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### Building Cost of Health Service Prices at Public Hospitals in Hanoi in the Condition of Implementing Autonomy

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#### Abstract

As the country moves toward a market economy, the health sector is viewed as an industry within the national economic framework and is a part of the service industry group that meets social welfare requirements. The new viewpoint holds that while a hospital is a service economic unit, its primary objective is not profit maximization. Hospitals receive funding from their service-related activities, which they

utilize to pay for operating expenses and capital improvements. The cost of medical services is a major factor when it comes to public hospitals' need for autonomy. This article examines how medical care costs are now set in Hanoi's public hospitals. Based on the findings of the research, the author suggests the best course of action for figuring out fair costs for medical services.

**Keywords:** Health Services, Cost of Health Services, Public Hospitals, Autonomy

#### 1. Introduction

Hospital autonomy is one of the policies expressed in Decree No. 10/2002/ND-CP dated January 16, 2002 of the Government on implementing financial autonomy for all medical units. Revenue-generating businesses, including public service units in the health sector, are now regulated in Decree No. 60/2021/ND-CP dated June 21, 2021 on the financial autonomy mechanism of public service units. Create. After 20 years of implementation, up to now, many public service units in general and public hospitals in particular have achieved full autonomy in their recurrent expenditures. In 2019, in Hanoi, there were 2 hospitals piloting hospital autonomy according to Resolution No. 33/NQ-CP dated May 19, 2019 of the Government, namely K Hospital and Bach Mai Hospital. However, after 2 years of implementation, hospitals have difficulty determining medical service prices. This is a very important task for the hospital to implement financial autonomy.

Besides, the prices of drugs and medical services are constantly increasing, no longer even able to provide enough for people in low- and middle-income countries. Faced with that situation, the results of health economic research help managers make reasonable policies, bringing about changes in the health system in which cost information is the most important. Not only does it help allocate resources appropriately and improve operational efficiency, but cost information also helps with financial and budget management, orienting effective investment and improving the quality of health economic studies. Vietnam is a developing country with a high population growth rate. The need for health care is increasing, but resources are very limited. In addition, health insurance is at a rudimentary level and medical services do not include enough price components, which is one of the difficulties and challenges of Vietnam in the period 2010-2015. In addition, domestic hospitals only apply prices for basic medical services according to the guiding circular of the Ministry of Health, so the integration process with countries in the region and the world regarding the assessment program is difficult. Medical economics still face many difficulties. Therefore, the need to determine appropriate medical service prices is even more urgent.

#### 2. Theoretical Background

##### *Health services*

According to the World Health Organization (WHO), health services include all health-related services from disease diagnosis, treatment, patient care to recovery and hospital discharge.

According to Nguyen Chi Tan (2015), health services include personal health services and public health services.

According to Nguyen Thi Lan Anh (2016), health services, which include two categories of services in the enlarged public sector, are a particular kind of public service that address people's fundamental needs as well as those of the community. The state or the private sector can handle the group of on-demand medical examination and treatment services (more private goods in nature, can use competitive mechanism in this market) and the group of public health services, such as illness prevention (more public goods in nature)...

To put it succinctly, a medical service is a kind of service wherein units offer medical examinations, testing, and inpatient or outpatient therapy to people who have health issues.

### **Costs of health services**

#### **Cost of health services as seen from the perspective of the treatment and examination center**

The entire amount of money received while offering a certain class of medical procedures to clients is known as the medical service pricing. From the perspective of the medical examination and treatment facility, the cost of medical services includes the following elements:

*First*, medical examination and treatment facilities get their income from the cost of medical services. Medical service costs are not the main source of income for public medical examination and treatment facilities; these facilities are funded by state funds.

*Second*, the cost of health services affects how resources are allocated and how service consumers are signaled by pricing.

*Third*, the cost of health services encourages competition across clinics that provide diagnosis and treatment. There will be more competition amongst medical examination and treatment facilities if they are allowed to be independent and choose their own rates for medical services. On the one hand, this forces medical diagnostic and treatment centers to determine a fair cost for healthcare services. However, in order to compete with other medical examination and treatment facilities that charge comparable medical service rates, medical examination and treatment facilities will be motivated to raise the quality of their offerings to match the cost of medical services. The competition between medical diagnostic and treatment centers will be the engine for raising the standard of the healthcare system as a whole.

If the cost of health service is considered as a "price" of medical services, from the medical facility side, the impact of medical service prices on the number of people participating in medical examination and treatment should be considered. Based on the revenue of the medical examination and treatment facility. The number of people participating in medical examination and treatment will change when medical examination and treatment facilities increase the price of medical services. To ensure revenue, medical examination and treatment facilities should estimate the elasticity of demand for medical service prices.

#### **Costs of medical services from the standpoint of the service recipient**

From the perspective of those receiving care, the cost of medical services is defined as the entire sum of money required to be paid in order to be able to supply and use a certain set of medical procedures in accordance with the requirements of medical examination, treatment, and care,

as well as health protection. The following characteristics of medical care charges are seen from the standpoint of service users:

*First*, one permanent feature of medical examination and treatment facilities that influences service consumers' decisions is the cost of health services. Health service charges are one of the most obvious expenditures associated with medical examinations and treatments; they are declared and governed with clarity.

*Second*, health service pricing give service customers insight into the average or marginal cost of a medical examination and treatment. Based on that, service users may select a service that meets their expectations for the quality of the service as well as their capacity to pay for themselves and their family.

*Third*, service customers are aware of their rights since they are paying for health services. According to Callender (2006), service customers tend to demand larger advantages from medical facilities when their fees are higher. Consequently, enabling medical examination and treatment facilities to charge for health services has the effect of encouraging them to raise the caliber of their services.

It is clear from this that medical service pricing affect both medical service providers and consumers in terms of raising the standard of care provided by the overall healthcare system.

The amount that service customers must pay to cover all or a portion of the cost of medical services is known as the medical service price. The service pricing technique and roadmap for estimating the entire cost of prescribed education and training services, including wage costs, material costs, management costs, and discount costs, are used to calculate the prices of medical services, amortization/depreciation of various costs and finances as well as fixed assets (accumulated investment).

Thus, the price of health services is the amount of money that the service user or payer must pay to the medical examination and treatment facility when they receive those services.

#### **Elements that make up the price of medical services**

The basic elements that make up the price of medical services include:

1. Costs of drugs, chemicals, and consumables;
2. Costs of electricity, water, waste treatment...;
3. Direct equipment maintenance costs, purchasing replacement tools and instruments;
4. Salary, allowances;
5. Equipment depreciation costs;
6. Infrastructure depreciation costs;
7. Indirect and other departmental costs;
8. Costs for training, technology transfer, and scientific research;
9. Accumulated costs.

Can be grouped into groups as follows:

(1) *Direct costs*: Direct costs to perform the service, including:

- Medicines, chemicals, consumables, replacement supplies (including storage costs and losses according to regulations).
- Electricity, water, fuel, waste treatment, environmental sanitation, infection control costs directly to perform the service.

- Repair and maintain equipment, purchase and replace tools and equipment directly used to perform services.
- Other direct costs such as: applications, hiring information technology services; costs of calibrating, inspecting, and calibrating direct equipment, tools, and instruments; Cost of purchasing liability insurance for medical examination and treatment and other direct costs.

(2) *Salary*: Salary costs include:

- Salaries, allowances, contributions according to regulations of officials and employees (including direct and indirect departments) of the unit, of permanent workers at the unit, the supply department provide services upon request.
- Chi phí nhân công thuê ngoài, mời chuyên gia, thầy thuốc, lương y trong đơn vị (không phải là người làm việc cơ hữu ở đơn vị, bộ phận cung cấp dịch vụ theo yêu cầu), ngoài đơn vị, người nước ngoài để khám, tư vấn, điều trị, thực hiện các dịch vụ kỹ thuật y tế đáp ứng nhu cầu của người dân, người bệnh;

(3) *Chi phí quản lý*: Chi phí quản lý của các bộ phận quản lý, gián tiếp bao gồm:

- Chi phí điện, nước, nhiên liệu; cước phí internet, thông tin, liên lạc, tin học, hệ thống mạng, theo dõi an ninh, an toàn người bệnh; chi phí vệ sinh, môi trường, xử lý chất thải, các chi phí thuê, mua ngoài khác.
- Chi phí duy tu, bảo dưỡng tài sản, mua sắm trang thiết bị, công cụ, dụng cụ, vật tư, phương tiện, văn phòng phẩm phục vụ cho bộ phận quản lý, gián tiếp và hoạt động chung của đơn vị.
- Expenses for business trips, conferences and seminars according to current policies and regulations; hire interpreters and translators; Expenses for purchasing, printing, and photocopying documents and publications for professional use.
- Costs for uniforms, costumes, labor protection, ensuring labor safety, protecting workers' health... and other reasonable actual costs.
- Reasonable and valid costs according to regulations for communication, advertising, marketing, commissions, and customer care.
- Fees and charges; Land use tax; Occupational risk insurance, property insurance, fire prevention and fighting costs.
- Loan interest payment expenses (if any).
- Other expenses as prescribed by law and other reasonable and valid expenses to operate and ensure the normal operation of the medical examination and treatment facility.

(4) *Depreciation of assets*

(5) *Costs for training, transfer of new techniques, training to improve professional capacity: calculated according to actual or estimated costs for each service.*

(6) *Risk provisions.*

(7) *Accumulated for investment expansion and technical development must not exceed 10% of the total costs from Clauses 1 to 5 of each service.*

### **Public hospital**

Public hospitals are those that the state owns, finances, and invests in infrastructure. This kind of hospital accepts

donations to fund its operating expenses while offering free medical care.

A public hospital is a medical facility that is legally founded by a capable state body, has its own seal, account, and independent accounting system set up in compliance with the law. In the health fields of medical examination and treatment, preventive medicine, nursing, rehabilitation, safety food hygiene, medical assessment, forensic medicine, traditional medicine, population and family planning, reproductive health, and accounting laws to carry out the task of providing public health services or state management...

### **Autonomy of public hospitals**

Public hospital autonomy means the rights and obligations of hospitals assigned by the State to exercise autonomy in: finance; organize the apparatus, staff and organize professional activities. Currently, the State is granting autonomy to hospitals based on the level of financial autonomy to exercise other autonomy rights. The higher the level of financial autonomy, the higher the autonomy in professional activities, organizational structure, and staffing, and vice versa.

Hospital autonomy is currently divided into 4 groups, each group has different levels of autonomy, including: Group 1: Autonomy in recurrent and investment expenditures; Group 2: Self-control of recurrent expenses; Group 3: Partial autonomy of regular expenses; Group 4: The state budget ensures all regular expenditures.

According to operational content, financial autonomy includes the following three main contents: Autonomy in revenue management; Autonomy in spending management; autonomously manage and use financial results.

### **3. Determine the cost of health services at public hospitals in Hanoi**

#### **Introduction to public hospitals in Hanoi**

As the economic and social locomotive of the Northern region, Hanoi city has a population of more than 10 million people, especially in recent years, due to economic development, increased labor demand, people in Immigration to the city from other provinces and cities is increasing. This is also a big challenge in people's health care activities for the local health sector. Overview of the public hospital system in Hanoi:

Hanoi currently has 67 public hospitals, including 42 hospitals under the Department of Health and 25 hospitals under the Ministry of Health, including groups of general and specialized hospitals.

General hospitals are hospitals that can diagnose and treat most diseases (such as Bach Mai Hospital, Hospital, E Hospital, Friendship Hospital, Medical University Hospital). Specialized hospitals specialize in examining and treating a group of diseases (such as the National Eye Hospital, National Dermatology Hospital, K Hospital, etc.) or for a group of patients (such as the National Children's Hospital, National Geriatric Hospital, National Obstetrics Hospital,...).

#### **The current state of pricing medical services in Hanoi's public hospitals**

The Ministry of Health has not yet released guidelines or criteria pertaining to service quality to direct the application of rates commensurate with service quality, resulting in hospitals offering the same level of care at the same cost.

The disparities across public hospitals result in unequal reimbursement for medical services, which negatively impacts patient rights and drives up the expense of receiving insurance-covered care. excessive medical expenses. Specifically, the growth in medical examination and treatment fund expenditure utilizing health insurance has been going on for a number of years since the establishment of medical service charges. According to survey data from 2023, 67% of Hanoi's public hospitals raised their spending on health insurance.

The implementation of medical service prices towards correct and complete calculation is stipulated in Decree No. 85/2012/ND-CP and Decree No. 16/2015/ND-CP; Accordingly, from 2013 to 2020, the price of medical services using health insurance gradually calculates the full cost of performing the service, including management costs, depreciation costs of fixed assets, and fully calculates the cost of performing the service. Salary costs are based on the current base salary. In 2018, the Ministry of Finance coordinated with the Ministry of Health to review economic and technical norms to adjust the price of medical examination and treatment services with health insurance among hospitals of the same level nationwide according to Circular No. 15./2018/TT-BYT. Beginning on July 15, 2018, discounts will be applied to 70 services, with an average reduction of approximately 15%. These discounts will be limited to high-frequency services with high medical examination and treatment costs, with a focus on bed days, medical examination services, and other technical numbers. In addition, nine services will see price increases of approximately 5%, and nine services will have new prices added. According to Circular No. 15/2018/TT-BYT, the cost of medical examination and treatment services utilizing health insurance is established based on the Ministry of Health's human resource standards as well as economic-technical criteria for direct consumption. Determination: The pricing only takes into account the direct expenses that have already been applied for about 900 services for which there are no economic-technical norms for direct consumption.

Besides, in the process of building and implementing medical service prices, there are still certain difficulties. Specifically, Clause 20, Article 1 of the Law amending and supplementing a number of articles of the Law on Health Insurance assigns the Minister of Health to preside over and coordinate with the Minister of Finance to uniformly regulate prices for medical examination and treatment services by Health insurance among hospitals of the same class nationwide, but currently only prices are regulated according to hospital class for the two groups of services that account for the largest proportion of medical examination and treatment costs: the group of prices for medical examination services and the group of prices for medical examination and treatment services. Service prices per bed per day of treatment, prices for other technical services are not yet classified by hospital class.

On the other hand, up to now, the Ministry of Health has not issued standards and service quality as a basis for guiding the application of prices consistent with service quality, leading to the same quality of service (same price.) at different medical facilities are different, creating inequity in payment of medical examination and treatment costs between medical examination and treatment facilities, greatly affecting the rights of patients, increasing costs.

Medical examination and treatment using unreasonable health insurance. In addition, since the implementation of new medical service prices, increased spending from the medical examination and treatment fund using Health Insurance has occurred in many localities, causing some provinces to spend more than assigned estimates; Propaganda and dissemination of legal policies on health insurance in some places is not yet frequent and extensive, especially for people in rural, remote and mountainous areas.

#### 4. Conclusion

Hospital autonomy is the Party and State's policy to innovate the operating mechanism of public hospitals in accordance with the development context of a socialist-oriented market economy. After 20 years of implementing this policy, there have been certain results: the number of public hospitals with autonomous regular expenditures has increased rapidly, the quality of public service provision has improved, and budget expenditures have been significantly reduced. Government books.

However, during the implementation process, especially after 2 years of piloting full autonomy at four hospitals under the Ministry of Health, some inadequacies in policy mechanisms and legal corridors have been revealed. Exercising autonomy and lacking a mechanism to establish medical service prices. The article proposes a number of solutions for state management agencies as well as public hospitals in Hanoi in particular and the country in general:

##### (1) For state management agencies

The policy process that the state will use to set the costs for medical services has to be developed more precisely. The following elements must be included in any mechanisms or policies used to determine the cost of medical services:

- The cost of medical services must be agreed upon as a price cap for all relevant hospitals and included in the State's price management items.
- The cost of medical services must be fairly determined, taking into account all relevant and socially acceptable cost elements based on cost standards.
- Create a price control system for medical goods, such as a tax code or a policy for managing the cost of medical supplies and equipment. This will ensure that input and output costs are transparent to the public and will stabilize the market.
- Controlling the criteria for medical service quality that serve as the foundation for setting medical service costs.

##### (2) For public hospitals

- Build and organize the organization and price determination process

The organization of valuation is extremely important, demonstrating professionalism or unprofessionalism in the valuation process. Close coordination between departments in the hospital will make the organization of pricing simpler. Building a standard, simple, and clear pricing process will shorten the time and costs of the hospital. Valuation work, therefore will also affect the valuation.

- Choose an appropriate valuation method  
Medical services are specific and special services, and are affected by many factors, both objective and subjective. The choice of valuation method will directly

affect the valuation results. In valuation, there is no method that is most accurate, but only an appropriate and effective method based on a suitable perspective for the conditions. Application and type of service to be priced, and more importantly, minimize costs in the pricing process. Choosing an appropriate valuation method based on available, reliable sources of information and data will help the valuer set a highly reliable price, convincing customers with a scientific basis. And will reduce costs for valuation work.

- **Building a pricing information system**  
Although information is an objective factor from the market, building an information system completely depends on the subjectivity of the valuer and the strategy of each hospital. To accurately determine the value of medical services provided by hospitals requires valuers to regularly collect and process information. Therefore, a standard information system, a reliable, complete, and promptly updated information source will be the basis for valuers to accurately evaluate and analyze, thereby greatly influencing the valuation results and greatly reduces costs and time for determining service prices.
- **Training human resources**  
In any condition, human resources for valuation work are extremely important. The ethical qualities and professional qualifications and experience of the valuation staff greatly affect the valuation process and results. Valuing medical services is a difficult and complex job and requires good professional qualifications and thorough training. Determining the price of medical services is a highly specialized activity, requiring the price assessor to have specialized knowledge and be able to point out the factors that affect the price of medical services. An experienced valuer is someone who can react quickly to factors that affect the determination of medical service prices and unexpected changes in medical service prices to avoid mistakes and negative impacts. Extremely involved in pricing activities.

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