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Financial Evaluation of Subdistrict Health Promoting Hospitals Transferred to Provincial Administrative Organizations (2023)[1]

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Abstract

This research article reports the study of the financial status of Subdistrict Health Promoting Hospitals (SHPHs) that were transferred from the Ministry of Public Health to Provincial Administrative Organizations (PAOs). The objectives are to (1) to determine the appropriate financial system for the primary health care services that SHPHs should adhere to after the transfer? (2) to assess the financial status of the SHPHs after the transfer, what are their strengths and weaknesses? (3) to use the study results to make recommendations for relevant agencies to consider. This research used a survey method, collecting both quantitative and qualitative data. The main source of information was 32 SHPHs from 8 provinces and 4 regions. The study results found that (1) after the transfer, the financial system of the SHPHs already had an appropriate structure. (2) The financial status of the SHPHs still had insufficient revenue and uncertainty in the allocation. (3) The research team used the study results to make recommendations by requesting that the amount of money and the allocation method be reconsidered more appropriate.

Keywords: Subdistrict health promoting hospital, Financial model for primary health care system model, Public health decentralization, Robust public financial management

Introduction

Necessity

Following the Cabinet's resolution that approved the transfer of the Subdistrict Health Promotion Hospitals (SHPHs) to be under Provincial Administrative Organizations (hereafter be referred as PAOs). In effects 3,263 units of SHPHs (out of a total of 9,872) have been devolved from the Ministry of Public Health to be under supervision of 49 PAOs. This policy change is important and significant from viewpoint of public sector resource allocation. It is hypothesized that this program transfer should exert positive effects for health service delivery and an increase in quality of life especially in terms of health promotion. This topic has garnered wide interest from academia and public at large-one of the topics of interest are whether there are favorable improvement in SHPHs finance, investments in buildings, equipment, innovations, or new types of service (if any), and a reduction in congestion and overcrowding in general hospitals and regional hospitals, health promotion activities, disease screening, and community health education under PAOs management. Given that PAOs are local organizations working closely with

[1] This research is one of a series of projects on evaluating policies for transferring Subdistrict Health Promoting Hospitals to Provincial Administrative Organizations, which received funding from the Health Systems Research Institute (HSRI)

communities, it is appropriate to evaluate the outcomes of this transfer, considering ongoing evaluations for continuous improvement. This evaluation aims to provide insights for policy level decision makers based on field data and experiences for future opportunities.

Objectives of study

For the above reasons, this research aims to assess the financial and budget performance status of the transferred SHPHs in fiscal year 2023 to find out (1) to study the financial and budget performance system model that is appropriate for primary health care services operated by the transferred SHPHs; (2) to assess the financial and budget performance status of the SHPHs transferred to the PAO in fiscal year 2023, what are their strengths and weaknesses; and (3) to use the results of the study from (1) and (2) to develop recommendation for policy development to improve the financial and budget performance system of the SHPHs to better meet the objectives of the primary health care system.

Scope of study

Study the finances and budget performance of specific SHPHs that were transferred in fiscal year 2023, totaling 32 locations, 8 provinces, 4 regions of the country.

Literature review

Sub- district Health Promoting Hospitals (SHPHs)

SHPHs is a primary health care unit of Thailand. According to the Primary Health Care System Act B.E. 2562[2], SHPHs is the primary health care unit of the country's public health service system. Currently, there are 9,872 SHPHs, covering subdistricts nationwide. They have important roles in providing primary health care services to people in their areas. In summary, primary health care services have the following important roles: (1) Emphasize health promotion, disease prevention, and disease surveillance by taking proactive steps to control social root causes. (2) Be the first- line care unit for patients to provide medical treatment. The government has assigned SHPHs duties to treat illnesses at the primary level. If beyond capacity, they must be referred to the secondary level. This includes community hospitals or district hospitals which have doctors from various fields on staff (3) providing rehabilitation services for health problems resulting from illness to return them to their original condition as much as possible (4) providing palliative care services to bedridden patients or patients with reduced physical and mental abilities by providing beds at the patients' homes as if they were in a ward (Primary Health System, 2019)

The need for decentralization of health to local governments

Decentralization by transferring tasks from central government to local governments has been proven by several international research studies and synthesizes of experiences that have proven to improve service efficiency. For example, Rubio and Gomez (2017) followed up on the evaluation of health care transfers in Spain from 1981 to 2002 and found that the transfer of health care, which had been carefully and continuously carried out for two decades, was very successful. Political factors, urban context, and spatial factors were important factors driving such success. Key indicators of success of the transfers, such as the neonatal mortality rate and infant mortality rate, have significantly decreased.

The results of the evaluation of primary health care decentralization to 5,560 municipalities in Brazil, which were retrospectively evaluated from 2001 to 2011, found that the transfer of primary care to the municipalities resulted in a 30 percent reduction in diabetes mortality and a 2.3 percent reduction in the need to refer patients to higher level hospitals. In addition, it was found that transferring to municipalities with higher development levels and better financial status would help reduce the risk of illness among the

[2] According to the document of the Parliament Radio Station, broadcast in June 2019, it states that the primary health care system means the mechanism and process for coordinating cooperation to provide primary health care services through participation between the government sector, local administrative organizations, the private sector and the public sector, including referring service recipients and linking data between primary, secondary and tertiary service units, and providing an appropriate number of family physicians and primary health care providers.

people better (Nishijima et al., 2019). In Thailand, the Constitution of the Kingdom of Thailand B.E. 2007 has provisions supporting decentralization. The enforcement of the Act on the Decentralization Plan and Procedures for Local Administrative Organizations B.E. 2007 stipulated that the state must decentralize more power. This resulted in the announcement of the decentralization plan for local administrative organizations on December 2, 2000. The Decentralization for Local Administrative Organizations Committee (DLA) prepared the first decentralization action plan (2000-2007), the second (2008-2018), and the third (2019-2022). The total time from the beginning to the present is 22 years (The Committee on Decentralization, Local Administration and Special Form of Administration, 2022).

The said decentralization plans the goal is to transfer 9,826 SHPHs, which were originally under the Ministry of Public Health, to be under the jurisdiction of the PAOs in all 76 provinces. In the fiscal year 2023, 49 PAOs submitted their intention to transfer 3,263 SHPHs in the first round. The criteria for the transfer are that SHPHs will receive an increased budget (The Sub-committee on the Transfer of Public Health Missions to Local Administrative Organizations, 2022).

The change in the status of SHPHs is considered a change in the power structure. After the transfer, 3,263 SHPHs were transferred from the Ministry of Public Health to the PAOs. This change in affiliation will cause the policy and administration of these SHPHs to fall under the responsibility of the PAO. Each subdistrict administrative organization may have different administrative concepts, which is likely to affect the mechanisms and processes for providing primary health care services to the public. Especially the financial and budget management mechanism of the SHPHs.

WHO's basic model of primary health care

In 2018, the World Health Organization (WHO 2018) developed a strategic framework for driving health into the 21st century for member states to apply. It emphasizes the principle of taking care of people's and society's own health, with primary health care systems as the core to drive the goal of overall health of people and society, as shown in Figure 1.

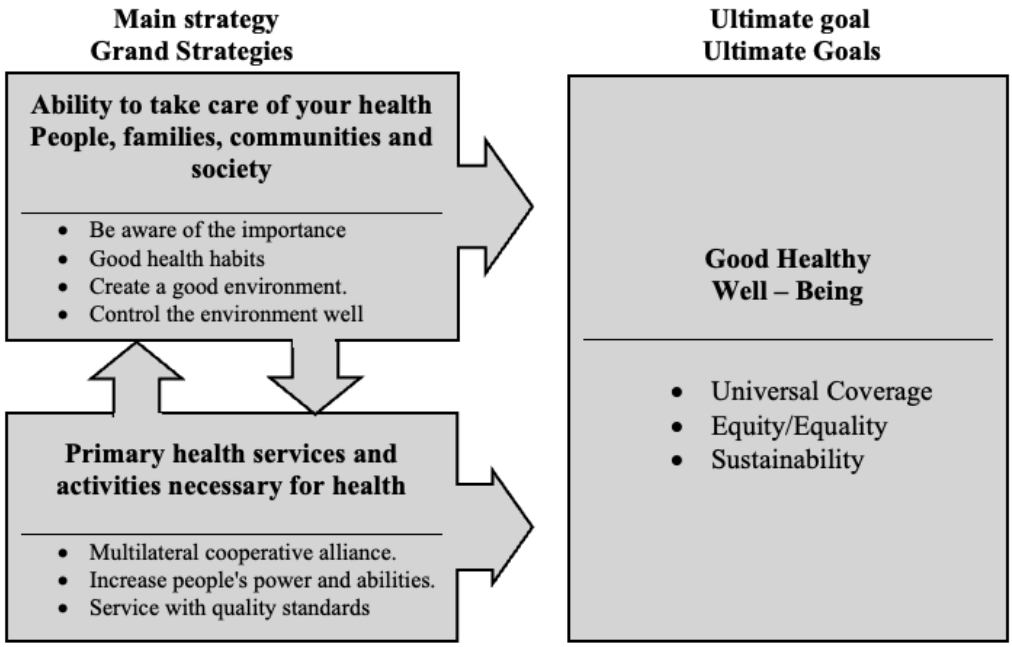


Figure 1 WHO's basic's model of primary health care

From Figure 1 above, it shows the causal and effect WHO's basic's model of desired health that the SHPHs must successfully implement. The primary health model has important WHO's basic's components, namely, the *ultimate goals* of state health, which consist of good health and the well-being of the people, with

indicators of Universal Health Coverage (UHC), *equity and equality in receiving services, and sustainability of services*. There are two main grand strategies to drive towards achieving the ultimate goals: the strategy of "building the ability to take care of oneself of the people and society", which has clear intentions and government policies supporting it, by coordinating cooperation between the government sector, civil society, the people, and the private sector, and the strategy of delivering services to achieve well being", which has important components, namely, primary health care (PC), which focuses on health promotion, disease prevention, primary medical care, and health surveillance. and close palliative care with target groups in the Catchment Area.

The operations under the two main strategies must be based on the importance of the SHPHs as primary care units and necessary public health missions as the core of integrated services to meet the needs, using policies and network activities resulting from cooperation from many sectors (Multisectoral Policy & Action) such as local administrative organizations, communities, foundations, clubs, local leaders, etc., including the empowerment of people and communities in taking care of their own health to have sufficient knowledge, understanding, awareness, and ability to carry out activities as well as taking care of the environment and habits at all three levels: individual level, household level, and community level.

The 6 building blocks model

From the strategic framework, the WHO has developed a model for implementation, emphasizing the importance of driving primary health care services towards their goals in full. This model is called *the 6 essential components (The 6 Building Blocks Model)*, which are (1) Health Workforce, (2) Health Funding, (3) Access to Essential Drugs, (4) Services Delivery, (5) Health Information System, and (6) Governance & Leadership (WHO, 2010), as shown in **Figure 2.** For such services to be successful, they must consist of the characteristics according to the 4 criteria for success: (1) Availability, (2) Accessibility, (3) Acceptability, and (4) Affordability.

If the system has the above characteristics, it will result in better achievement of the system's goals. Considering (1) it can improve health, (2) it can respond to needs quickly, (3) it can protect against social and financial risks, and (4) it can improve efficiency.

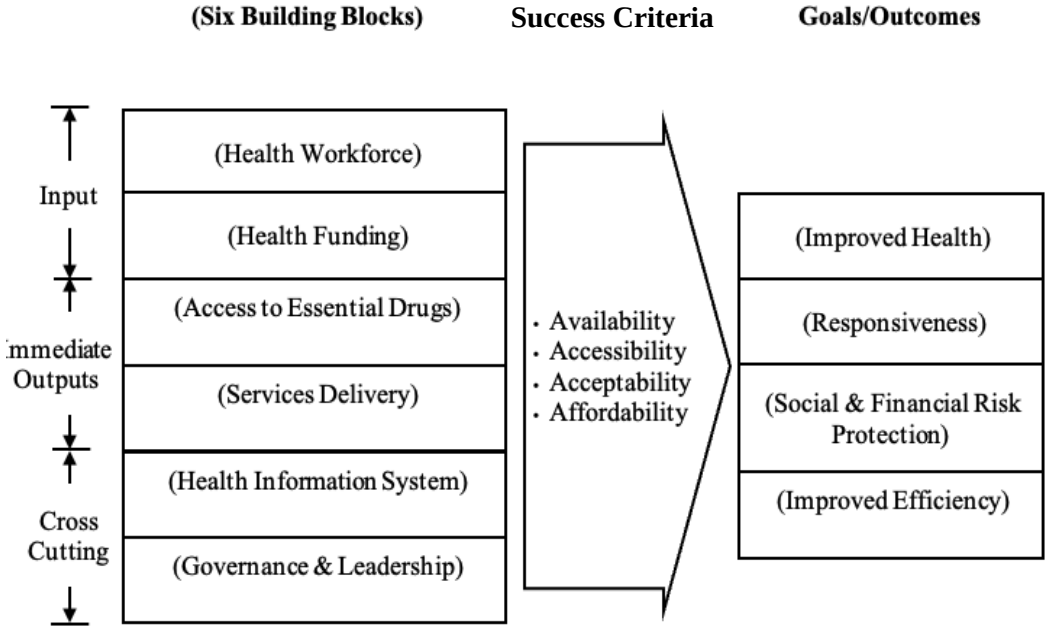


Figure 2 The six building blocks model of primary health care
Source: Updated from WHO, 2010.

From the above model, it can be seen that health financing is a necessary component of the model. WHO explains that good health financing can be considered from 3 characteristics: *1. Ability of revenue collection*, which means the ability to procure sufficient and appropriate revenue to drive towards health; *2. Security of revenue*, which means having sufficient and timely revenue stability without risks that may cause financial crises; and *3. Allocating revenue to expenditure efficiently and effectively*, which means that spending must be distributed fairly and respond to the level of need effectively. Since these 3 characteristics are conditions for success in government health financing management, all service units must consider and find their own measures to manage health financing successfully and effectively (WHO, 2020).

A model of robust budgeting in primary health care

WHO (2018) conducted a study and proposed a model of robust public budgeting in primary health care units to apply as a precondition for success. Such a robust budget system must start from *(1) having a clear and stable revenue and expenditure structure, i. e., revenue and expenditure must be clearly classified into categories and can be procured consistently; (2) having good types of spending and sufficient budget to meet spending needs; and such money must be stable and consistent. If at any time there is a shortage of money to meet spending needs, it means that a crisis has occurred for the service or product that will follow; (3) having criteria for managing both revenue and expenditure that are appropriate to the needs, such as (a) forecasting and planning the need for revenue and expenditure management in advance; (b) organizing allocation according to priority; (c) being able to manage without obstacles; and (d) being flexible and adoptable.*

From the above concepts, the most common problem in terms of revenue in the public health system is insufficient revenue due to the less importance given to public health than other businesses. Moreover, the view that public health services are merit services, which the service prices should be calculated based on social prices and only what people can afford rather than the market price. This financial status limits the collection of service fees from people who come to receive services to the extent that they can afford, and they must rely mainly on government budget support, while the government sector also has a limited budget. This problem is a snake swallowing its own tail, resulting in the state's health being in a dilemma.

In terms of expenditure, according to the general expenditure management principles, efficiency and effectiveness in spending are required. However, in terms of health services, which are merit services that the state must provide to people sufficiently and universally, they cannot rely on financial efficiency only. (WHO, 2020).

Another key to a robust budget for a health system is that it must be able to link both revenue and expenditure to the goals, and it must also prioritize the mission. The budget must be clearly linked to and respond to the mission. It can be measured and evaluated easily and is mutually acceptable among all stakeholders. In addition, a major problem with budget spending is that budget recipients do not have clear spending standards that specify how much budget each mission requires and when, as well as a lack of mutual acceptance between budget allocators and budget spenders, which leads to weak budget management and supervision, which ultimately leads to inefficiency in budget spending (WHO, 2018).

In order to have strong budget management, it is necessary to consider covering both procurement, allocation, and spending, with measurement criteria that are closely related to the 3 levels of goals: *initial goals*, namely output, *intermediate goals*, and *final goals.* The achievement of initial goals will be based on the characteristics of the budget, which are (1) adequacy of the budget that can be predicted, (2) budget allocation that is consistent with the mission priorities, (3) better budget spending, and (4) flexibility in budget spending.

In addition, the achievement of intermediate goals will be based on (1) transparency and accountability for results, (2) efficiency in spending, and (3) fairness in receiving the budget. The final goals in budget management are: Providing universal health services that are in line with needs with financial allocation and financial equity, as shown in Figure 3.

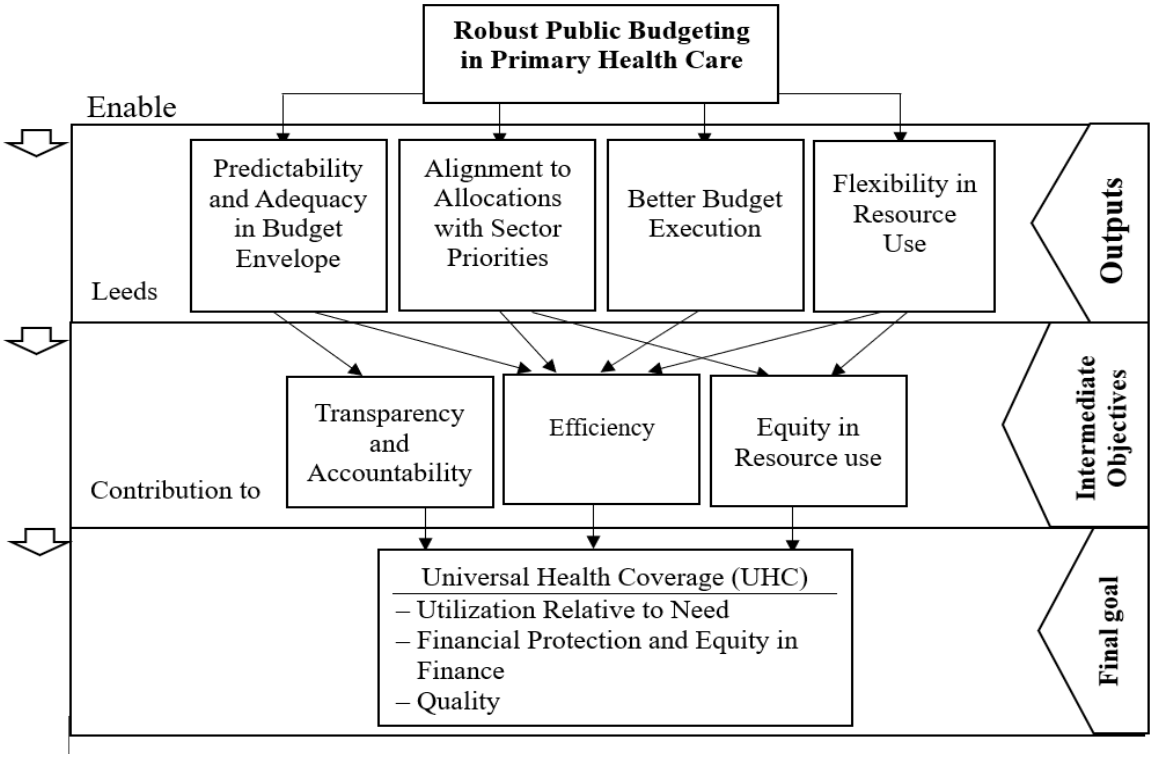


Figure 3 Robust public budgeting in primary health care model
Source: WHO (2018).

Preliminary examination of the financial model currently used by the SHPHs

In order to have preliminary data to study the financial model of the SHPHs, the research team reviewed the literature and found that there was no literature that was consistent with the robust budgeting model, as shown in Figure 3. However, when examining the data recording files of the SHPHs sent to the Ministry of Public Health, it was found that the model had not yet been applied. When visiting Bueng Kham Phroi 1 SHPHs, Pathum Thani, to study the financial system that the SHPHs actually use, it was found that the financial and accounting management criteria of the SHPHs consisted of (1) there must be a staff member responsible for disbursements specifically, but in practice there are no such personnel; (2) there must be a plan for receiving and paying money; Both in terms of budget and maintenance funds (3) there must be a current revenue and expenditure control account (4) there must be a current outstanding account file and a current procurement account file, and (5) there must be an audit by an audit committee twice a year.[3] The 4 criteria above are criteria that the Ministry of Public Health has set for the all of SHPHs to adhere to.

Research concept

From the above literature review, the research team has developed the following conceptual framework for the research:

Good financial standard framework of primary health care system

The results of the literature review can be concluded that the framework of expectations for good primary health care budgeting for SHPHs should have 5 characteristics: (1) Robust financial and budget systems are very important for driving primary health care services to success. (2) Robust financial and budget systems include revenue, expenditure, and financial and budget management that are appropriate for the mission

[3] The research team requested to observe the work at Bueng Kham Phroi 1 SHPHs when using the data to develop the survey on August 30, 2022.

and context of each area. (3) Criteria for measuring revenue strength include sufficiency of funds for providing necessary services and consistency in receiving budgets in time for the need for spending. (4) Criteria for measuring expenditure strength include efficiency and conservation of budget spending. (5) Budget allocation and spending are closely related to the 3-stage goals: initial goals, intermediate goals, and final goals.

Research question framework

The results of the literature review and the preliminary study visit at Bueng Kham Phroi 1 SHPHs concluded that the health promoting hospital still did not have a robust budgeting and finance model. Therefore, this research should study and survey the current situation to identify the current practice along with its advantages and disadvantages, in order to provide recommendations for good budget management of the SHPHs in the future. The questions collected in the field included (1) What is the revenue structure and types of revenue of the SHPHs that have been transferred to the PAO? Will the transfer have positive or negative effects on the SHPHs revenue strength? (2) What is the expenditure structure and main expenditure types of the SHPHs? What is the majority of the budget spent? (3) What is the average expenditure per capita of the SHPHs? Is it sufficient for the necessity? (4) What are the budget opportunities and constraints of the SHPHs after the transfer? And (5) Use the above findings to consider the recommendations for revenue development and management of the SHPHs.

Research methodology

This research used a survey research method. The unit of analysis was the 32 SHPHs that received transfers from 4 regions, 8 provinces, 4 SHPHs per province. The provinces were selected using a purposive selection method, considering 3 important criteria: (1) being a province that received transfers of SHPHs exceeding 70 percent of the total number of SHPHs in the province, and both the PAO and SHPHs were willing to facilitate the research; (2) having never received research of the same nature before; (3) having SHPHs of all sizes that could be selected for the study; The SHPHs of each province were selected using a simple random sampling method based on the proportion of size.

Data collection was conducted using a survey method by (1) using well trained and standardized surveyors, (2) semi- structured survey instruments, consisting of open- ended questions for in- depth interviews with data recorders, (3) the primary data sources were financial records and financial officers from each SHPHs, (4) the results were discussed in group discussions with the SHPHs director and relevant officers of each SHPHs to explore the key strengths and weaknesses of the financial status of each hospital again.

Data analysis was conducted using the ATLAS.ti program, starting with the analysis of each SHPHs, then upgrading to each province and country respectively. In terms of interpretation, the research team and field surveyors, including the SHPHs directors of each province, jointly interpreted to find accurate and reliable conclusions via Zoom Meeting.

Research results

The research findings are divided into 3 parts: (1) revenue sector, (2) expenditure sector, and (3) budget opportunities and constraints resulting from transfers, as follows:

Revenue sector: structure, types, and average revenue per SHPHs

The study of revenue sector consists of revenue structure, which is classified by revenue type and revenue allocation method, as follows:

Revenue structure classified by revenue type of SHPHs

Each SHPHs has different sources of revenue. The most common sources are (a) revenue from the national budget to pay for personnel salaries, (b) area subsidies for operating expenses that cover fixed costs, (c) subsidies for service development according to the size of the SHPHs (SML), and (d) lump sum allocations per capita from the universal health coverage system according to primary missions, which are subdivided into two levels: the main network and the sub-network. The main network is the secondary hospital as the allocator and the SHPHs is the SHPHs that is the allocator. (e) subsidies from the PAO, which are allocated from revenue or savings for the development and improvement of buildings, rooms, tools and

materials. (f) donations or service fees or support from the community, local businesses. (g) money that the SHPHs has tried to generate revenue from using other types of resources, such as land in the possession of government agencies (e.g. the Royal Forest Department, the National Park Department, temple areas, the Treasury Department, etc.). (h) developing new types of service centers to generate revenue.

From the data analysis results, it can be concluded that the SHPHs has an average total revenue of 1,991,554 baht/ SHPHs, excluding personnel salaries. This amount is divided into 5 main types of revenue structure: (1) revenue from the lump-sum budget per capita of service recipients from the National Health Security Office (NHSO) as a regular service unit that is a network under the contract to provide primary health care services with (Contracted Unit of Primary Care: CUP); (2) government subsidies to support the development of the quality of public health services of the SHPHs that are transferred to local administrative organizations; (3) revenue from the health insurance fund at the local or area level to spend on health promotion and prevention activities in the SHPHs areas; [4] (4) revenue for replacement investment (depreciation)[5]; and (5) other revenue that the SHPHs can collect by themselves as service fees from service recipients who are not entitled to health insurance (gold card). Each type has a revenue project and budget as shown in Table 1.

Table 1 Revenue structure classified by revenue type of SHPHs for fiscal year 2023

n = 32

Revenue structure classified by type of revenue	Average (baht / SHPH / year)	percentage
1. Lump sum budget per head from NHSO	951,491	47.78
2. Service quality development subsidy (SML)	687,500	34.52
3. Local Health Insurance Fund	143,556	07.21
4. depreciation	96,937	04.87
5. Other revenue	112,070	05.63
Total average revenue per SHPHs	**1,991,554**	**100.00**

Note: 1) Data from 32 SHPHs studied: 7 small, 16 medium, and 9 large, totaling 32 hospitals. 2) The SHPHs Quality Development Fund is allocated by the Budget Bureau to small SHPHs: 400,000 baht, medium SHPHs, and 650,000 baht, and large SHPHs: 1,000,000 baht. The allocation is based on the budget period, which is allocated only to the SHPHs that have been transferred.

Methods for allocating revenue from 5 types of revenue sources

For the 5 types of revenue mentioned above, each type has a different allocation method, as follows:

1) Revenue from the lump sum budget from the NHSO Public Health Promotion Hospitals, as regular service units that are contracted to provide primary health care services with the NHSO, receive this revenue from the NHSO through the Community Hospitals (PHCs). that are the main network. The allocation of each main network hospital (CUP) will be based on the criteria that the committee of each main network has resolved to determine. The budget allocation framework from this source includes the

[4] The NHSO has supported the establishment of health promotion funds at the local level, namely municipalities and sub- district administrative organizations, since 2007 on a per capita basis. See the research report by Patmasiriwat et al. (2009) on behalf of the Research Center, Faculty of Economics, Thammasat University.

[5] In 2023, the government approved a budget to support the National Health Security Fund of 204,140 million baht, of which 161,603 million baht is a lump sum per capita payment, or an average of 3,385.98 baht per population, to network hospitals, which is classified as an expense item, including investment costs and depreciation.

budget for outpatient administration (OP) and promotion and prevention services in hospitals (PP), as well as fixed costs of each SHPHs.

For the lump sum budget per capita from the NHSO in fiscal year 2023, the average lump sum per capita is 3,385.98 baht per population.[6] Of this amount, the SHPHs received only 112 baht,[7] as shown in Table 2.

Table 2 The lump sum budget per capita from the National Health Security Office that small, medium and large SHPHs receive on average

n = 32

Subdistrict Health Promotion Hospital	Quantity	Average budget (baht)	Average population (person)	Average budget per capita (baht)
Small size (S)	6	516,755	2,999	255
Medium size (M)	14	928,415	5,358	162
Large size (L)	11	1,409,304	10,181	143
Average	**3 1**	**731,325**	**6,179.40**	**112**

Note: The calculation result of 112 baht is derived from the weighted average.
Source: Research Results

From Table 2, it can be seen that the lump sum budget per capita that the SHPHs received from the network hospitals (CUP) on average for small/medium/large (S/M/L) was 155, 162, and 143 baht, respectively. When calculated as an average per capita, the average budget that the SHPHs received from each category was 112 baht, while the per capita budget that the NHSO allocated to the Contracted Unit of Primary care (CUP) in fiscal year 2023 was as high as 3,385.98 baht. This means that the SHPHs had an average budget (from all categories combined) of 3.30 percent of the per capita budget that the NHSO allocated to the SHPHs.

2) Revenue from subsidies to support the development of the quality of public health services of health centers transferred to local administrative organizations (SML money) The budget from this source was allocated from the Budget Bureau. In order to comply with the allocation criteria announced by the Public Health Office (abbreviated as "SML funds"), it is allocated to the SHPHs. The criteria for the amount of money allocated to the SML funds is based on the size of the SHPHs. That is, according to the allocation agreement, small SHPHs will receive 1 million baht, medium-sized SHPHs 1.5 million baht, and large SHPHs 2 million baht. The main objective of this type of subsidy allocation is to support the provision of health services to the SHPHs to be more comprehensive.

When a SHPHs receives this type of subsidy, it must be placed in the maintenance fund category in accordance with the regulations of the Ministry of Interior. The budget from this source will be allocated directly from the Budget Bureau through the PAO to the SHPHs.

The study found that in fiscal year 2023, the SHPHs in the sample group did not receive budget allocations in accordance with the specified criteria. It was found that each SHPHs did not receive the full SML budget allocation according to the agreed criteria. That is, in fiscal year 2023, small SHPHs received an average budget allocation of 400,000 baht/SHPHs, medium-sized SHPHs received an average budget allocation of 650,000 baht/SHPHs, and large SHPHs received an average budget allocation of 1,000,000 baht/SHPHs.

From the incomplete budget allocation according to the specified criteria, the SHPHs felt that the government did not comply with the announced transfer criteria.

[6] http://www/nhso.go.th.news, retrieved on 21 Feb 2024

[7] Calculate the lump-sum budget per capita that the SHPHs receive at 951,491 baht per location (according to Table 2) divided by the average population of the SHPHs studied (equal to 6,179.4 people per location).

3) Revenue from the local or area health insurance fund, the local area health insurance fund This is a budget that the NHSO allocates to municipalities and Sub-district Administrative Organizations (SAOs) in the area to be used in field health promotion activities. The SHPHs have the right to propose projects to request for allocation of funds to implement community health promotion projects. Therefore, SHPHs can propose projects through the municipalities /SAOs that own the area on a project-by-project basis.

From the study of revenue from this item of SHPHs, it was found that small SHPHs received an average allocation of 68,915 baht/SHPHs, medium sized SHPHs received an average allocation of 153,907 baht/ SHPHs, and large SHPHs received an average allocation of 207,846 baht/SHPHs.

4) Revenue from depreciation budget This revenue item is another budget revenue of SHPHs that is directly allocated by the NHSO to be used for maintenance and compensation for depreciation of buildings and equipment. The spending method will be in accordance with the criteria for expenses to compensate for depreciation of buildings and equipment as announced by the Ministry of Public Health. Subject: Criteria, methods and conditions for receiving money, paying money, keeping money, and a list of expenses related to and necessary for supporting and promoting the provision of public health services and other expenses.

The survey results found that all SHPHs under this study did not receive a budget allocation for this item in fiscal year 2023. The small SHPHs group received an allocation of 2 out of 6 studied, with an average allocation of 53,609 baht/ SHPHs. The medium sized SHPHs received an allocation of 7 out of 14, with an average allocation of 106,517 baht/SHPHs. Meanwhile, the large SHPHs received an allocation of 9 out of 11, with an average allocation of 130,633 baht/SHPHs.

5) Other revenue, other revenue is revenue other than (1) to (4), such as revenue that the SHPHs can collect by itself, such as from out of area patient service fees, social security payments. and the money collected from the Traffic Act in the case of traffic accidents that require the use of rights under the Motor Vehicle Accident Victims Act, etc.

The study results found that almost all of the SHPHs studied had different revenue from this item. It was found that only 6 of the 7 small SHPHs in the sample group had revenue from this item, with an average revenue of 25,966.37 baht/SHPHs. As for the 16 medium sized SHPHs studied, only 14 had revenue from this item, with an average revenue of 61,347 baht/ SHPHs. Meanwhile, all 9 large SHPHs in the sample group studied had revenue from this item, with an average revenue of 248,916 baht/SHPHs.

Expenditure sector: Structure, types and average expenditure per SHPHs

The study found that the budget expenditure structure of SHPHs *after the transfer was not different from the period before the transfer.* Expenditure can be classified into 7 main types as shown in Table 3.

From the table above, it can be seen that the SHPHs has a spending structure consisting of 7 main expenditure items: (1) Medical service fees in hospitals, with a value of 839,334 baht/SHPHs, accounting for 66 percent of total expenses. Expenses in this list consist of 4 sub-items: medicine and medical supplies, personnel compensation, medical equipment, and compensation for doctors from SHPHs who provide services; (2) Service fees outside the hospital, which are mostly for promotion/prevention/home visits, with an expense of 183,029 baht (14 percent); (3) Utility expenses (6 percent); (4) Office supplies (7 percent); (5) Operating expenses (4 percent); (6) Official travel expenses (2 percent); and (7) Land and buildings (1 percent). The total expenses in the past 8 months had an average value of 1,272,161 baht/SHPHs.

From the table above, it is evident that the majority of expenses are related to service activities, comprising (1) medical service costs within hospitals and (2) service costs outside hospitals. The combined value of these two categories amounts to 1,022,363 baht per SHPH, representing 80.36 percent of the total expenditure.

Budgetary and financial opportunities and constraints arising from transfers

Financial and budget opportunities that arise after the transfer.

The study found that after the transfer, the SHPHs had at least 3 additional financial opportunities:

First, *the general subsidy (SML) increased according to the size of the SHPHs,* as mentioned earlier. It is a type of general subsidy (SML) which in the

previous fiscal year, the Budget Bureau transferred money directly to the SHPHs without going through the main network. This amount of money allowed the SHPHs to provide more health services than before the transfer.

Second, *the SHPHs received budget allocations from the PAO to solve urgent problems of the SHPHs.* The study results showed that after the transfer, many PAOs allocated budgets to hire additional personnel for the SHPHs, resulting in the SHPHs having more personnel necessary to provide services to the public. In addition, the PAOs allocated money to solve problems related to the benefits and welfare of personnel that the Ministry of Public Health did not transfer this amount of money to, which improved the morale and encouragement of personnel.

Lastly, *the financial and budget management system of the SHPHs is more flexible and agile,* because (1) after the transfer of the PAO, the financial authority was decentralized to give the SHPHs more freedom. (2) there is a shorter chain of command than in the past because the PAO is a local administrative organization with a decentralized budget and financial management system and regulations, while the administration of the Ministry of Public Health is centralized, so there are more complex financial processes and procedures. (3) In addition, it was found that the PAO has initiated new services to reflect the changes to the public. Therefore, some of the budget is allocated for administration that requires more flexibility, such as hiring specialists (e.g. doctors and nurses who have retired from government service) to help with administration, expanding essential drugs, and providing telemedicine, etc.

Table 3 Spending structure (October 65 – May 66) The first 8 months of State SHPHs that has been transferred

n=32

Expense list	Quantity	Percentage	Number
1. Expenses for medical services in hospitals	839,334	66	
1.1 Cost of drugs and medical supplies	115,318	9	3
1.2 Personnel compensation (Includes personnel compensation for performing work Outside of business hours (OT) and temporary employee wages)	607,861	48	1
1.3 Cost of medical equipment	46,731	4	8
1.4 Compensation for the doctor's services from Rural Health Station who came to provide support medical examination on SHPHs	69,424	5	6
2. Service fees outside the hospital emphasize disease promotion and prevention. and visit patients at their households	183,029	14	2
3. Utilities costs (water electricity telephone Internet, etc.)	83,801	6	5
4. Office supplies costs	84,443	7	4
5. Living expenses maintain and so on	52,250	4	7
6. Travel and training expenses	20,979	2	9
7. Cost of land and buildings	8,325	1	10
Together	**1,272,161**	**100**	

Note: It is the value of expenses between Oct. 65 – May 66 (8 months)

Financial and budgetary constraints after the transfer

The study found that the transfer of SHPHs that were previously under the Ministry of Public Health to the PAOs resulted in at least four limitations in the budget and financial management of the SHPHs, including:

First, *the Ministry of Public Health did not transfer the full amount according to the transfer criteria of the Public Health Promotion Commission*

(PHPC), especially the money for personnel benefits that were not transferred. In addition, the delivery of equipment, land, and buildings was not complete, causing the SHPHs and PAOs to have the burden of finding money to spend on such items.

Second, *the subsidy for supporting the development of the quality of public health services of health centers transferred to local administrative organizations (SML money) received less than the transfer criteria as announced by the PHPC.* The survey results of the revenue of SHPHs in fiscal year 2023 found that the budget allocation from the subsidy or SML money can be used to compensate for the shortfall due to the Ministry of Public Health not transferring the assets and personnel in full according to the transfer conditions. However, the SML money received was still lower than the original criteria set by the Decentralization Committee, causing the SHPHs to be unable to manage their finances according to the plan, including the problem of insufficient revenue.

Thirdly, *after the transfer, the SHPHs received a smaller proportion of the per capita budget (through the CUP) because after the transfer,* the per capita budget from the NHSO was divided into the outpatient service budget (OP) and the health promotion and disease prevention service budget (PP). However, the study found that most of the transferred SHPHs received less budget allocations for both of these parts than the previous year because many network hospitals had set aside approximately 80 percent of this money for their own use (with the CUP claiming that the transferred SHPHs had already received the SML money). Therefore, the SHPHs had to use the SML money to compensate so that it would not affect the service provided to the public.

Fourthly, *it was found that the financial system standards and accounting systems of the SHPHs still had significant weaknesses.* It was found that most SHPHs had not yet complied with the central standards of the said system. This is because most of them do not have accountants directly and have to use other personnel who lack accounting skills to perform the duties instead. Making the accounting system of lower quality than good accounting standards

Discussion

The important conceptual framework used as a reference for the discussion of the results is the robust public budgeting framework in primary health care of the WHO, as mentioned in figure 3 of the literature review. Such robust budgeting system means a budget system that can be managed to produce results effectively. When applied to the case of the SHPHs studied, both the research team and the directors of the SHPHs studied agreed that: The expected budget system of the SHPHs should consist of three important characteristics: (1) the budget system structure with a clear revenue and expenditure section that is stable enough and consistent with the situation of the various missions that it is responsible for; (2) there must be a stable amount of money flowing in and out that is appropriate for the spending situation; and (3) the financial management process must have appropriate and consistent steps and regulations, such as (a) it must be predictable; (b) there must be a revenue and expenditure plan that is consistent with reality; (c) there must be a prioritization of spending in line with the objectives; and (d) there must be flexibility that can be adjusted according to the necessity of the situation.

In addition, a good budget system of the SHPHs must be able to effectively manage at all 3 levels: *Level 1: achieving initial goals,* which is budget management to deliver products or services to service recipients effectively, considering the adequacy of the budget received and predictable in advance; budget allocation that is consistent with priorities; and there must be a better budget spending system in practice, including flexibility in budget spending. *Level 2: achieving intermediate goals,* considering transparency and accountability for results. The efficiency of spending and the fairness of budget receipt, and *the Level 3: the final goal*, is the consideration of providing universal health services that are in line with the needs, with financial allocation and financial fairness, according to the model mentioned **in Figure 3** (WHO, 2018).

In addition, the research team believes that such expected models are difficult to create successfully in the near future. For this research, it is believed that the results of this research should be considered to develop a robust financial system for SHPHs, as follows:

1) Achievement of the initial target or output level target, the study results clearly reflect that almost all of the sampled SHPHs still have problems with budget adequacy and cannot predict the amount of budget that should be allocated each fiscal year. In particular, an

important budget item is the lump-sum budget per capita for service recipients from the NHSO as a regular service unit that is a contract partner for primary health care services under the agreement with the NHSO. The SHPHs receive this budget allocation through the network community hospitals (HCHOs), which is allocated in a very small amount and has high uncertainty.[8] Therefore, the SHPHs have confirmed that it is insufficient to provide services to the public according to the quality standards of the star-rated SHPHs.

The next important revenue item is the subsidy for supporting quality development. The public health services of the SHPHs that received the transfer (SML money), which is a revenue item with a ratio of 34.92 percent of the total revenue of the SHPHs. The problem with this revenue item is that the amount of budget from the subsidy that the SHPHs actually received did not meet the specified criteria. That is, the criteria for allocating subsidy money to large, medium, and small SHPHs are 2 million baht/SHPHs, 1.5 million baht/SHPHs, and 1 million baht/SHPHs, respectively. However, the actual budget allocated in fiscal year 2023 found that large SHPHs received an average subsidy of only 1 million baht/SHPHs, medium sized SHPHs received an average budget allocation of only 650,000 baht/SHPHs, and small SHPHs received an average budget allocation of 400,000 baht/SHPHs, which is much lower than the criteria. Therefore, it can be considered that this revenue item is still lower than the target.

The situation with the main revenue items of the SHPHs reflects that the revenue structure of the SHPHs is not robust in terms of sufficiency and revenue forecasting because the SHPHs cannot forecast their own revenue in advance. Everything depends on the decision and discretion of the superior allocation unit in allocating the budget. This leads to a negative situation in providing health services of the SHPHs from the output or service level, which is sufficient evidence that the financial structure of the SHPHs is not robust from the output level.

Therefore, it can be concluded that the financial structure of the SHPHs has not achieved the initial target in the revenue dimension. In terms of spending, it was found that almost half of the expenses were spent on personnel costs, followed by expenses for providing health services and medicine and medical supplies. It can be said that the SHPHs have used the budget in line with the true necessity because personnel, services, medicine and medical supplies are the most necessary things in providing health services.

Similarly, the flexibility in budget spending found that many SHPHs used the revenue from the subsidy budget to compensate for the lump-sum per capita budget that was shared from the network hospitals, which was less than necessary for outpatient services (OP) and the budget for health promotion and disease prevention services (PP) so that the health services of the SHPHs could continue to operate. The aforementioned situation reflects the flexibility in budget spending of the SHPHs after the transfer.

In summary, when considering the criteria for achieving the initial target or the productivity target according to the framework of the robust budget structure for primary health care services of the World Health Organization, it can be said that the budget structure of the SHPHs has limited resources for operations and under this limitation, it is still impossible to predict in advance with certainty.

2) Achievement of the intermediate target is considered from 4 indicators: (1) transparency (2) responsibility for results (3) efficiency in spending and (4) creating fairness in budget use. All 4 indicators have the following remarks:

The study results reflect that the budget spending of the SHPHs has quite clear regulations on which items the allocated revenue can be spent. However, when considering *the transparency and verifiability*, it was found that it is not easy to verify because the accounting system of the SHPHs is not up to international accounting standards. In addition, from the initial observations of the research team, there are relatively few complaints related to corruption in the SHPHs,

[8] Note: Support for subdistrict hospitals from CUP varies between areas, with NHSO allowing an agreement between CUP, i.e. the parent and child networks, with the majority of allocation authority depending on the parent network

which may be because there are several higher-level supervisory units.

In *terms of responsibility for results*, since the SHPHs have clear service scopes both in terms of area and target groups, they have a high level of ties with community members. The results of the service are primary care and health promotion for the community population. Therefore, health problems in the community are the responsibility of the SHPHs that cannot be denied. From the results of this study, it was found that most SHPHs are trusted and have faith in the people in the community at a fairly high level.

In *terms of budget efficiency*, it can be considered in a broader perspective that is linked to universal service provision. The study results show that most SHPHs are relatively weak in terms of revenue, both in terms of the small amount of budget per capita that they are responsible for providing services and the consistency of the allocation. However, when considering from the perspective of service recipients who are still satisfied and accept the high standards of service provision of SHPHs, including being a health care facility that the public trusts, it reflects that SHPHs have used the scarce allocated money to provide services to the public to the fullest extent, including sacrificing the physical and mental strength of personnel who are committed to providing services to the public without considering the returns received and using this as a limitation in providing services to the public. Therefore, it cannot be concluded that SHPHs have used the allocated budget effectively.

As for the last criterion, *which is fairness in budget expenditure*, it can be said that SHPHs are health service units that community members can access most easily, both in terms of location in the community and expenses, including not favoring or discriminating in providing services regardless of differences in gender, age, race, nationality, skin color, and traditions and cultures. Therefore, it can be said that the budget expenditure of SHPHs has led to creating fairness in health as appropriate.

From learning about the transfer of SHPHs in the past, from 2008-2020, there were 65 health centers transferred, namely 27 in 2008, 19 in 2012, 4 in 2014, 1 in 2016, 6 in 2019, and 8 in 2020. Of these, many areas were very successful and became study sites, such as the transfer of Bueng Yi Tho Municipality, Pathum Thani, which allocated a budget for investment in building construction, equipment, and finding doctors to work part-time, and changing the name to the Medical and Rehabilitation Center. From the database of the Medical and Rehabilitation Center, which reported statistics of 35,262 service users, classified as people in the area, Villages 1-4, and service recipients outside the area (totaling 12,284 people) [9] (Patmasiriwat & Ratchatapibhunphob, 2023).

In summary, it can be said that the budget spending of the SHPHs can achieve the intermediate goals. to a certain extent. This is when adhering to the concept of a robust budget structure for primary health care services of the World Health Organization in all criteria assessed in terms of transparency and accountability, efficiency in budget use, and equity in resource use.

3) Achievement of the final goal, is considered from providing health services that are (1) universal and consistent with necessity, and (2) fair in financial allocation.

The study results show that the financial allocation for universal health care services, SHPHs have received too little budget, whether considering the criteria for determining the per capita expenditure received from the allocation by the NHSO or the criteria for allocating subsidies set by the Decentralization Committee. However, in actual practice, it was found that there were several weaknesses in actual practice that prevented SHPHs from receiving equality and fairness in terms of finance. For example, the allocation of lump-sum payments per capita from the network hospitals had a lower ratio than it should have been. In addition, there was a problem with transfers because the Ministry of Public Health did not transfer money for individual benefits. This does not meet the criteria set out in the transfer agreement, causing most SHPHs to feel that they have been treated unfairly by their superiors.

[9] This is an opinion from an interview with a worker at a sub-district health promotion hospital.

Summary of research results and recommendations

Summary of research results

This research aims to assess the financial status and development of the budget of the SHPHs that have been transferred to the PAO in the fiscal year 2023 by trying to find answers to (1) what should be the appropriate financial and budget performance model for the SHPHs? (2) to assess the financial and budget performance status of the SHPHs, both in terms of structure and types of revenue and expenditures (3) to study the strengths/ weaknesses of the financial and budget performance of the SHPHs? and (4) to use the study results to make recommendations for improving the financial and budget performance system to be stronger.

From the above objectives, the research team reviewed the relevant literature and concluded into 2 conceptual frameworks for the research: (1) a good financial standard framework for primary health care system development. This framework will be used as a reference standard that a good financial system of the SHPHs should adhere to the criteria of the WHO model on a robust budgetary system in primary health care. (2) the application of the aforementioned financial and budgetary system to develop a stronger financial and budget system of the SHPHs, which leads to the determination of the research question framework as a framework created to be used as a task to search for information on the financial and budget performance status of the SHPHs, in order to obtain answers according to the research objectives.

The research results found that

1) The revenue and expenditure structure of the financial budget system of the SHPHs is already appropriate, because there are already comprehensive revenue and expenditure categories.

2) After the transfer, the revenue of the SHPHs increased, by approximately 34.52 percent of the total revenue from before the transfer because they received more quality development subsidies (SML). Therefore, it answers the objective 1 that after the transfer, the financial status of the SHPHs improved (see Table 1).

3) The budget structure of the SHPHs still fluctuates in terms of both revenue and expenditure. The results of the analysis of the budget structure of the SHPHs by considering the criteria for achieving the initial target or the productivity target according to the framework of the robust budget structure for primary health care services of the WHO concluded that the budget structure of the SHPHs, although it can be implemented, has weaknesses because a) it is difficult for the SHPHs executives to predict their financial future because the financial allocation depends on the decision of the superior agency. And the superior agencies do not adhere to the fixed allocation criteria. b) however, in areas where the PAO has good financial status and a large amount of savings, budget support from the PAO helps the administration become more flexible because there is sufficient revenue to operate or even improve. c) from interviews in some areas, it was stated that all SHPHs have not implemented disease prevention and promotion, which is their main duty, because there are many patients requesting medical services at the hospital, resulting in insufficient time and budget for prevention and promotion.

4) The budget expenditure of the SHPHs can be audited and responds to the results. From the findings and discussions of the results, it can be concluded that the budget expenditure of the SHPHs has been recorded in detail because there are quite clear budget expenditure regulations on which items the allocated revenue can be spent. In addition, there are relatively few complaints related to corruption of the SHPHs because there are many levels of regulatory agencies, including the fact that the SHPHs are local service agencies. The budget expenditure is therefore closely monitored by the local people. In addition, the SHPHs are committed to tangible results because the SHPHs are defined to have clear service scopes both in terms of area and target groups. As a result, the performance results of the SHPHs are accepted, trusted, and have faith from the local people in the SHPHs towards the SHPHs at a fairly high level.

5) The major financial problem of the SHPHs is the risk of revenue uncertainty and insufficient funds, as well as the lack of financial equality and fairness. For example, the criteria used to determine per capita expenditure allocated by the National Health Security Office (NHSO), as well as the subsidy allocation guidelines established by the Decentralization Committee, remain unstable and insufficient to meet actual needs. In practice, several loopholes have been identified that hinder fair distribution to SHPHs. These include cases where per capita lump sum payments from

network hospitals are allocated at lower rates than appropriate, and instances where subsidy allocations based on SHPH size (S/M/L) do not adhere to the criteria set by the National Statistical Office (NSO).

Recommendations

Recommendations to address weaknesses in the budget structure to make it stronger.

From the results of the study mentioned above, the research team is of the opinion that the revenue and expenditure structure of the SHPHs is appropriate (see Table 1 and Table 3). Therefore, it should continue to be used. For the major weaknesses found as mentioned in discussion section, the main part is that the amount of money that the SHPHs should receive is not sufficient and stable as necessary. Therefore, the research team has considered and agreed that importance should be given to improving the following 3 issues:

1) The NHSO should clearly specify the minimum standards for the primary health care system. This is to ensure that people will receive primary health care services as targeted and the NHSO must oversee the allocation process to ensure fairness and consistency with the actual cost burden of providing services. At least, the per capita revenue standard for the SHPHs must be clearly defined.

2) The Budget Bureau should allocate the budget for the subsidy item to support the development of service quality for the SHPHs that have been transferred (SML funds) in accordance with the agreement according to the transfer criteria so that the SHPHs can plan their services to the public effectively, which will make primary health care services stronger.

3) There should be initiatives to mobilize greater use of community and social resources, beyond the limited support from government funding. These resources may include donations and volunteer services provided without financial expectations, drawn from both the local communities where the SHPHs are located and from broader society—both domestically and internationally.

In accordance with these recommendations, the researcher submitted the matter to the Minister of Public Health (Chairman of the Primary Health Care System Committee), and to the Director of the Primary Health Care System Support Office.

Recommendations for developing knowledge related to strengthening the budget structure include 3 issues:

1) There should be a study on the appropriate amount of per capita lump sum budget for primary health care services of SHPHs for specific use, and study the feasibility of separating the lump-sum budget per capita between the services of the community hospitals (PHCs), the main network and the SHPHs.

2) There should be a study to determine the budget framework for the subsidy items to support the development of the quality of services of the transferred SHPHs (SML money) that is appropriate and consistent with the budget spending needs of each SHPHs. This is because in the past, the allocation was based on the criteria of the size of the SHPHs, which was too broad and did not correspond to the problems and needs of each area. Good allocation criteria should consider covering the number of target groups at risk of health, the number of vulnerable groups in the area, the number of elderly people in the area, and the number of people who need intensive health promotion, etc.

3) There should be a study of the feasibility of promoting the SHPHs to initiate the mobilization of community resources or social resources to contribute to the cost of production and services to the public in addition to government resources, including the preparation of general guidelines and the establishment of a consulting body to provide advice on guidelines and methods for using resources in the community, society and abroad to benefit the provision of health services in both health promotion and treatment dimensions.

In accordance with these recommendations, the researcher submitted a letter to the Chairman of the Decentralization to Local Government Organizations Committee and to the Director of the Office of the Decentralization to Local Government Organizations Committee.

Declaration of generative AI in scientific writing

□ Generative AI is used solely for language enhancement.

□ In addition, the author did not use AI to assist in research in any other content.

CRediT author statement

Udom Tumkosit: Initiation, Conceptualization, Methodology, Discussion, Oversight. **Direk Patmasiriwat:** Essential Intellectual Contribution (EIC). **Surachai Phromphan:** Data Collection, Fieldwork Supervision. **Jirawat Sriruang:** Software, Data Analysis

References

Ministry of Interior Regulations Concerning the Maintenance of Hospitals and Public Health Service units of the Organization Thai Local Government B.E. 2017. (2017). *National Gazette, 135*(256B), 3.

Ministry of Public Health. (2019). *Regulations of the Ministry of Public Health regarding maintenance funds for affiliated service units. Ministry of Public Health 2019 (items 4 -8)*. Retrieved from http://auditer.hss.moph.go.th/web_Audit /upload1/maintenance/01.pdf

National Health Security Office. (2023). *Cabinet approves gold card budget for 2023 '200 billion baht', per capita budget of 3.385,98 baht per population.* Retrieved from https://www.nhso. go.th/lgo/news/3474

Nishijima, M., Sarti, F. M., Vodenska, I., & Zhang, G. (2019). Effects of decentralization of primary health care on diabetes mellitus in Brazil. *Public Health, 166*, 108-120.

Patmasiriwat, D., & Ratchatapibhunphob, P. (2023). *Budget distribution. Government manpower and the inequality of spatial dimensions.* Bangkok: P.A. Living Company Limited.

Rubio, J. D., & Gomez, G. P. (2017). Decentralization of health care systems and health outcomes: Evidence from a Natural Experiment. *Social Sciences & Medicine, 188*, 69-81.

Primary Health System Act B.E. 2019. (2019). *National Gazett*, 136(56A), 165.

The Committee on Decentralization, Local Administration and Special Form of Administration. (2022). *Action plan to determine the steps for decentralization, No. 1 (2000-2007), No. 2 (2008-2018), and No. 3 (2019-2022).* Retrieved from https://odloc.go.th/plan/

The Sub-committee on the Transfer of Public Health Missions to Local Administrative Organizations. (2022). *Meeting minutes No. 3/2022 on 23 May 2022.* Retrieved from https://odloc.go.th/report

World Health Organization. (2010). *A conceptual framework for action on the social determinants of health.* Geneva, Switzerland: World Health Organization.

World Health Organization. (2018). *Budget metters for health: Key formulation and classification issues.* (Health Financing Policy Brief No. 4). Geneva, Switzerland: WHO Publication.

World Health Organization. (2020). *Health Financing Policy Brief No. 12.* Geneva, Switzerland: WHO Publication.