P&P

HEALTH PROMOTION & DISEASE PREVENTION

NHSO
National Health Security Office

GLOSSARY

HEALTH PROMOTION

The Health Promotion Fund Act refers to 'health promotion' as a process aimed at enhancing and supporting the physical, mental, intellectual and social well-being of individuals by supporting individual behavior and a conducive environment for health and well-being of individuals, their families, community, and society. The health promotion process covers improving knowledge, attitudes, and behaviors so that individuals take care of their health and the health of family members, as well as to support and advance society and the environment to create conditions which are health-reinforcing.

DISEASE PREVENTION

Disease prevention refers to the control of disease, as well as the factors and antecedents which directly give rise to disease, illness, or debilitating condition. This also includes preventing relapse or recurrence of the disease or unhealthy condition. Disease prevention can be classified into three levels: (1) Prevention before a disease or injury has taken place, including health promotion and primary prevention; (2) Prevention during the early stage of disease or injury, including immediate treatment/therapy to prevent debilitating illness or death; and (3) Rehabilitation for a return to health after the primary cause of illness or injury is removed. That said, the services of the National Health Security System, or Universal Coverage Scheme (UCS), emphasize the first category of prevention, followed by disease screening, such as screening for cervical and breast cancer, among other treatable conditions if detected early enough.

THE OTTAWA CHARTER FOR HEALTH PROMOTION

This Charter is an agreement that was endorsed at the 1st International Conference on Health Promotion organized by the World Health Organization (WHO) in November 1986 in Ottawa, Canada, in order to motivate countries to strive to achieve health goals by 2000 and other future health promotion objectives. The Ottawa Charter focuses on five areas: (1) Building healthy public policy; (2) Creating supportive environments; (3) Strengthening community action; (4) Developing personal skills; and (5) Reorienting health services.

HEALTH SYSTEM

The Thai National Health Act defines the 'healthcare system' as covering the individual and broader than the individual, which has the objective to raise the health status of the population across all dimensions. The WHO has defined the "Six Building Blocks of a Health System" as follows: (1) Service delivery; (2) Health workforce; (3) Health information; (4) Medical products, vaccines, and technologies; (5) Health financing; and (6) Leadership/governance.

CAPITATION PAYMENT

The capitation payment system pays compensation for services rendered by healthcare providers participating in the UCS. Those services include health promotion and disease prevention (P&P). The healthcare providers receive a quota payment based on the number of the registered population in the catchment area of the provider. The payment is calculated in advance as a cost per capita, hence the term "capitation." The number of service interactions by a UCS beneficiary does not affect the amount of the capitation payment in any way.

BENEFIT PACKAGE

The 'benefits package' refers to the essential services or health-promoting activities which the population needs. This covers diagnosis, clinical care, treatment, P&P, rehabilitation, and supportive care. The service providers who participate in the UCS are defined by the National Health Security Board.

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INTRODUCTION

1.1

CONCEPTUAL FOUNDATION OF HEALTH PROMOTION

The WHO Constitution defines 'health' as a "*…state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.*" The WHO definition encompasses a state of being that is characterized by healthy relationships and a well-balanced life across the physical, mental, intellectual, and social dimensions.[1]

Health promotion is one of the core services of a healthcare system. In 1986, the concept of health promotion was given a boost when the Canadian Ottawa Charter was announced, reaffirming the goal of achieving "universal health" by the year 2000. The Ottawa Charter values the contributions of all sectors of society, especially policymakers, while emphasizing the role which people can play in taking care of their own health. This concept represented a subtle paradigm shift from reliance on medical and health personnel as health promoters to a process that empowers people to be able to control and improve their health on their own. This paradigm also focuses on the holistic interaction of all sectors across the society.[2] Disease prevention is another important component of a healthcare system that helps reduce illness or disease which affects people's well-being.

The WHO Constitution defines 'health' as a *"…state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"*

Thus, health promotion and disease prevention (P&P) is not just concerned with personal well-being. Instead, the view is broader to encompass social, economic, and national development. Many countries focus on P&P by establishing a countrywide strategy. For example, Australia established a National Preventive Health Taskforce to focus on actions to reduce obesity, tobacco consumption, and excessive alcohol use since these were identified as the most important determinants of the burden of disease. The cost to the Australian healthcare system of these preventable factors was calculated to be almost $6 billion per year or a loss of productivity of nearly $13 billion.[3] Similarly, Canada has a national health promotion plan called the Pan-Canadian Healthy Living Strategy that focuses on promoting behaviors to prevent the occurrence of chronic non-communicable disease (NCD) which is the leading cause of death for Canadians and cost the country $80 billion in losses annually.[4]

1.2

NETWORK PARTNERS WHICH PLAY A ROLE IN P&P IN THAILAND

P&P in Thailand is implemented through a network of partners who come from a variety of sectors, including the government, private sector, and Civil Society organizations (CSO). The following are some of the key players in P&P in Thailand.

MINISTRY OF PUBLIC HEALTH [MOPH]

The Thai MOPH is the principal agency with the mandate to deliver P&P services, issue policy proposals, formulate strategies, expand the service system, and staff the system with qualified personnel. The MOPH has the Department of Disease Control (DDC), the Department of Health (DOH), the Department of Medical Services, the Department of Mental Health, the Food and Drug Administration (FDA), the Department of Thai Traditional and Alternative Medicine, and the Department of Health Service Support.[1] The MOPH has service units under its administration which provide P&P, including the larger hospitals which are under the technical departments of the MOPH, and smaller providers which are under the provincial health office (PHO), such as the district hospital, the district health office, the Tambon (sub-district) health promotion hospital (THPH), and the village health volunteers (VHV).

NATIONAL HEALTH SECURITY OFFICE [NHSO]

The NHSO has the responsibility of submitting a budget request to the central government on behalf of the beneficiaries of the UCS. The NHSO also has to manage the budget for P&P services. In addition, the NHSO defines the criteria and methods of paying/reimbursing healthcare providers for services rendered and defining the P&P components of the UCS benefits package.[5]

THAI HEALTH PROMOTION FOUNDATION [THAI HEALTH]

ThaiHealth was created as part of the Health Promotion Fund Act of 2001 to manage funds for health promotion activities for all age groups of the population around the country. ThaiHealth provides grants to development partners in the services sector, academia, and CSO to advocate for policy and improvements in the health system. ThaiHealth aims to raise the effectiveness of health promotion programs which address the physical, mental, intellectual, and social dimensions. ThaiHealth also plays a coordination role among all the related agencies in society to create and campaign for health promotion activities at the community and society levels in order to mobilize all residents to be active in preventing and responding to health challenges.[6]

NATIONAL HEALTH COMMISSION OFFICE [NHCO]

The NHCO has the responsibility to promote collaboration among partners across all sectors. The principal mechanism is the National Health Assembly which formulates national health policy based on a grassroots approach to consensus-building. Thus, the NHCO is an important channel for the voice of the population to be heard, as well as the related service providers. This broad perspective helps to accurately prioritize health challenges of the nation and inform policy to address the major health problems.[7]

HEALTH SYSTEMS RESEARCH INSTITUTE [HSRI]

The role of HSRI is to generate new knowledge and research findings on health which inform policy and programs on quality of the life of the population. HSRI supports a program of research which, in part, studies the impact of various factors on the healthcare system. This includes, but is not limited to, research and evaluation to inform the benefits package of the UCS, research on measures to promote health behavior, and studies of disease prevention and control of chronic NCD to help inform policy or measures on P&P.

Other noteworthy healthcare providers which deliver P&P include the Healthcare Accreditation Institute, the National Institute for Emergency Medicine, all the local administrative organizations (LAO) throughout the country, research institutes in the health sector, and the network of academic health entities.[6] In addition, there are agencies in the public, private, and state enterprise sectors which impact on P&P services, both directly and indirectly. These include the Ministry of Finance, the Ministry of Tourism and Sports, the Ministry of Social Development and Human Security, the Community Development Organization Institute, and the Metropolitan Electricity Authority, among many others. Many CSOs also play an important role in P&P in Thailand, such as the Foundation for Consumers, ASH Thailand (anti-smoking group), and the Thai National AIDS Foundation, among many others.

1.3

ROLE AND RESPONSIBILITY OF THE NHSO IN P&P

Thailand switched to the Universal Health Insurance System (UCS) under the National Health Security Act in 2002

All Thais were able to receive P&P benefits to promote good health, reduce disease risk factors, and build immunity against communicable and non-communicable diseases

1 WHY ARE P&P SERVICES INCLUDED IN THE BENEFITS PACKAGE OF THE UCS?

P&P has been a part of the Thai public health system since the establishment of a Department of Public Health in the Ministry of Interior in 1918. In its early stages, public health activities focused on disease prevention and promoting public health, especially to control killer epidemics such as smallpox, cholera, and plague.[8] National health insurance was first established in 1975, initially as protection for low-income people to access essential medical care at no cost. Thus, this system was a form of public welfare for the poor. Efforts were then made to create a more inclusive voluntary health insurance system, and health cards were sold which included P&P benefits in addition to medical treatment. The aim was to create health security for the population and place an importance on P&P services based on the proposition that the people believe in the modern Thai medical profession. Any services or activities that aimed to raise public awareness of the importance of taking care of one's health in order to reduce the risk of disease were believed to be achieved if provided by doctors.

In the initial stages of Thai national health insurance, the P&P component focused on maternal and child health (MCH), including midwifery services, family planning, and childhood immunization.[9] Later, the benefits package was expanded to cover individuals in the general population and families. The MOPH sold these "family cards" until Thailand switched to the universal health insurance system (UCS) under the National Health Security Act in 2002. After that, all Thais were able to receive P&P benefits to promote good health, reduce disease risk factors, and build immunity against communicable and non-communicable diseases. In addition, there was a nationwide health promotion campaign with the slogan "Health promotion leads cure" to begin to shift the emphasis from curative care to health promotion and maintenance.

2 THE BUDGET FOR P&P IS ONE PART OF THE CAPITATION PAYMENT SYSTEM OF THE UCS

The NHSO system introduced significant changes in how to allocate the budget for P&P services.[10] Since the establishment of the NHSO under the National Health Security Act of 2002, one major innovation was the adoption of a capitation payment system to allocate budget for curative care and P&P services. The NHSO also specified that 20 percent of the budget for outpatient and inpatient care be earmarked for P&P for individuals and families (Table 1).[11] Initially, the quota of 20 percent was a bit arbitrary due to the lack of accurate and complete data on benefits activities, production cost, and the size of the catchment population in the various participating healthcare outlets when the UCS was launched.[12]

In addition, after the establishment of the NHSO, the Bureau of the Budget (BOB) allocated a per capita budget for P&P for individual beneficiaries to the NHSO, instead of through the technical departments and Office of the Permanent Secretary of the MOPH, as had been the practice in the past.[10] In addition, the NHSO established a fund for P&P to ensure that this component was not neglected in the UCS system.

Table 1: Cost Per Capita per Year When the UCS Began in 2002

COST CATEGORY	Baht/ Person/ Year	%
Outpatient Care	574	47.7
Inpatient Care	303	25.2
P&P for Individuals and Families	**175**	**14.6**
Capital Investment	93	7.7
High Medical Cost Care	32	2.7
Accident and Emergency Care	25	2.1
Total	**1,202**	**100.0**

Source: Adapted from Viroj Tangcharoensathien et al. (2001)[11]

3 DEFINITION AND SCOPE OF P&P SERVICES

Article 5, para 3, Article 18 (3) (14), and Article 20 of the National Health Security Act defines 'health promotion' as services or activities directly provided to individuals, families, or groups of individuals for the purpose of motivating and enabling them to maintain their health status. 'Disease prevention' was defined as health/clinical services and activities directly provided to individuals, families, or groups of individuals for the purpose of preventing the occurrence of disease. Practically speaking, the scope of P&P covers the following:

1. Diagnosis and screening of risk for health problems and health promotion potential
2. Promotion of health behavior change, counseling, education, and demonstration of P&P practices
3. Building immunization, use of medicines, and performing procedures which promote P&P. Not included are disease surveillance, prevention of complications of disease, or delaying the progression of disease.

Coverage of benefits for P&P services in the Thai UCS is a special feature since it is a continuation of free, universal coverage

4 ALLOCATION OF BUDGET FOR P&P SERVICES FOR THAIS COVERED BY ANY HEALTH INSURANCE SCHEME

Coverage of benefits for P&P services in the Thai UCS is a special feature since it is a continuation of free, universal coverage which the MOPH introduced during the initial health insurance scheme, launched in 1975. After passage of the 2002 Act, P&P services were, accordingly, included in the benefits package for UCS beneficiaries. However, the Comptroller-General and the Social Security System still had restrictions on the use of budget for P&P in other government health insurance schemes. For example, Thais covered under the Civil Servants Medical Benefits Scheme (CSMBS), the insurance system for state enterprise employees, and staff of LAO did not have coverage for subsidized P&P services. Thus, the NHSO appealed for an expansion of coverage of P&P for these schemes so that all Thai citizens had equal access to those services under a government health insurance program, regardless of affiliation.[10, 13]

2

MANAGEMENT OF THE BUDGET FOR P&P SERVICES

Under the UCS, the NHSO calculates budget for P&P for all Thais under all of the government insurance schemes using the capitation method. Those calculations are then merged with the per capita cost estimate for clinical care as a basis for annual budget requests. For example, for fiscal year (FY) 2021, the budget request was based on a calculation of 455 baht per UCS beneficiary (or 48 million persons). When converting this to a budget for all Thai citizens (66 million), the capitation cost was reduced to 328 baht.[14] The following are the components of the P&P budget for FY2021:

1. Increasing access to P&P services
2. Prevention or amelioration of health problems or national disease burdens
3. Supporting local P&P
4. Increasing the quality of P&P services[14]

2.1

MANAGEMENT OF COSTS OF P&P SERVICES

Management of the budget for P&P services has been modified since the emergence of the UCS. However, the NHSO started to take full responsibility for budget management in 2006 and has developed budget management strategies since then. The following are five current guidelines to manage P&P budget:

1 P&P NATIONAL PRIORITY PROGRAM AND CENTRAL PROCUREMENT

In order to effectively address the public health challenges, a country must take a national view of the situation, and prioritize by area. There has to be consideration of innovative approaches to services and careful procurement and distribution practices. A national health insurance system needs to take advantage of economies-of-scale whenever possible to reduce unit cost. While the Thai UCS decentralizes payments and reimbursements to a large extent, there are situations when central management of budget is the preferred approach, such as the following:

1. National health emergencies or priorities, or new areas that need to carefully adhere to budget categories and the scope of P&P services, and which may deviate during the year or between years. For example, in FY 2021, two national priorities are the provision of testing for abnormal hypothyroidism (TSH) and the provision of drugs for safe termination of pregnancy.
2. National consolidated procurement. This includes the cost of different types of vaccines, including vaccines against basic diseases (tuberculosis, diphtheria, tetanus, and pertussis); vaccines for hepatitis B, cervical cancer, and vaccine against rotavirus diarrhea; and seasonal influenza vaccine, including the cost of the vaccination/health history booklet.

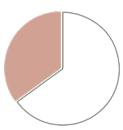
2 BASIC P&P SERVICES

There are two types of payment mechanisms: capitation payment and the payment of services (fee schedule)

Basic P&P services are, in principle, available to all Thai citizens, both within and outside the participating service unit network. The NHSO pays for the services so that they are free to the beneficiaries. There are two types of payment mechanisms: capitation payment and the payment of services (fee schedule). In 2010, the fee schedule was added as a payment mechanism in addition to capitation to expedite access. In FY 2021, the following services need to expedite access:

1. Cervical cancer screening
2. Antenatal care (ANC)
3. Prevention and control of thalassemia anemia in pregnant women
4. Prevention and control of Down syndrome in the fetus of pregnant women
5. Prevention and control of neonatal hypothyroidism (TSH)
6. Semi-permanent contraception (IUD, contraceptive implant) in women under age 20 years
7. Treatment of safe termination of pregnancy
8. Semi-permanent contraception (IUD, contraceptive implant) in women over age 20 years after termination of pregnancy
9. Preventive dental services in school-age children (fluoride coating and permanent sealants)

As for the capitation budget, the proportion is 65:35, with 65 percent paid on a per-person basis, adjusted according to the age group structure at the provincial level (national average ± 10%) and paid to the participating service unit according to the size of the catchment population of beneficiaries. For Thai citizens covered under other schemes (Social Security, CSMBS, state enterprise scheme, LAO personnel, etc.), the zonal branch of the NHSO makes a determination to adjust the allocation to the participating service units, taking into account the access to services of all residents in the catchment area, distribution of health insurance rights, and consideration of the approval of the zonal Health Insurance Subcommittee at the area level.



The amount of 35 percent is paid according to the number of services, as specified (since 2019) as follows:

1. Number of postpartum women who received 2 or more postnatal care services
2. Number of recipients of contraceptive services
3. Number of children age 0 - 5 years who received all childhood developmental services
4. Number of children age 6-12 years whose weight and height were measured
5. Number of persons receiving vaccines based on the Expanded Program on Immunization (EPI) of all types, from birth to primary grade 6
6. Number of persons age 30 years or over who received screening services for diabetes/hypertension

3 AREA-BASED P&P

Starting in 2008, the NHSO began to focus on P&P services at the zonal/provincial level to improve efficiencies in program management and more closely tailor the services to the needs of the local population. This sub-national focus was accompanied by devolution of budget management to the zone and provincial levels. Ever since 2017, the NHSO has used the capitation budgeting method at the zone level (using a global budget ceiling mechanism). Each of the 13 NHSO branch offices had to submit plans or projects with the scope of P&P services, with an emphasis on access by the underserved beneficiary population. The criteria for making payments had to be approved by the local zonal Health Fund Subcommittee.

4 COMMUNITY-BASED P&P SERVICES

The NHSO also has a mechanism for supporting P&P services that are implemented at the community level. Initially, budget was allocated to the local health center or THPH. Later, in 2006, after the Community Health Funds (CHF) were established, those resources were used to fund the P&P activity in collaboration with the LAO, according to the NHSO Board's announcement. Localities were encouraged to integrate the funding from the CHF with other local development mechanisms, such as the Quality of Life Development Committee at the district level. The priority for the use of these funds was to recruit the underserved groups into the healthcare system. This includes toddlers, the elderly, monks, and persons at risk for NCD. If there is any budget left from the funds, the NHSO will allocate these remaining funds for basic P&P services.

5 QUALITY AND OUTCOME FRAMEWORK [QOF]

The QOF is a mechanism to motivate healthcare providers to use resources efficiently while maintaining standards of high quality of essential P&P services. The QOF attempts to steer the management of the P&P budget so that it produces quality service outcomes. The QOF is also seen as a mechanism to reassure reluctant members of the population to join the P&P services system. The NHSO, MOPH, and technical specialists have developed a set of indicators of quality P&P services, starting in FY 2017, including the following:

Percentage of the Thai population age 35-74 years screened for diabetes (under any one of the government health insurance schemes) by measuring blood sugar level. (Target: not less than 90 percent)

Percentage of the Thai population age 35-74 years screened for hypertension (under any one of the government health insurance schemes). (Target: not less than 90 percent)

Percentage of pregnant women receiving their first ANC check-up during the first trimester of pregnancy (under any one of the government health insurance schemes). (Target: not less than 60%)

Percent cumulative coverage for cervical cancer screening in women aged 30-60 years (under any one of the government health insurance schemes) within 5 years. (Target: not less than 80%)

2.2

IMPROVING THE EFFICIENCY OF BUDGET MANAGEMENT BY THE CAPITATION OR OTHER METHODS

The NHSO acts on behalf of the population of UCS beneficiaries in the management of the P&P budget. Thus, the financial mechanisms of the NHSO are an important tool to maximize efficiency and quality of services. The NHSO has developed a model of payment for services which should reflect outcomes and quality of services, especially for low-demand services.[15] The use of the capitation budget mechanism has obvious advantages, such as better cost control and easier management. But the disadvantage of a capitation system is that the quality of services cannot always be controlled. That is because the per-capita method does not create incentives for providing higher quality services to the public. Thus, the NHSO uses additional measures to address the limitations of the capitation payment system, including:

1. **Fee schedule**: This is appropriate for activities with a clear unit cost, or have a fixed list of services, which makes it easier to reimburse the cost of services as an incentive for both the provider and recipient

2. **QOF**: This tool introduces performance-based incentives for service providers and is suitable for activities that need to increase accessibility while taking into account the burden of disease, the number of people affected by health problems, and the severity of their health problems

3. **Global Budget**: Budget for services with a global budget ceiling can control service costs, predict costs in advance, and enable efficient budget management because it is a single budget. This is a system of allocation of lump-sum budget, such as budget allocation to the district and provincial level, among others.[16]

NHSO uses additional measures to address the limitations of the capitation payment system, including:

Fee Schedule

Quality and Outcome Framework

Global Budget Ceiling

The integrated service payment system eliminates the problems of providing services resulting from a single, traditional service payment, such as access to services, the quality of services, and rising costs of services. However, the weaknesses of a mixed-services payment system are the difficulty in combining different service payment models in an optimal proportion for all contexts, and the difficulty in integrating data reporting systems to be efficient and accurate. An effective integrated payment model for P&P services depends on the incentives and needs of the service provider and which type of model is used.[16]

3

P&P BENEFITS

The objective of including P&P in the UCS benefits package is to reduce the nation's critical illness and disease burden rates, enhance the quality of life, and enable Thais to have a longer quality-life expectancy

3.1

DEVELOPMENT OF THE BENEFITS PACKAGE: 2002 – THE PRESENT

The objective of including P&P in the UCS benefits package is to reduce the nation's critical illness and disease burden rates, enhance the quality of life, and enable Thais to have a longer quality-life expectancy.[5] In the initial phase, the NHSO Board approved the benefits package based on the 2001 MOPH Regulation on Health Insurance, covering the following 10 P&P services:[12, 17]

1	Personal health record for continuous health care monitoring of each individual
2	Examination and supervision to promote the health of pregnant women
3	Child health care, development and nutrition, including immunization in accordance with the national immunization program
4	Health examination of the general public and at-risk groups
5	Family planning
6	Antiviral drugs to prevent HIV transmission from mother to child
7	Home visits and home care
8	Providing health education to recipients of services at the individual and family levels
9	Counseling and encouraging people to participate in health promotion
10	Oral P&P: oral health examination, dental health advice, sealant and fluoride supplementation in groups at risk of caries, such as children and the elderly

Later in 2008, the list of sub-activities for P&P services was amended to guide the preparation of budget and services requests from FY 2009 until the NHSO Board's announcement on the types and scope of public health services (10th Edition) in 2016: P&P services for five priority groups:

1 Pregnant women
2 Young children (0 - 5 years)
3 Youth and adolescents (6 - 24 years)
4 Adults (25 - 59 years)
5 Elderly (60 years or over)[17]

NHSO and MOPH technical departments have been reviewing and improving services/activities included in the P&P benefits package from time to time (based on academic studies) which have been proven to be useful and cost-effective (Table 2)

Table 2: Development of the P&P Benefits Package: FY 2002 – 2021

Year	Benefits
2002	Benefits package of the MOPH Health Insurance regulation specifies 10 P&P services
2008	Adjusted the list of sub-service activities under UCS FY 2009's P&P benefits, with the addition of the following four items: 1 DTP-Hepatitis B combined vaccine (DTP-HB) in young children 2 Cervical cancer screening by VIA (Visual Inspection with Acetic acid) and cold cauterization in women aged 30 - 45 years 3 Oral cleaning and fluoride coating in the risk group > 35 years old 4 Seasonal flu vaccination for patients with major chronic diseases, including asthma, chronic obstructive pulmonary disease, kidney failure, heart disease, diabetes, cerebrovascular disease, and cancer patients receiving chemotherapy
2013	Extended coverage of seasonal influenza vaccine in pregnant women over 4 months gestation and children age 6 months - 2 years
2016	1 NHSO Board Announcement on Types and Scope of Public Health Services (10th Edition) 2016: P&P services for 5 age groups 2 Announcement of the NHSO Board on Types and Extent of Public Health Services (11th Edition) 2016 on Services to Prevent HIV Infection in At-Risk Groups
2018	Cervical cancer vaccine (Human Papillomavirus, HPV) was added for grade 5 female students and Thai girls age 11-12 years who were not in the formal school system
2019	1 Five vaccines: diphtheria, tetanus, whooping cough, hepatitis B virus, and meningitis (DTPHB-Hib) 2 ARV drug: Raltegravir prevents HIV transmission from mother to child

Year	Benefits
2020	1 Option for cervical cancer screening with HPV DNA test and liquid-based cytology confirmation test of abnormal cases 2 Rotavirus vaccine for prevention of diarrhea in infants age 2 - 6 months 3 Medabon® to prevent unsafe termination of pregnancy 4 Pilot screening for fetal Down syndrome in pregnant women no older than 35 years of age 5 Screening and laboratory testing to confirm Covid-19 infection for all Thai citizens
2021	1 Measles, mumps and rubella (MMR) vaccine for children age 18 months 2 Screening for fetal Down syndrome in pregnant women of all ages 3 FIT test for colon cancer screening

Sources: NHSO Annual Report for FY 2020[18]
and Handbook for the Management of the NHSO Fund for FY 2021[14]

3.2

ADDITIONS TO THE BENEFITS PACKAGE MUST HAVE REFERENCE DATA ON COST-EFFECTIVENESS OF THE SERVICE IN ORDER TO RECEIVE THE SUPPORT OF ALL SECTORS

The periodic review of the P&P benefits package offers a mechanism for synthesizing the findings from studies of cost-effectiveness of a new service as a criteria for inclusion. Most of these studies are projects run by the independent Health Intervention and Technology Assessment Project (HITAP) under the MOPH, and they play a key role in evaluating the cost-benefit of an addition to the UCS package. In 2014, HITAP developed a proposal to improve the P&P benefits package in all age groups for FY 2016 by selecting measures or services approved by P&P experts for each beneficiary age group. Representatives from the NHSO, MOPH, P&P Subcommittee, Royal College and experts from relevant departments met to provide opinions and select effective measures or services for addressing critical health problems of each age group. Measures or services are prioritized according to feasibility and expected benefit and proposed to the NHSO to consider and include in the budget request for the next FY. [5]

At present, the P&P benefits list includes comprehensive services covering: (1) Screening for health risks and potential for health promotion; (2) Behavior change enhancements, including counseling, guidance, education, and demonstration of P&P practices; and (3) Immunization, use of medicines and procedures for P&P for five age groups (see table in the appendix).

4

COMMUNITY HEALTH FUNDS [CHF]

4.1

CONCEPT OF P&P COMMUNITY-BASED SUPPORT THROUGH MATCHING FUNDS

The 1997 Constitution of the Kingdom of Thailand stipulates that public health services must be inclusive and efficient under a system that encourages LAO and private individuals to participate[7]. Decentralization began in 1999 when the government launched the LAO Decentralization Plan and Procedure Act. When the NHSO was established in 2002, the local decentralization concept was incorporated into the National Health Security Act, and national health insurance was born. As a counterpart to the national NHSO Fund, "Community Health Funds (CHF)" started to be developed in 2006, as provided in Section 47 (8).

The CHF is a joint (or matching) fund between NHSO and LAO. The management of this fund is a collaboration of the LAO, community representatives, the public sector, and local health workers. The LAO plays a key role in CHF operations, and the NHSO oversees regulations of the CHF. The CHF helps reduce constraints in the public sector structure. Local entities can design activities or projects that fit their own context and health challenges. A key mechanism for the sustainability of the UCS is to mobilize contributions from multiple sectors of society to meet the health needs of local residents.

4.2

COMMUNITY HEALTH FUND AND P&P

Most P&P services require stimulation of demand to encourage the use of services which people might not necessarily perceive as urgent or important. Plus, the health challenges differ from location to location, and they may need to be addressed in different ways. The CHF is a mechanism of the NHSO to allow flexibility of response and community participation. Since its establishment in 2006, the CHF's scope and framework have been focused on organizing activities that support P&P that is essential to the health and livelihood of local residents. To help LAO manage the CHF more effectively, in 2014, the P&P Subcommittee, under the NHSO Board, detailed activities according to specific priority target groups[17]: pregnant women and postpartum women, preschool-age children, school-age children and youth, working-age people, the elderly, chronic disease sufferers, persons with disabilities, and other vulnerable subgroups of the population.[a]

Performance in 2020 shows that the P&P services managed by the LAO were directed to most at-risk individuals in the general population (25.1 percent), followed by school-age children and youth (16.5 percent) and working-age groups (16.1 percent) (Figure 1).

[a] Other vulnerable subgroups of the population refer to people who have risk-related behaviors to health and livelihood, namely: 1) Health-risk behaviors such as physical inactivity, insufficient sleep, unhealthy diet, use of drugs, unprotected sex that contributes to sexually transmitted infections; 2) Risk-taking behaviors such as not wearing a crash helmet, disrespect for traffic rules, drink-driving; and 3) Environmental health behaviors such as waste management and use of chemical substances in agriculture.

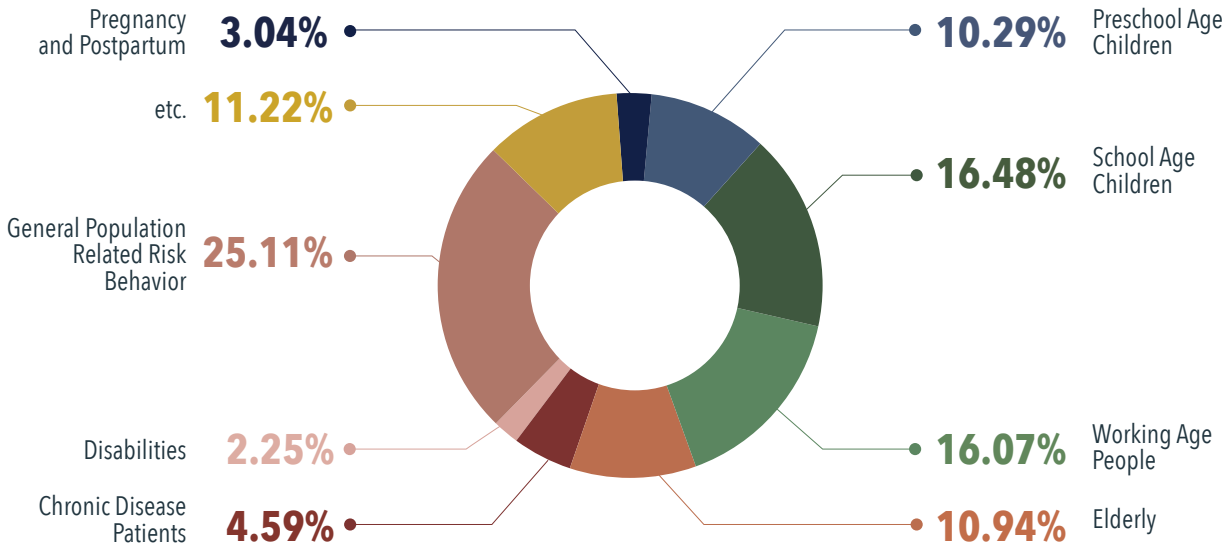


Figure 1: Proportion of Target Groups Implemented P&P in Local Sector in FY 2020

Source: NHSO Annual Report for FY 2020[18]

In addition, based on the past performance of the CHF, there is a heightened awareness and concern by participating LAO and network partners. In 2006, a total of 888 Tambon Administrative Organizations (TAO) and municipalities set up pilot Health Funds. As of 2020, Health Funds had been established in 7,732 LAO, thus covering virtually all of the nation's 7,775 LAO (including Bangkok and Pattaya).[18] Still, many of these locally-administered funds have encountered problems and obstacles that need to be addressed. For example, many of the TAO and municipalities still simply adhere to the LAO development plan without assessing what the true needs for P&P are in the locality. Also, projects and implementation often change abruptly when there is a change of relevant personnel in the LAO. In addition, there is still too little local participation by residents and UCS beneficiaries in how the funds are used.[19]

5

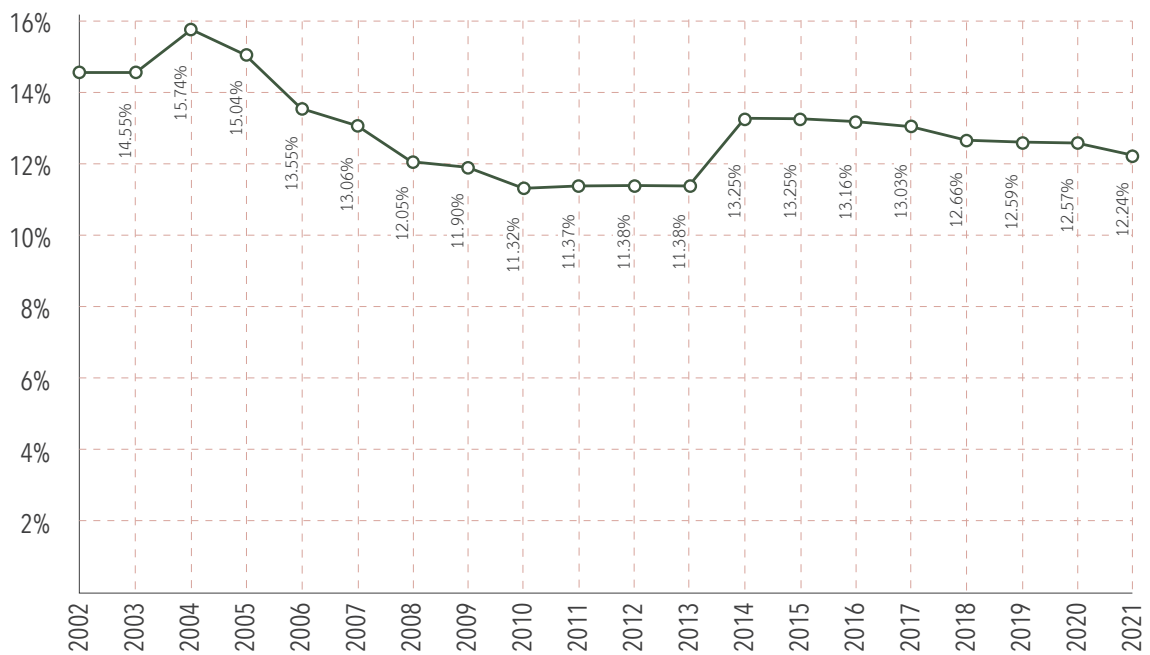
KEY ACHIEVEMENTS IN IMPLEMENTING P&P SERVICES

5.1

CAPITATION BUDGET SYSTEM FOR P&P UNDER THE NHSO FUND

Budget for P&P services under the capitation system increased from 175 baht per eligible UCS beneficiary in FY 2002 to 455 baht per beneficiary in FY 2021, or an increase of 2.6-fold. By comparison, the proportional budget for P&P decreased from 14.6 percent of the total in 2002 to 12.2 percent in 2021 (Figure 2).

Figure 2: Budget for P&P Services as a Proportion of the Capitation Budget: FY 2002 – 2021



Sources: NHSO Annual Report for FY 2020[18]
and Handbook for the Management of the NHSO Fund for FY 2021[14]

5.2

COVERAGE OF MORE THAN 80 P&P SERVICES

Starting with only ten services in 2002 when the UCS was launched, P&P has increased to over 80 services in the benefits package as of the time of this study (see table in the appendix).

5.3

ADDING THE HPV DNA TEST[b] FOR CERVICAL CANCER SCREENING

One important step in the development of P&P services was to optimize cervical cancer screening. This cancer is a major public health threat in Thailand, and cervical cancer is the second most common cancer of all cancers found in Thai women. This cancer has a high mortality rate if left untreated or treated late in the course of disease. However, cervical cancer can be cured if it is found in its early stages. Early screening for cervical cancer as a therapeutic approach is an important measure and is one of the benefits of P&P services, in conjunction with Pap Smear/Conventional Cytology (CC) screening services or VIA Method (Visual Inspection with Acetic Acid).

Cervical cancer screening with the HPV DNA test is a very sensitive method in detecting abnormal cells. However, this method has a relatively high cost, and strict quality controls are required. Initially, the test could only be offered by healthcare providers with large laboratories. However, nowadays, HPV DNA test machines and kits are more user-friendly and affordable. According to HITAP, the HPV DNA test is a cost-effective method of cervical cancer screening that can reduce the progression and mortality from cervical cancer, with a similar cost as the other two screening methods cited above. In 2020, the NHSO Board agreed to add the HPV DNA test to the cervical cancer screening protocol as a new benefit of the UCS package. That addition meant that the service provider and beneficiary had the choice of three screening methods: Pap smear, VIA, and HPV DNA test.

Cervical cancer screening with the HPV DNA test was first piloted in 24 provinces, under the joint management of the Department of Medical Services and Department of Medical Sciences. The target population for screening is women age 30-59 years, and the test is repeated every five years if a previous test result was negative. However, in case of a positive test result (i.e., infection), the test is repeated and, if confirmed, then treatment is initiated. Despite its greater sensitivity (low false-negative rate), the HPV DNA test has implications for staffing and quality control in reading the results from the HPV DNA machine. Thus, adding this service to the P&P benefits package can significantly increase the workload across all the NHSO zones. Accordingly, the NHSO has coordinated with the Office of the Permanent Secretary of the MOPH, the Department of Medical Services, the Department of Medical Sciences, and the Royal College of Obstetricians of Thailand to build the capacity of all participating UCS service units to provide the HPV DNA test.

[b] Cervical cancer screening with HPV DNA test is a test in which cells are scraped from the cervix to look for DNA of Human Papilloma Virus (HPV) which causes cervical cancer

5.4

DISEASE-SPECIFIC BENEFITS

HIV PREVENTION

There are P&P services that are separately managed, including HIV prevention services, and support for people living with HIV (PLHIV). According to the NHSO Board's announcement on type and scope of public health services (11th Edition, 2016), the priority target population groups for the HIV prevention service are older children and adolescents (6 - 24 years), adults (25 - 59 years), and elderly (60 years and over) at risk of HIV infection.[c]

Prevention services include the following:

1 Education, counseling, advice, and behavior change motivation for those at risk of HIV infection.
2 Providing advice, persuasion, and referrals from the community, service unit/drugstores
3 Prevention supplies such as condoms, lubricant, sterile injection equipment
4 HIV voluntary counseling and testing (VCT)
5 Appointment and follow-up to receive continuous services and to maintain a negative HIV test
6 Screening for sexually transmitted infections (STI)
7 Referral for STI treatment and antiretroviral therapy (ART)

During 2020, the UCS provided HIV/STI testing services for 74,228 beneficiaries, exceeding the target of 68,500. In addition, outreach activity contacted 86,955 persons at risk of HIV and referred them to HIV VCT. Of these, 80,321 received HIV VCT and, of these, 2,184 were diagnosed with HIV infection and referred for ART. [18]

[c] The high-risk groups are men who have sex with men (MSM), transgender women (TG), male/TG/female sex workers (both venue-based and non-venue-based), people who inject drugs (PWID), discordant couples, sex partners of high-risk individuals, prisoners, and youth in detention.

COVID-19 SCREENING AND PREVENTION

In response to the sudden pandemic of Covid-19 in early 2020, the NHSO Board added screening and laboratory testing services to confirm Covid-19 infection under P&P for all beneficiaries (Announcement No. 18, 2020). The NHSO is also supporting the prevention of Covid-19 infection through the CHF. The CHF is the first line of response and supports projects aimed at preventing and containing the spread of Covid-19. Implementation of control and prevention of Covid-19 emphasizes the following: (1) Preventive education campaign according to DDC guidelines; (2) Provision of protective equipment such as face masks, alcohol gel, thermometer, etc.; (3) Screening of vulnerable groups in the community; (4) Monitoring and visiting risk groups in the community; and (5) Monitoring people returning to the community after being in an epidemic area. These activities have been implemented widely in many areas throughout the country, especially in vulnerable areas. As a result, this locally-driven response has probably significantly contributed to controlling the epidemic spread of Covid-19 so far.

CHF is the first line of response and supports projects aimed at preventing and containing the spread of Covid-19 by:

Preventive education campaign according to DDC guidelines

Provision of protective equipment

Screening of vulnerable groups in the community

Monitoring and visiting risk groups in the community

Monitoring people returning to the community after being in an epidemic area

Table 3: Use of P&P services: 2015 - 2019

5.5

UTILIZATION OF P&P SERVICES

The use of P&P services by the Thai population has improved. People have more access to essential services than before (Table 3). In addition, the percentage of recipients of screening services for diabetes, high blood pressure, cervical cancer, and ANC (within the first 12 weeks of pregnancy) have increased. This may be due to the adjustment of the payment model according to the service quality criteria, QOF since 2017, resulting in the development of the service quality of the provider and motivating the public to receive more services and on a regular basis.[20]

	INDICATOR	2015	2016	2017	2018	2019
	PREGNANT WOMEN					
1	Percentage of pregnant women receiving their first ANC check-up at 12 weeks or less gestation (target: >= 60%)	57.10	62.25	66.43	74.39	80.59
2	Percentage of pregnant women receiving at least 5 ANC check-ups (Target: >=60%)	51.10	50.25	53.27	62.92	70.28
3	Percentage of women receiving at least 3 post-partum check-ups (Target: >=65%)	49.72	49.79	51.53	63.04	70.89
	CHILDREN					
1	Childhood immunization*					
—	BCG (Target >= 90%)	88.3	94.7	95.3	99.8	97.41
—	MMR1 (Target >= 95%)	84.2	90.9	88.4	96.1	91.48
—	DTP3-HB3/OPV3 (Target >= 90%)	85.8/85.8	91.8/92.0	90.2/90.2	96.5	92.37/92.5
—	IPV (Target >= 90%)	-	-	-	88.4	91.73
—	DTP4/OPV4 (Target >= 90%)	83.7/83.6	87.6/87.4	86.8/86.6	95.3	89.72/89.67

	INDICATOR	2015	2016	2017	2018	2019
	CHILDREN					
—	JE2 (Target >= 90%)	80.4	84.1	84.2	96.9	89.6
—	JE3 (Target >= 90%)	78.0	75.2	72.3	95.1	82.26
—	MMR2 (Target >= 95%)	58.4	80.1	83.6	86.6	89.7
—	DTP5/OPV5 (Target >= 90%)	78.7/78.5	79.9/79.7	81.2/81.0	87.2	85.7/85.61
2	Percentage of confirmation of hypothyroidism in abnormal cases (Target >= 80%)	86.67	95.25	94.32	91.96	82.90
3	Percentage of children age 0-5 years with normal growth and development (Target >=80%)	81.50	91.94	95.84	96.66	97.61
4	Percentage of children with pre-obesity (Target <= 10%)	-	-	-	8.90	11.15

	INDICATOR	2015	2016	2017	2018	2019
	ADULTS AND THE ELDERLY					
1	Percentage of Diabetes Mellitus Screening (Target >= 90%)					
	- Age 35-59 years	67.89	75.41	84.65	86.32	86.67
	- Age 60 years or older	63.21	71.45	81.89	84.49	86.22
2	Percentage of Hypertension Screening (Target >= 90%)					
	- Age 35-59 years	71.44	79.24	85.51	87.08	87.19
	- Age 60 years or older	70.28	78.34	84.10	86.72	87.81
3	Percentage of Cervical Cancer Screening in women age 30-60 years: Cumulative 2015 - 2020 (Combined Target: >= 80%)	16.41	27.33	38.34	48.81	56.64
4	Percentage of seasonal flu vaccinations administered in the target groups	78.47	78.04	87.31	78.30	91.24

Note * Immunization coverage in children in target groups: Country overview. From the 2017-2019 Annual Report, Division of Vaccine Preventable Diseases, DDC[21-23]

Sources: NHSO Annual Report for FY 2015 – 2019[20,24-27]

6

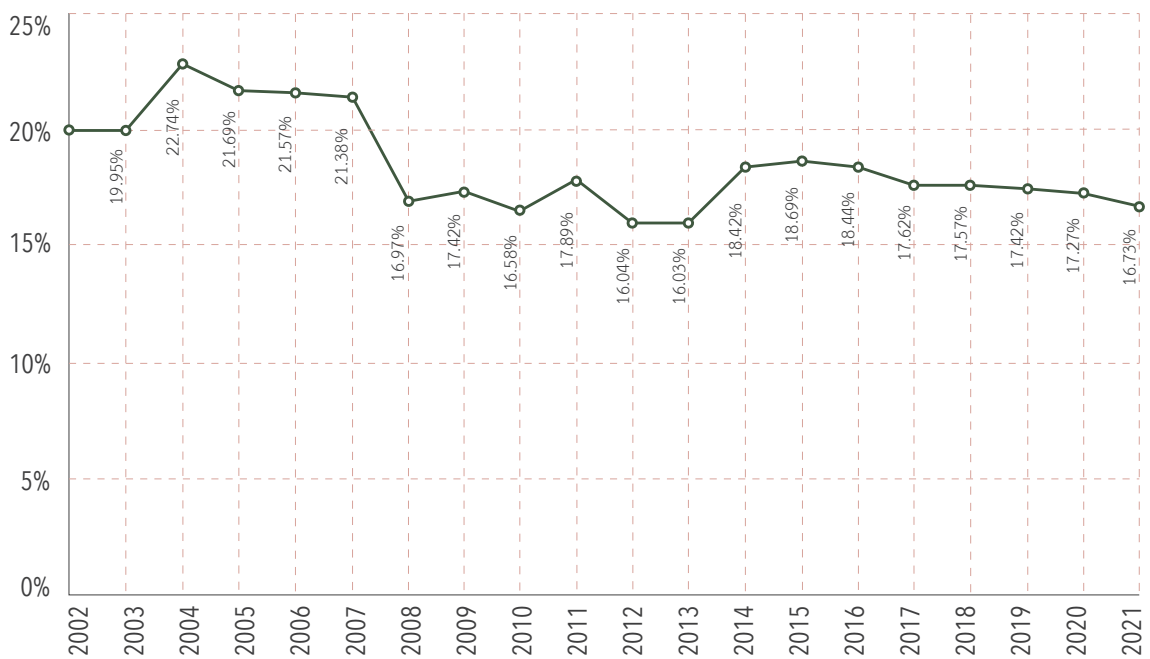
LESSONS LEARNED AND CHALLENGES REMAINING

6.1

THE PROPORTION OF THE CAPITATION BUDGET FOR P&P HAS BEEN STEADILY DECLINING

The proportion of budget capitation allocation for P&P services continues to decline, despite the NHSO Board resolution in 2010 to earmark at least 20 percent of the budget for P&P (for outpatients and inpatients combined). However, from FY 2008 to the present, the proportion of the total budget for P&P services has remained below 20 percent (Figure 3). The decrease in P&P budget proportion is due to the discrepancy between performance and the previous year's allocation. In addition, budgeting is also based on the development of the benefits package, which is limited for P&P in some respects. This hinders the optimization and expansion of the options of services.

Figure 3: Proportion of the Capitation Budget for P&P Services for In- and Outpatients: FY 2002-21



Sources: NHSO Annual Report for FY 2020[18] and Handbook for the Management of the NHSO Fund for FY 2021[14]

6.2

REQUIRING BENEFICIARIES TO GO FOR P&P SERVICES ONLY AT THE SERVICE PROVIDER THEY ARE REGISTERED WITH COULD BE AN OBSTACLE TO ACCESS

Compared to clinical and curative care, P&P services are heavily dependent on outreach and creation of demand. Part of the problem is that people who feel well might not see the need for health promotion or disease prevention. Also, people who feel unhealthy but not ill may be reluctant to go for services which they may not believe will help them. Access is always a potential barrier, especially in remote rural areas, or in congested urban areas such as Bangkok. Although the Civil Registration data indicates that the population of Bangkok is approximately five million people, in fact, it is estimated that the de facto population could be twice that on any given day. Thus, NHSO Zone 13 (Bangkok) has to proactively reach out to the 'hidden' population of inner-city dwellers through creative means, such as drugstores, mobile health screening programs for informal public transport migrant drivers, and community dental health programs, among others.[20] The outreach can use technology to reduce steps or processes in receiving services at specific service units to increase access to P&P services. For example, people can now make advance appointments for flu vaccination in Bangkok by using the LINE application on social media. There are also the "Health Wallet" and "Pao-Tang" apps to allow people to access information about the services they are entitled to, and make appointments in advance without having to travel multiple times to the service unit.[18]

Moreover, with the current demographic shifts, Thailand is in the process of becoming an 'aged society,' and chronic NCDs are major health problems of the elderly. Developing proactive P&P services for this vulnerable group is a challenge that must be undertaken. This requires working with the local community to support long-term care of the elderly, and where the home neighborhood will be a key base of care, together with network partners in every sector.[15] Examples of projects are the "Near House – Near Heart" project and the community-based nursing and midwifery clinics, among many others.

6.3

DESIGNING APPROPRIATE COMPENSATION FOR SERVICES AND INCENTIVIZING SERVICES WHILE CONTROLLING DISBURSEMENT SO THAT IT IS ACCURATE, TRANSPARENT, AND AUDITABLE

The NHSO employs a variety of payment methods in addition to the capitation budget system in compensating for P&P services to increase incentives in providing services, such as encouraging service units to proactively conduct screening for diabetes and high blood pressure (because these diseases are chronic and are among the top health problems in the country). However, because these services are included in the capitation budgets, providers are not incentivized to provide services to the public. To address this problem, the NHSO has adapted a model to itemize payments through a fee schedule. However, that approach also opens the door to forged billing practices. For example, in 2020, false billing for metabolic syndrome case management was detected in some participating private sector providers in Bangkok.

NHSO revamped its entire disbursement and inspection system with a Digital Identification system to verify the identity of the recipient

As a result of this incident, the NHSO revamped its entire disbursement and inspection system, and added a pre- and post-reimbursement inspection process with a Digital Identification system to verify the identity of the recipient of the services online and confirm the access to the services with the code that the recipient of the services received from the NHSO only. The service unit must use that code as evidence before claiming any further reimbursement from the NHSO.

PROMOTION

PREVENTION

TREATMENT

6.4

LACK OF DATA LINKAGES BETWEEN P&P AND CLINICAL CARE DATABASES

Previously, there were no linkages of the data systems for screening-referral-treatment.[5] This shortcoming made the work more fragmented and meant that there was a lack of systematic integration in the development of P&P services. In order to create a continuous working process between promotion/prevention/treatment, it is imperative that these databases are seamlessly linked. For example, when an abnormality is detected, especially in such procedures as screening for hypothyroidism in newborns, prompt referral for treatment is very important to prevent the occurrence of mental retardation in the child.

6.5

EVALUATION OF EFFECTIVE COVERAGE OF P&P SERVICES

Another major challenge with P&P is the assessment of effective coverage. That is because the measure of the health benefits that people receive from P&P services need to reflect the correlation between the effectiveness and quality of the services. The use of effective coverage in the evaluation of P&P performance is, therefore, limited. As the benefits that service recipients receive from most P&P services are difficult to measure (e.g., increased health knowledge or behavior modification), trying to correlate outcomes with services rendered is rarely straightforward. An option in monitoring service coverage that could not be tracked by evaluating effective coverage is to use alternative service coverage metrics.

In 2017, the Subcommittee on the types and scope of public health services that are essential to health and livelihood identified indicators to measure the effective coverage of ten priority disease groups, including tuberculosis, HIV/AIDS, cervical cancer, diabetes, high blood pressure, Ischemic heart disease, Ischemic stroke/thromboembolism, pediatric mental retardation, oxygen deprivation of the newborn, and chronic psychiatric disorder.[d] [20] Evaluation of effective coverage of cervical cancer prevention and case management uses P&P monitoring indicators, for example, the percent coverage of HPV vaccine[e] and percent 5-year cumulative coverage of screening for cervical cancer in women age 30-60 years, since those screening and vaccination services are critical elements of a program to control cervical cancer.[29]

6.6

INVESTING IN HEALTH PROMOTION FOR CHILDREN AGE 0 – 3 YEARS

The P&P benefits package currently includes services for at least one screening session for age-appropriate child development at age 9, 18, 30, and 42 months.[17] However, in children age 0 to 3 years, brain and emotional development are essential to overall well-being. In order to achieve optimal growth in all aspects of childhood, the NHSO should invest in additional benefits to promote brain and emotional development in children age 0 - 3 years to prepare a solid foundation for the health of the population and society going forward.

[d] Schizophrenia, depression, bipolar disorder and those requiring long-term anti-psychotic drug treatment

[e] It is one of the benefits of P&P services for girls in primary school grade 5 and girls age 11-12 years outside the formal education system

7

SUMMARY

HEALTH
PROMOTION
LEADS CURE

Health promotion and disease prevention (P&P) are part of the Thai healthcare system that has its foundation dating back for more than a century since 1918. Over the past 20 years, the comprehensive benefits of P&P in the UCS have been the unique feature of the Thai health insurance system. P&P services are now available to all citizens equally. The NHSO, as the main agency responsible for preparing the P&P budget and processing the budget allocation requests for Thais of all age groups, has continually improved budget management to provide incentives in providing comprehensive and efficient services. However, extra effort is needed since P&P are low-demand services that require outreach and population motivation to generate participation from beneficiaries. In addition, the P&P benefits package has evolved continuously, taking into account the need for efficiency and cost-effectiveness of health services. The P&P benefits package now covers a comprehensive list of services. However, despite the fact that people have access to essential P&P services more than in the past, the proportional budget for P&P services has decreased over time, from 14.6 percent in 2002 to 12.2 percent in 2021, compared to the total capitation budget. This trend poses a challenge for the NHSO to continue to develop and improve the management of P&P services under the slogan of "Health promotion leads cure" which is an important mission to ensure the well-being of the people and the development of the country in the years and decades ahead.

REFERENCES

1. Office of Policy and Strategy, Office of the Permanent Secretary, Ministry of Public Health. Thai Public Health: 2011 - 2015. 2016.

2. World Health Organization. Milestones in health promotion: Statements from global conferences. World Health Organization; 2009. Report No.: 6161115336.

3. National Preventative Health Taskforce. Australia: the healthiest country by 2020. Canberra: Commonwealth of Australia Canberra; 2009.

4. Intersectoral Healthy Living Network. The integrated pan-Canadian healthy living strategy. 2005.

5. Health Intervention and Technology Assessment Project. Project to develop proposals to improve benefits package and health promotion and disease prevention services for FY 2016 under universal health insurance. 2015.

6. Office of Policy and Strategy, Office of the Permanent Secretary, Ministry of Public Health. National strategic framework for health promotion and disease prevention: 2011 - 2015. 2011.

7. Chantana Jensupaseree, Darika Musikul, Aomjai Chalee, and Nittikorn Nunnark. Evaluation of the Implementation of Health Promotion and Disease Prevention for the Year 2013. Disease Control Journal. 2017;43(2):120-9.

8. Department of Health, Ministry of Public Health. Strategic Plan. Development of health and environmental health promotion system according to the National Health Development Plan during the 12th National Economic and Social Development Plan (2017-2021). 2016.

9. Surajit Sunthorntham, Phongphisut Chongudomsuk, Bunyawee Uasiriwan, Samrit Srithamrongsawat, Jadet Thammathat Aree, Sirinat Nipaporn, et al. Thai health insurance system. Bangkok: National Health Security Office; 2012.

10. Somsak Choonharat, Ladda Damrikarnlert, Phusit Prakongsai, Weerasak Phuttasri, Samrit Srithamrongsawat, Pinit Fahamnuaypol, et al. Complete study report: an alternative model, management of budget for health promotion and disease prevention under the universal health insurance system. 2007.

11. Viroj Tangcharoensathien, Yot Teerawattananon, Phusit Praksai. Budget for Universal Health Coverage: How was the 1,202 Baht Capitation Rate Derived?. Journal of Public Health. 2001; 10 (3): 381-90.

12. Walaiporn Patcharanarumol, Phusit Prakongsai, Kanjana Tisayatikom, Viroj Tangcharoensathien. Capitation Rate for Promotion and Prevention Package for the Fiscal Year 2546BE (2003AD). Journal of Health Science. 2002; 11 (5): 582-98.

13. National Reform Advocacy Council. People's health insurance reform: Core benefits of health. 2016.

14. National Health Security Office. Handbook for the Management of the National Health Security Office Fund for FY 2021.Bangkok: National Health Security Office; 2020.

15. National Health Security Office. National Health Security Office Annual Report for FY 2013. 2014.

16. Health Intervention and Technology Assessment Project. Complete report. Health promotion and disease prevention services proposal development project. 2017.

17. Law Office, National Health Security Office. Regulations issued under the National Health Security Law. Bangkok: National Health Security Office; 2020.

18. National Health Security Office. National Health Security Office Annual Report for FY 2020. 2021.

19. National Health Security Office. National Health Security Office Annual Report for FY 2011. 2012.

20. National Health Security Office. National Health Security Office Annual Report for FY 2019. 2020.

21. Vaccine-Preventable Disease Division, Department of Disease Control. 2018 Annual Report, Division of Vaccine-Preventable Diseases. Department of Disease Control, Ministry of Public Health.

22. Vaccine-Preventable Disease Division, Department of Disease Control. 2017 Annual Report, Division of Vaccine Prevention Diseases. Department of Disease Control, Ministry of Public Health.

23. Vaccine-Preventable Disease Division, Department of Disease Control. Annual Performance Report FY 2019. Department of Disease Control, Ministry of Public Health.

24. National Health Security Office. National Health Security Office Annual Report for FY 2017. 2018.

25. National Health Security Office. National Health Security Office Annual Report for FY 2015. 2016.

26. National Health Security Office. National Health Security Office Annual Report for FY 2016. 2017.

27. National Health Security Office. National Health Security Office Annual Report for FY 2018. 2019.

28. International National Health Policy Program Foundation. Complete report on the project to develop mechanisms and processes for effective coverage assessment and access to health services. 2021.

29. International Health Policy Program Foundation. Complete report: Effective coverage assessment project phase one: FY 2018. 2018.

APPENDIX

P&P BENEFITS FOR THE POPULATION IN FIVE AGE GROUPS IN 2021

PREGNANT WOMEN	Quality ANC services according to WHO and/or Department of Health guidelines	Pregnancy tests
CHILDREN (0 – 5 YEARS)	Common P&P services include paediatric health clinic services, health assessment and assessment of general condition, physical examination, measurement and assessment, developmental surveillance and required screening; parental guidance, asking and answering questions, showing appreciation, encouragement	Vitamin K
CHILDREN AND YOUTH (6 – 24 YEARS)	General P&P services include history/inquiry services, physical examination, physical health/mental health assessment and diagnosis of general problems, risk behavior assessment, screening, parental guidance, question and answer sessions, showing appreciation, encouragement	BCG vaccine
ADULTS (25 – 59 YEARS)	General P&P services include history/inquiry services, physical examination, physical health/mental health assessment and diagnosis of general problems, risk behavior assessment, screening, health education, counseling, question and answer sessions	dT vaccine
ELDERLY (60 YEARS OR OLDER)	General P&P services include history/inquiry services, physical examination, physical health/mental health assessment and diagnosis of general problems, risk behavior assessment, screening, health education, counseling, question and answer sessions	dT vaccine

Taking a personal history, past illness, obstetrical history, current pregnancy	Physical exam, examination of the fetal development	Mental health assessment
Screening for hypothyroidism	BCG vaccine	Hepatitis B vaccine
dT vaccine	OPV	MMR vaccine
Seasonal flu vaccine	Screening for risk of use of tobacco, alcohol, and other addictive substances	Blood pressure screening
Seasonal flu vaccine	Nutrition assessment	Blood pressure screening

PREGNANT WOMEN	Multiple urine dipstick to diagnose urinary tract infection	STI screening (e.g., VDRL) at first and fourth ANC visit (28-32 weeks gestation)
CHILDREN (0 – 5 YEARS)	DTwP-HB vaccine	DTwP vaccine
CHILDREN AND YOUTH (6 – 24 YEARS)	Seasonal flu vaccine	HPV
ADULTS (25 – 59 YEARS)	Diabetes screening	Screening for cardiovascular disease
ELDERLY (60 YEARS OR OLDER)	Diabetes screening	Screening for cardiovascular disease

HIV screening at the 1st and 4th ANC visit	Hepatitis B screening at 1st ANC visit	CBC screening or Hb measurement, or Hct measurement at 1st and 4th ANC visits
DTPHB-Hib vaccine	OPV/IPV	MMR vaccine
Screening for iron-deficiency anaemia	School-based oral health exam	Vision disorder screening
Screening for cervical cancer	Education on self-breast exam for breast cancer	Screening for colorectal cancer (age 50+ years)
Screening for risk of stroke	Screening for dementia or infirmity due to old age	Screening and counselling for depression

PREGNANT WOMEN	Screening for thalassemia	Screening for fetal Down syndrome
CHILDREN (0 – 5 YEARS)	JE vaccine	Seasonal flu vaccine
CHILDREN AND YOUTH (6 – 24 YEARS)	Hearing impairment screening	Assessment of development and nutrition
ADULTS (25 – 59 YEARS)	Fluoride treatment	Iron-fortified supplements
ELDERLY (60 YEARS OR OLDER)	Fluoride treatment	Education on exercise, mental stimulation to prevent dementia

ABO and Rh blood group tests	dT vaccine	Flu vaccine at over 4 months gestation
Vaccine for rotavirus diarrhoea	Screening for anaemia	Assess child development and cranial circumference
Screening for risk of use of tobacco, alcohol, and other addictive substances	Blood pressure screening	Iron-fortified supplements
Reproductive health services and prevention of unwanted pregnancy	HIV prevention education and risk behavior reduction	Counseling and referral from the community, drugstore or other service providers
Education on self-breast exam for breast cancer	Screening for colorectal cancer (age 60-70 years)	HIV prevention education and risk reduction

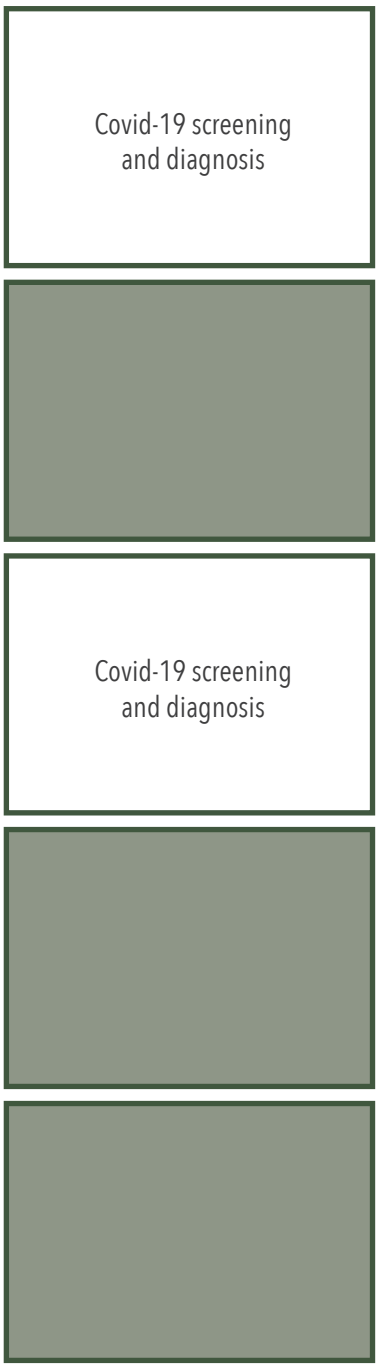
PREGNANT WOMEN	Iron supplements, folic acid, iodine, taken daily throughout the pregnancy	Plaque removal and cleaning teeth at 1st or 2nd ANC visit (within 6 months of pregnancy)
CHILDREN (0 – 5 YEARS)	Child development screening	Screening for vision disorder
CHILDREN AND YOUTH (6 – 24 YEARS)	Fluoride coating for teeth	Sealants
ADULTS (25 – 59 YEARS)	Prevention supplies, such as condoms, lubricant, sterile injection equipment	HIV VCT
ELDERLY (60 YEARS OR OLDER)	Counseling and referral from the community, drugstore or other service providers	Prevention supplies, such as condoms, lubricant, sterile injection equipment

Treat abnormalities as detected, including correction of malnutrition	Assess for need for referral	Counseling for pregnancy care, delivery, infant care and family planning
Oral health examination and fluoride treatment	Iron-fortified supplements to prevent anaemia from iron deficiency	HIV screening and ART
Reproductive health services and prevention of unwanted pregnancy	Education on HIV prevention and reduction of risk behavior	Counseling and referral from the community, drugstore or other service providers
Appointments and continuing motivation to remain HIV-negative	Screening, diagnosis, and treatment for STI; referral for screening, treatment and ART	Home visits
HIV VCT	Appointments and continuing motivation to remain HIV-negative	Screening, diagnosis, and treatment for STI; referral for screening, treatment and ART

PREGNANT WOMEN	Pre-/post-test counseling for HIV, anaemia, Thalassemia, fetal Down syndrome	Emergency counseling and appointment for next visit
CHILDREN (0 – 5 YEARS)	Infant formula for HIV+ mothers	MCH booklet
CHILDREN AND YOUTH (6 – 24 YEARS)	Prevention supplies, such as condoms, lubricant, sterile injection equipment	HIV VCT
ADULTS (25 – 59 YEARS)	Covid-19 screening and diagnosis	
ELDERLY (60 YEARS OR OLDER)	Home visits	Covid-19 screening and diagnosis

MCH booklet	**Post-partum care** - Inquiry for weight, blood pressure measurement, general physical examination and in-specific examination with clinical indications - Screening for postpartum depression - Advice and services for voluntary family planning (oral pills, injectable contraceptives, IUD, implantation, sterilization) - Breastfeeding and nursing advice - Iron supplements, folic acid, iodine, taken daily after 6 months
Home visits	Covid-19 screening and diagnosis
Appointments and continuing motivation to remain HIV-negative	Screening, diagnosis, and treatment for STI; referral for screening, treatment and ART

PREGNANT WOMEN	Home visit for pregnant and post-partum women	Promotion of breastfeeding in the workplace
CHILDREN (0 – 5 YEARS)		
CHILDREN AND YOUTH (6 – 24 YEARS)	Student health booklet	Home visits
ADULTS (25 – 59 YEARS)		
ELDERLY (60 YEARS OR OLDER)		



Sources: NHSO Board Declaration on Types and Scope of Public Health Services (10th Edition) 2016 (P&P); NHSO Board Declaration on Types and Scope of Public Health Services (11th Edition) 2016 (HIV Prevention); NHSO Annual Report for FY 2020; and Handbook for the Management of the NHSO Fund for FY 2021.

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