietnam's direct payment level is still too high compared to many countries and is a challenge for the Vietnamese health financial system in applying a financial model that ensures efficiency and fairness equal.

Finally, the source of social health insurance. Before 2015, health insurance in Vietnam had two forms: compulsory health insurance and voluntary health insurance (Decree No. 299-HDBT). Compulsory health insurance is prescribed for groups of government employees who are still working or retired; officers and employees of enterprises with 10 workers or more. However, during this time, the coverage of compulsory health insurance in private enterprises was still very low. Voluntary health insurance covers students, students, farmers, and traders. There is also health insurance that is fully paid by the state for the group of people with meritorious services to the revolution, the poor. In 2015, health insurance became compulsory form for Vietnamese people, according to which "Medical insurance is a form of compulsory insurance applied to the subjects specified in this Law to health care, not for profit, organized by the State" (Law on Health Insurance No: 01/VBHN-VPQH). In 1992, the social health insurance source contributed 0.4 USD/capita/year to health financing. By 2022, this source will provide about 40 USD/person/year for health financing.

4.4. Examining Efficiency and Equity in Vietnam's Health Financing Model

In the new stage of development, the Party and State of Vietnam still emphasize the importance of sustainable social security. Therefore, one of the factors that make up social security is the health financing model which also needs to be evaluated and revised when necessary. An appropriate health financing model should achieve factors that help stabilize the economy, reduce inequality in the healthcare sector, create equity among social groups and promote development lasting. The mixed health financing model is considered a suitable model for the Vietnamese economy in the current period. However, this model also has some limitations that reduce performance, and the fairness is not guaranteed. Health financing is generated from three sources, which increases the costs associated with source generation. Equity is not guaranteed when Vietnam applies the method of distributing the health budget from the central to local levels based on the number of hospital beds. This has caused inequality because urban areas have large hospitals, more beds, and larger populations, so they receive a higher budget. Meanwhile, in the big city areas, their budget is much larger than in disadvantaged areas and rural areas. Then there is the unfairness of paying out-of-pocket. The group of high-quality and skilled healthcare services can only be accessed by those who can afford it, low-income people will not have access to these high-quality services. This indirectly causes inequality in the distribution of health care services among people. Finally, direct payments put many people at risk of becoming impoverished because of the medical costs of serious illnesses.

5. CONCLUSION

Vietnam affirms the path towards building socialism and chooses the model of a "Socialist-oriented market economy" to realize the goal of "Rich people, strong country, democracy, justice, and culture bright". With that goal, a health finance model suitable to the political regime, the State model and economic institutions have a close relationship and help Vietnam develop and achieve the set goals. The current health financing model suitable for Vietnam is a combined model that shows the characteristics of the social state and the welfare state with three principles of sharing, equity and responsibility. However, in the future when the economy develops, Vietnam needs to consider changing to a more suitable health financing model, eliminating the existing limitations mentioned above.

CONFLICT OF INTEREST

Declared none.

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