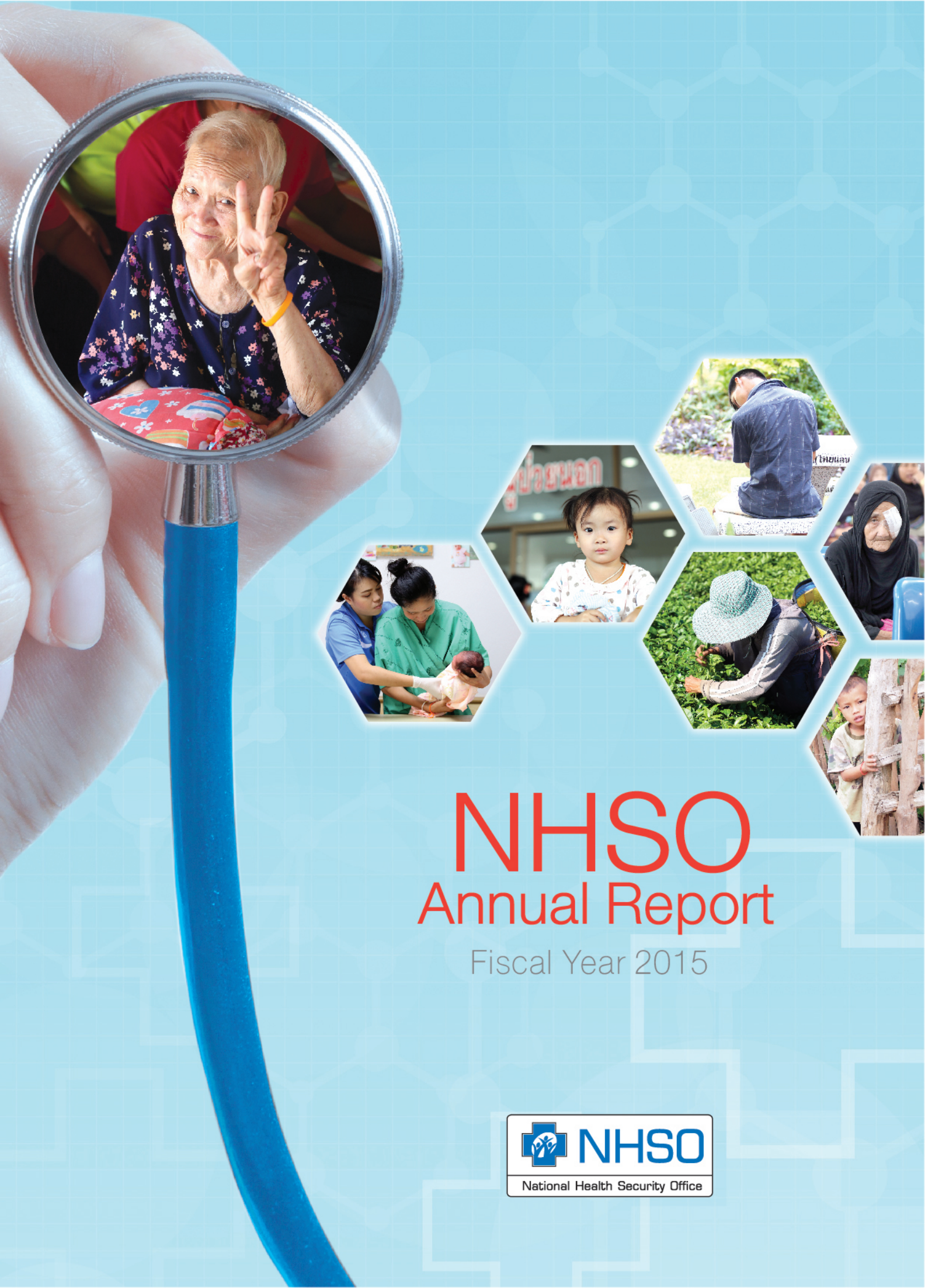


NHSO
Annual Report
Fiscal Year 2015

NHSO
National Health Security Office

NHSO Annual Report

Fiscal Year 2015

A message from the Chair of the National Health Security Board

The Thai government has made healthcare development a priority for several years, especially in the past decade, to improve quality of life for all of its citizens through health system development. This important policy has continued to promote and support all areas of health care including healthcare services, health personnel, health information, medicines and medical instruments, good governance, and the health financing system.

The Universal Health Coverage (UHC) system is one of the primary policies to improve efficiency in health financing and management. Although achieving universal health coverage for Thailand has been internationally recognized as a role model for other developing countries, continuous development and better management for the benefit of citizens and the health system as a whole are still important missions. The key policies for improving the quality of life of Thai citizens whilst also being able to control long-term health expenditure for sustainable health security can be complex. It includes improving efficiency in administration and resource management and improving accessibility to quality healthcare at every level. This also includes harmonizing government health insurance and improving accessibility to healthcare to that portion of the population needing special attention or who face obstacles in accessing necessary basic healthcare.

In FY2015, the National Health Security Board (NHSB) put in place several important policies to aid improvement in the continued implementation of universal health coverage. The top six most important policies were:

1) Improving efficiency in health security fund management and promoting integrated holistic health services in response to local health needs to insure access to health services countrywide;

2) Coordinating government health insurances to improve equity and efficiency in the health system;

3) Promoting both new and existing benefit packages in order to give added accessibility and efficiency to the health system, e.g., Long-term care for the dependent elderly, integrated emergency health service systems and primary care development in urban areas;

4) Promoting consumer rights protection in the health security system for beneficiaries of other small government health insurance schemes such as government officers of local administrative organizations and their dependents;

5) The exchange and development of ideas with the international community regarding universal health coverage implementation in accordance with the prime minister's policy;

6) Developing other support systems for better universal health coverage, such as public meetings, etc.

The achievements made so far have been successful due mainly to good support and collaboration with stakeholders and other alliances. I would like to thank both executives and staff from the Ministry of Public Health (MoPH), other related ministries, health facilities and hospitals both government and private, health professional institutes, local administrative organizations, civil society, and other related organizations including the NHSO for their involvement in universal health coverage development and support in the implementation of the government's universal health coverage policy. As a result citizens are ensured an accessible standard quality of care; health equity; and benefit packages that cover more of the targeted groups, especially the disadvantaged.

I hope that all stakeholders and other alliances continue to give their support, involvement, and be a part of universal health coverage development, as they have done in the past, thus increasing the benefits granted to our citizens. I also wish you and your family all the best of happiness.

(Clinical Prof. Emeritus Piyasakol Sakolsatayadorn, M.D.)
Minister of Public Health
Chair of the National Health Security Board

A message from the Chair of the Health Service Standard and Quality Control Board

The fiscal year 2015 marks the fourth year since the implementation of the Health Service Standard and Quality Control Board (HSQCB). Its objectives being to review and analyze any problems or limitations of previous health service implementations as well as advancing health service development towards the highest possible standards, as authorized by section 50 of the National Health Security Act, B.E. 2545.

Being the last year of this board's tenure, and to prevent any gap of operation, the board has appointed 13 new regional subcommittees to oversee standards and quality control. The board has developed a policy framework with guidelines for the subcommittees to follow. In addition, they have revised the registering criteria for service units and qualified primary care units. The recommendations given by the board regarding these essential indicators should be given due consideration in the future development of the health service.

At the provincial level, seminars such as "Mechanisms of Section 41 towards Quality of Healthcare Services" have been organized, to create links between stakeholders and the local subcommittees' duties. The two subcommittees (the provincial sub-committees on health service standard and quality control and the provincial sub-committees to adjudicate complaints for losses from health service) have worked together to improve the healthcare system and to reduce its negative impacts. At the same time promoting dialogue between consumers and providers to improve services. The number of locations where complaints may be dealt with has increased to 102, covering 69 provinces; allowing people to more freely submit complaints irrespective of their status, in accordance with Section 50(5).

In order to build a better healthcare system, The Health Service Standard and Quality Control Board is focused on results and patient satisfaction. However, their recommendations are not its only driving force. To best meet people's needs the cooperation of every relevant stakeholder is vitally important.

My thanks and continued support goes to members of The Health Service Standard and Quality Control Board, members of working groups and sub-committees at central, regional, and provincial levels, other related stakeholders, and the National Health Security Office for their continued involvement in our goal to benefit the people of Thailand.

(Associate Prof. Prasobsri Ungthavorn, M.D.)
Chair of the Health Service Standard
and Quality Control Board

A message from the Secretary-General of the National Health Security Office

The Universal health coverage scheme of Thailand has been securely in place for more than a decade, entering its fourteenth year as of the fiscal year-2016. It has received much praise from the Thai people and a very favorable international reputation from the United Nations (UN), the World Health Organization (WHO), and the World Bank. The scheme has been strengthened by the invaluable feedback of relevant stakeholders such as consumers, providers, professional groups, local administrative organizations, and etc..

Many pertinent recommendations from stakeholders brought to the National Health Security Board have then been analyzed, synthesized and utilized in improving the system. Thus affording more benefit to the relevant groups and relieving their health expenditure. Notable additions to the scheme in the fiscal year – 2015 were “Long-term care for the elderly” (increasing elderly needed more medical care), “High cost care” (open heart surgery), “Emergency care” (Ischemic stroke & ischemic heart disease), and District health system development, etc.

Higher levels of satisfaction from both stakeholders and consumers are a clear sign of the NHSO’s achievements. Consumer satisfaction rates increased from 8.86 in the year 2014 to 9.11 in 2015, while providers level of rose to 6.98 in 2015. Regardless of the increase in provider satisfaction, we recognize extra improvements are essential.

Finally, the participation of every stakeholder is still the most important mechanism moving the universal health coverage scheme towards its ultimate goal. With strength and cooperation we can we can all have a brighter, happier future.

(Prateep Tanakijjaroen, M.D.)
Acting Secretary-General of the NHSO

Executive Summary

The Key target of Universal Health Coverage (UHC) is equality, when access to necessary healthcare is required, for all Thai citizens. The main indicators of UHC's achievements are best illustrated by its increasing equity of accessibility and its reduction of household expenditure required for health care. The performance of universal health coverage in the fiscal year (FY) 2015, the thirteenth year of implementation, is described below:

1. Improving access to healthcare

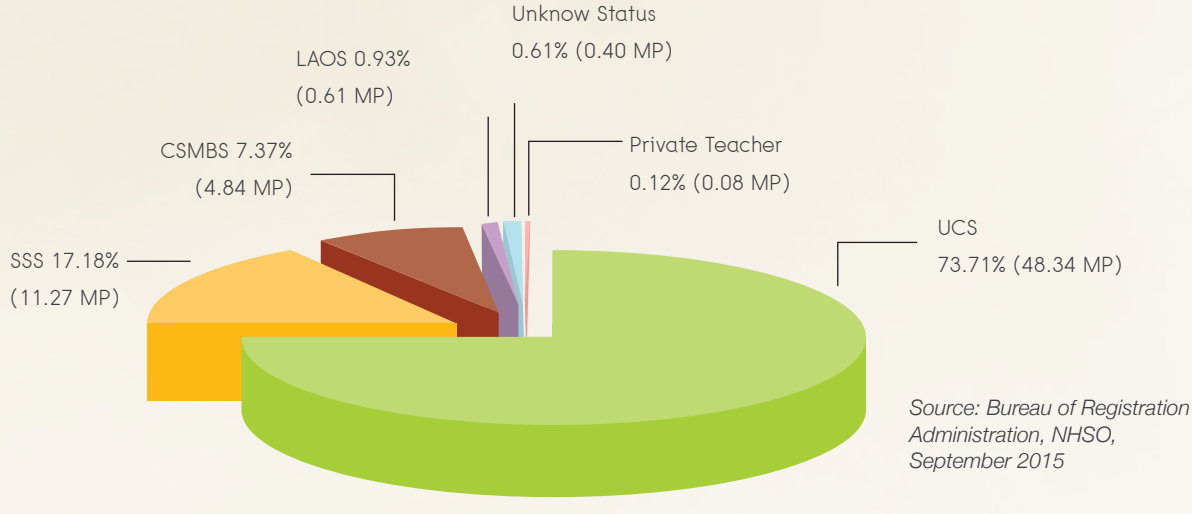
1.1 Health service coverage

Health service coverage to uninsured persons indicates a rise in equality. In FY 2015, the total Thai population was 65.580 million people (MP), 65.530 million people were insured by a health insurance scheme, or 99.92% coverage. In the Universal Coverage Scheme (UCS), 48.336 from 48.386 million beneficiaries had already registered (99.90% coverage), 0.050 million people or 0.08% were still not registered and about 0.141 million people were waiting for citizen status confirmation. Figure-A shows that 73.71%, 17.18%, 7.37%, and 0.93% of the total Thai population as registered for the UCS, the Social Security Scheme (SSS), the Civil Servant Medical Benefit Scheme (CSMBS), or the Local Administrative Organization Scheme (LAOS), respectively.

1.2 Improving accessibility and quality of healthcare

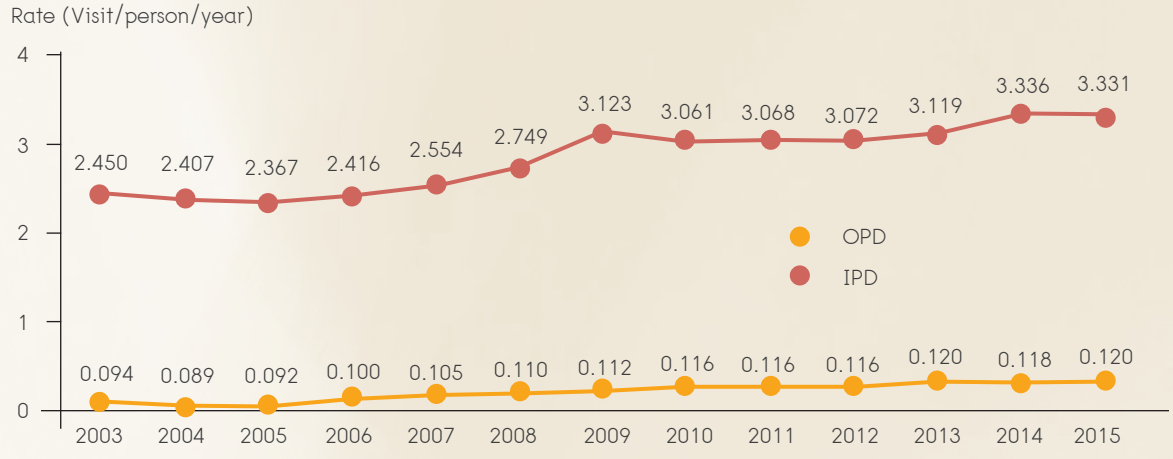
The number beneficiaries accessing UCS at the out-patient departments (OPD) increased from 2.450 visits/person/year in FY 2003 to 3.331 visits/person/year in FY 2015 while at the in-patient department (IPD), it had increased from 0.094 visits/person/year in FY 2003 to 0.120 visits/person/year in FY 2015 (Figure-B)

Figure-A Proportions of the government health insurance schemes, FY2015



Source: Bureau of Registration Administration, NHSO, September 2015

Figure-B Utilization rate of in-patient and out-patient services in UCS, FY2003- 2015

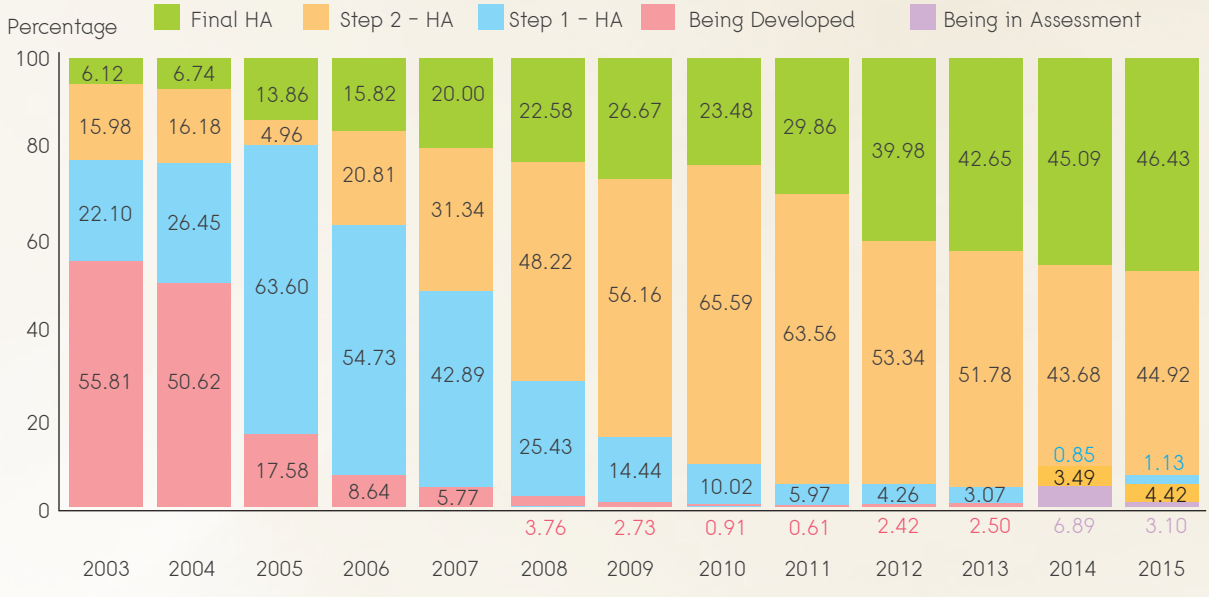


Source: *1) Out-patient data:*
- *FY2003-2009 are from 0110RP5 Report, Ministry of Public Health*
- *FY2010 – 2015 data are from NHSO,*

2) In-patient data from NHSO

The NHSO has continued to promote quality improvement for its' main contractors and referral hospitals by supporting hospital accreditation (HA) processes. The percentage of accredited main contractors and referral hospitals has continued to increase from only 6.12% in FY2003 to 46.43% in FY2015 (Figure-C)

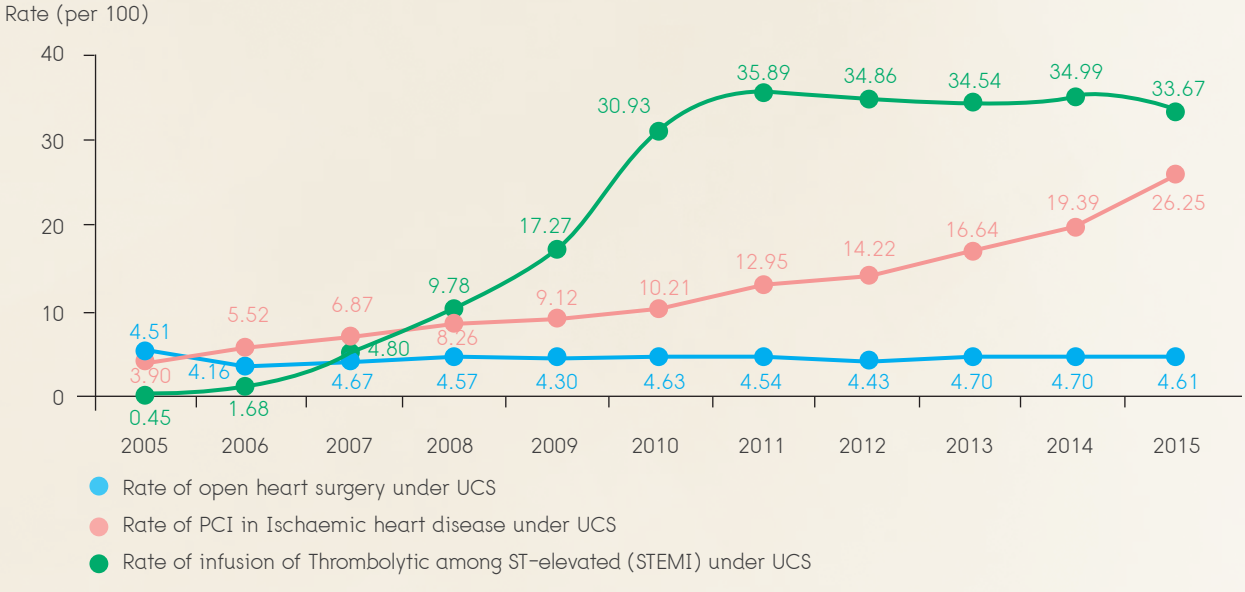
Figure-C Percentage of UCS registered hospitals classified by level of accreditation, FY2003-2015



Source: The Healthcare Accreditation Institute, FY2015 (30 Sept.2015), analyzed by Bureau of Quality and Health Outcome Monitoring, NHSO

Furthermore, it is important to promote access to necessary treatments in high mortality rate diseases, such as cardio-vascular diseases, that have a limited number of specialists both in terms of quantity and distribution. For example, access to key procedures for heart disease patients under the UCS has increased. Access to Percutaneous Coronary Intervention (PCI) for patients with Ischemic heart disease, and Thrombolytic agent infusion (TAI) for patients with acute myocardial infarction type ST-elevation (STEMI) have dramatically increased from 3.90% in FY 2005 to 26.25% and from 0.45% in FY 2005 to 33.67% in FY 2005 respectively; recipients of open heart surgery for patients was between 4.51 – 4.71% as shown in figure-D.

Figure-D Recipients of corrective heart procedures for patients under the UCS, FY2005-2015



Source: In-patient data, NHSO

Most of the key performance indices (KPIs) of the UCS fund management in FY2015 are achieved based on the target as described in table A

Table-A The NHSO key performance indices in FY2014 (Source: OP and IP services data, NHSO)

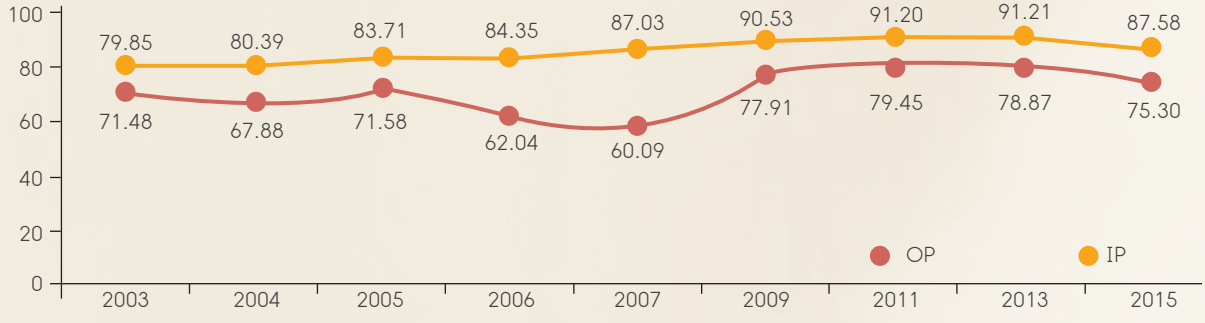
KPIs	Goal	Performance	% of performance
1. HIV/AIDS patients received ART (cases)	202,800	204,363	100.77
2. CKD patients received Renal Replacement Therapy (cases)	35,848	39,052	108.94
3. Health promotion and prevention in chronic diseases			
- secondary prevention in DM and HT patients (cases)	2,808,322	3,606,930	128.44
4. Rehabilitation			
- instruments for disabled (cases)	47,705	26,991	56.58
- rehabilitation services for disabled (visits)	236,257	231,902	98.16
5. Thai traditional medicines			
- Massage, hot compress, herbal stream (visits)	4,003,442	4,477,501	111.84
- post-partum care (visits)	30,834	35,668	115.68
6. Health promotion and prevention			
- Seasoning influenza vaccines (cases)	2,831,998	2,222,297	78.47
7. Patients received medicine from E(2) category drug list (cases)	15,490	21,713	140.17
8. Patients received orphan drug (cases)	4,670	5,708	122.23
9. Patients received Compulsory licensing drugs (Clopidogrel)	127,074	107,273	84.42

1.3 The choices made by citizens when accessing health care services

According to a health and welfare survey by the National Statistics Office in 2015, the trend of UCS beneficiaries to use out-patient services (OPS) and in-patient services (IPS) had both increased.

The results in figure-E show that the number of people using out-patient services was lower than in-patient services in FY2015; which were 75.30% and 87.58%, respectively.

Figure-E Patients using out-patient and in-patient services in UCS, FY2003- 2007, 2009, 2011, 2013 and 2015

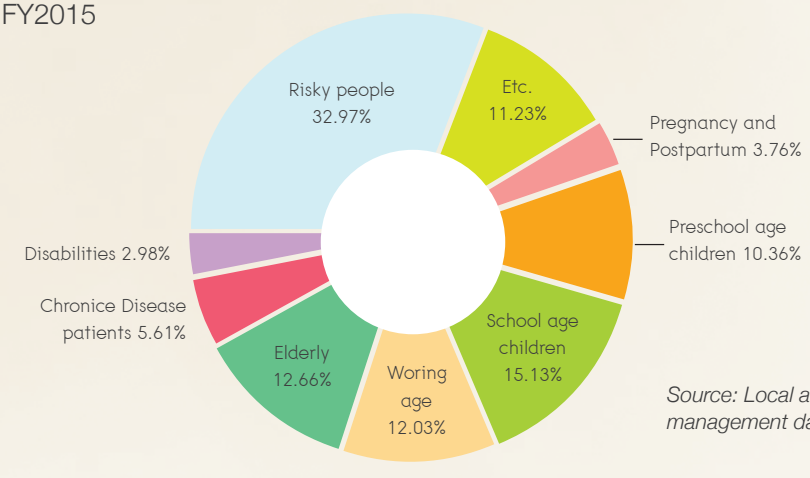


Source: Health and welfare survey, National Statistics Office, analyzed by Associate Prof. Supon Limwattananonta of Khon Kaen University

2. Participation from Local Administrative Organization (LAO)

In FY 2015, 99.79% of LAOs (7,760 from 7,776 LAOs) joined with the National Health Security Fund giving them access to the NHSO's budget of THB1,294 million for implementing health projects. 32.97% of the budget was used targeting people with high risk factors. 15.31%, 12.66% and 12.03% of the budget was used for the young, the elderly, and the rest of the general population respectively (Figure-F)

Figure-F Health related activities supported by community health security funds classified by specific groups of people, FY2015



Source: Local administrative management data, NHSO

3. Consumer's Rights Protection

Establishing Customer service and support centers (CSS) is one of the consumer rights protection mechanisms. The centers are a channel for inquiries, complaints and petitions concerning health services. They are accessed through the 1330 hotline, letters, fax, email, or in-person at the NHSO offices. In FY2015, the number of inquiries, complaints, petitions, etc. handled was 488,601 cases.

The 467,190, 14,025, 4,269, and 3,117 cases were for inquiries, petitions, complaints, and referral respectively.

74.05% of the complaints were settled within 25 working days. Most of these complaints were "did not receive service as per their benefit package", "inconvenience in health service", "requests for cost of care", and "providers did not follow standard of care"

The number of applications filed for preliminary compensation in accordance with section 41 of the National Health Security Act in FY2015 was 1,045 cases. 78.85% of these were compensated and the total amount of compensation paid was THB202.929 million. The approved cases were for death or complete disability (53.64% of all approved cases), injuries or continuing illness (33.62%), and partial disability (12.74%).

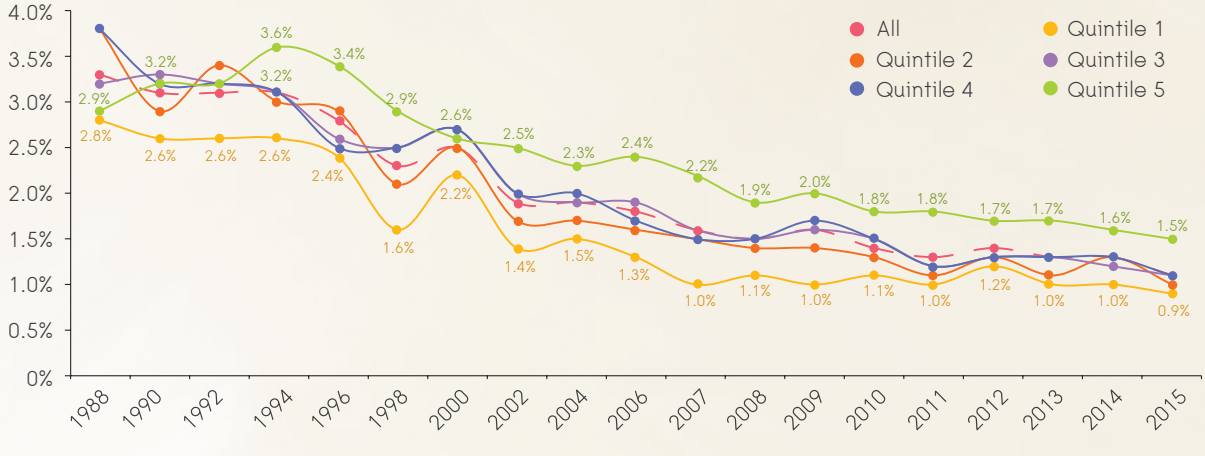
The number of providers filing for compensation in FY2015 was 398. Of these 325 (81.66%) were compensated. The preliminary amount of compensation was THB5.354 million, most of which were for injuries or continued illness.

4. Reducing the household burden; curtailing financial ruin or hardship due to excessive health care expenditure

One of the achievement indicators of the UCS is protecting households from financial hardship by reducing their health care expenditure.

By analyzing households where more than 10% of their income was going towards health care, we found that at every economic level, this figure was continually reducing. In the poorest group (quintiles 1), it decreased from 2.8% in FY1988 to 0.9% in FY2015, while the richest group (quintiles 5), it decreased from 2.9% in FY1988 to 1.5% in FY2015. (Figure-G)

Figure-G Percentage of health care expenditure from the overall household budget classified by income groups, FY1988 – 2015



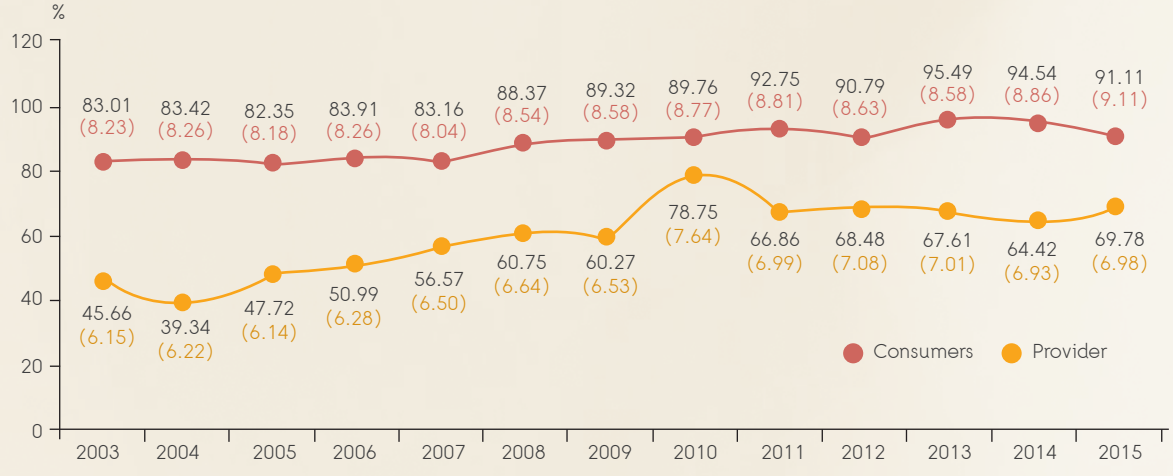
Source: Supon Limwattananonta analyzed from Household socio-economic survey of the National Statistics Office (NSO), FY1988 – 2015

Note: 1) The survey has been done by the NSO annually since 2006.
2) Calculated from health expenditure as a ratio of the overall household expenditure

5. Satisfaction of consumers and health care providers

The percentage of consumers and providers who were satisfied with the UCS scheme at level 6 and higher in FY 2015 was 91.11 and 69.78%, respectively. (Figure-H)

Figure-H Satisfaction levels, as a percentage, of consumers and providers, FY2003-2015



Source: 1) *FY2003-2015: Satisfaction survey report, Academic Network for Community Happiness Observation and Research (ANCHOR), Assumption University of Thailand*
2) *FY2014: NIDA Poll Center, National Institute of Development Administration*

6. Challenges for UHC improvement and implementation in the future

The biggest challenge is how to improve the UCS fund management within available resources, slow economic growth, environmental change, social change, urban expansion, structural population change, chronic diseases increase, emerging and re-emerging diseases, an aging society, technological advance, inequality among government health insurance schemes and conflicts among stakeholders.

Highlight activities in FY2015

1. Rights protection mechanisms for the local administrative organization (LAO) under the civil service medical benefit scheme (CSMBS)

The NHSO was assigned by the cabinet to develop a claims management system for the employees of the LAO under the CSMBS scheme in order to promote accessibility, equality, and a standard quality of care aimed at reducing the problems of having to pre-pay for health care costs of the beneficiaries, especially for comprehensive high cost care and employees of lower standing in the LAO, using a limited health benefit fund. The decision to allow the employees of the LAO and their dependents, under the CSMBS scheme, to have access to health benefits in accordance with the National Health Security Act (2002) was legislated in November 2013 and officially put into effect as from October 1, 2013.

The achievements in FY 2015 were:

1. The number of beneficiaries from all 7,851 LAOs enrolled into the system has been increased from 700,716 in August 2013 to 739,627 in October 2015;

2. The number of beneficiaries who registered for direct payment between the Comptroller General's Department (CGD) and health facilities (eradicating the need to pre-pay health care costs) has been increased from 418,785 or 56.62% of all enrolled beneficiaries in August 2013 to 515,317 or 69.67% of all enrolled beneficiaries in October 2015;

3. Claim and Reimbursement system (From 1 Oct. 2014 to 30 Sep. 2015);

3.1 The total number of direct payments in FY2015 was 1,872,479 visits / admissions. The total amount of the direct payments was THB3,555.340 million, divided into:

- Out-patient service 1,794,631 visits, THB 2,005.824 million;
- In-patient service 77,848 admissions, THB 1,549.515 million;

3.2 The total number of paper claims in FY2015 was 165,780 claims or amount of THB208.585 million divided into:

- Out-patient service 163,393 visits, THB 187.688 million;
- In-patient service 2,387 visits, THB 20.896 million;

3.3 The total number of claims for Hemodialysis and receiving Erythropoietin in FY2015 was 129,682 visits or amount of THB310.661 million;

4. Consumer's right protection;

The number of inquiries and complaints from LAO through the NHSO 1330 hotline in FY2015 was 5,208, 95.62% of this number was inquiries which were mostly concerning how to use their rights, the benefit from using the service, how to claim reimbursement, or how to register for the system of direct payment between the Comptroller General's Department and providers. 4.10% (15 cases) were complaints concerning inconvenience while using the system.

2. Emergency Claim Online (EMCO) Service

In response to the policy of "Reducing inequality in the case of an emergency, there is now cooperation between private hospitals and government organizations (NHSO, MoPH, CGD, and Social Security Office / SSO) to harmonize the accident and emergency services. The NHSO was the Clearing House for this project. The project,

called EMCO, was aimed at helping patients with an emergency access necessary health care at a nearby hospital without it questioning their health insurance scheme or without pre-payment for the care. This required extending the referral system to cope with such cases.

In the FY2015, we found that:

1. 253 from 358 private hospitals (70.67%) had submitted service data for claims under the EMCO project to the NHSO. The total number of submitted health data is 7,471 visits, reimbursed in amount of THB230.961 million, divided between out-patient cases costing THB3.938 million and in-patient cases costing THB227.023 million;

2. Inquiries, complaints, and referral using the EMCO service through hotline-1330 was 9,837 calls, divided into:

- Total number of inquiries was 7,117 calls (72.35%), 6,497 calls from consumers (91.29%), 620 calls from providers (8.71%). Most of them concerned reimbursement, rights and benefit, pre-payment in private hospitals;
- Total number of complaints was 354 calls (3.60%), 207 calls concerning UCS (58.47%), 105 calls concerning CSMBS (29.67%), 38 calls concerning SSS (10.73%), and 4 calls concerning LAO (1.13%);
- Total number of referrals was 2,366 calls (24.05%), 2,178 calls concerning UCS (92.05%), 126 calls concerning CSMBS (5.33%), 34 calls concerning SSS (1.44%), 10 calls concerning LAO (0.42%), and 18 calls concerning aliens (0.76%).

3. Long-term care system development for the dependent elderly

The average life expectancy is increasing worldwide. Likewise, a significant proportion of Thailand's population is aged over 60. Frail elderly with non-communicable diseases (NCDs) and/or disabilities require more resources. Thailand currently has 10 million elderly; 70,000 of these are bed ridden; 170,000 are homebound. This situation has produced a financial burden not only on the households but also on society as a whole.

The national health security board has acknowledged these issues. A sub-committee on Long term care (LTC) for the dependent elderly was created by the board to develop a strategic plan for FY2015-2018. The concept is to promote home and community based care, and to promote local administrative organizations to be a key partner to help mobilize activities with close collaboration and support from all stakeholders in the community. The key objective of the plan is to promote and support families and communities, enabling them to provide appropriate health care for the dependent elderly in their communities.
In the FY2015, the national health security board approved a budget of THB600 million for the dependent elderly's healthcare. This budget will be utilized during the FY2016 with the intention of helping an estimated 100,000 bedridden and homebound. The targets of this benefit package include primary screening, need assessment, home visits, health promotion, disease prevention, physical therapy, medical instruments, occupational therapy, etc.

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Abbreviation List

AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy
BORA	Bureau of Registration Administration
CAPD	Continuous Ambulatory Peritoneal Dialysis
CGD	Comptroller General's Department
CKD	Chronic Kidney Disease
CSMBS	Civil Servant Medical Benefit Scheme
CUP	Contracting Unit Provider
DM	Diabetes Mellitus
DM/HT	Diabetes Mellitus/ Hypertension
HA	Hospital Accreditation
HD	Hemodialysis
HISRO	Health Insurance System Research Office
HITAP	Health Intervention and Technology Assessment Program
HIV	Human Immunodeficiency Virus
HSQCB	Health Service Standard and Quality Control Board
HSRI	Health Systems Research Institute
HT	Hypertension
IP	In-patient
KT	Kidney Transplantation
LAO	Local Administrative Organization
MOF	Ministry of Finance
MOI	Ministry of Interior
MOL	Ministry of Labor
MOPH	Ministry of Public Health
NCH	National Clearing House
NLEM	National List of Essential Medicines
NHSB	National Health Security Board
NHSO	National Health Security Office
NIEMS	National Institute for Emergency Medicine
NSO	National Statistics Office
OP	Out-patient
OPS, MOPH	Office of Permanent Secretary, Ministry of Public Health
PCI	Percutaneous Coronary Intervention
PCU	Primary Care Unit
PP	Promotion and Prevention
RRT	Renal Replacement Therapy
SSO	Social Security Office
SSS	Social Security Scheme
UCS	Universal Coverage Scheme
UHC	Universal Health Coverage
WHO	World Health Organization

PART 1

Improving Universal Health Coverage Overview

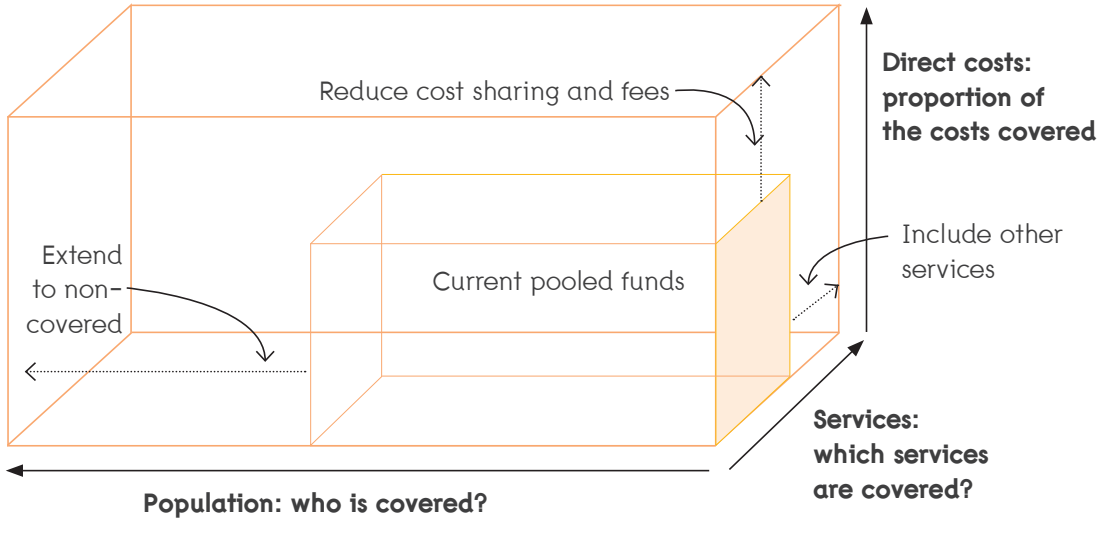
1. The Concept of the Universal Health Coverage
2. Health Financing and Budgeting for Universal Health Coverage
3. Coverage, Healthcare uses, and household expenditure for health care
4. Healthcare Service Provision and Accreditation
5. Accessibility, Efficiency, Quality and Effectiveness in the Healthcare System
6. Consumers' Rights Protection and Stakeholder Participation

1. The concept of Universal Health Coverage

The basic concept of Universal Health Coverage (UHC) is to extend health coverage to the entire population, allowing them access to health services as and when needed without financial barriers. Health financing systems are important mechanisms for equity building, especially to promote universal health coverage and thus removing (or reducing) financial risks and barriers when accessing health services. Universal Health Coverage needs to extend coverage in at least 3 dimensions (Figure 1) shown below:

1) Covered population
2) Covered services
3) Covered costs

Figure 1 Three dimensions to consider when moving towards universal coverage

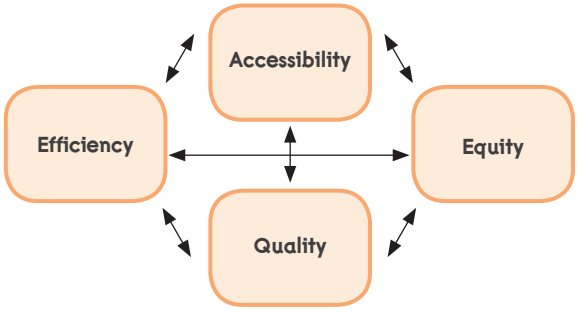


Source: World health report 2010, WHO

According to the World Health Organization (WHO)[1] , these proposed three dimensions need to be considered when moving towards universal coverage. The desirable target is 100% of population in the country covered; every social group. Whereas covered service means service benefit packages focusing on essential services up to and including high cost services to protect the poor from high expenditure. The benefit packages will vary depending on the socio-economic situation of each country, however desirable universal health coverage should, at a minimum, include services for health promotion, disease prevention, curative care, and rehabilitation. However, extending health service coverage in one direction will invariably affect the coverage of the other dimensions. One of the obvious problems is long waiting lists. Therefore, some services may not be covered or, in many countries, require co-payment by service users. This means covered cost in UHC is not 100%, some people will still have to pay, for some services. out of their own pockets. It is difficult to cover 100% of the 3 dimensions even for a developed country. The target of extending covered cost should be “minimizing people’s expenditure for essential services, to protect the poor” rather than “trying to eradicate people’s out-of-pocket payments altogether”.

Extending coverage in any or all of the 3 dimensions requires increased expenditure. However, keeping running costs to a minimum is also of great importance. Therefore, funds must be allocated to where they will benefit the system most efficiently. There are other factors to take into consideration when expanding accessibility such as quality, and equity in health service usage. The extension of accessibility will also cause an increase in workload which affects quality of service, and may affect equality among certain groups of people. Therefore, moving to UHC needs to adjust the balance among at least 4 dimensions of effective outcomes in healthcare system (Figure 2) to prevent negative impacts to the overall health service system

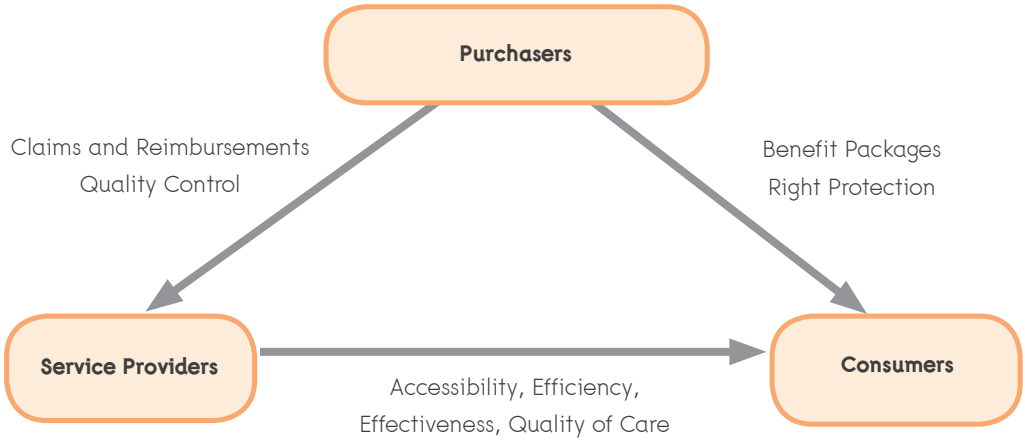
Figure 2 Four dimensions of effective outcomes in healthcare system



[1] WHO, Health financing for universal coverage: universal coverage-three dimensions, http://www.who.int/health_financing/strategy/dimensions/en/

Moving towards full implementation of universal health coverage does not consist of only financial mechanisms to extend health coverage but by also promoting new relationships within the key stakeholders of the system. The key stakeholders of universal health coverage include purchasers, service providers, and consumers. The roles of the purchasers include reimbursing health care cost to service providers in accordance with service agreements, preparing optimal benefit packages to promote effective outcomes, remove financial risks from the beneficiaries, and to ensure appropriate distribution of services between regions. Furthermore, consumer rights protection and stakeholder participation are also important to ensure a good relationship with stakeholders. This relationship is summarized in figure 3.

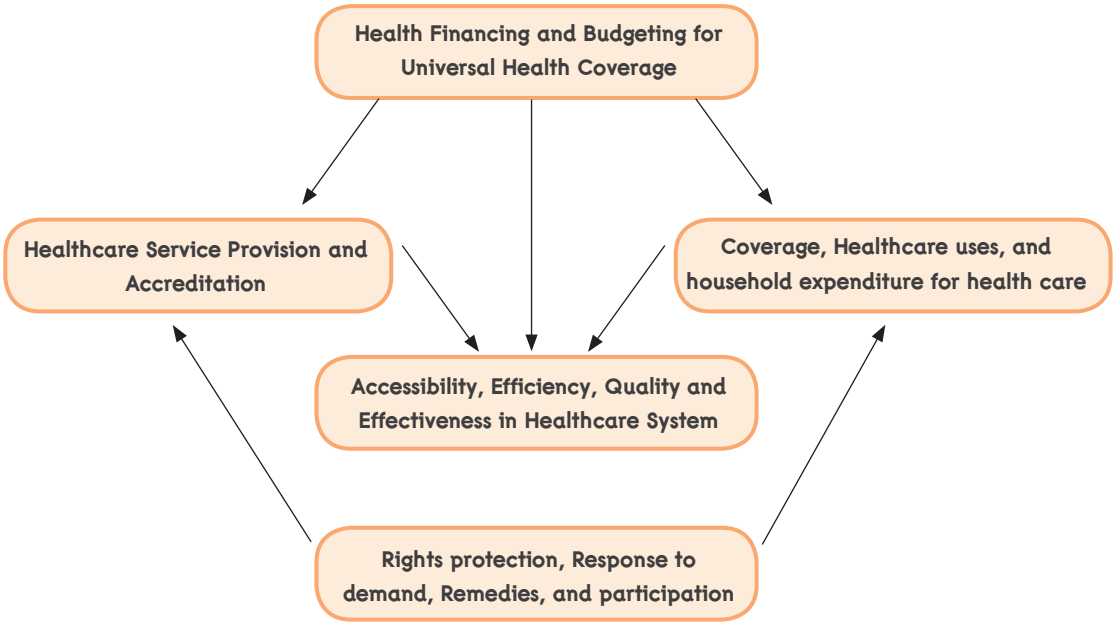
Figure 3 Relationships of key stakeholders in universal health coverage



The above concepts create the framework for improving UHC. It has been divided into the following five linked sections; as represented in figure 4:

1. Health Financing and Budgeting for Universal Health Coverage
2. Coverage, Healthcare uses, and household expenditure for health care
3. Healthcare Service Provision and Accreditation
4. Accessibility, Efficiency, Quality and Effectiveness in Healthcare System
5. Consumers' Right Protection and Stakeholder Participation

Figure 4 Framework to represent the Annual Report for the UHC

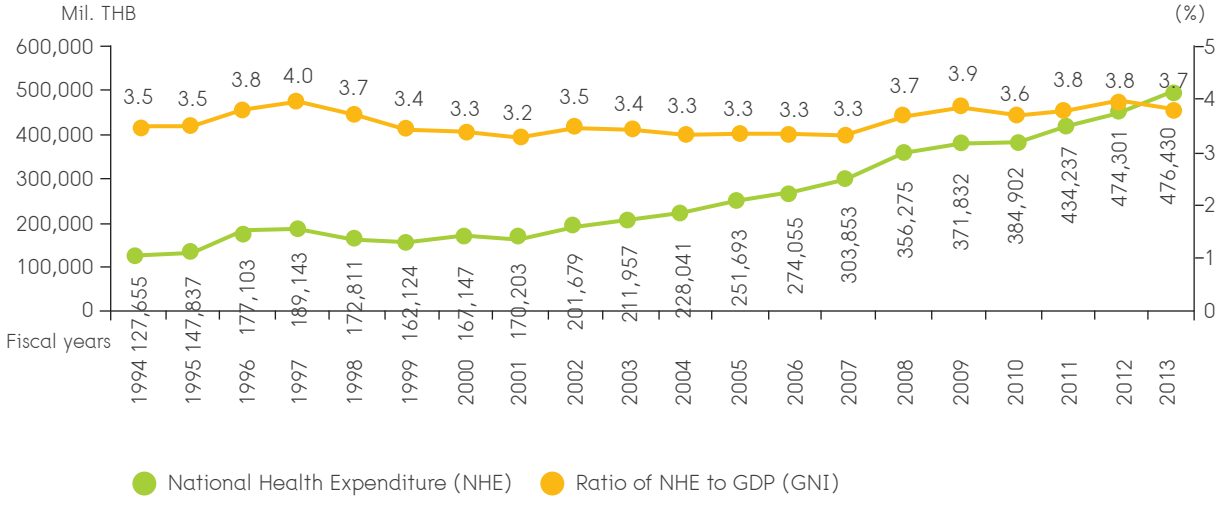


2. Health Financing and Budgeting for Universal Health Coverage

2.1 Overview of National Health Expenditures

Health financing policies are important mechanisms, for universal health coverage (UHC) implementation, to protect households from financial risk. Government is an important part of the UHC. However, it is important for the government to carefully manage the system for sustainable implementation. National health expenditure during FY1994 – 2011 shown in figure 5 has increased from THB127 billion in FY1994 to THB512 billion in FY2013. However, when compared as a ratio to gross national income (GNI), the ratio has steadily increased between 3.3% – 4.5% of the GNI that is comparatively lower than developed countries.

Figure 5 Thai National Health Expenditure, FY1994 – 2013

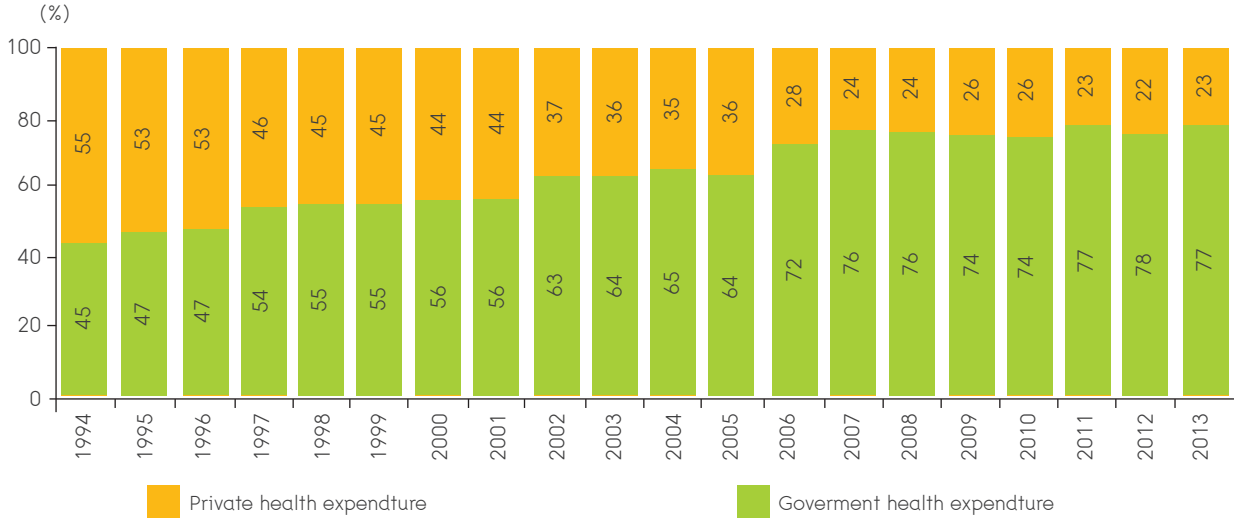


Source: Thai National Health Account FY2002-2012, International Health Policy Program (IHPP), Ministry of Public Health, Thailand
Note: The FY2008-2010 data were adjusted with new data from some organizations, e.g., local administrative organizations, non-government organizations, international grants.

According to the National Health Account report by the International Health Policy Program (IHPP), Ministry of Public Health, the government health expenditure has continued to increase from 44.56% of the national health expenditure in FY1994 to 75.67% in FY2012, as shown in figure 6.

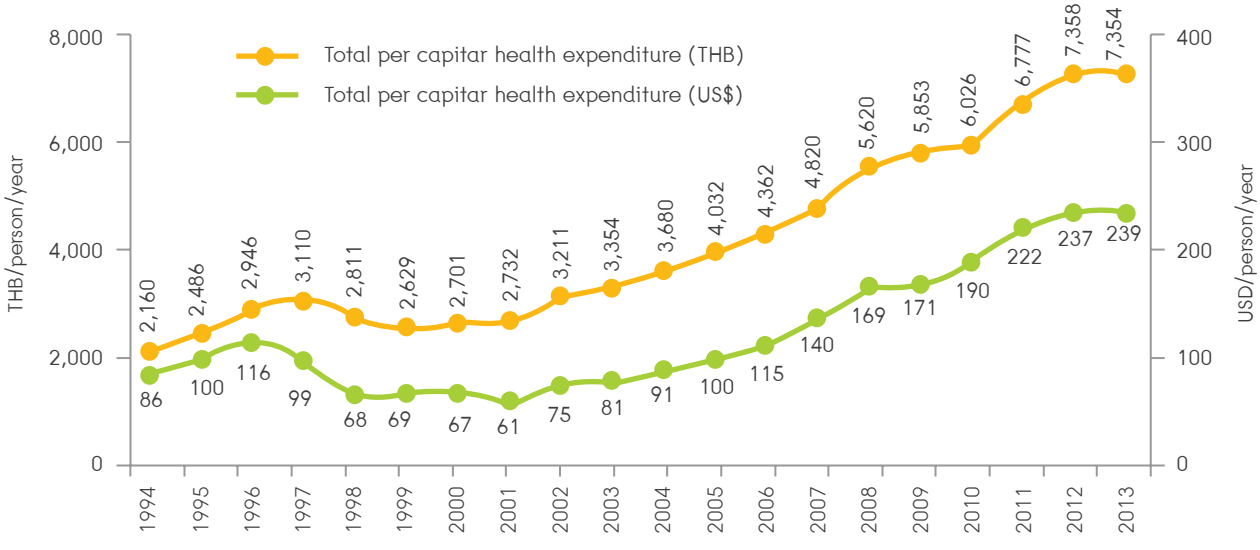
Annual health expenditure per capita at current price has increased from THB2,160 (or USD86) in FY1994 to THB7,949 (or USD256) in FY2012, as shown in figure 7.

Figure 6 National Health Expenditure ratio between government and private sectors, FY1994 – 2013



Source: National Health Account FY1994-2012, International Health Policy Program (IHPP), Ministry of Public Health, Thailand

Figure 7 National Health Expenditure, FY1994 – 2013

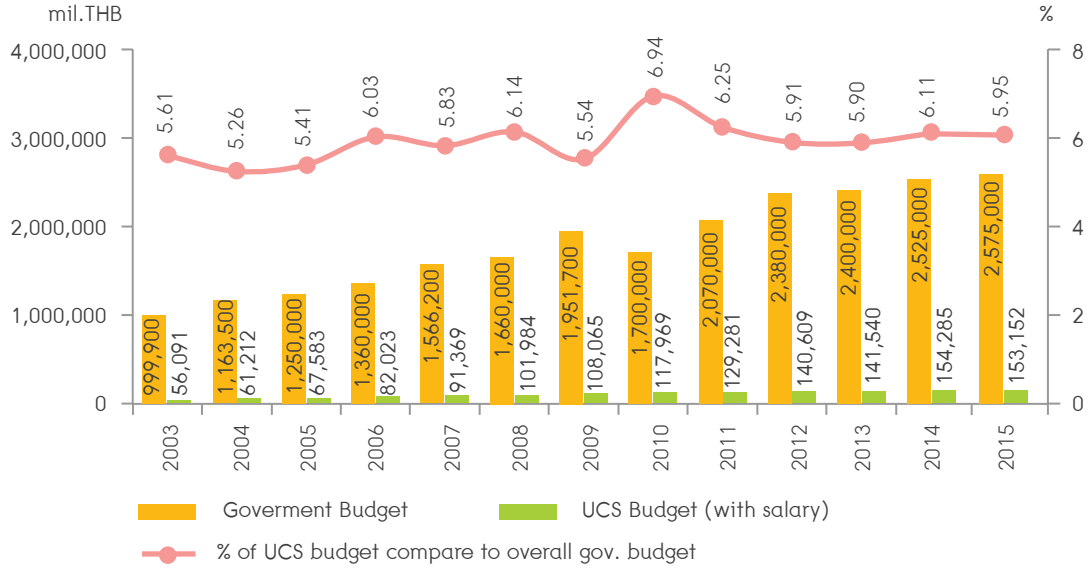


Source: National Health Account FY2002-2012, International Health Policy Program (IHPP), Ministry of Public Health, Thailand
Note: According to the National Health Account Report, average annual exchange rates were used, i.e., 25, 25, 25, 31, 42, 38, 40, 44, 43, 41, 40, 40, 38, 35, 33, 34, 32, 30 and 31 for FY1994 to FY2012, respectively.

2.2 The Universal Coverage Scheme's budgeting

All budgets for implementing the UHC in Thailand through the universal coverage scheme (UCS) have been supplied by the government. The ratio of the UCS budget to the overall government budget during FY2003 – FY2014 was quite steady at a rate of 5.26% to 6.94%, as shown in figure 8. For most years, the UCS budget has increased in direct relation to overall government spending except for the fiscal year 2010 in which government spending decreased from 1,961,700 to THB1,700,000 million while the UCS budget increased from 108,066 to THB117,969 million.

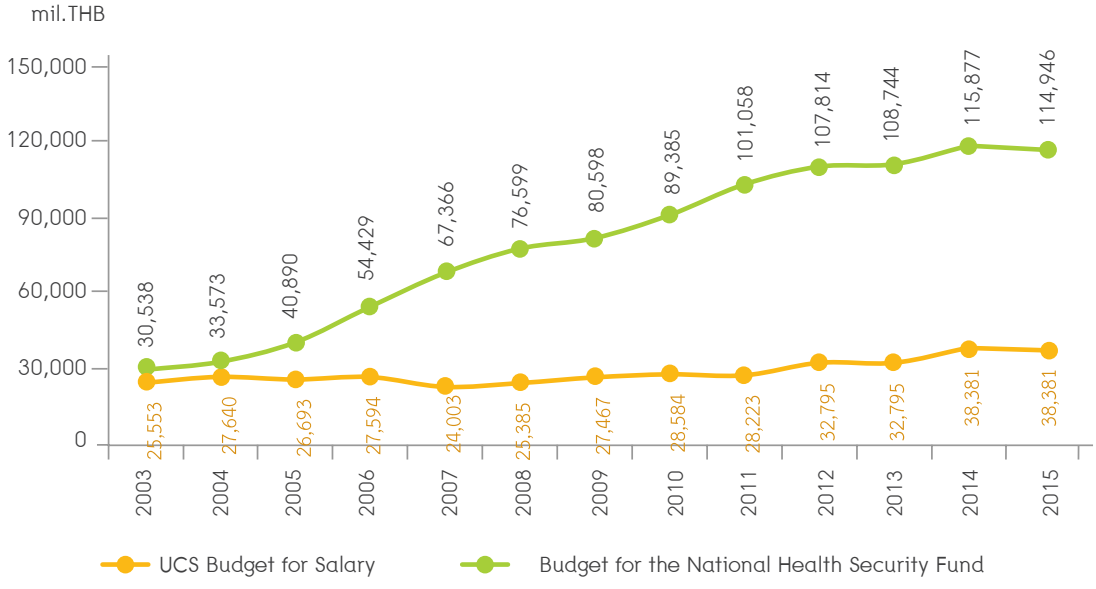
Figure 8 Government budget for the UCS and ratio to the overall government budget, FY2003 – 2015



Source: Bureau of Plan and Evaluation, NHSO

The UCS budget includes the salaries of health staff under the Office of The Permanent Secretary, the Ministry of Public Health (MoPH) since FY2002. The total amount of these salaries has ranged from THB24.0 – 38.4 billion per year. However, the percentage of the salaries has decreased from 45.6% in FY2003 to 24.93% in FY2015. The net budget for the UCS scheme after government salary deductions has increased from THB30.538 billion in FY2003 to THB114.964 billion in FY2015, about 3 times the salary as shown in figure 9.

Figure 9 Approved UCS Budget, FY2003 – 2015



Source: Bureau of Plan and Evaluation, NHSO
Note: The rate for salary deduction from the national health security budget has been reviewed a few times since UHC implementation as follows:

1. *Revisions for health staffs under the office of permanent secretary, MOPH were done in FY2004 and FY2007.*
2. *Revisions for health staffs under other affiliated departments or ministries were done in FY2004 and FY2011.*
3. *During FY2003 - 2006, central budgets of the government were added in the amount of THB 5,000 mil., THB 3,845.33 mil., THB4,993.33 mil., and THB14,761.83 mil., respectively. The reason for the additional budgets included increasing in capitation rate or the number of beneficiaries.*

In the past 13 years, the net UCS budget for general health services has increased from THB1,202.40 per capita in FY2003 to THB2,895.09 in FY2014 and FY2015. Budgets for vertical programs were started in FY2006 for HIV/AIDS management. Other vertical programs were included later, such as for kidney replacement services started in FY2009, chronic disease management (DM/HT prevention) in FY2010, psychiatric services in FY2011, and additional budgets to improve efficiency in remote areas and incentive for health personnel under the MOPH in FY2014. However, budgets for vertical programs are adjusted because of other health problems and policies, e.g., seasonal influenza vaccines, drug management to increase accessibility to high cost drugs, system development to support primary care or to promote the referral system. Details of the UCS budget categories are shown in Table 1.

Table 1 Details of the UCS Budget categories, FY2002 – 2015

(unit: mil.THB)

Budget categories	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. Medical service	51,407.71	56,091.23	61,212.39	67,582.60	79,226.80	87,513.45	97,601.70	103,551.25	113,438.11	122,222.38	133,186.41	133,495.04	141,430.92	140,718.75
1.1 Service expenditure	27,611.91	30,538.40	33,572.87	40,889.95	51,632.43	63,510.79	72,216.40	76,083.85	84,853.88	93,999.41	100,391.13	100,699.76	103,049.63**	102,530.72
1.2 Gov. salaries	23,795.80	25,552.83	27,639.52	26,692.65	27,594.37	24,002.66	25,385.30	27,467.40	28,584.23	28,222.98	32,795.28	32,795.28	38,381.29	38,188.02
2. HIV/AIDS health service package	-	-	-	-	2,796.20	3,855.60	4,382.40	2,983.77	2,770.85	2,997.74	2,940.06	3,276.83	2,947.00	2,811.90
3. CKD health services package	-	-	-	-	-	-	-	1,530.07	1,455.44	3,226.55	3,857.89	4,357.79	5,178.80	5,247.22
4. Chronic diseases (DM, HT) health service package	-	-	-	-	-	-	-	-	304.59	630.60	437.90	410.09	801.24	908.99
5. Psychosis service package	-	-	-	-	-	-	-	-	-	203.62	187.14	-	-	-
6. Budget to improve efficiency in remote areas	-	-	-	-	-	-	-	-	-	-	-	-	900.00	464.80
7. Incentive for health personnel under the MOPH	-	-	-	-	-	-	-	-	-	-	-	-	3,000.00	3,000.00
Total UCS budget	**45,934.25**	**51,091.23**	**57,367.06**	**62,589.27**	**67,261.17**	**91,369.05**	**101,984.10**	**108,065.09**	**117,969.00**	**129,280.89**	**140,609.40**	**141,539.75**	**154,257.97**	**153,151.66**
UCS budget (exclude 1.2)	22,138.45	25,538.40	29,727.54	35,896.62	39,666.80	67,366.39	76,598.80	80,597.69	89,384.77	101,057.91	107,814.12	108,744.46	115,876.67	114,963.64
Capitation rate (THB per UCS beneficiary)	1,202.40	1,202.40	1,308.50	1,396.30	1,659.20	1,899.69	2,100.00	2,202.00	2,401.33	2,546.48	2,755.60	2,755.60	2,895.09	2,895.09
UC budget/person	1,142.39	1,219.37	1,307.40	1,437.93	1,717.76	1,983.44	2,194.29	2,297.99	2,497.24	2,693.54	2,909.18	2,921.66	3,157.66	3,150.88
% of increase in capitation	-	0.00%	8.82%	6.71%	18.83%	14.49%	10.54%	4.86%	9.05%	6.04%	8.21%	0.00%	5.06%	0.00%

Source: Bureau of Plan and Evaluation, NHSO

The budget in FY2015 was THB2,895.09 per capita for 48.606 million people. The capitation budget classification approved by the NHSB is shown in table 2.

Table 2 Capitation budget classification, FY2015

Type of services	Capitation rate (Baht/head)
1. General out-patient services	1,056.96
2. In-patient services	1,027.94
3. Specific vertical programs, e.g., high cost care, disease management programs, OP refer out of province.	271.33
4. Health promotion and disease prevention for all Thai citizens (not only UCS but also other government schemes)	383.61
5. Rehabilitation medical services	14.95
6. Thai traditional medicines	8.19
7. depreciation cost for building and medical investment in registered hospitals	128.69
8. compensation budget to consumer for losses from health services in accordance with Section 41 of the Act	3.32
9. compensation budget to health provider for losses from health services in accordance with to Section 41 of the Act	0.10
Total	**2,895.09**

Source: The NHSB announcement on Operation guideline for UCS budget management, FY2015

3. Improving equity in health service accessibility and household expenditure for health care

The key goal of implementing universal health coverage in any country is to extend coverage to its entire population, so that they can have access to essential health services without financial barriers. The key indicators of achieving the goal are to improve equity in access to a high standard of health care, to reduce the household burden on health expenditure, and to protect households from financial catastrophe due to health expenditure. During the past 13 years, we found:

3.1 Improving equity in health service accessibility

3.1.1 Universal Health Coverage situation

Universal Health Coverage (UHC) covering the whole of Thai society is one indication of improved equity in health service accessibility. In the past decade, UHC in Thailand increased dramatically from 71.00% in FY2001 to 92.47% in FY2002 while implementing the UHC policy, and to 99.92% in FY2015. This coverage did not include stateless people living in Thailand such as Thai citizens living overseas or foreigners. The number of Thai citizens who were eligible but did not enroll to the UCS in FY2014 was about fifty thousand people (0.08% of all population). However, the eligible non-registered people will be able to gain access to health services by registering to the UCS when they need; and can select a contracting unit near their home. The UHC situation in Thailand during FY2005-2015 is shown in table 3.

When comparing proportions of population utilizing UCS or other government health insurance schemes, classified by gender and age group, findings showed that most of the UCS patients were children and elderly (10-19 year-olds and people over 58 years old) while most of the other schemes were being utilized by the working aged group 20-54. The Proportions of the population in each government scheme classified by gender and age group in the FY2015 is shown in figure 10.

Table 3 The Population of Thailand classified by health insurance status, FY2005 - 2015

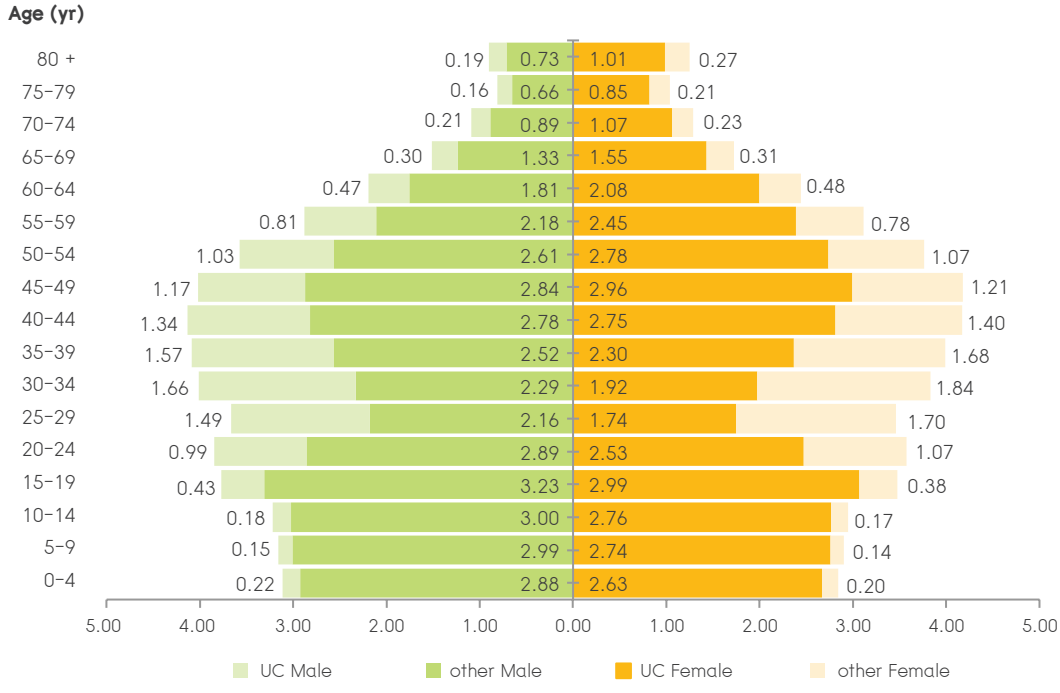
No.	Status	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	Universal Coverage Scheme (UCS)	47,343,401	47,542,982	46,672,613	46,949,267	47,558,456	47,729,516	48,116,789	48,620,104	48,612,007	48,312,428	48,336,321
2	Social Security Scheme (SSS)	8,741,658	9,200,443	9,581,665	9,835,528	9,616,602	9,899,687	10,167,671	10,327,129	10,689,260	11,065,325	11,266,495
3	Civil Servant Medical Benefit Scheme (CSMBS)	4,150,924	4,061,220	5,132,556	5,001,858	4,955,042	4,918,271	4,965,014	4,967,575	4,878,258	4,837,927	4,836,208
4	Local Administrative Officers									99,780	578,525	611,982
5	Questionable Persons							367,289	343,583	413,549	489,275	400,333
6	Private School Teachers	218,408	232,105	242,395	237,623	232,406	516,527	104,331	102,834	100,265	72,159	78,387
7	Veterans							166,698	164,027	163,684	-	-
8	Qualified non-registered UCS	2,356,963	1,357,460	779,263	522,352	332,541	407,289	31,906	65,113	81,983	105,184	50,148
9	Total (1+2+3+4+5+6+7+8)	62,811,354	62,394,210	62,408,492	62,546,628	62,695,047	63,471,290	63,919,698	64,590,365	65,038,786	65,460,823	65,579,874
10	Total Coverage (1+2+3+4+5+6+7)	60,454,391	61,036,750	61,629,229	62,024,276	62,362,506	63,064,001	63,887,792	64,525,252	64,956,803	65,355,639	65,529,726
11	Total UCS (1+8)		48,900,442	47,451,876	47,471,619	47,890,997	48,136,805	48,148,695	48,685,217	48,693,990	48,417,612	48,386,469
12	% of total Coverage) (10/ 9*100)	96.25	97.82	98.75	99.16	99.47	99.36	99.95	99.90	99.87	99.84	99.92
13	% of UCS (1/11*100)	95.26	97.22	98.36	98.90	99.31	99.15	99.93	99.87	99.83	99.78	99.90
14	Unknown citizen status [1]		453,740	897,371	1,156,404	1,440,173	1,347,031	1,197,746	791,008	624,552	214,382	140,760
15	Thais living abroad [2] **	62,713	60,013	57,020	55,167	14,328	15,261	15,566	15,641	15,733	17,119	16,889
16	Foreigners	274,671	82,520	299,929	312,888	324,904	176,981	109,245	106,941	124,871	192,379	218,701
17	Foreigners with insurance											94
18	Total of others (14+15+16+17)	337,384	796,273	1,254,320	1,524,459	1,779,405	1,539,273	1,322,557	913,590	765,156	423,880	376,444
	Total population	**63,148,738**	**63,190,483**	**63,662,812**	**64,071,087**	**64,474,452**	**65,010,563**	**65,242,255**	**65,503,955**	**65,803,942**	**65,884,703**	**65,956,318**

Source: Bureau of Registration Administration, NHSO (September, 2015)

Note: 1) People with citizenship status issues such as duplicated ID number, wrong ID number, foreigners

2) Numbers taken from the Bureau of Registration Administration (BORA), Ministry of Interior (MOI)

Figure 10 Proportions of the population using UCS or other government health schemes classified by gender and age group, FY2015

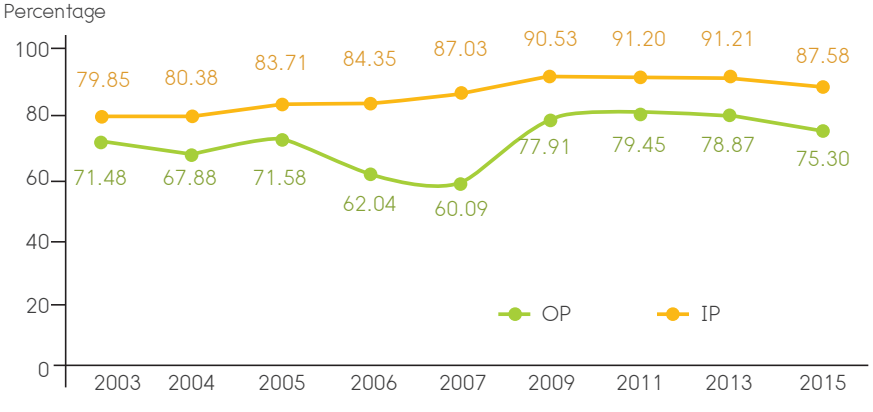


Source: Bureau of Insurance Information Technology, NHSO (September, 2015)

3.1.2 How patients accessed Healthcare via the Universal Coverage Scheme

According to the health and welfare survey by the National Statistics Office in 2015, analyzed by Prof. Supon Limwattananonta of Khon Kaen University, The amount of UCS beneficiaries accessing out-patient services (OPS) and in-patient services (IPS) had both increased. The results in figure 11 show that the percentage of UCS beneficiaries accessing out-patient and in-patient services in FY2015 are 75.30% and 87.58%, respectively.

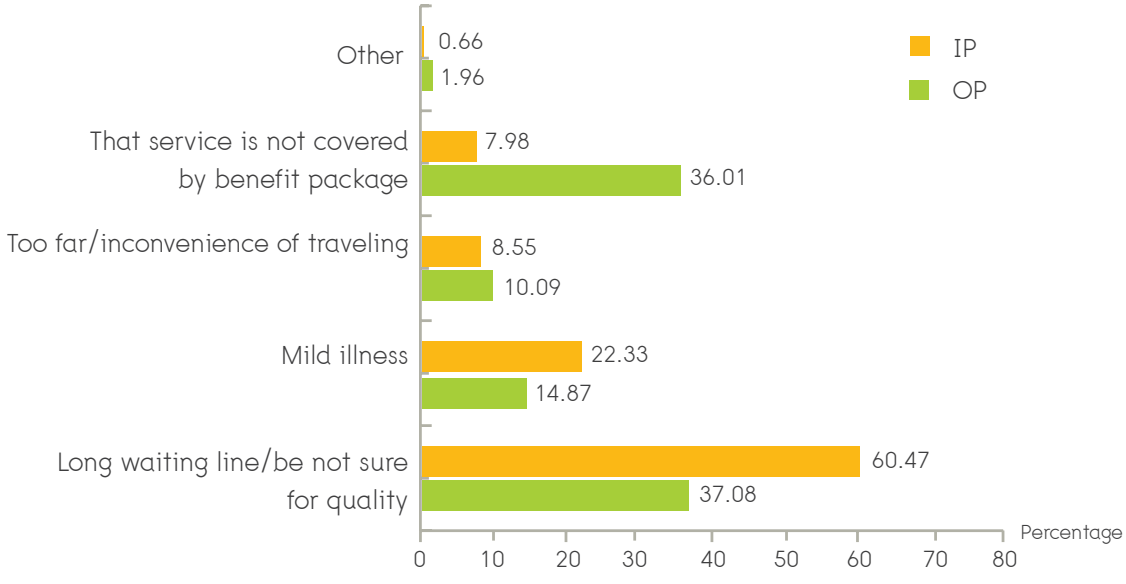
Figure 11 Utilization of out-patient services and in-patient services, FY2003–FY2015



Source: Health and welfare survey, National Statistics Office, analyzed by Associate Prof. Supon Limwattananonta of Khon Kaen University
Note: There was no survey in 2008, 2010, 2012, and 2014

In order to achieve full UHC implementation, it is important that the beneficiaries are not only covered by related government health insurance schemes but that they will also be reimbursed for their health services in accordance with their benefit packages. However, a Health and welfare survey by National Statistics Office in 2015 found that some beneficiaries did not register for their benefit packages and were willing to pay out of pocket for their health services. The top three reasons for not using out-patient services were "symptoms are minor", "long waiting time", and "inconvenience during office hours", respectively. The top three reasons for not using in-patient services were "long waiting time", "unreliable or absent diagnosis", and "service is not covered by my benefit package." The most common reasons in health promotion services are "long waiting time", and "service is not covered by benefit package." All reasons are shown in figure 12.

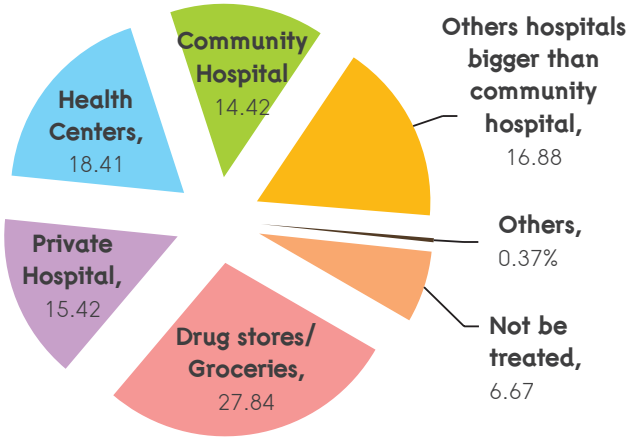
Figure 12 Reasons for not utilizing a UCS benefit package when accessing health services, FY2015



Source: Health and welfare survey 2015, National Statistics Office Analyzed by Bureau of Executive Information Administration, NHSO

According to the same survey, the alternative options consumers chose when they were sick and did not admit themselves to hospital were "drug stores" (27.84%), "private hospitals" (15.42%), "health promotion hospitals or health centers" (18.41%), and "community hospitals" (14.42%), respectively as shown in figure 13.

Figure 13 Choices consumers made when they were sick and did not admit themselves to hospital, FY2015

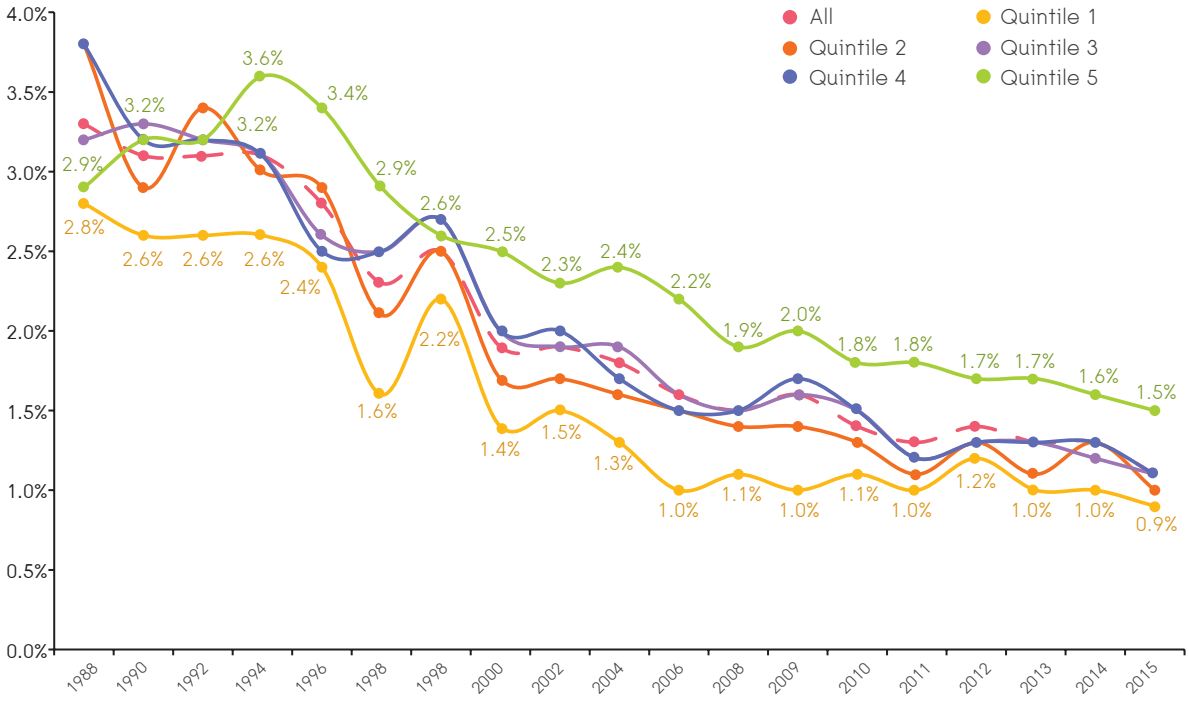


Source: Health and welfare survey, National Statistics Office, 2015 Analyzed by Bureau of Plan and Policy, NHSO

3.2 Household's Burden on Health expenditures

Reducing the burden on households from healthcare expenditure, especially protecting them from financial catastrophe is one indicator of achieving UHC. According to Time Series Analysis by Associate Prof. Supon Limwattananonta of Khon Kaen University using data from the national household socio-economic survey of the National Statistics Office to compare household health expenditure with overall household expenditure and classified by income groups, the result showed that the household health expenditure percentage continued to decrease in every income group. In the poorest group (quintile 1), the percentage decreased from 2.8% in FY1988 to 0.9% in FY2015, while one of the richest groups (quintile 5) decreased from 2.9% in FY1988 to 1.5% in FY2015, as details in figure 14.

Figure 14 Household health expenditure percentages classified by income groups, FY1988 – 2015



Source: Supon Limwattananonta analyzed from Household socio-economic survey of the National Statistics Office, FY1988 – 2015

4. Healthcare Service Provision and Accreditation

4.1 Healthcare Service Provision

In moving to the universal health coverage, besides providing health benefit packages, providing qualified health care units for beneficiaries is an essential factor. Registered hospitals under the UCS scheme are classified into three categories: primary care facilities, main facilities, and referral hospitals. Most of the providers and hospitals are affiliated to the Ministry of Public Health; 94.49% of primary care facilities, 68.75% of the main contractors, and 83.95% of referral hospitals. Details of the registered hospitals are described in Table 4

Table 4 The number of registered hospitals & percentages under the UCS scheme, FY2015

Types of hospitals / Affiliation	Primary care units		Main contractors		Referral hospitals		Total	
	Units	%	Units	%	Units	%	Units	%
Ministry of Public Health	10,916	94.49	889	68.75	910	83.95	11,038	93.17
Other gov. affiliations	174	1.51	151	11.68	97	8.95	218	1.84
Private	261	2.26	241	18.64	73	6.73	301	2.54
Local Administrative Org.	201	1.74	12	0.93	4	0.37	290	2.45
TOTAL	**11,552**	**100.0**	**1,293**	**100.0**	**1,084**	**100.0**	**11,847**	**100.00**

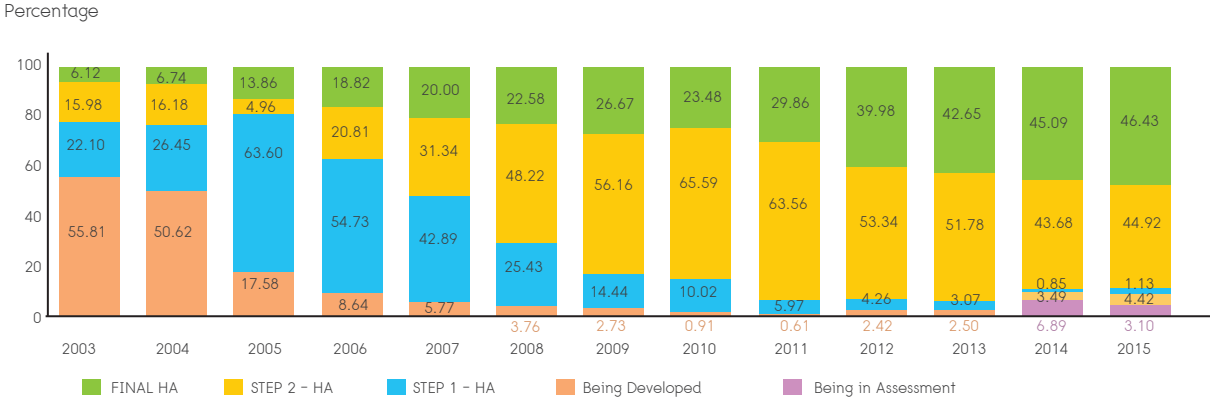
Source: Bureau of Registration Administration, NHSO, September 2015

4.2 Quality Audit and Hospital Accreditation

The NHSO has continued to promote quality and improvement for its' main contractors and referral hospitals by supporting hospital accreditation (HA) processes. Accredited main contractors and accredited referral hospitals have continued to increase from only 6.12% in FY2003 to 46.43% in FY2015. If included, hospitals at level 2 of the accreditation scale, the

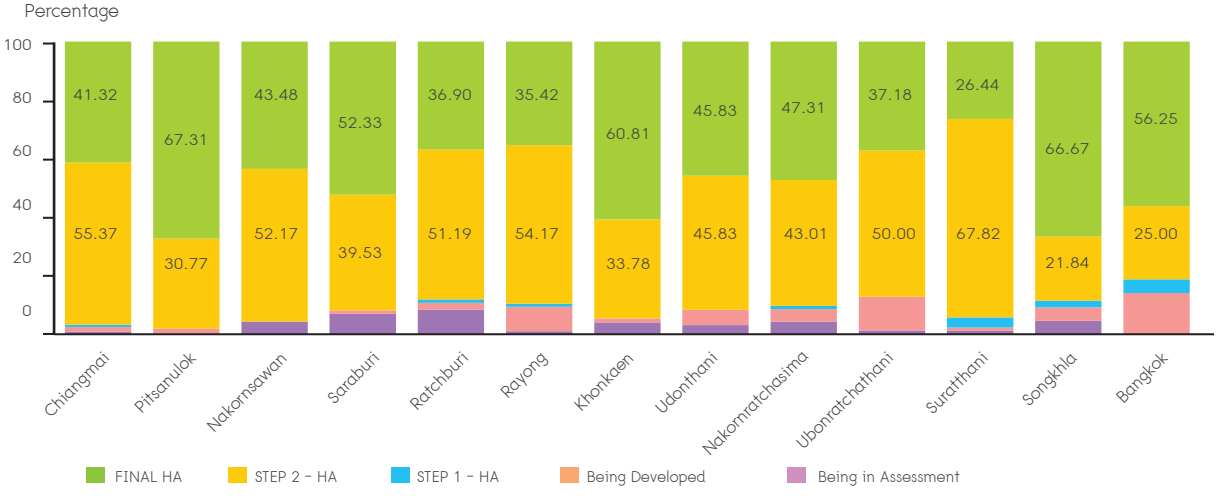
proportion of the accredited hospitals increases from 22.10% (6.12% + 15.98%) in FY2003 to 91.35% (46.43% + 44.92%) in FY2015, as shown in figure 15. When classified by NHSO region, the UCS registered hospitals in FY2015 with a high proportion of accredited hospitals were Region 2 Phitsanulok (67.31%), Region 12 Songkhla (66.67%), and Region 7 Khon Kaen (60.81%), respectively as shown in figure 16.

Figure 15 UCS registered hospitals percentages classified by level of accreditation, FY2003-2015



Source: The Healthcare Accreditation Institute, FY2014, analyzed by Bureau of Quality and Health Outcome Monitoring, NHSO

Figure 16 UCS registered hospitals percentage classified by level of accreditation and by the NHSO Region in FY2015



Source: The Healthcare Accreditation Institute, FY2014, analyzed by Bureau of Quality and Health Outcome Monitoring, NHSO

In order to guarantee an acceptable standard of quality from health care units, hospital assessments were performed. The result of the assessments in FY2015 shows that 23.55% of the primary care units had passed while 72.87% of them conditionally passed; 62.10% of the main contractors passed while 37.28% conditionally passed; and 7.93% of referral hospitals passed while 91.51% conditionally passed, as shown in Table 5.

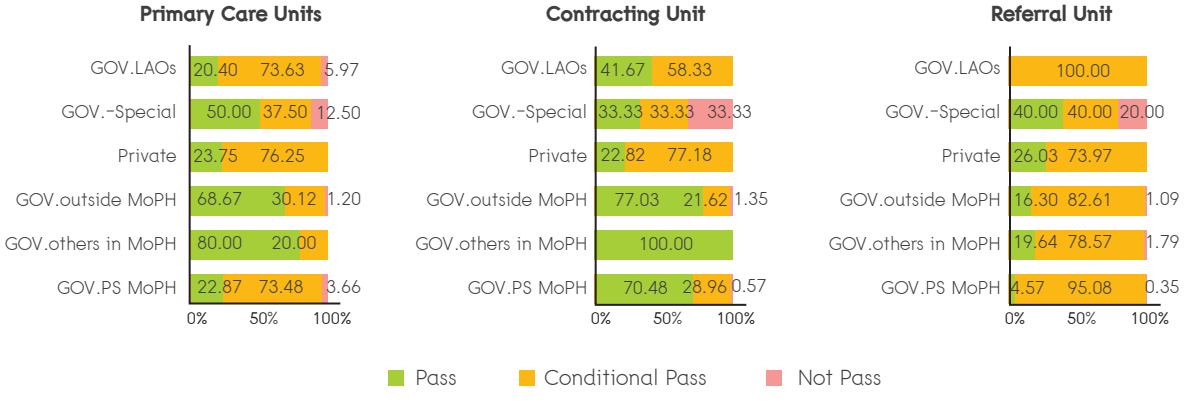
Table 5 Results of hospital assessment classified by type of registration, FY2015

Results \ Types of hospitals	Primary care units		Main contractors		Referral hospitals	
	Units	%	Units	%	Units	%
Passed	2,720	23.55	803	62.10	86	7.93
Passed with conditions	8,418	72.87	482	37.28	992	91.51
Not passed	414	3.58	8	0.62	6	0.55
Total	**11,552**	**100.00**	**1,293**	**100.00**	**1,084**	**100.00**

Source: Bureau of Registration Administration, NHSO, September 2015

When affiliation of the hospitals is considered, the primary care units and the main contractor hospitals under the Ministry of Public Health and the other government affiliation passed more than other types of affiliations. However, more referral hospitals under other government affiliations passed than ones under the Ministry of Public Health. Details of the assessment classified by hospital's affiliation are shown in figure 17.

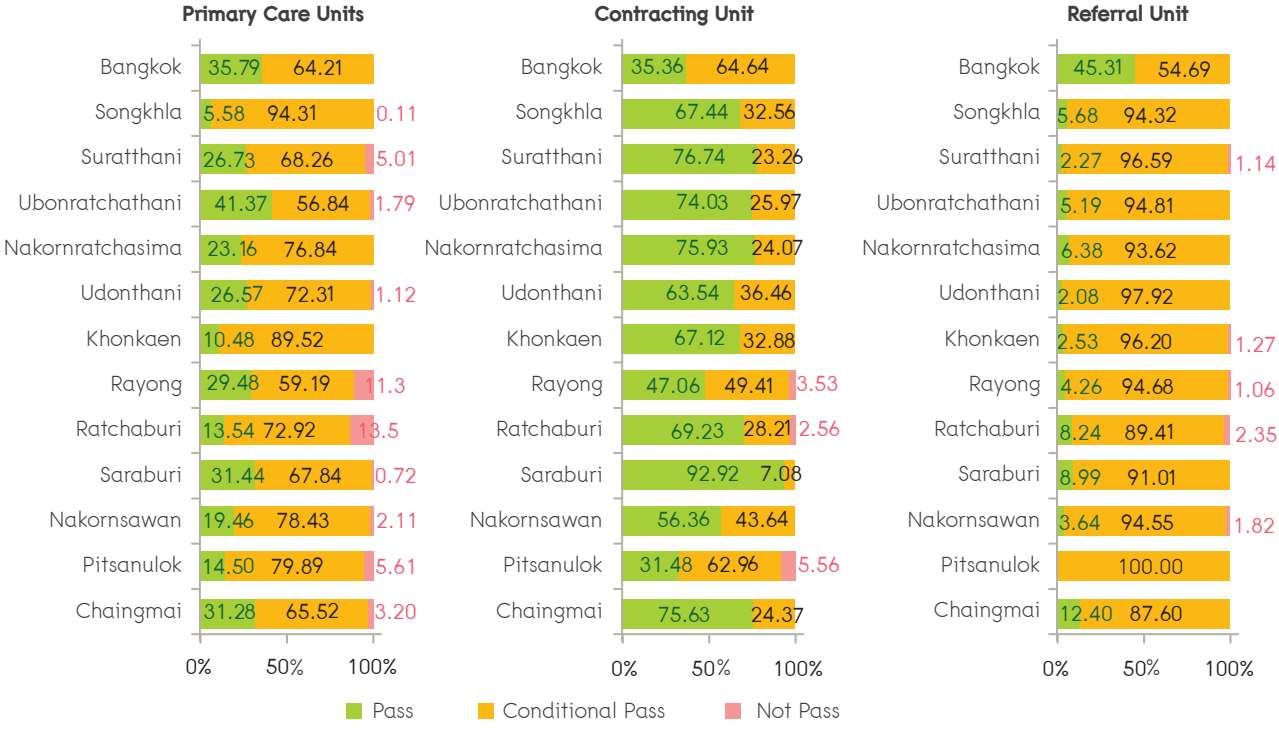
Figure 17 Hospital assessment results as percentages classified by hospital's location, FY2015



Source: Bureau of Registration Administration, NHSO, September 2015

When hospitals' locations classified by the NHSO regions are considered, the primary care units and the referral hospitals located in the NHSO Region 13 (Bangkok) passed more often than other regions. The main contractor hospitals located in the NHSO region 4 (Saraburi) passed more than other regions. Overall, it was found that the main contractor hospitals in every region, except the NHSO region 13 (Bangkok), passed in a higher proportion than primary care units and referral hospitals. Details of these results are shown in figure 18.

Figure 18 Hospital assessment results as percentages classified by hospital's location, FY2015



Source: Bureau of Registration Administration, NHSO, September 2015

5. Accessibility, Efficiency, Quality and Effectiveness of the Healthcare System

5.1 The NHSO key performance indices in FY2015

Key performance indices (KPIs) of the UCS management were set in several dimensions. Details of goal and performance for each KPI are described in Table 6.

Table 6 The NHSO key performance indices in FY2015

KPIs	Units	Goal	Performance (according to budget allocation)	% of performance
Targeted population				
- Thai citizens (Sept.2015)	persons	65,104,000	65,529,726	100.65
- UCS beneficiaries (Sept.2015)	persons	48,606,000	48,336,321	99.45
1. Out-patient services (OP)				
- total OP visits	visits	137,554,980	161,078,026	117.10
- utilization rate	visits/ person/yr	2.83	3.33	117.70
2. In-patient services (IP)				
- total admissions	admissions	4,811,994	5,779,678	120.11
- utilization rate	admissions /person/yr	0.099	0.120	121.21
3. Disease management or vertical programs				
3.1 Accident and Emergency (AE)				
- AE in hospitals located outside their registered province, and service outside registered hospital in disabled people	visits	900,550	1,255,711	139.44
- Birth delivery in new SSS less than 3 months of contribution (IP)	visits	638,110	594,966	93.24

KPIs	Units	Goal	Performance (according to budget allocation)	% of performance
- number of non-registered UCS accessing to service in the first time	cases	25,811	13,207	51.17
- OP refer out of province or OP refer within province where having university hospital in province	visits	836,297	318,948	38.14
- referred cases with transportation cost	visits	218,346	231,087	105.84
3.2 To improve confidence in quality of care				
- Peritoneal dialysis and Hemodialysis in acute renal failure	visits	27,040	35,164	130.04
- Medicinal treatment for opportunistic infections (Cryptococcal meningitis & Cytomegalovirus retinitis) in HIV-patients	cases	5,611	3,855	68.70
- Stroke (Stroke Fast Track)	cases	2,640	2,557	96.86
- Thrombolytic treatment in acute myocardial infarction type ST-elevation (STEMI)	cases	1,810	3,846	212.49
- OP visits for Chemotherapy/Radiotherapy in cancers	visits	685,718	989,387	144.28
- Cataract operation	visits	116,221	168,726	145.18
- Laser treatment in diabetic retinopathy	visits	12,062	7,528	62.41
- Asthma	cases	117,350	93,525	79.70
- Orthodontics services for cleft lip and cleft palate	cases	385	1,308	339.74
3.3 To reduce financial risk of healthcare providers				
- Hemophilia	cases	1,239	1,453	117.27
- Hyperbaric oxygen therapy in decompression sickness as OP cases	cases	83	4	4.82
- Corneal transplant	cases	397	388	97.73
- Heart transplant	cases	45	56	124.44
- Liver transplantation in children	cases	105	156	148.57
- Hematopoietic stem cell transplantation	cases	24	97	404.17
3.4 Services required closed monitoring				
- Methadone maintenance treatment (MMT) in drug addicts	cases	4,449	5,163	116.05
- E(2) category drug list of the NLEM	cases	15,490	21,713	140.17
- Orphan drugs	cases	4,670	5,708	122.23
- Compulsory licensing drugs (Clopidogrel)	cases	127,074	107,273	84.42
3.5 Disease management or vertical programs				
- Thalassemia	cases	1,000	9,835	983.50
- Tuberculosis	cases	52,161	53,951	103.43
- Morphine treatment in palliative cases	cases	11,471	9,347	81.48

KPIs	Units	Goal	Performance (according to budget allocation)	% of performance
4 Health promotion and prevention				
Seasoning influenza vaccines	cases	2,831,998	2,222,297	78.47
5 Community health security fund				
- number of collaborated local administrative organizations	offices	7,776	7,760	99.79
- amount of co-funded by local administrative organizations	million THB	990	1,294	130.71
- amount of co-funded by the NHSO	million THB	2,560	2,572	100.47
6 Rehabilitation				
- disables	cases	1,149,702	1,146,156	99.69
- instruments for disables	cases	47,705	26,991	56.58
- rehabilitation services for disables	cases	236,257	231,902	98.16
- rehabilitation services for elderly	cases	270,038	235,499	87.21
- rehabilitation services for others	cases	168,484	316,094	187.61
- Orientation and Mobility (O&M) for disables	cases	5,948	2,633	44.27
7 Thai traditional medicines				
- Massage, hot compress, herbal stream	visits	4,003,442	4,477,501	111.84
- post-partum care	cases	30,834	35,668	115.68
- prescribing herbal medicines in national essential drug list	visits	4,162,265	6,089,216	146.30
8 Preliminary compensations in accordance with section 41 of the Act				
- approved cases: for consumers	cases	1,256	824	65.61
- approved cases: for providers	cases	454	325	71.59

Source: OP and IP services data, NHSO, September 2015

5.2 Out-patient and In-patient Services

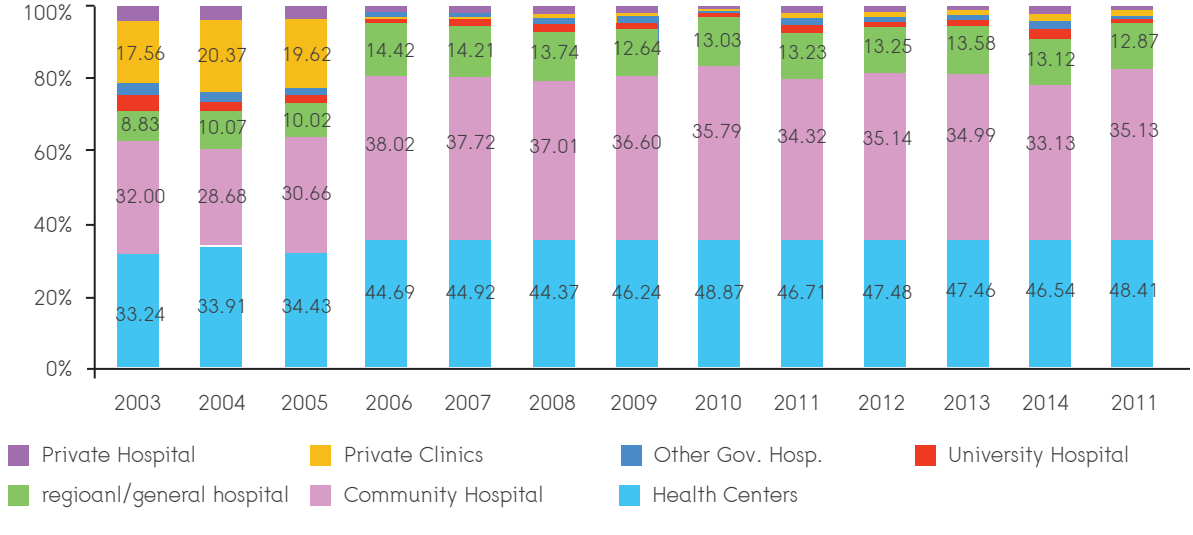
Out-patient (OP) services are the way the majority of people access healthcare and as such can be a strong indicator to the overall use of healthcare services. It was expected that access to OP services would increase with the implementation of UHC. Data between FY2003 and FY2015 has shown that the number people using OP services under the UCS scheme increased from 111.95 million visits or 2.45 visit/person/year in FY2003 to 161.08 million visits or 3.33 visit/person/year in FY2015, as shown in figure 19.

Figure 19 The number of out-patient visits and utilization rate per person per year of the UCS scheme, FY2003 – 2015

Source: *1) Out-patient data of FY2003-2009 are from 0110RP5 Report, Ministry of Public Health*
2) FY2010 – 2015 data are from NHSO

When classifying OP services by types of facility, the data shows that OP services accessed at health centers or PCUs increased from 33.24% in FY2003 to 48.41% in FY2015, at district hospitals from 32.00% in FY2003 to 35.13% in FY2015, and at regional/general hospitals from 8.83% in FY2003 to 12.87% in FY2015, as shown in figure 20. It should also be noted that access to OP services at private clinics had dramatically decreased from 17.56% in FY2003 to only 0.67% in FY2015.

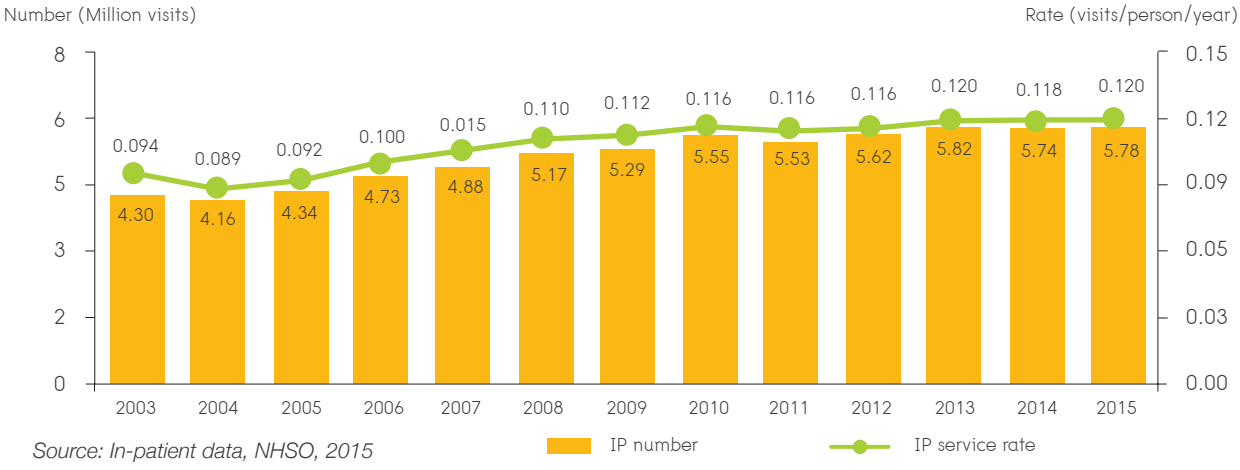
Figure 20 Out-patient services usage as a percentage, classified by type of health facilities, FY2003 – 2015



Source: *1) FY2003-2005 data are from health and welfare survey, the National Statistic Office*
2) FY2006-2009 data are from 0110RP5 Report, Ministry of Public Health
3) FY2010 – 2015 data are from NHSO

Utilization rate of in-patient (IP) services under the UCS scheme had also continued to increase from 4.30 million admissions or 0.094 admissions per person per year in FY2003 to 5.78 million admissions or 0.120 admissions per person per year in FY2015, as shown in figure 21.

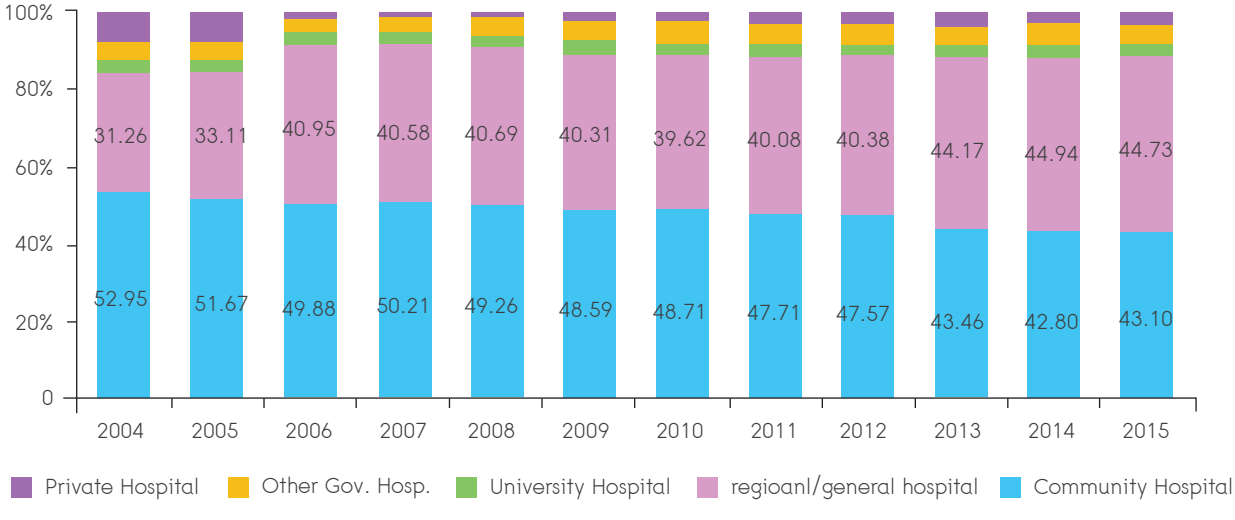
Figure 21 In-patient services under the UCS scheme, FY2003 – 2015



Source: In-patient data, NHSO, 2015

When classifying IP services by types of hospital, the data shows that most of the IP services in FY2015 were accessed at regional/general hospitals (44.73%), and at district hospitals (43.10%), as shown in figure 22.

Figure 22 In-patient services under the UCS scheme classified by hospital types, FY2004 – 2015



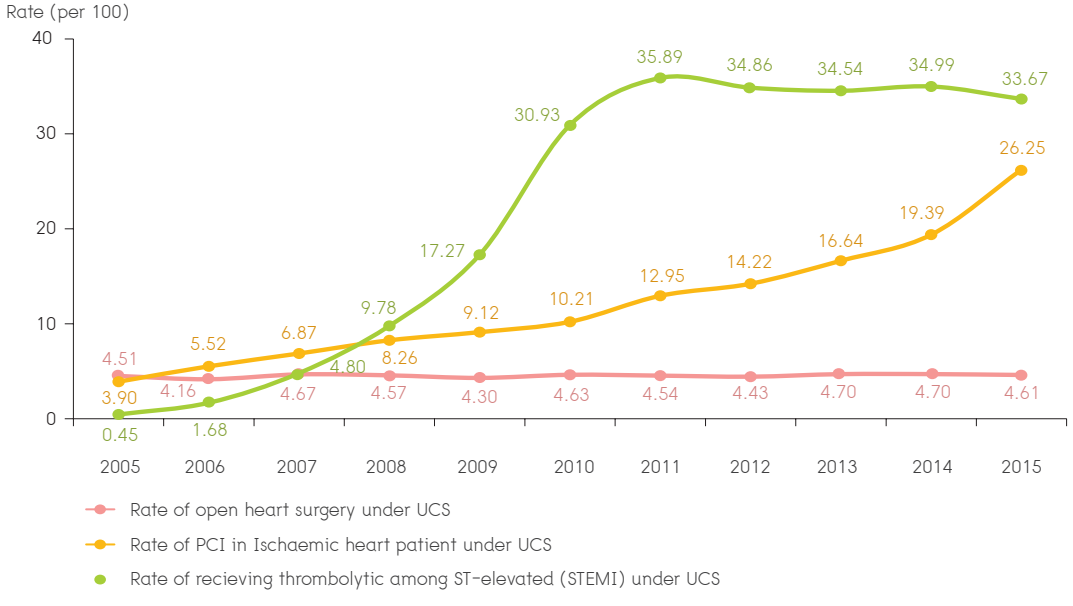
Source: In-patient data, NHSO, 2015

5.3 Disease management and Vertical program

5.3.1 Heart diseases and cerebrovascular diseases

One of the limitations when requiring access to health services for heart and cerebrovascular diseases is a lack of specialists both in terms of availability and distribution. Figure 23 shows the number of heart procedures, i.e., open heart surgery, percutaneous coronary intervention (PCI), and infusion of thrombolytic agent, performed under the UCS scheme during the FY2005-2015. The percentage of open heart surgeries increased from 4.51% in FY2005 to 4.61% in FY2015, PCIs increased from 3.90% in FY2005 to 26.25% in FY2015, and infusion of thrombolytic agents increased from 0.45% in FY2005 to 33.67% in FY2015.

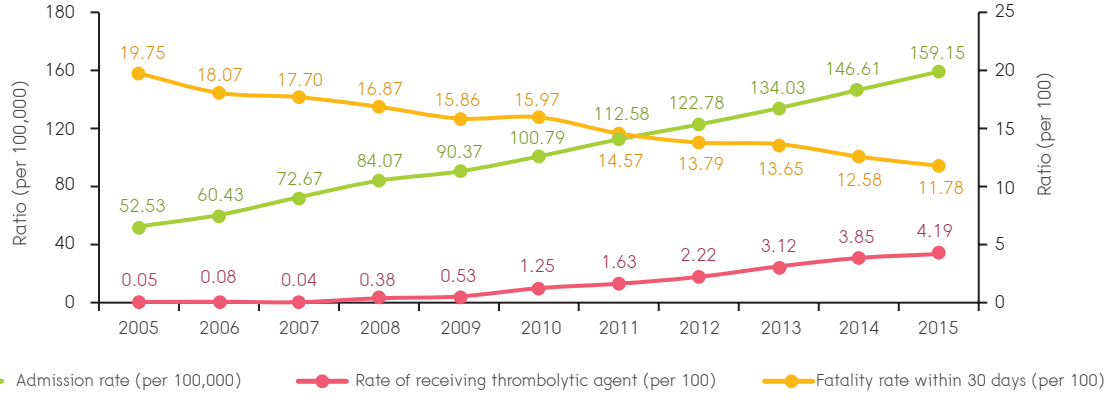
Figure 23 The rate of heart procedures performed on heart disease patients under the UCS scheme, FY2005-2015



Source: In-patient data, NHSO, 30 Sept., 2015

In cerebral infarction patients aged 15 years and older under the UCS scheme, the number of the patients getting thrombolytic treatment increased from only 10 cases (or 0.05% of the patients admitted with cerebral infarction) in FY2005 to 2,139 cases (4.19%) in FY2015, as shown in figure 24.

Figure 24 Accessibility to thrombolytic treatment for cerebral infarction patients aged 15 years and older under the UCS scheme

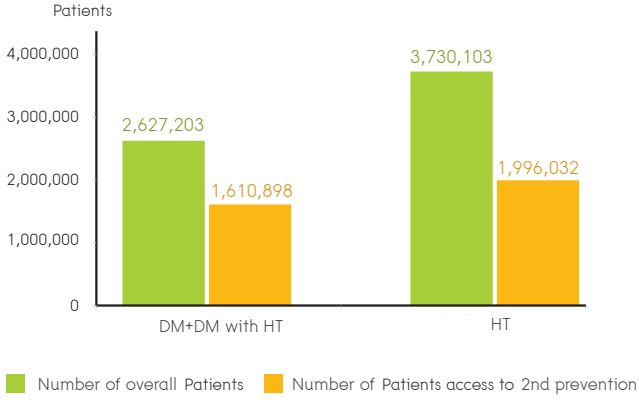


Source: In-patient data, NHSO, 30 Sept., 2015

5.3.2 Diabetes Mellitus and Hypertension

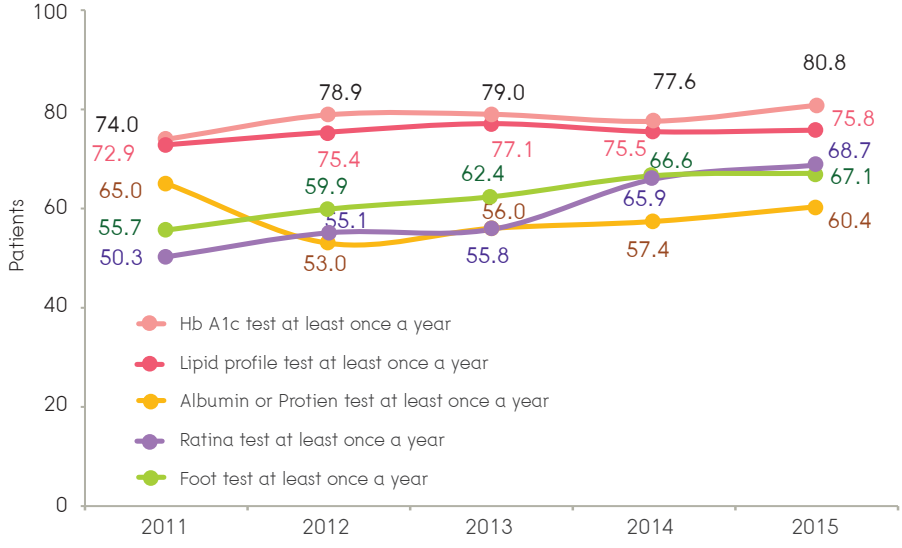
Diabetes Mellitus (DM) and Hypertension (HT) are preventable conditions as they are related to behavior and/or lifestyle choices. A treatment only approach cannot reduce these diseases, prevention is also required. Prevention and treatment of the diseases may not only reduce the burden on the patient but also their family and society as a whole in the long term. In FY2015, the NHSO was allocated a budget of THB908.987 million to screen patients with complications resulting from these diseases (secondary prevention). The patient target in this screening was 2,808,322 cases while the total number of patients with these diseases was 6,357,306 cases. 1,610,898 from 2,627,203 cases with DM and DM + HT were enrolled in secondary prevention while the 1,996,032 from 3,730,103 cases with HT-only were enrolled in secondary prevention. (Figure 25)

Figure 25 Accessibility to secondary prevention of DM and HT, FY2015



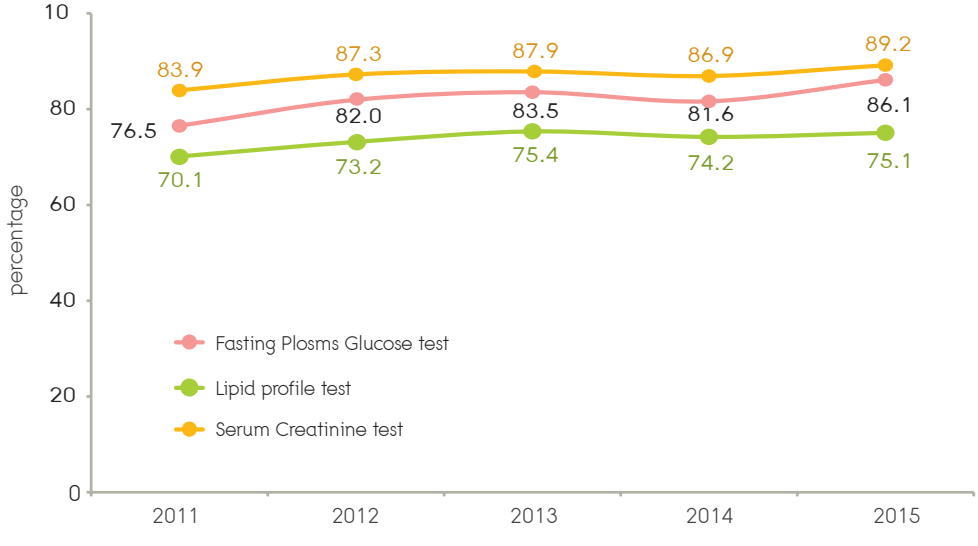
According to the evaluation report on type II-DM and HT outcomes in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2011-2015 by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools, screening rates for early complication detection in type II-DM and HT tended to increase during this period, as shown in figure 26 and 27.

Figure 26 Screening rate -HbA1c, Lipid profile, Albumin or protein, eyes and feet screening in type II-DM, FY2011-2015



Source: Evaluation Report on health service outcome of type II DM and HT in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2011-2015, by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools.

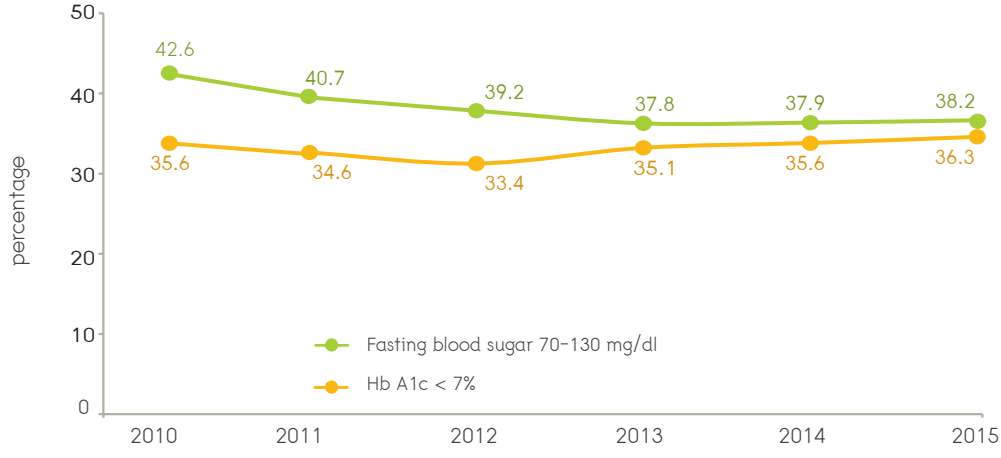
Figure 27 Screening rate for routine laboratory tests in Hypertension, FY2011-2015



Source: Evaluation Report on health service outcome of type II DM and HT in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2011-2015, by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools.

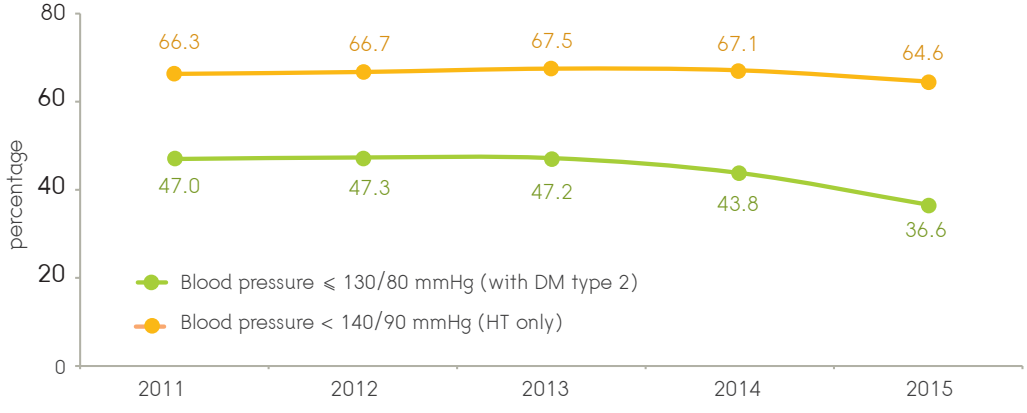
It is important to control the symptoms of metabolic chronic diseases such as DM and HT in order to prevent complications and reduce losses from preventable symptoms and disabilities. According to the health service evaluation report of type II-DM and HT in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2010-2015 by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools, control rate of risk symptoms in DM and HT was quite steady or a little worse during the period of study, as shown in figure 28 and figure 29.

Figure 28 Control rate of risk symptoms in DM, FY2010-2015



Source: Evaluation Report on health service outcome of type II DM and HT in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2010-2015, by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools.

Figure 29 Control rate of risk symptoms in Hypertension, FY2011-2015



Source: Evaluation Report on health service outcome of type II DM and HT in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2010-2015, by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools.

The study also reports the incidence rate of complications found in DM and HT patients, as shown in figure 30 and figure 31. In DM patients, incidents of complications decreased during the period of the study except for renal complications which increased from 5.4% in FY2011 to 7.9% in FY2015. In HT patients, while the rate of complications in patients with cerebrovascular diseases and cardio-vascular diseases was quite steady, the renal failure complication rate had increased from 3.4% in FY2011 to 6.3% in FY2015.

Figure 30 Complication rate in DM, FY2011-2015

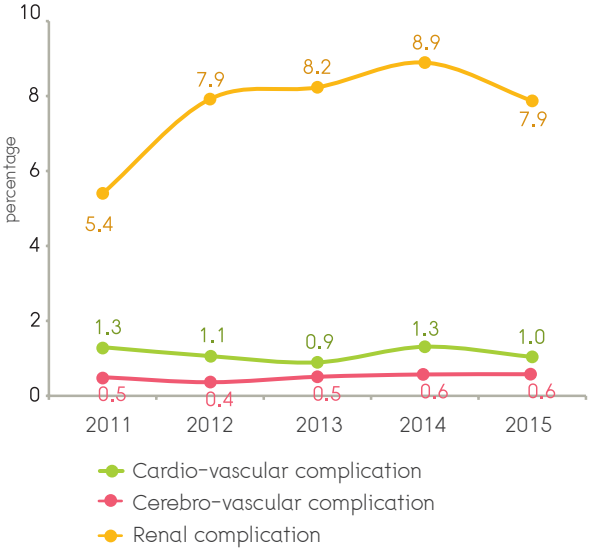
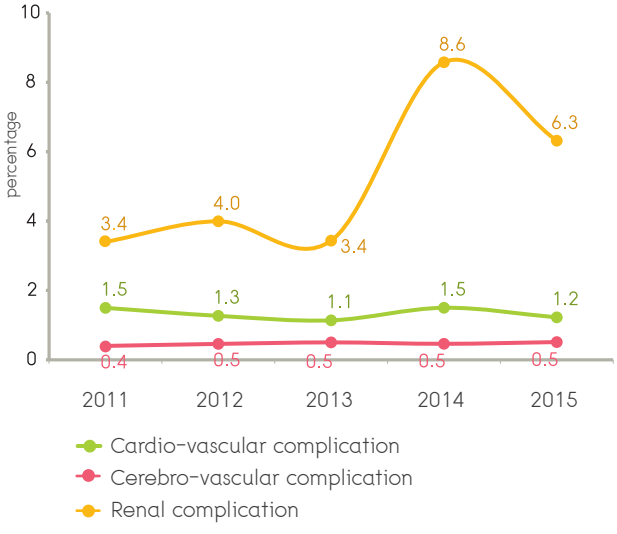


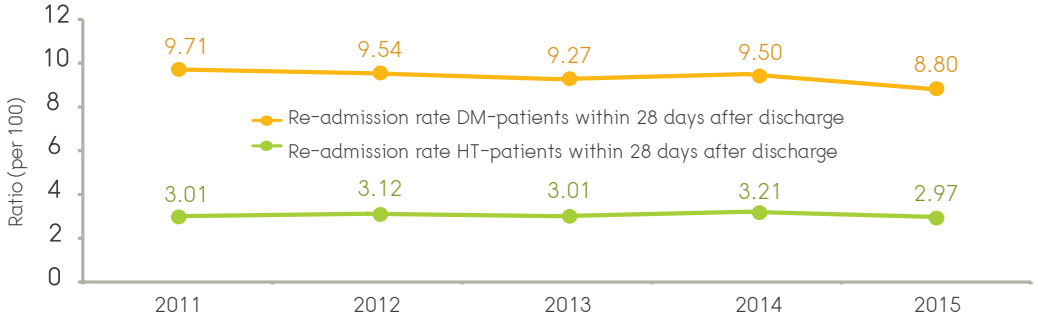
Figure 31 Complication rate in Hypertension, FY2011-2015



Source: Evaluation Report on health service outcome of type II DM and HT in hospitals under the Ministry of Public Health and the Bangkok metropolitan administration office during FY2010-2015, by Medical Research Network (MedResNet) of the Consortium of Thai Medical Schools.

Re-admission within 28 days of being discharged could be another indicator that reflects quality of IP care or effectiveness of the last treatment. Under the UCS scheme patients, aged 15 years and older requiring further treatment within 28 days had decreased slightly from 9.71% in FY2011 to 8.8% in FY2015 for DM patients and from 3.01% in FY2011 to 2.97% in FY2015 for HT patients, as shown in figure 32.

Figure 32 Re-admission within 28 days of a previous discharge for DM and HT patients under the UCS scheme, FY2011-2015



Source: In-patient data, NHSO, 30 Sept., 2015

5.3.3 HIV/AIDS

The NHSO has consistently supported access to healthcare services for HIV/AIDS patients. In the FY2015, 322,996 cases were registered to this service, 258,039 cases (79.89%) had received antiretroviral (ARV), 204,363 cases (79.20%) still retained in the antiretroviral therapy or ART (as of September 30th 2015), 171,823 cases (84.08%) had blood tests concerning viral load (VL), and 155,767 cases (90.66%) had a viral load of less than 50 copies/ml. (Table 7)

Table 7 Healthcare service for HIV/AIDS patients in FY2015

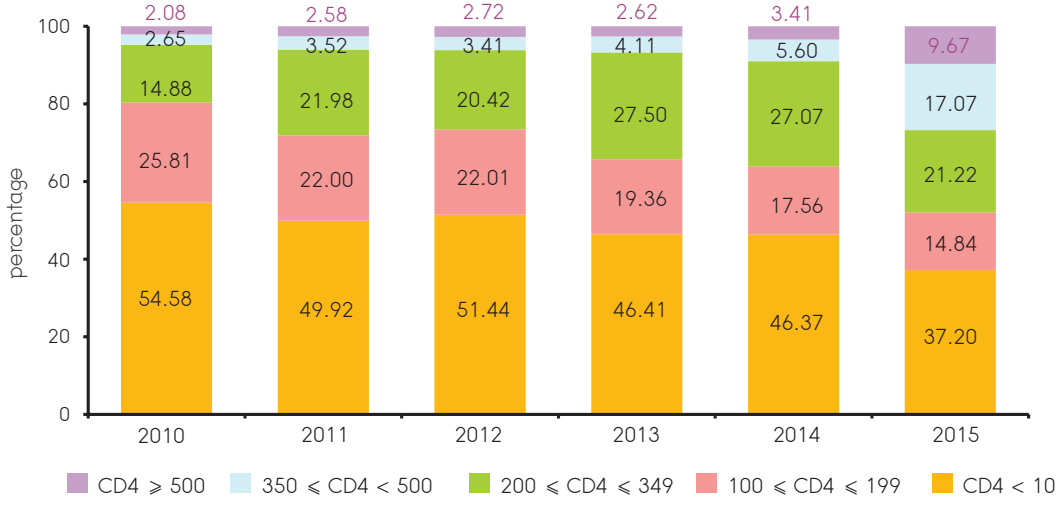
Services & Situation	Number of patients (cases)
1. Registered	322,996
- Old cases	301,910
- New cases	21,086
2. ARV prescribed	258,039
- Old cases	250,932
- Naïve	7,107
3. Retained in ART	204,363
4. VL tested	171,823
5. VL < 50 copies/ml (VL suppressed)	155,767

Source : National AIDS Program: NAP Plus at 30 September 2015, analyzed by the NHSO.
N.B.: In FY2015, every HIV/AIDS patients can be prescribed for ARV regardless of CD4 level. (Before FY2015, HIV/AIDS patients can be prescribed for ARV if CD4 less than 350 cell/mm^3.)

According to data released by provider follow-up services it was evident that a delay in accessing health services was the main cause of death. All patients entering the system under the UCS scheme are tested and classified, based on CD4 level to ascertain the severity of their condition before being enrolled for ART. The number of new cases with severe immune deficiency (CD4 < 100 cell/mm^3) enrolled into the program have continued to decrease slightly from 54.58% in FY2010 to 37.20% in FY2015, as detailed in figure 33.

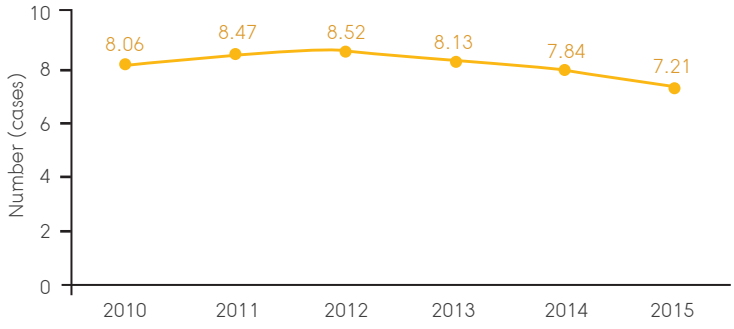
Another indicator that can be used to measure overall effectiveness of the system is the mortality rate of patients. Figure 34 shows the mortality rate of HIV/AIDS patients within 12 months of starting ARV treatment between FY2010-2015. The results show that the mortality rate of the patients, in this period, starting ARV treatment within 12 months decreased slightly from 8.06% to 7.21%.

Figure 33 CD4 level classification in new HIV/AIDS cases age 15+ years, FY2010-2015



Source: The National AIDS Program (NAP Plus), NHSO, date of data on 30 September 2015

Figure 34 Mortality rates of HIV/AIDS patients within 12 months after starting ART, FY2010-2015 under the UCS scheme



Source: The National AIDS Program (NAP Plus), NHSO, date of data on 30 September 2015

5.3.4 Chronic Kidney Diseases

Chronic kidney diseases (CKD), resulting in a high fatality rate, have continued to be one Thailand's most important health issues. Furthermore, financial barriers because of the excessive cost of treatment and after-care as well as a limitation of suitable service facilities have affected necessary patient care. The NHSO, therefore, has undertaken to address this issue not only through their benefit packages but also by supporting related health system developments.

In order to promote quality of care, quality of life, and health outcome, kidney replacement therapy, i.e., peritoneal dialysis for end-stage chronic kidney diseases has been included in the UCS benefit packages under the "PD first" policy since FY2008. Other methods, i.e., hemodialysis (HD) and kidney transplantation (KT), were included later for cases where Continuous Ambulatory Peritoneal Dialysis (CAPD) could not function.

The number of registrations to the chronic kidney disease management program under the UCS scheme has continued to increase since FY2008. From FY2013 to FY2015, accessibility to renal replacement therapy (RRT) for end-stage chronic kidney diseases has increased for every type of treatment as shown in Table 8.

Table 8 The number of CKD patients accessing Renal Replacement Therapy classified by method of RRT, FY2013-2015

Service Types	2013	2014	2015
1) Continuous Ambulatory Peritoneal Dialysis (PD)	14,225	18,284	21,195
- Old	7,407	10,748	13,817
- New	5,554	7,169	7,031
- Changed from other RRT methods	1,264	367	347
- Dead	3,477	4,467	5,208
2) Hemodialysis (HD)	7,855	10,525	12,320
- Old	5,250	6,676	9,011
- New	2,071	2,513	1,663

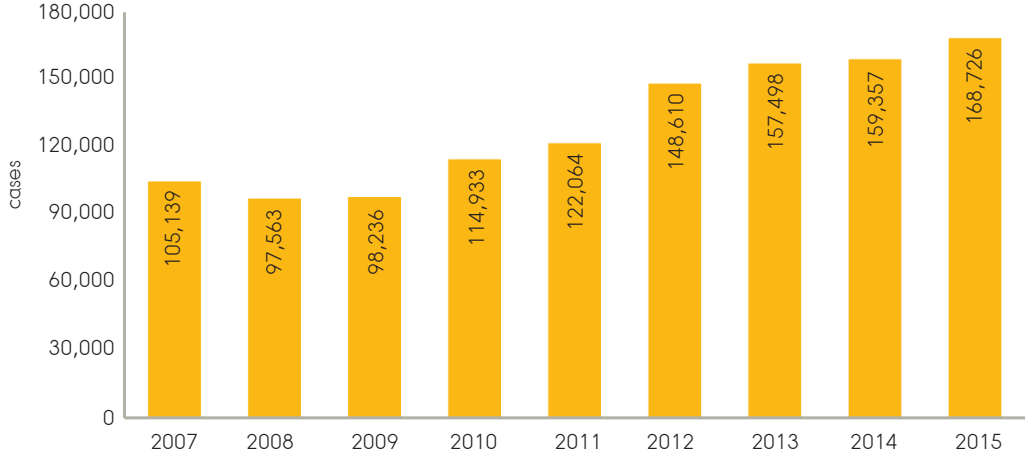
Service Types	2013	2014	2015
- Changed from other RRT methods	534	1,336	1,646
- Dead	1,179	1,484	1,755
3) Hemodialysis Self Pay (HD Self Pay)	2,513	3,389	4,037
- Old	1,356	1,992	2,529
- New	797	1,365	1,475
- Changed from other RRT methods	360	32	33
- Dead	521	860	1,055
4) Kidney Transplantation (KT)	86	182	198
- New	86	182	198
- Dead	3	9	5
5) Kidney Transplantation Immunosuppressive Drug (KTI)	1,197	1,292	1,302
- Old	998	1,068	1,186
- New	199	224	166
- Dead	129	106	33
Total RRTservices	**25,876**	**33,672**	**39,052**

Source: Chronic kidney disease management data, NHSO (April, 2016)
Note: 1. Patients may change RRT method in accordance with their medical indications.
2. The number of patients accessing RRT services does not include the number of dead patients.

5.3.5 Health services for Cataract surgery

Cataract is a common disease found in the elderly which affects quality of life. Therefore, the UCS scheme has included cataract surgery in a vertical program since FY2007. The number of cataract surgeries has increased from 105,139 cases in FY2007 to 168,726 cases in FY2015, as shown in figure 35. There were 50,376 cases of cataract surgery at the Blinding stage (29.86%)

Figure 35 The number of cataract surgeries of UCS patients, FY2007-2015



Source: In-patient data, NHSO, date of data in January 2016

5.4 Health Promotion and Disease Prevention

The Health promotion and disease prevention policy is an important strategy of the UHC to help curtail illness from preventable diseases and to prolong quality of life through healthier life choices. The importance of this strategy, which covers both the healthy and the sick, lead the National Health Security board to increase its budget for health promotion and disease prevention from THB175.00 per capitation in FY2003 to THB383.61 per capitation in FY2015; more than doubling its original budget.

Target and outcome of key indicators in health promotion and disease prevention of the UHC are shown in Table 9.

Table 9 Performance on health promotion and disease prevention, FY2015

No.	Indicators	Outcomes(%)
1.	**Maternal care**	
1.1	Rate of pregnancies attended the first visit of ANC within the first 12 weeks.[1]	57.10
1.2	Rate of pregnancies attended at least 5 times for antenatal care during pregnancy [2]	54.00
1.3	Primary screening for Thalassemia in pregnant women [2]	92.97
1.4	Maternal mortality rate (cases per 100,000 live births) [1]	27.50
1.5	Birth asphyxia rate in UCS (cases per 1,000 live births) [2]	26.51
1.6	Percentage of low birth weight (<2,500 grams) in UCS	10.27
1.7	Birth delivery rate of teenage pregnancy, age 15-19 years, UCS (per 1000 girls aged 15-19 years) [2]	43.11
2.	**Child health**	
2.1	Infant mortality rate (per 1000 live births) [1]	8.57
2.2	Rate of confirmation in thyroid hormone deficiency [3]	85.96
2.3	Fundamental Vaccinations [4]	
	- BCG (newborn)	100.0
	- MMR1 (9-12 months)	98.7
	- DTP3/OPV3 (6 months)	99.4
	- HBV3 (6 months)	99.4
	- DTP4/OPV4 (18 months)	97.8
	- JE2 (12-18 months)	96.1
	- JE3 (2 years)	91.9
	- MMR2 (4-6 years)	93.8
	- DT5 (11-12 years)	96.2
2.4	Children age 0-5 years grow properly [1]	81.50
2.5	Children age 4-6 years were oral health checked-up [5]	78.24

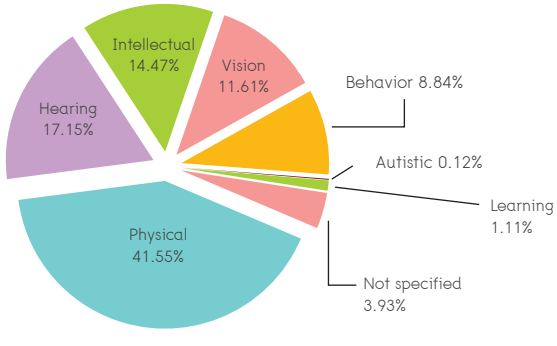
No.	Indicators	Outcomes(%)
3.	**Workforces and elderly care**	
3.1	CA cervix screening rate at least once within 5 years, women aged 30-60 years old 4	69.00
3.2	Depression screening rate [3]	
	• Aged 30-59 years old	55.51
	• Aged 60 years or older	84.08
3.3	DM screening rate [3]	
	• Aged 30-59 years old	81.71
	• Aged 60 years or older	74.92
3.4	Hypertension screening rate [3]	
	• Aged 30-59 years old	82.90
	• Aged 60 years or older	77.85
3.5	Denture service in elderly group aged 60 years and older [6]	101.19
3.6	Seasonal influenza vaccines in risk groups [2]	78.47

Source:
1) *Health statistics, Bureau of policy and strategy, Ministry of Public Health, September 2016*
2) *National Health Security Office*
3) *Department of Medical Sciences*
4) *Cervix Cancer screening report, National Cancer Institute, http://122.155.167.188/ , January 2016*
5) *Summarized from report of Bureau of Dental Health, Department of Health, FY2015*
6) *Denture service report http://nakhonsawan.nhso.go.th/denture/denture1.php 11 November 2015*

5.5 Medical Rehabilitation Services

The accumulative number of disabled people registered to the UCS scheme increased from 361,472 cases in FY2005 to 1,146,156 cases in FY2015. Figure 36 shows the number of disabled people classified by types of disability; most are physical disabilities (41.55%), deaf and hard of hearing (17.15%), intellectual disabilities (14.47%), blindness or low vision (11.61%), and psychiatric/behavioral disabilities (8.84%).

Figure 36 Disabled people registered to the UCS scheme classified by types of disability, FY2015

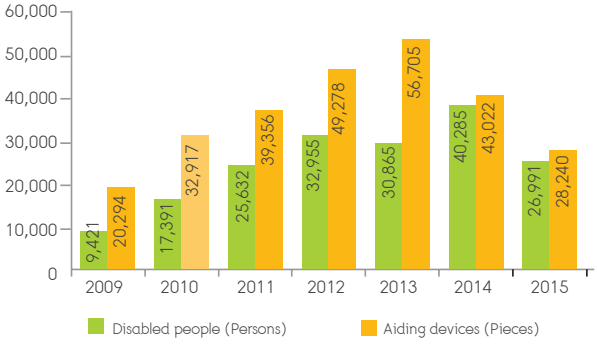


Source: Claim data for rehabilitation services and instruments, NHSO, November 2015
Note: A disabled person can have more than one type of disability.

The number of requests for assistive devices, by the disabled, increased from 20,294 items for 9,421 cases in FY2009 to 28,240 items for 26,991 cases in FY2015; however, the average number of items per person had decreased from 2.15 per person in 2009 to 1.05 per person in FY2015, as shown in figure 37.

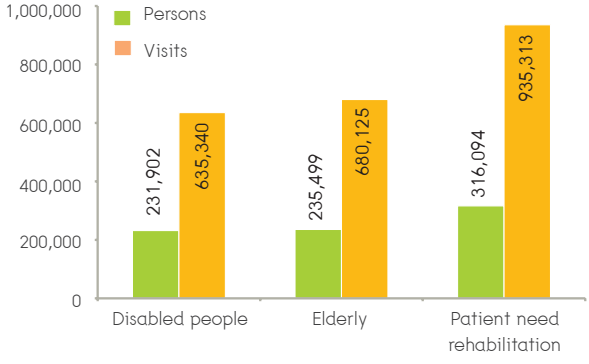
Accessibility to rehabilitation services for elderly, disabled, and other patients in need under the UCS scheme in FY2015 are shown in figure 38, most of the rehabilitation services were accessed by the elderly (680,125 visits for 235,499 cases), disabled people (635,340 visits for 231,902 cases) and other patients (935,913 visits for 316,094 cases).

Figure 37 The number of assistive devices requested by disabled people, FY2008-2015



Source: Claims data for rehabilitation services and instruments, NHSO, November 2015

Figure 38 The number of rehabilitation services accessed by beneficiaries under UCS, FY2015



Source: Claim data for rehabilitation services and instruments, NHSO, November 2015

5.6 Thai Traditional Medicine Services

Alongside the use of modern medicine, the NHSO has also continued to promote and support expanding Thai Traditional Medicine (TTM) services. TTM service utilization has increased from 510,751 cases (1,209,522 visits) in the FY2010 to 5,454,631 cases (10,698,878 visits) in the FY2015 (as shown in Table 10). The total number of massage, herbal compress, and herbal saunas was 1,800,551 cases / 4,477,501 visits; postpartum care was 35,668 cases / 132,161 visits and herbal medicine prescriptions, from the National List of Medicines, was 3,618,412 cases / 6,089,216 visits.

Table 10 Thai Traditional Medicine Service Usage, FiscalYear(FY) 2013-2016 (only the second trimester/S2)

Types of Services	2013		2014		2015		2016(S2)	
	Number of Patients	Number of Visits	Number of Patients	Number of Visits	Number of Patients	Number of Visits	Number of Patients	Number of Visits
1. Massage, Compress, Sauna	1,282,170	5,248,946	1,649,820	4,017,170	1,857,430	4,648,944	1,800,551	4,477,501
2. Postpartum care	15,982	53,814	26,725	93,335	35,612	134,100	35,668	132,161
3. Prescribing Herbal Medicines	2,882,338	4,124,220	4,926,678	7,509,526	4,929,835	7,517,170	6,258,561	9,950,144
- in NLEM	1,452,759	2,210,164	2,587,407	4,161,154	2,590,896	4,169,217	3,618,412	6,089,216
- outside NLEM	1,429,579	1,914,056	2,339,271	3,348,372	2,338,939	3,347,953	2,640,149	3,860,928
Total Services	**4,180,490**	**9,426,980**	**6,603,223**	**11,620,031**	**6,822,877**	**12,300,214**	**8,094,780**	**14,559,806**
Total Services excluding the use of herbal medicines outside NLEM"	**2,750,911**	**7,512,924**	**4,263,952**	**8,271,659**	**4,483,938**	**8,952,261**	**5,454,631**	**10,698,878**

N.B.: NLEM=The National List of Essential Medicines

Sources: 1) Thai Traditional Medicine Service Data from OP/PP individual data, e-claim, FY2012-2014, analyzed by Bureau of Supporting Primary Care Service System, Dec-2014
2) Report of Supporting Fund Management, M&E for Payment: H0401, FY2015, data processing by Bureau of Information Technology and Health Outcome Evaluation, NHSO, Jan-2016

5.7 Pharmaceuticals and Medical Instruments

The NHSO in collaboration with the Food and Drug Administration (FDA) of the MoPH has continued to promote system development for claims and administration, as well as drug usages in order to improve accessibility to the necessary high cost drugs. In FY2015, there were two groups of drugs separately managed to promote accessibility, i.e. E(2) category of the national list of essential medicines (NLEM) [2], and orphan and antidote drugs.

1) E(2) category of the national list of essential medicines

In FY2015, there were 17 items of drugs under the E(2) category list. Conditions needed in prescribing these drugs including specification of patients, authorized doctors and hospitals were developed. The number of new patients accessed to the drugs in the E(2) category had continually increased since FY2009, as shown in table 11.

[2] The National List of Essential Medicines (NLEM) is classified into six categories as follow:
- A category: the first line drugs used in most hospitals
- B category: the second line drugs
- C category: used only by specialists
- D category: variety of indications but only suitable in some indications, or limited of usage, or expensive than other medicines with the same indication
- E(1) category: under special programs of government agencies requires closed evaluation in accordance with the programs
- E(2) category: very specific indications and required special central mechanism to monitor drug access

Table 11 The number of new patients accessing E(2) category drugs from the national list of essential medicines, FY2009–2015

Drug Name	2009	2010	20114	2012	2013	2014	2015
1. Letrozole	-	1,558	2,629	1,330	1,382	2,282	2,237
2. Docetaxel	321	527	879	1,439	1,447	2,892	1,732
3. IVIG	271	679	901	1,059	1,318	1,307	1,285
4. Botulinum toxin type A	102	313	704	690	677	690	692
5. Leuprorelin	146	145	281	200	204	200	222
6. Liposomal Amphothericin B	5	68	139	134	133	198	212
7. Verteporfin	-	9	30	22	61	-	-
8. Bevacizumab	-	-	-	-	2,694	3,908	4,147
9. Voriconazole	-	-	-	-	216	470	402
10. Thyrotropin alpha	-	-	-	-	21	25	63
11. Peginterferon	-	-	-	-	559	771	1,356
12. ATG	-	-	-	-	56	100	105
13. Linezolid	-	-	-	-	4	16	16
14. Imiglucerase	-	-	-	-	5	4	9
15. Trastuzumab	-	-	-	-	-	-	313
16. Nilotinib	-	-	-	-	-	-	509
17. Dasatinib	-	-	-	-	-	-	86
Total	**845**	**3,299**	**5,563**	**4,874**	**8,777**	**12,863**	**13,386**

Source: *Bureau of Medicines Medical Supplies and Vaccines Management, NHSO*
Note: *Item 8 – 14 were included in the benefit package since FY2013*
Item 15 – 17 were included in the benefit package since FY2015

2) Orphan drugs and Antidotes

The small scale of the orphan drugs and antidotes market has caused limitations in procuring them. In FY2015, UCS benefit packages expanded to include 19 orphan drugs and antidotes managed by the Government Pharmaceutical Office (GPO) through the VMI system. The number of patients treated with orphan drugs and antidotes in 2013 - 2015 are listed in Table 12:

Table 12 Number of patients treated with orphan drugs and antidotes in 2013 - 2015

Drug Name	2013	2014	2015
1. Sodium nitrite inj.	32	7	7
2. Sodium thiosulfate 25% inj.	32	16	8
3. Succimer cap. (DMSA)	15	1	1
4. Methylene blue inj.	59	14	31
5. Glucagon kit	3	2	0
6. Dimercaprol inj. (British Anti-Lewisite; BAL)	3	11	5
7. Digoxin-specific Antibody Fragments	2	1	1
8. Sodium Calcium edetate (Calcium disodium edetate) Ca Na_2 EDTA	11	15	7
9. Botulinium antitoxin	3	5	2
10. Diptheria antitoxin	240	105	51
11. Esmolol	18	21	25
12. Polyvalent antivenum for hematotoxin	92	509	691
13. Polyvalent antivenum for neurotoxin	31	98	159
14. Green Pit Viper antivenin	355	1,754	1,952
15. Malayan Pit Viper antivenin	337	2,239	2,007
16. Russell's Viper antivenin	13	156	165
17. Cobra antivenin	126	521	577
18. Malayan Krait antivenin	9	30	19
Total	**1,381**	**5,505**	**5,708**

Source: Bureau of Medicines Medical Supplies and Vaccines Management, NHSO

Central management of specific drugs and medical instruments with high cost or requiring special intervention such as orphan drugs is an important mechanism. Improved accessibility and efficiency is needed to constrain budget expenditure. Central procurement and management during FY2010-2015 has continued to curtail overspending each year, as shown in Table 13.

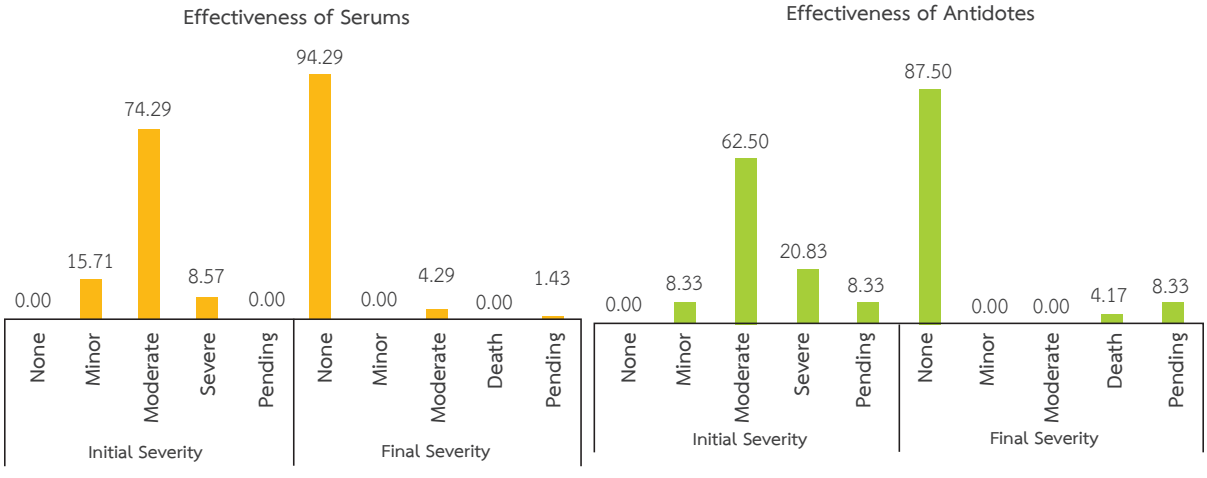
Table 13 Value of government budget saved from central management on specific drugs, FY2010 – 2015

FY	Value of saved budget					Total
	ARV Non CL[1]	ARV CL[2]	E (2) and Clopidogrel[3]	Influenza vaccines[4]	Serums[5]	
2010	311,768,680	866,282,286	108,014,711	-	-	1,286,065,677
2011	625,511,700	1,732,833,511	1,738,476,361	-	-	4,096,821,571
2012	1,032,528,666	2,318,995,360	1,172,558,860	65,668,964	-	4,589,751,850
2013	1,531,090,725	2,377,051,300	1,429,000,342	95,052,500	55,368,760	5,487,563,627
2014	1,827,692,222	2,870,030,790	2,382,318,247	105,750,000	23,518,810	7,209,310,069
2015	1,562,743,030	3,748,425,392	588,033,199	33,236,250	39,167,500.00	5,971,605,371

Source: *Bureau of Medicines and Medical Supplies Management, NHSO*
Note: *1. calculated based on budget spent in FY2009*
2. calculated based on drug price before compulsory licensing (CL) announced by the government
3. calculated based on drug price before having vertical program on E(2) category list and before CL on Clopidogrel
4. calculated based on budget spent in FY2012
5. calculated based on value of serums that hospitals paid to the Queen Saovabha Memorial Institute (producer of serums under the Thai Red Cross Society) and the Government Pharmaceutical Office (GPO) before having vertical program on serums under the UCS

The Thai society of Toxicology (T.S.T) monitored how effective treatments of patients receiving antidotes and serums were. Initial results showed that pre-treatment 74.29% and 62.50% of patients respectively could be classified as "moderate". After receiving antidotes and serums results showed 94.29% and 87.50% of patients respectively were cured, as shown in figure 39.

Figure 39 Clinical outcome of patients prescribed serums and antidotes, FY2014

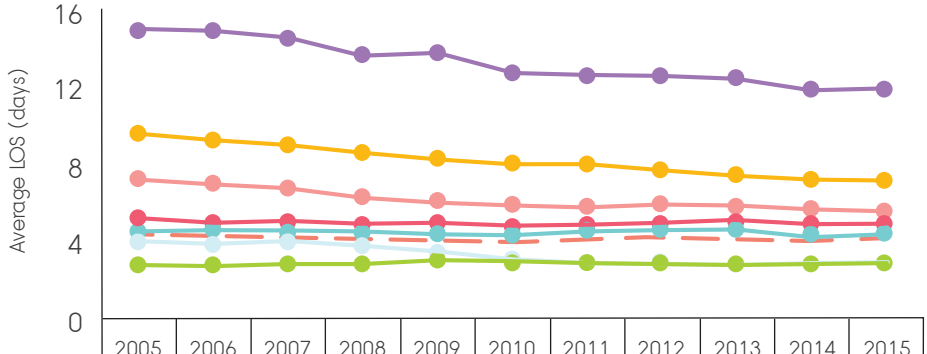


Source: Bureau of Medicines Medical Supplies and Vaccines Management, NHSO

5.8 Health service efficiency

The average length of stay (LOS) is one of the indicators reflecting effectiveness of IP services as a longer LOS consumes more resources. The average LOS of patients under the UCS scheme during FY2005-2015 had slightly decreased from 4.27 days per admission in FY2005 to 4.15 days per admission in FY2015. When classifying by types and affiliation of hospitals in FY2015, hospitals with high average LOS were other government hospitals (not under the office of permanent secretary/OPS) in Ministry of Public Health (MoPH) (11.96 days per admission), university hospitals (7.18 days per admission), other government hospitals outside MoPH (5.50 days per admission), and regional hospitals (4.91 days per admission), respectively as shown in figure 40.

Figure 40 Average length of stay (LOS) classified by types and affiliations of hospitals, FY2005-2015



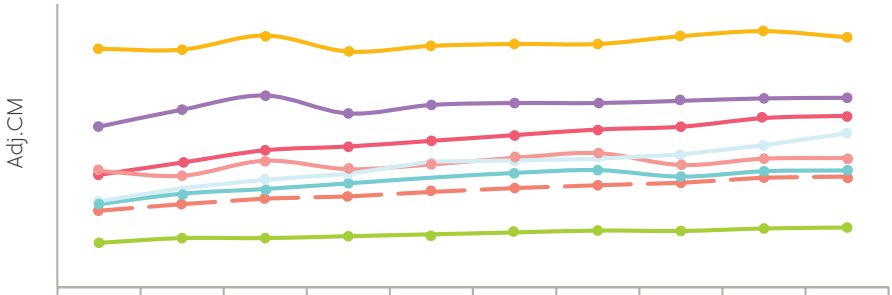
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gov. regional hosp.	5.24	5.12	5.04	4.92	4.88	4.85	4.89	4.91	4.89	4.96	4.91
Gov. general hosp.	4.54	4.48	4.43	4.32	4.32	4.39	4.45	4.51	4.49	4.33	4.34
Gov. community hosp.	2.91	2.92	2.92	2.92	2.95	2.99	3.05	3.09	3.07	3.04	3.04
Other gov. hosp. in MoPh	14.78	15.00	14.59	13.79	13.70	12.82	12.74	12.70	12.57	11.94	11.96
Gov. hosp. outside MoPh	7.21	7.12	6.88	6.39	6.16	5.84	5.82	5.97	5.85	5.60	5.50
University hosp.	9.62	9.24	8.97	8.52	8.17	7.95	7.82	7.68	7.34	7.26	7.18
Private hosp.	4.13	3.98	4.13	3.81	3.43	3.27	3.07	2.99	2.89	2.98	2.97
Total	4.27	4.23	4.19	4.11	4.07	4.09	4.15	4.17	4.14	4.17	4.15

Source: In-patient data, NHSO, January 2016

Case Mix Index (CMI) is an indicator for measuring severity of diseases calculated from Relative Weight (RW) or Adjusted Relative Weight (AdjRW) of all IP cases within a specific period of time to reflect effectiveness of service system. Admission may be more necessary in patients with higher RW or AdjRW.

Calculated with DRG application version 5, Adj. CMI of IP service under the UCS scheme had increased from 0.81 in FY2006 to 1.17 in FY2015; this increasing pattern was also true if classifying by types and affiliation of hospitals, as shown in figure 41.

Figure 41 Adjusted CMI of in-patient services under the UCS scheme, FY2006-2015

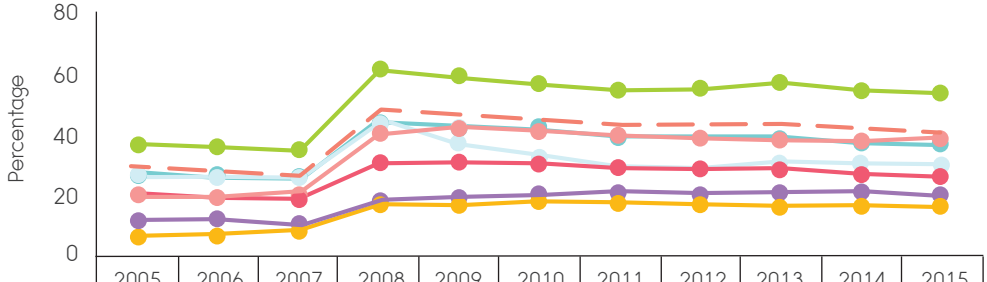


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gov. regional hosp.	1.19	1.32	1.45	1.49	1.55	1.61	1.67	1.70	1.79	1.81
Gov. general hosp.	0.88	0.99	1.04	1.10	1.16	1.21	1.24	1.17	1.23	1.24
Gov. community hosp.	0.47	0.52	0.52	0.54	0.56	0.58	0.60	0.60	0.62	0.63
Other gov. hosp. in MoPh	1.70	1.88	2.03	1.84	1.93	1.95	1.95	1.97	2.00	2.01
Gov. hosp. outside MoPh	1.23	1.18	1.34	1.25	1.30	1.37	1.42	1.29	1.36	1.37
University hosp.	2.61	2.60	2.75	2.58	2.64	2.66	2.66	2.74	2.80	2.73
Private hosp.	0.91	1.05	1.14	1.20	1.33	1.34	1.36	1.41	1.51	1.63
Total	0.81	0.88	0.94	0.96	1.01	1.05	1.08	1.10	1.16	1.17

Source: In-patient data, NHSO, January 2016

In cases of admission having less severity with a Relative Weight (RW) less than 0.5 in FY2015, most of these patients were admitted at district hospitals (50.25%), other government hospitals not under the MoPH (30.33%), and general hospitals (30.54%), as shown in figure 42.

Figure 42 Percentage of admissions in the UCS scheme having RW<0.5 classified by types and affiliation of hospitals, FY2005-2015

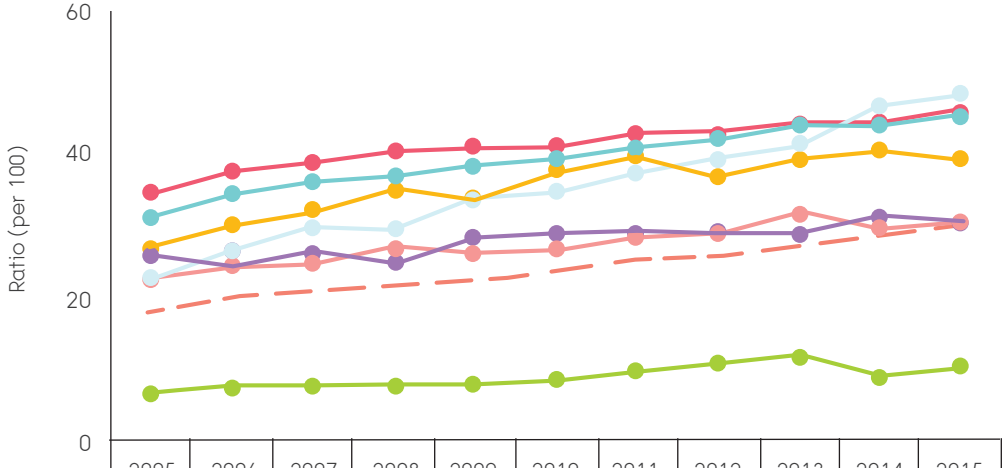


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gov. regional hosp.	14.68	14.45	13.30	26.49	25.33	24.83	23.46	23.00	23.27	21.76	21.87
Gov. general hosp.	20.67	20.31	19.44	37.83	36.46	34.86	32.85	32.07	32.65	30.75	30.54
Gov. community hosp.	31.56	31.27	30.00	57.98	55.94	53.70	50.83	51.56	54.21	51.23	50.25
Other gov. hosp. in MoPh	10.05	10.43	8.90	16.22	16.04	16.38	16.26	16.62	16.25	16.00	14.68
Gov. hosp. outside MoPh	17.00	17.16	17.62	36.57	35.86	35.02	32.16	30.33	29.84	28.76	30.33
University hosp.	5.55	5.67	6.09	13.64	13.37	14.16	13.98	13.69	12.60	12.65	13.09
Private hosp.	20.67	19.62	18.13	38.44	33.64	27.56	24.89	24.73	26.84	27.05	27.01
Total	23.80	23.45	22.40	43.51	41.94	40.09	37.67	37.63	39.01	36.71	36.37

Source: In-patient data, NHSO, January 2016

Cesarean section requires more resources and therefore costs are higher than for natural childbirth. The percentage of cesarean sections, under the UCS scheme, increased from 18.20% in FY2005 to 30.55% in FY2015; this pattern was also over all classifications, types and affiliation of hospitals, as shown in figure 44. This shows that elective cesarean section delivery exists.

Figure 43 Cesarean section rates under the UCS scheme classified by hospital types, FY2005- 2015



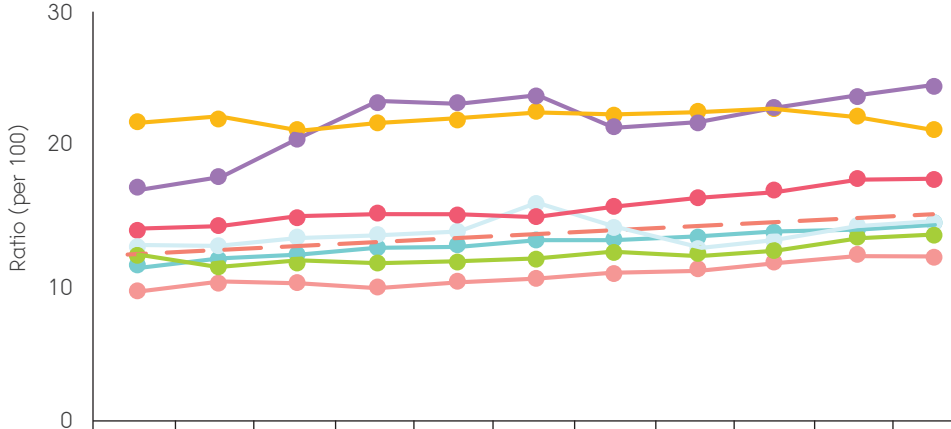
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gov. regional hosp.	34.50	36.89	38.20	39.76	40.62	40.98	42.20	41.91	43.88	44.80	45.81
Gov. general hosp.	31.36	34.30	35.56	36.55	37.72	38.97	40.64	41.96	43.72	43.73	44.90
Gov. community hosp.	6.61	7.29	7.94	7.92	8.20	8.97	10.16	10.88	11.99	9.05	10.45
Other gov. hosp. in MoPh	25.70	26.28	25.81	25.46	27.92	28.73	28.75	29.41	29.13	30.92	30.24
Gov. hosp. outside MoPh	22.61	24.56	24.77	26.94	26.27	27.07	28.57	29.19	29.19	29.81	30.10
University hosp.	26.35	29.65	31.77	35.09	33.77	37.95	39.63	37.17	37.17	40.43	39.20
Private hosp.	23.21	26.22	29.95	29.52	33.52	34.80	37.25	39.36	41.24	46.28	45.61
Total	18.20	20.20	21.06	21.90	22.80	23.70	25.32	25.95	27.58	29.05	30.55

Source: In-patient data, NHSO, January 2016

5.9 Quality and service outcome

Re-admission within 28 days of a previous discharge could be another indicator to reflect quality of IP care or effectiveness of the last treatment. In FY2015, the average re-admission rate was 15.04%; hospital types with high re-admission rates were hospitals outside the MoPH (24.36%), university hospitals (21.19%), regional hospitals (17.55%), private hospitals (14.49%), and general hospitals (14.06%), as shown in figure 45.

Figure 44 Re-admission within 28 days of a previous discharge of patients under the UCS scheme classified by type and affiliation of hospitals, FY2005-2015

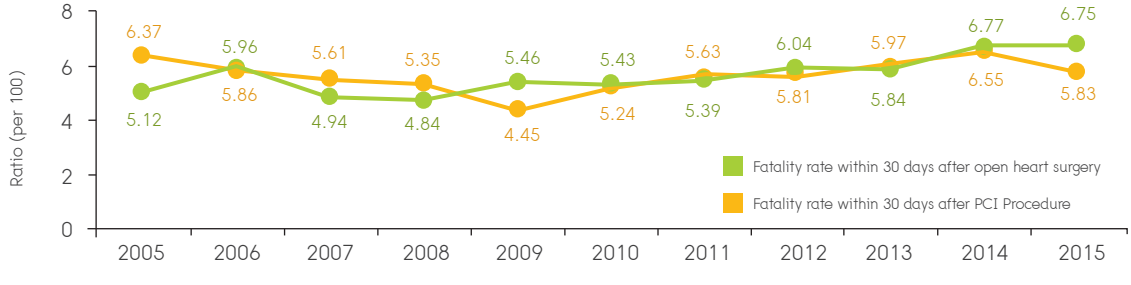


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gov. regional hosp.	13.98	14.28	14.73	15.14	14.95	15.11	15.52	16.22	16.99	17.67	17.55
Gov. general hosp.	11.29	11.57	11.94	12.37	12.50	12.85	12.99	13.32	13.58	13.87	14.05
Gov. community hosp.	11.99	11.41	11.52	11.79	11.75	11.90	12.50	12.56	12.42	13.78	13.83
Other gov. hosp. in MoPh	17.17	17.85	20.68	23.09	23.17	23.71	21.87	21.86	22.71	23.49	24.36
Gov. hosp. outside MoPh	9.72	10.22	10.16	9.95	10.12	10.29	10.76	11.03	11.58	12.24	12.02
University hosp.	21.89	21.96	21.33	21.85	21.85	22.70	22.39	22.50	22.70	22.17	21.19
Private hosp.	12.68	12.83	13.36	13.49	14.03	15.80	13.94	12.54	13.22	14.39	14.49
Total	12.04	12.42	12.70	13.10	13.07	13.42	13.70	13.86	14.08	15.01	15.04

Source: In-patient data, NHSO, January 2016
Note: 1) In-patient data that discharge type of the last admission = "improve" are selected.
2) Planned or unplanned admissions cannot be classified. Therefore, the second admission may be planned for follow-up treatment.

Adverse effects that occur from errors during treatment, and/or delays in diagnosis or treatment can be used to evaluate quality of care. Fatality rate within 30 days of treatment is one of the indicators that are used to reflect quality of care in a health system. Figure 46 shows comparisons between fatality rates within 30 days of their last admission in heart disease patients receiving open heart surgery or PCI procedures during FY2005-2015. Fatality rates within 30 days of their last admission in both treatments slightly increased during this period.

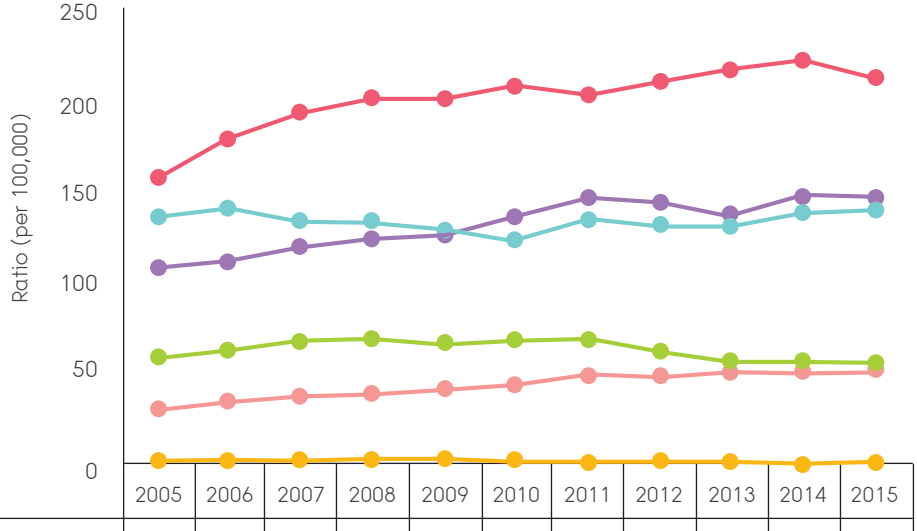
Figure 45 Fatality rates within 30 days of the last admission in heart disease patients receiving open heart surgery or PCI procedures, FY2005-2015



Source: In-patient data, NHSO, January 2016

The Admission rate of patients with ACSC (Ambulatory care sensitivity condition: ACSC) is one of the indicators to reflect efficiency and effectiveness of services which providers at OPD should control symptoms of chronic diseases to prevent admissions from complications. The diseases enrolled in the ACSC group include DM, hypertension, asthma, chronic obstructive pulmonary diseases (COPD), epilepsy, and heart failure with pulmonary emphysema condition. By analyzing data of the UCS from FY2005 to FY2015, we found that admission rates of DM, COPD and epilepsy tended to increase, but the rates of asthma and heart failure with pulmonary emphysema conditions tended to decrease, and the rate of HT tended to be stable (Figure 47)

Figure 46 UCS scheme Admission rates of chronic disease ACSC, FY2005-2015

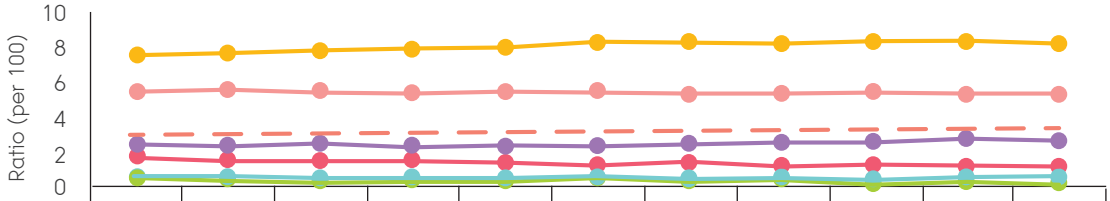


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
DM	158.70	178.56	192.47	201.27	201.24	207.51	203.07	209.88	216.13	220.45	213.13
HT	135.05	141.02	133.54	133.39	127.18	121.84	133.03	130.60	130.38	138.16	138.73
Asthma	60.27	63.88	66.07	69.63	68.24	69.52	69.33	61.79	56.49	57.67	55.94
COPD	108.50	113.20	120.55	127.26	128.79	136.33	145.37	144.05	136.43	148.38	145.82
Epilepsy	31.60	34.44	36.48	39.21	41.52	48.37	48.37	49.32	51.08	52.05	53.12
Heart failure with pneumonia	1.08	1.17	1.23	1.24	1.28	1.03	1.03	0.85	0.88	0.73	0.61

Source: In-patient data, NHSO, January 2016

For overall outcome of IP services, fatality rates in hospitals are not only an indicator of disease severity but also can be used as an indicator to reflect efficiency and quality of care as well as disease monitoring in the catchment area. Figure 48 shows fatality rates in hospitals of patients under the UCS during FY2005-2015. This rate increased from 2.81% in FY2005 to 3.20% in FY2015. Only in FY2015, most of the deaths were by the elderly aged 70 years and older (8.00%) and the elderly aged 60-69 years (5.15%).

Figure 47 Fatality rate of patients under the UCS classified by age groups, FY2005-2015



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
< 1 year	1.70	1.55	1.44	1.33	1.21	1.14	1.15	1.11	1.07	1.01	0.95
1-4 years	0.29	0.28	0.29	0.27	0.26	0.26	0.25	0.25	0.25	0.23	0.23
5-14 years	0.44	0.42	0.40	0.38	0.36	0.36	0.36	0.37	0.34	0.40	0.31
15-59 years	2.42	2.41	2.35	2.36	2.29	2.36	2.44	2.49	2.50	2.64	2.57
60-69 years	5.48	5.48	5.37	5.33	5.32	5.37	5.28	5.28	5.20	5.29	5.15
> 70 years	7.32	7.42	7.53	7.65	7.73	8.11	8.07	8.06	8.05	8.14	8.00
Total	2.81	2.82	2.79	2.81	2.79	2.88	3.01	3.07	3.08	3.26	3.20

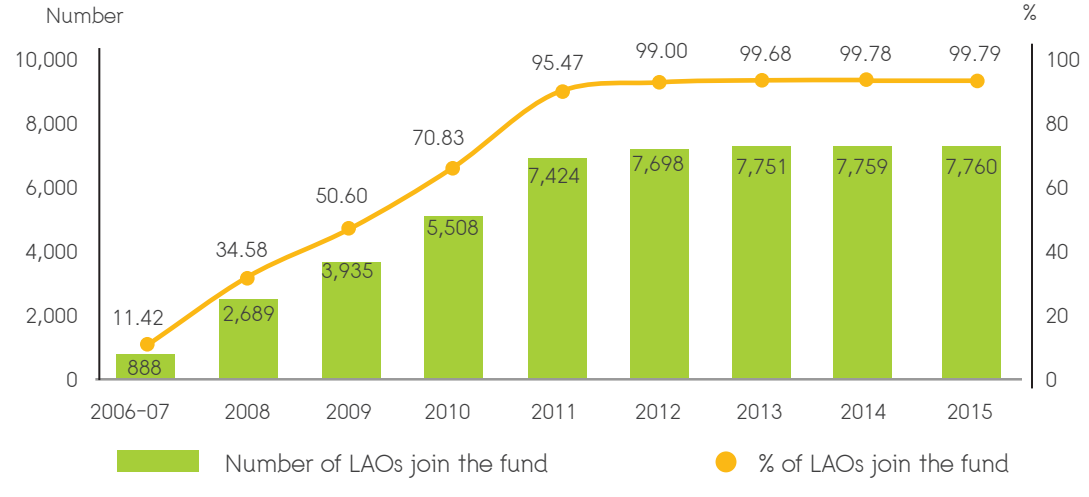
Source: In-patient data, NHSO, January 2016
Note: Fatality rate of patients age < 1 year not include Diagnosis code (ICD-10) = Z380

6. Consumers' Rights Protection and Stakeholder Participation

6.1 Promoting local community participation

Promoting local community participation is one of the key mechanisms, in accordance with Section 47 of the National Health Security Act, to respond to health needs of a local community by including them in the decision making and co-funding of health related programs. The number of Local Administrative Organizations/ LAOs (Subdistrict Administrative Organizations/ SAOs and Subdistrict Municipalities/ SMs) co-funding in community health security funds has increased from only 888 subdistricts (11.42%) in FY2006 to 7,760 subdistricts or 99.79% of all local administrative organizations in FY2015, as shown in figure 49. The community health security funds were set up to promote health related activities suitable for the health needs of each community. Consumers and related organizations in each of the communities were not only contributing financially to the community health security funds but also engaging in the related decision making processes.

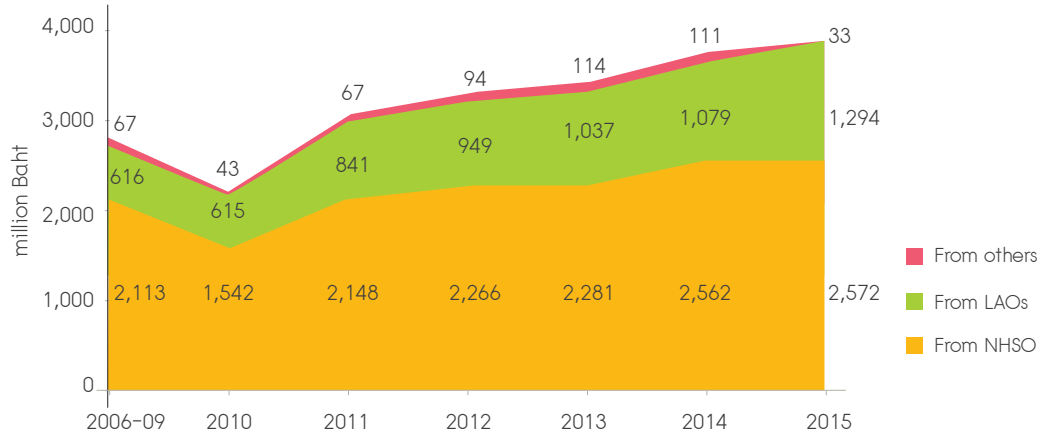
Figure 48 The number of local administrative organizations co-funding community health funds, FY2006-2015



Source: Local administrative management data, NHSO

The budget of The Community Health Security Fund in FY2015 was THB3,899 million (including interest). This amount came from three main sources: the NHSO, Local Administrative Organizations, and others (such as interest, consumers and the community). Funding from local administrative organizations increased from THB616 million (22.03% of the annual fund) in FY2006 to THB1,294 million (33.19% of the annual fund) in FY2015. Funding from the NHSO has increased from THB2,113 million (75.57% of the annual fund) to THB2,572 million (65.97% of the annual fund) in FY2015. Details of community health security funds classified by source are shown in figure 50.

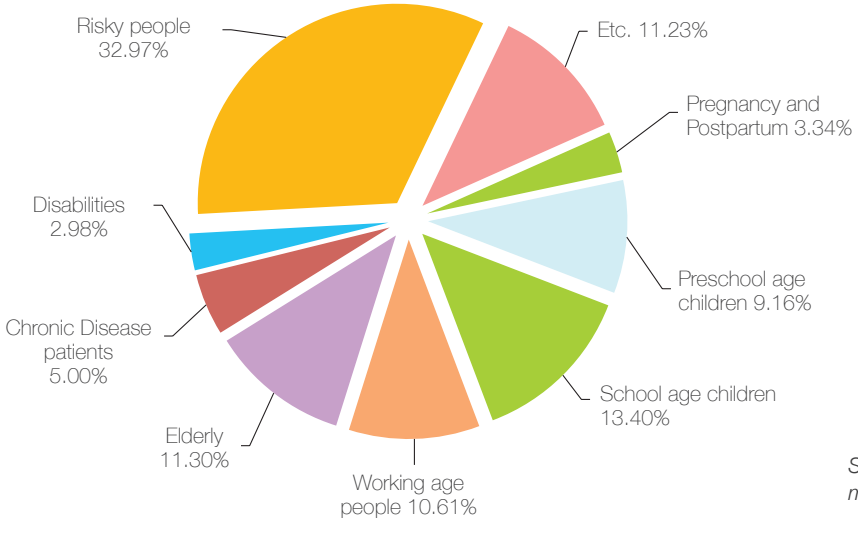
Figure 49 Community health security funds classified by source, FY2006-2015



Source: Local administrative management data, NHSO

If classified by target groups, a budget of 32.97 % was used for people at risk. The budgets for the youth, the elderly, and the working age were 15.31%, 12.66% and 12.03% respectively (Figure 51)

Figure 50 Percentages of local health security funds, FY2015, budgeted to each targeted group.



Source: Local administrative management data, NHSO

6.2 Consumer Rights Protection

To protect the consumer's rights regarding the use of and access to health services, the NHSO had opened various channels for inquiries, complaints, and coordination through hotlines (call 1330), letters, fax, e-mail, or direct contact. In the FY2015, there were 488,601 cases, divided into: 1) inquiries of 467,190 items, by consumers 432,915 items, by providers 34,275 items; 2) complaints related to general management 4,269 items; 3) complaints related to quality of care 14,025 items; and 4) coordination for referral 3,117 cases (Table 13)

Table 14 Number of inquiries, complaints related to general management, complaints related to quality of care, and referral issues serviced in FY 2011-2015

Type of services	2011	2012	2013	2014	2015
1. Inquiries (cases)	729,320	607,050	612,510	583,260	467,190
- from consumers	697,325	570,220	574,777	541,309	432,915
- from proviers	31,995	36,830	37,733	41,951	34,275
2. Complaints related to general management (cases)	4,386	4,370	4,420	3,828	4,269
3. Complaints related to quality of care (cases)	5,756	6,324	6,616	11,029	14,025
4. Referral issues (persons)	4,368	4,980	3,653	3,090	3,117
Total	**743,830**	**622,724**	**627,199**	**601,207**	**488,601**

Source: Consumer rights protection data, NHSO, 30 September 2015

6.2.1 Inquiries

Inquiries from consumers:

In the FY2015, the total number of inquiries was 432,915 of which 410,140 (94.74%) was in regards to UCS. There were 179,920 (43.87%) inquiries about their rights, 89,808 (21.90) inquiries about their rights and how to use services, and 85,267 (20.79%) regarding registration and service unit selection. (Table 14)

Table 15 The number of inquiries from consumers classified by callers and issues, FY2011-2015

Callers & Issues	2011	2012	2013	2014	2015
1. Consumers in UCS	690,350	559,946	557,690	512,490	410,140
1.1 Registration & chosing provider	208,775	141,399	136,596	94,798	85,267
1.2 Benefit package & accessing to it	93,629	93,426	117,989	114,362	89,808
1.3 Early payment for damage from health service in accordance with section 41 of the act	262	196	259	301	239
1.4 Health insurance status confirmation	323,876	264,993	244,245	244,111	179,920
1.5 Hospital information	29,008	19,156	19,106	15,793	14,790
1.6 Organization information	2,027	2,180	3,076	3,869	2,352

Callers & Issues	2011	2012	2013	2014	2015
1.7 Emergency Medical Claim for All	-	3,579	7,359	10,321	6,535
1.8 Others(news, other organizations, follow-up cases, etc.)	32,773	35,017	29,060	28,935	31,229
2. Consumers in CSMBS	681	2,497	5,290	5,350	4,082
3. Consumers in SSS	6,294	7,777	11,285	12,175	14,440
4. Consumers in Local Administrative Organization Scheme (LAOS)	-	-	512	11,294	4,253
Total	**697,325**	**570,220**	**574,777**	**541,309**	**432,915**

Source: Consumer rights protection data, NHSO, 30 September 2015

Inquiries from providers:

In the FY2015, the total number of inquiries from providers was 34,275 of which 29,515 (86.11%) were in regards to UCS. Of these 9,895 (33.53%) concerned data verification, 9,266 (31.39%) were general inquiries, such as relevant news, matters of other organizations, and 5,088 (17.24%) regarding registration and service unit selection. (Table 15)

Table 16 The number of inquiries from providers classified by schemes and issues, FY2011-2015

Schemes and Issues	2011	2012	2013	2014	2015
1. Providers in UCS	31,376	35,649	36,407	33,586	29,515
1.1 Registration & chosing provider	2,584	2,276	2,333	4,239	5,088
1.2 Benefit package	4,065	4,846	4,354	3,407	3,296
1.3 Receiving refund	1,092	1,074	491	637	665
1.4 Early payment for damage from health service in accordance with section 41 of the act	18	28	27	27	29
1.5 Early payment for damage from health service in accordance with section 18(4) of the act	22	21	22	79	18
1.6 Health insurance status confirmation	12,415	17,064	18,988	15,605	9,895
1.7 Hospital information	489	447	415	433	409
1.8 Organization information	400	436	444	651	482
1.9 Emergency Medical Claim for All	-	1,096	308	390	367
1.10 Others (news, other organizations, follow-up cases, etc.)	10,291	8,361	9,025	8,118	9,266
2. Providers in CSMBS	223	534	555	1,476	1,207
3. Providers in SSS	396	647	678	775	1,014
4. Providers in LAOS	-	-	93	6,114	2,539
Total	**31,995**	**36,830**	**37,733**	**41,951**	**34,275**

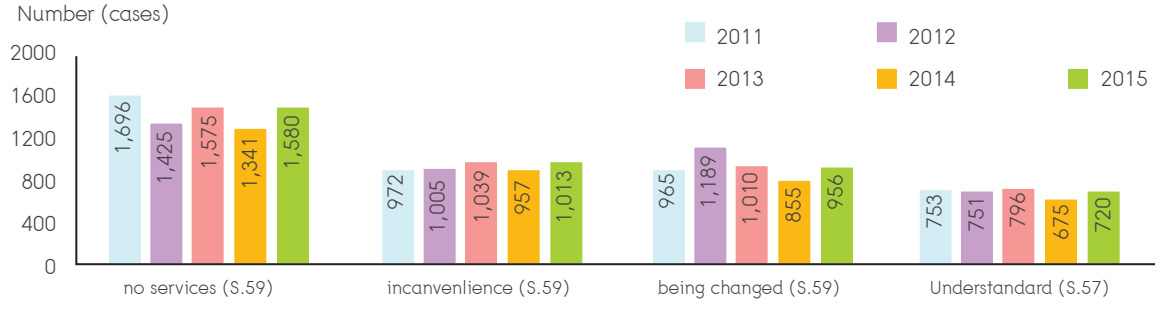
Source: Consumer rights protection data, NHSO, 30 September 2015

6.2.2 Complaints

Receiving and responding to complaints is a mechanism of consumer rights protection, a method of indicating and fixing problems in the health service system. It allows for better communication between consumers and providers, helping in the improvement and development of the system.

In the FY2015, the NHSO had received 4,269 complaints, of these 1,580 complaints (37.01%) were about "health unit not providing treatment pursuant to their rights" (section 59), 1,013 complaints (23.73%) were about "inconvenience while using the service", 956 complaints (22.39%) were about "being charged fees for service by health care unit without authority", and 720 complaints (16.87%) were about "health care units failing to meet the prescribed standard of service" (section 57) (Figure 52). These complaints had been already resolved for 3,585, 2,862 (74.05%) were already resolved within 25 working days. (Table 16)

Figure 51 The number of complaints concerning quality of care classified by issues, FY2011-2015



Source: Consumer rights protection data, NHSO, 30 September 2015

Table 17 Executing complaints during FY2011-2015

Complaints	2011	2012	2013	2014	2015
1. Total	4,386	4,370	4,420	3,828	4,269
2. Already been executed	4,267	4,173	4,133	3,346	3,585
3. Already been executed within 25 days	4,104	4,102	4,051	3,268	2,862
4.Being in the process less than 25 days	119	143	248	482	404
5. % of already been executed within 25 days	96.18	97.04	97.10	97.67	74.05

Source: Consumer rights protection data, NHSO, 30 September 2015

6.2.3 Petition

In the FY2015, the NHSO had received 14,025 petitions, of these 13,408 petitions (95.60%) regarding UCS, 8,474 petitions (63.20%) were regarding consumer rights issues, 1,640 petitions (11.96%) were requests for assistance, and 1,340 petitions (9.99%) in regards to registration and service unit selection (Table 17)

Table 18 Number of petitions classified by schemes and issues, FY2011-2015

Schemes & Issues	2011	2012	2013	2014	2015
1. UCS	5,742	5,773	6,012	10,100	13,408
1.1 registration and selecting service unit	786	737	779	767	1,340
1.2 having right status problem	3,789	3,330	3,373	7,343	8,474
1.3 asking for help	1,134	1,252	991	1,040	1,604
1.4 consult/recommend	380	351	504	464	834
1.5 being refused pursuant to section 7	8	5	-	-	-
1.6 being refused to use EMCO service	-	288	362	224	746
1.7 ect.	-	-	3	262	410
2. CSMBS	4	477	499	510	312
3. SSS	10	74	105	100	158
4. LAOs	-	-	-	319	147
Total	**5,756**	**6,324**	**6,616**	**11,029**	**14,025**

Source: Consumer rights protection data, NHSO, 30 September 2015

6.2.4 Coordination for referral

In the FY2015, the coordination center for referring accident & emergency cases had received 3,117 patient referral requests, of these 2,891 cases (92.75%) were in UCS, 2,177 cases (75.30%) were from private hospitals outside EMCO, 516 cases (17.85%) were from under-competency ill-equipped service units. Moreover, this center also coordinated referral patients in other schemes and patients without health insurance. The reasons for terminating some referral cases because they were better, they want to go home, they died, they changed their decision, or too risky to move. (Table 18)

Table 19 Number of coordination for referrals classified by schemes & reasons, FY2010-2015

Schemes & Reasons for referral	2011	2012	2013	2014	2015
1. Refer to UCS	4,280	4,538	3,255	2,832	2,891
1.1 being in private hospitals outside EMCO service	3,464	3,588	2,537	2,215	2,177
1.2 no bed	171	211	140	120	120
1.3 not enough competency	576	644	505	447	516
1.4 want to go back to contracting unit	69	95	73	50	78
2. Refer to CSMBS	58	297	263	184	144
3. Refer to SSS	25	80	64	34	51
4. Refer to LAOs Scheme	-	-	-	17	10
5. Etc.	5	65	71	23	21
Total	**4,368**	**4,980**	**3,653**	**3,090**	**3,117**

Source: Consumer rights protection data, NHSO, 30 September 2015

6.2.5 Compensation and Healthcare service negligence.

Section 41 of the National Health Security Act concerns the payment of preliminary aid in cases where a beneficiary is damaged by medical treatment provided by a service unit where no wrongdoer is identified, or where the wrongdoer is identified but the beneficiary has not received compensation within a reasonable period of time. In the FY2015, of the 1,045 complaints lodged, 824 cases (78.85%) received compensation, totaling THB202.929 million. Of these cases 442 (53.64%) were compensated an amount totaling THB157.188 million because of death or permanent disability, 277 cases (33.62%) were compensated THB20.062 million for injury or continuing illness, and 105 cases (12.74%) were compensated THB22.879 million for loss of organ or partial disability.

Healthcare providers lodged 398 requests for preliminary aid, of these 325 (81,66%) were compensated an amount totaling THB3.354 million. Of the 325 cases, 323 received a total of THB3.014 million for injury or continuing illness and 2 were compensated a total of THB0.33 million for death or disability. (Table 19)

Table 20 Consumers & providers and preliminary assistance due to their damages from health service, FY2011-2015

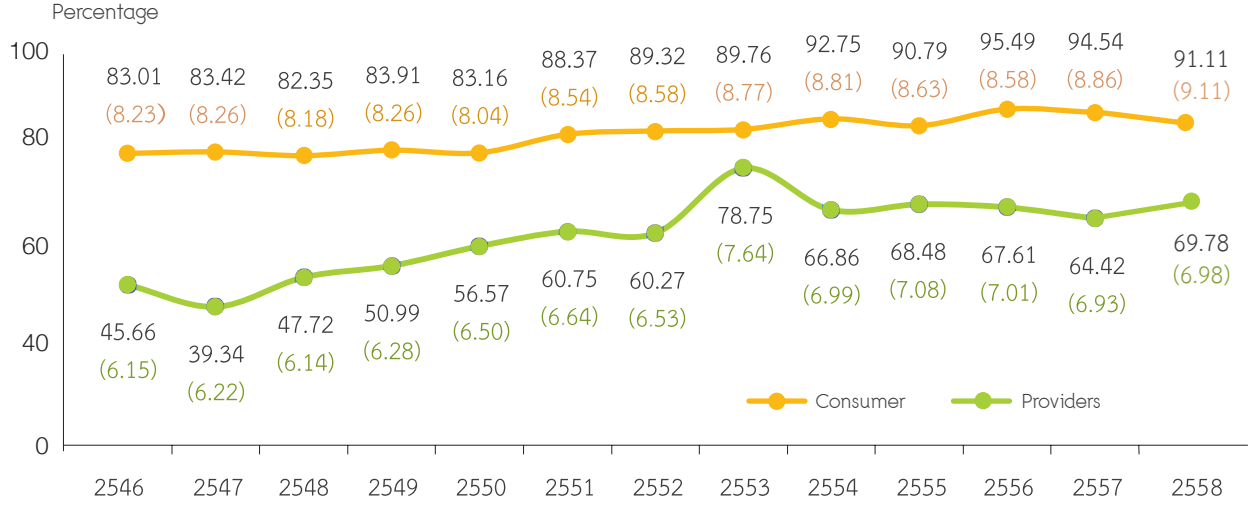
	2011		2012		2013		2014		2015	
	cases	THB	cases	THB	cases	THB	cases	THB	cases	THB
Consumers										
1. Lodging petition	965		951		1,182		1,112		1,045	
2. Receiving compensation	783		834		995		931		824	
2.1 death / complete disability	401	66,162,000	401	69,360,000	533	149,926,000	478	166,370,000	442	157,188,000
2.2 organ loss / partial disability	141	15,097,000	140	15,250,000	125	20,311,200	116	24,631,800	105	22,878,800
2.3 injury / continuing illness	241	9,007,330	293	11,254,000	337	17,936,100	337	23,875,000	277	20,061,500
3. Being in appeal	114	1,940,000	88	2,763,000	98	3,402,000	112	3,562,400	82	2,801,000
Total	**783**	**92,206,330**	**834**	**98,627,000**	**995**	**191,575,300**	**931**	**218,439,200**	**824**	**202,929,300**
Providers										
1. Lodging petition	625		624		532		526		398	
2. Receiving compensation	505		511		454		420		325	
2.1 death / complete disability	2	400,000	3	550,000	2	400,000	3	1,000,000	0	-
2.2 organ loss / partial disability	-	-	-	-	4	390,000	2	270,000	2	330,000
2.3 injury / continuing illness	503	3,811,050	508	3,944,200	448	3,578,050	415	3,829,100	323	3,013,500
3. Being in appeal	21	161,000	19	10,000	14	2,000	9	100,000	13	10,000
Total	**505**	**4,372,050**	**511**	**4,504,200**	**454**	**4,370,050**	**420**	**5,199,100**	**325**	**3,353,500**

Source: Consumer rights protection data, NHSO, 30 September 2015

6.3 Satisfaction of Consumers and Health care providers

Each year surveys are taken to assess satisfaction levels of both UCS consumers and Healthcare providers. Results indicated that the satisfaction level of consumers increased from 8.23 out of 10 (83.01%) in the FY2003 to 9.11 (91.11%) in FY2015. During the same period providers scores rise from 6.15 (45.66%) to 6.98 (69.78%). see Figure 53. There may be several factors that affect why UCS consumer satisfaction levels were higher than those of providers. However, from these results we can surmise that, although the UCS implementation is doing well at accommodating the needs of consumers, some areas of management need improving in order to better satisfy the providers. Whatever the changes, the benefit of the consumer must always come first.

Figure 52 Consumers' and providers' satisfaction scores, FY2003-2015



Source:

1. *FY2003 – 2013: Satisfaction survey report, Academic Network for Community Happiness Observation and Research (ANCHOR), Assumption University of Thailand*
2. *FY2014: Satisfaction survey report, NIDA poll, National Institute of Development Administration, Thailand*
3. *FY2015: Surveying by the Institute for Social and Economic Sciences, Dhurakij Pundit University, May – August, 2015*

PART 2

The National Health Security Office

1. Vision, Goals, Missions, and Strategies
2. Budget Management
3. The NHSO Key Performance Indices in FY2015
4. Challenges in Universal Health Coverage system implementation

1. Vision, Goals, Missions and Strategies

The National Health Security Office (NHSO) was established by the National Health Security Act B.E. 2545, in 2002. All Thai citizens have been insured by the health universal coverage since the Act was passed by the parliament in November 2002. The National Health Security Office (NHSO) was established by the Act to manage universal health coverage for Thai citizens. As established in Section 24 of the Act, the NHSO is a government legal entity operating autonomously under policies set by the National Health Security Board, chaired by the Public Health Minister.

The Universal Coverage Scheme (UCS) announced by the National Health Security Act covers all Thai citizens who are not insured by other government health insurance schemes, i.e., 1) the Civil Servants Medical Benefit Scheme (CSMBS) for civil servants and their dependents; 2) the Social Security Scheme (SSS) providing health care for employees of private firms; 3) local government schemes which are comparative to the CSMBS. If Thai citizens are not eligible for at least one of these schemes based on employment or otherwise, they may register to the UCS. Consequently, access to high quality health care is still available to them.

Head office of the NHSO is located at the following address:
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"The Government Complex" Building B, 2-4 Floor
120 Moo 3 Chaengwattana Road,
Lak Si District, Bangkok 10210 Thailand
Tel 66 2 141 4000 (Office hours)
Fax 66 2 143 9730-1
Office Hours: Mon.-Fri. 08:30 – 16:30
Call Center (24 hrs.): 1330 (Local calls only)

There are a total of 13 branches of NHSO regional offices nationwide as follows:

National Health Security Office Region 1 Chiangmai
Post Office Building, 2nd Floor
6 Mahidol Road, Suthep Subdistrict, Muang, Chiangmai 50200 Thailand
Tel 66 53 285 355 (Office hours)
Fax 66 53 285 364
Provinces in Region 1:
Chiangmai, Chiangrai, Phayao, Maehongson, Lampang, Lampoon, Phrae, Nan

National Health Security Office Region 2 Phitsanulok
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118 Bhutabucha Road, Naimuang Subdistrict, Muang, Phitsanulok 65000 Thailand
Tel 66 55 245 111 (Office hours)
Fax 66 55 247 111
Provinces in Region 2:
Phitsanulok, Tak, Phetchabun, Sukothai, Uttaradit

National Health Security Office Region 3 Nakhonsawan
1045/2 Moo 10 Nakhonsawantok Subdistrict, Muang, Nakhonsawan 60000 Thailand
Tel 66 56 371 831-7 (Office hours)
Fax 66 56 371 838
Provinces in Region 3:
Nakhonsawan, Kamphaengphet, Chainat, Phichit, Uthaitani

National Health Security Office Region 4 Saraburi
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Muang, Saraburi 18000 Thailand
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Fax 66 36 213 263
Provinces in Region 4:
Saraburi, Ayutthaya, Lopburi, Singburi, Angthong, Phathumtani, Nontaburi, Nakhonnayok

National Health Security Office Region 5 Ratchaburi
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Fax 66 32 332 593
Provinces in Region 5:
Ratchaburi, Kanchanaburi, Prachuapkhirikhan, Phetburi, Samutsongkhram, Nakhonpathom, Suphanburi, Samutsakhon

National Health Security Office Region 6 Rayong
115 Star Plaza Building, 2nd Floor, Shopping Center 4 Road,
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145 Srinarong Road, Naimuang Subdistrict, Muang, Ubonratchathani 34000 Thailand
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Kanchanavithi Road, Bangkung Subdistrict
Muang, Suratthani 84000 Thailand
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Fax 66 77 274 818
Provinces in Region 11:
Suratthani, Krabi, Chumporn, Nakhonsithamarat, Phangnga, Phuket, Ranong

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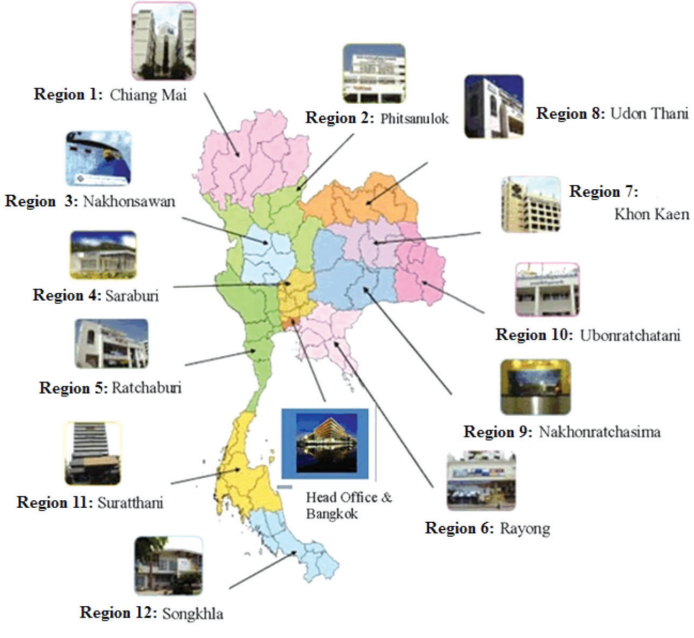
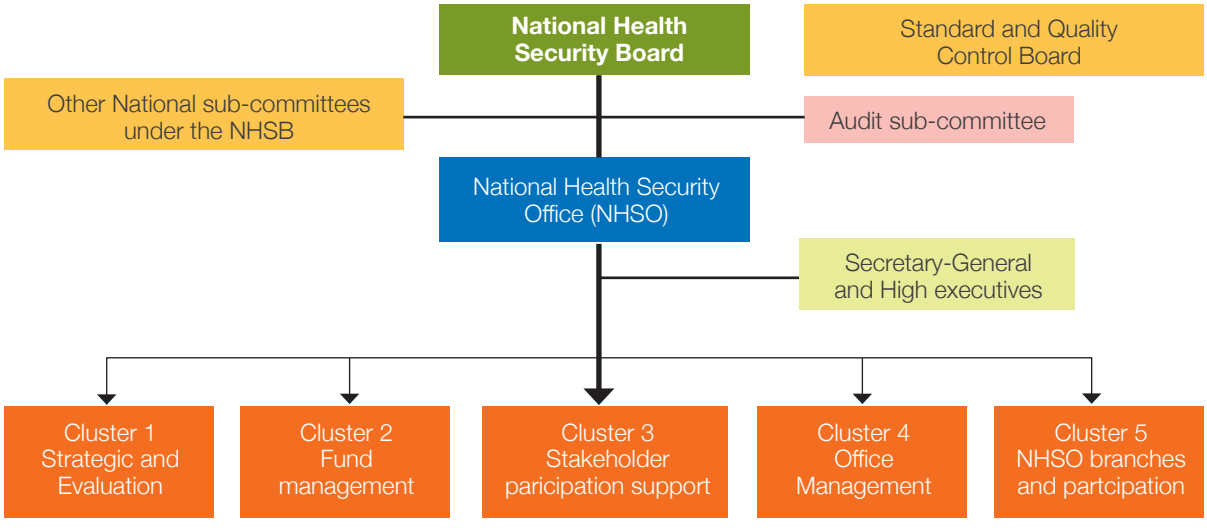


Board of Directors

The NHSO operates autonomously under policies set by the National Health Security Board chaired by the Public Health Minister. Another board also established by the National Health Security Act is the Standard and Quality Control Board. The audit sub-committee and other 13 related sub-committees were set up by the two boards in order to support the boards' policies. The Standard and Quality Control Board was assigned by law to have powers and duties relating to the standards and quality of healthcare services under the UCS. The audit sub-committee acts as independent auditors of NHSO operations. The structure of the NHSO's Board of Directors is shown in the following diagram.

The NHSO's Board of Directors



Dr. Sakchai Kanjanawatana
Deputy Secretary-General

Dr. Weerawat Phankrut
Deputy Secretary-General

Dr. Winai Sawasdivorn
Secretary-General

Dr. Prateep Dhanakijcharoen
Deputy Secretary-General

Mrs.Netnapis Suchonwanich
Deputy Secretary-General

1.1 Vision

"All residents in Thailand have assured health protection under the universal health coverage."

1.2 Goals

All residents in Thailand have health security, allowing them access to necessary health care with equity, quality, efficiency, effectiveness, social accountability, and without financial risk, especially without financial catastrophe.

1.3 Missions

1. Supporting Univeral Health Coverage (UHC) to cover all citizens in Thailand,

2. Promoting every stakeholder's ownership and participation in the universal coverage scheme (UCS),

3. Supporting health service development under the UCS to meet high quality standards that are easily accessible for all, while satisfying both consumers and health providers,

4. Promoting the development of good relations between providers and consumers with an emphasis on respect for the rights and dignity of each other.

5. Continued improvement and efficiency to the National Health Security Fund's financial management,

6. Promoting equality among government health insurance schemes for both benefit packages and service provision.

1.4 Strategies

1. Providing robust mechanisms and measures for protecting the health of all Thai citizens.

1.1. Promoting the development of mechanisms to cover residents who have no health insurance, especially the disadvantaged,

1.2. Protecting the rights of residents covered by government health insurance schemes, e.g., Local Administrative Health Insurance Scheme, State Enterprise Health Insurance Scheme, and other small autonomous government offices,

1.3. Developing public relations mechanisms, to bring awareness and education to both consumers and providers with regards to their rights and responsibilities under the UHC,

2. Encouraging continued participation and ownership through constructive and collaborative development,

2.1. Focusing on working with various health organizations for the further advancement of the UHC, especially with the Ministry of Public Health,

2.2. Educating all stakeholders about the UHC at both individual and organizational levels,

2.3. Promoting both regional and local participation of the UHC health service management system,

2.4. Strengthening relationships between consumers and providers,

3. Strengthening health service system development. Ensuring the primary health care system also meets the needs of local requirements,

3.1. Improving the quality of care at service units on all levels ensuring they meet the national standard. Allowing all residents access to healthcare services as and when required, especially at primary health care level,

3.2. Conducting research & development, innovating new medicines, techniques etc., to support health promotion and

disease prevention, in order to increase health care accessibility with equality,

3.3. Recognizing and supporting the value and dignity of providers in the primary health care system. Enhancing workforce development by using local collaboration and resources,

3.4. Developing mechanisms and networks to facilitate access to healthcare services at all levels in compliance with the national health care plan,

3.5. Supporting primary health care service management by local administrative organizations and the private sector, especially in urban areas,

4. Enhancing harmonization among government health insurance schemes,

4.1. Developing benefit packages based on both overall benefit and their cost-effectiveness. Allowing people, regardless of their benefit package, to more efficiently access appropriate healthcare services,

4.2. Studying alternative resource management systems to better provide both current and new services in the future,

4.3. Developing standard financial mechanisms that can be used to harmonize all government health insurance schemes,

4.4. Upgrading systems such as management, information processing, etc., used by government health insurance schemes, to a single universal standard allowing improved communication between stakeholders,

5. Building and developing a robust administration for the universal coverage scheme,

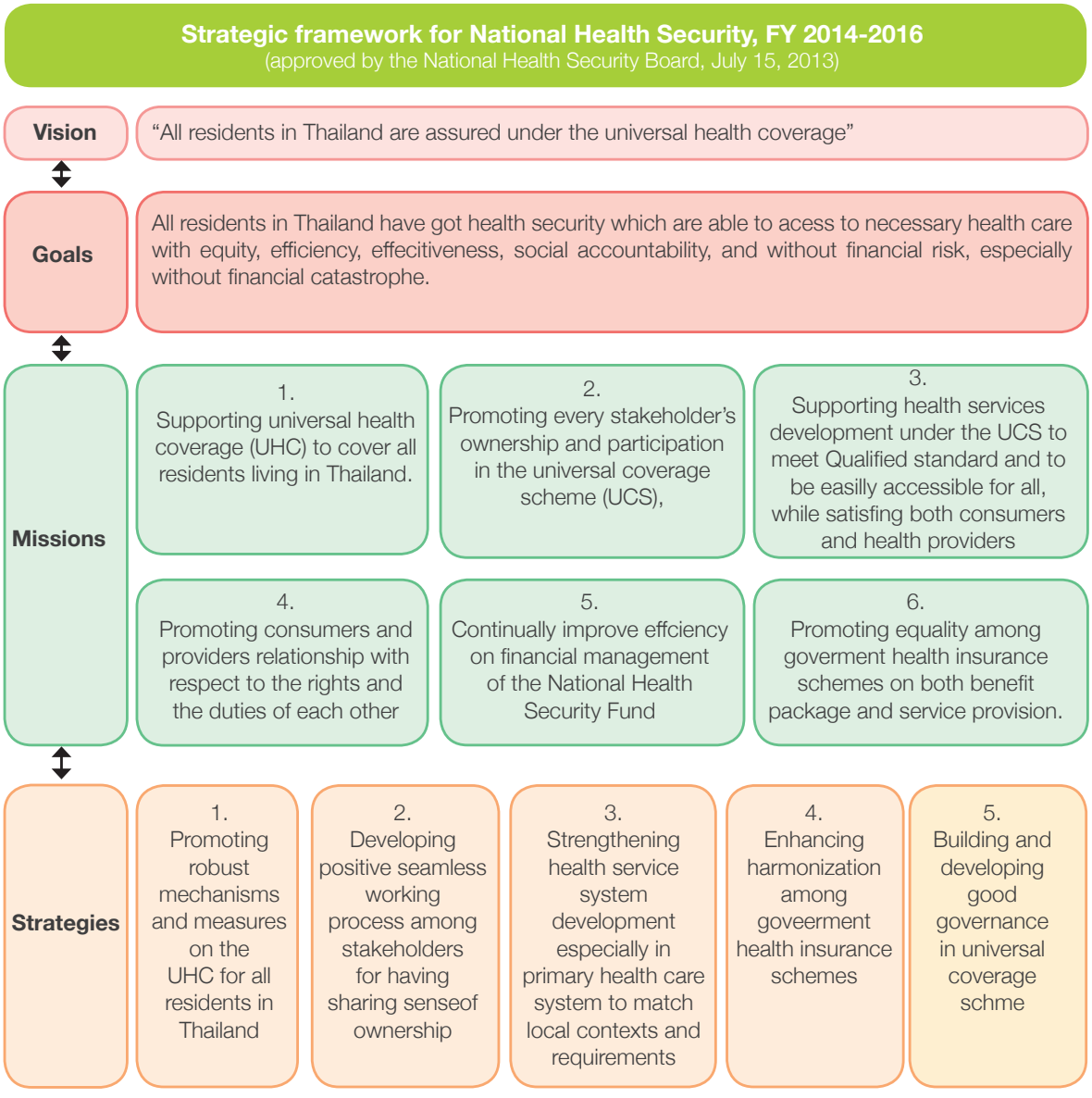
5.1. Developing fund and general management in the UHC, with efficient administration,

5.2. Supporting decentralization coupled with continuous auditing, monitoring and evaluation of the system, focusing on health outcomes,

5.3. Promoting human resource development in the UHC, targeting both competency and ethics from the national level downwards,

5.4. Evolving the National Health Security Office into an archetype in the field of UHC development; promoting the worldwide exchange of knowledge and ideas.

Figure 53 Strategic framework of Universal Health Coverage Development, FY2014-2016



2. Budget Management

The NHSO's budget is divided into two funds, managed under the supervision of the National Health Security Board, as follows:

1. The National Health Security Fund (or UCS Fund) is used to bring efficient and accessible services to the public through healthcare providers,

2. NHSO Administrative Fund provides the budget for operational costs. It is divided into two subsections, the routine operations budget and strategic operations budget.

The approved government budgets for the UCS fund and the NHSO administrative fund increased from THB101,984.10 million in FY2008 to THB153,151.66 million in FY2015, and from THB807.65 million in FY2008 to THB1,427.10 million in FY2015, respectively as shown in table 20.

Table 20 Approved government budgets for the UCS fund and the NHSO administrative fund, FY2006-2015

(unit: million THB)

Budget for	2008	2009	2010	2011	2012	2013	2014	2015
(1) UCS fund	101,984.10	108,065.09	117,969.00	129,280.89	140,609.40	141,539.75	154,257.98	153,151.66
(2) Admin. fund	807.65	936.75	858.46	961.30	1,099.80	1,209.12	1,442.19	1,427.10
% of (2)/(1)	0.79	0.87	0.73	0.74	0.78	0.86	0.93	0.93

Source: Bureau of Planning and Evaluation, NHSO

Net UCS fund approved by the government for FY2015 after providers' salaries were deducted was THB114,963.640 million; classified into the following categories:

1. Medical services (THB102,530.724 million)
2. HIV/AIDS health service packages (THB2,811.901 million)
3. CKD health service packages (THB5,247.224 million)
4. Chronic disease (DM, HT) health service packages (THB908.987 million)
5. Budget to improve efficiency in remote areas (THB464.804 million)
6. Incentive for health personnel under the MoPH (THB3,000.000 million)

The UCS fund allocated to healthcare providers in the FY2015 (end at September-30, 2015) was THB120,221.353 million. It is classified into the following categories:

1. Medical services (THB102,601.532 million)
2. HIV/AIDS health service packages (THB2,811.900 million)
3. CKD health service packages (THB5,372.180 million)
4. Chronic disease (DM, HT) health service packages (THB908.987 million)
5. Budget to improve efficiency in remote areas (THB464.804 million)
6. Incentive for health personnel under the MoPH (THB3,000.000 million)
7. Medical services for Local Administrative Organizations (THB5,061.950 million)

Other incomes in the FY2015 are bank interest (THB142.683 million), medical service cost refund from the FY2014 (THB79.757 million), returned medical service costs paid in the FY2014 after audit (THB23.547 million), and miscellaneous (THB32.982 million). Thus, the total income of the UCS fund in the FY2015 was THB83.206 million higher than the total expenses.

The NHSO administrative fund total income in the FY2015 was THB1,584,388,694.22. This number consists of the government budget (THB1,427,100,000) plus various other revenue (THB157,288,694.22). Total expenses during FY2015 was THB1,614,472,747.15 which is classified into human resource expenditure (THB558,268,950.25), operation cost (THB882,505,947.28), depreciation cost (THB173,647,582.49), and other expenditures (THB50,276.13). Therefore, the income of the NHSO administrative fund in the FY2015 was THB30,084,061.93 lower than the total expenses.

3. The NHSO Key Performance Indices in the FY2015

Performance of the NHSO's operation in the FY2015 was evaluated by the Comptroller General's Department (CGD) using KPI. Four aspects of performance were evaluated; financial management, operation management, responsiveness to stakeholders' needs, and working capital development. The highest score for each is 5. The final score of the NHSO performance in the FY2015 was 4.6952, as shown in table 21.

Table 22 Key performance indices of the NHSO in FY2015

No.	KPI	Score
1	**Financial management (3%)**	**5.0000**
1.1	Complying with financial plan	5.0000
2	**Responding to stakeholders' needs (27%)**	**4.3948**
2.1	Satisfaction of stakeholders	3.9107
	2.1.1 Satisfaction of consumers	5.0000
	2.1.2 Satisfaction of healthcare providers	2.7560
	2.1.3 Satisfaction of other stakeholders	3.9760
2.2	Hospital Accreditation	5.0000
2.3	Complaint process	5.0000
3	**Operation management (40%)**	**4.9191**
3.1	Efficiency in budget management	4.9928
	3.1.1 Complying with budget plan	4.9856
	3.1.2 Budget report	5.0000
3.2	UCS service center in 10-59 beds hospitals	5.0000
	3.2.1 UCS service center in 10-29 beds hospitals	5.0000
	3.2.2 UCS service center in 30-59 beds hospitals	5.0000

No.	KPI	Score
3.3	Promoting participation of local administrative organizations	
	3.3.1 Local UC funds participate in Verbal Screening of DM & HT	5.0000
	3.3.2 Local UC funds participate in community healthcare services for elderly and disability including health promotion, disease prevention and rehabilitation	5.0000
3.4	Promoting home healthcare	
3.5	Complication screening in DM & HT	4.6000
	3.5.1 Complication screening in DM	4.2000
	3.5.2 Complication screening in HT	5.0000
3.6	CKD patients accessibility to Renal Replacement Therapy	5.0000
3.7	Viral load control in HIV/AIDS patients	5.0000
3.8	Self-Assessment in 30-59 beds hospital	5.0000
3.9	Collaboration of the three main government health insurance schemes	5.0000
3.10	Success of complaint solving within 25 office days	5.0000
4	**Working capital development (30%)**	
4.1	Performance of the committee	4.4000
4.2	Risk management	
4.3	Internal control	4.8200
4.4	Internal audit	5.0000
4.5	information management	5.0000
4.6	human resource management	4.3000

Source: National Health Security Fund, NHSO FY 2015 (October, 2014 – September,. 2015)

4. Challenges in Universal Health Coverage System Implementation

Developing and Implementing the Thai UCS depends on several factors, both supporting and undermining the system. One of the most important factors is the government policy announced by Prime Minister, General Prayuth Chan-o-cha on September 12, 2014. It gives priority to stability, prosperity and sustainability. Its aim is to reduce inequality in society by increasing accessibility to government services and improving quality of healthcare services. Special attention is awarded to the elderly and, because the coming together of the ASEAN Economic Community, Social diversity. Ensuring every resident of Thailand regardless of status has access to the highest quality healthcare.

To achieve success the UCS requires cooperation and support from both stakeholders and government policy makers. Past implementations of the Thai UCS had certain degrees of success and were accepted by the international community as a role model of universal health coverage; however, social, economic and other unforeseen changes may impact the Thai UCS system in the future. Even now we can see some of the challenges:

1. Slow economic growth can make managing the national health security fund more difficult. The challenge is how to improve the efficiency of the system. Creating a new payment mechanism, which does not overly affect consumers, may be necessary to control expenditure long term. Though, it may well impact relations between the NHSO and health service facilities.

Procuring additional funds and resources, long term financial management and controlling the risks of system sustainability are all big challenges for the National Health System in the future. The challenge is to understand society, and find the right choice in accordance with the situation of Thailand; for the sake of the people and the country as a whole.

2. An increased demand for healthcare in Thailand due to social change, urbanization, population structural change, the aging society expansion, emerging and re-emerging diseases, and technological advance. In response to this challenge efficiency needs to improve in specific areas of management, such as: the elderly care service system, NCDs & chronic diseases management, technology assessment, TTM

utilization, urban health system management, health service network development with complete referral systems, campaigns for health promotion & disease prevention, as well as health care for the disadvantaged.

3. Disparity among government healthcare systems needs to be addressed. Integrating them so that each and every person receives access to the necessary healthcare service, such as emergency services and high cost diseases services. This challenge needs strong policies to be implemented to ensure the developed system will be both sustainable in impartial. Moreover, common management systems should also be integrated, such as: payment data systems, health service data systems, registration systems, monitoring systems, etc. to optimize the use of resources and reduce redundant operations.

4. Conflicts between purchaser (NHSO) & providers (MoPH & hospitals) and conflicts among stakeholders are still the big challenge. The focus needs to be on mutual consent by promoting participation, cooperation, clarification, and negotiation. Open discussion and negotiation based on empirical data will help reduce conflicts. Nevertheless, organizational development of the NHSO cannot be overlooked; it too must be improved and become a more highly efficient organization.

PART 3

The National Health Security Board and The Health Service Standard and Quality Control Board

1. Members of the National Health Security Board,
   FY2015 (Oct. 2014 - Sept. 2015)
   Duties and Authorities of the National Health Security Board
2. Members of the Health Service Standard and Quality Control Board,
   FY2015 (Oct. 2014 - Sept. 2015)
   Duties and Authorities of the Health Service Standard and Quality Control Board

1. Members of the National Health Security Board, FY2015 (Oct. 2014 – Sept. 2015)

No.	Name	Surname	Position	
1.	Mr. Rajata	Rajatanavin	Minister of Public Health (Aug.2014-Aug.2015)	Chairman
	Mr.Piyasakol	Sakolsatayadorn	Minister of Public Health (Sept.2015 -)	
2.	Mr. Charal	Trinvuthipong	Medicine and public health expert	Member
3.	Mr. Kanit	Sangsubhan	Fiscal financing expert	Member
4.	Ms. Somsri	Phaosawat	Health insurance expert	Member
5.	Mr. Pinit	Hirunyachote	Alternative medicine expert	Member
6.	Mr. Narongsak	Angkasuwapla	Thai traditional medicine expert	Member
7.	Mr. Ittaporn	Khanacharoen	Social science expert	Member
8.	Mr. Sangiam	Boonjuntr	Law expert (Nov.2011-Dec.2014)	Member
	Mr. Chalermsak	Jantorntim	Law expert (Mar.2015-Nov.2015)	
9.	Mr. Narong	Sahametapat	Permanent Secretary of Public Health	Member
	Mr. Surachate	Satitniramai	Acting Permanent Secretary of Public Health (Mar.2015-Jul.2015)	
	Mr. Amnuay	Kajeena	Acting Permanent Secretary of Public Health (Jul.2015-Sep.2015)	
10.	Mr. Charin	Chakapak	Deputy Permanent Secretary of Interior	Member
11.	Mr. Pakorn	Amorncheewin	Deputy Permanent Secretary of Labor (Jul.2013-Sep.2014)	Member
	Ms. Pannee	Sriyuthasak	Deputy Permanent Secretary of Labor (Oct..2014-Nov.2015)	

No.	Name	Surname	Position	
12.	Mr. Boonyarak	Poonchai	Representative from Ministry of Defence (Oct.2014-Mar.2015)	Member
	Mr. Triroje	Krutwaecho	Representative from Ministry of Defence (Apr.2015-Nov.2015)	
13.	Ms. Suthasri	Wongsaman	Permanent Secretary of education (Oct.2013-Oct.2014)	Member
	Mr.Kamjorn	Tatiyakavee	Permanent Secretary of education (Oct.2014-Sep.2015)	
14.	Ms. Urawee	Ngaourungrueng	Deputy Permanent Secretary of Commerce	Member
15.	Mr. Pongpanu	Sawetaroon	Deputy Permanent Secretary of Finance (Jun.2013-Jan.2015)	Member
	Mr. Manus	Jaemwaeha	Representative from Ministry of Finance (Feb.2015-Nov.2015)	
16.	Mr. Kowit	Mekaruna	Representative from Bureau of the Budget	Member
17.	Mr. Amnarj	Kusalanont	Representative from the Medical Council of Thailand	Member
18.	Mr. Toranin	Jarusjarungkiat	Representative from the Dental Council	Member
19.	Mr. Kitti	Pitaknitinant	Representative from the Pharmacy Council of Thailand	Member
20.	Ms. Tassana	Boontong	Representative from Thailand Nursing and Midwifery Council	Member
21.	Mr. Aurchat	Kanjanapitak	Representative from Private Hospital Association	Member
22.	Mr. Ittipol	Khunpluem	Representative from Other Forms of Local Administrations	Member
23.	Mr. Worawit	Buranasiri	Representative from Provincial Administrative Organizations	Member
24.	Mr. Kittisak	Kanasawat	Representative from Municipality agencies	Member
25.	Mr. Surakij	Suwankam	Representative from Subdistrict Administrative Organizations	Member
26.	Mr. Chusak	Janthayanond	Representative from NGOs for the disability	Member
27.	Mr. Vichai	Chokevivat	Representative from NGOs for the elderly	Member
28.	Ms. Saree	Ongsomwang	Representative from NGOs for agriculturists	Member
29.	Ms. Suntaree	Sengking	Representative from NGOs for labour forces	Member
30.	Mr. Nimitr	Tienudom	Representative from NGOs for people with HIV or chronic diseases	Member

Authority and duties of the National Health Security Board

In accordance with section 18 of the National Health Security Act B.E. 2545 (A.D.2002), the National Health Security Board has been designated the following authority and duties;

1. To establish the service standards of public health services, and network services. To ensure the standards of National Health Security services are, and remain, effective;

2. To provide advice to the Minister and to appoint a ministerial declaration for the implementation and execution of this Act;

3. To determine the type and scope of health services that are essential to health, sustainability, and the rates of cost sharing pursuant to section 5 of this Act;

4. To prescribe the rules of fund management and implementation;

5. To set and enforce the rules, procedures and conditions for the removal of the Secretary-General under Article 31; and to prescribe the qualifications and prohibitions in the appointment of the Secretary-General;

6. To issue and enforce the rules and regulations pertaining to the receipt of money, payments, and other such financial matters pursuant to section 40;

7. to prescribe rules, procedures, and conditions on payment of preliminary aid to reimburse a beneficiary who is subject to damage or injury caused by any service provided by a health care unit where the wrongdoer is non-apparent or the wrongdoer is apparent but such beneficiary can not be reimbursed within a period deemed appropriate in accordance with section 41;

8. To support and coordinate with the local government in the implementation and administration of health care in local areas as appropriate, with due consideration to their readiness, reasonableness, and need, in order to establish national health security in accordance with section 47;

9. To set and support guidelines for community organizations and the private sector curtailing the operation of services for profit. The Implementation and management of funds in local areas as available, suitable and required, encouraging participation in the process of establishing national health security in accordance with section 47;

10. To prescribe rules for receiving and addressing feedback from providers and beneficiaries conducive to improved quality and standards of the health service;

11. To prescribe rules on penalties, administrative fines and the revocation of enrollment;

12. To create reports on all matters relevant to the Board's activities and conduct including, but not limited to, their duties and obstacles faced. All accounts and finances of the Board to must be submitted annually to the Cabinet, the House of Representatives, and the Senate within six months from the last day of the fiscal year;

13. To hold an annual meeting allowing the Board to hear the general opinions of both providers and beneficiaries;

14. To perform such other duties as prescribed by this Act, the Minister, or other laws.

No.	Name	Surname	Position	
31.	Mr. Winai	Sawasdivorn	Secretary-General of NHSO (Nov.2011-Jun.2015)	Secretary
	Mr.Prateep	Tanakijjaroen	Acting Secretary-General of NHSO (Jun.2015-Nov.2015)	

2. Members of the Health Service Standard and Quality Control Board, FY2015 (Oct. 2014 – Sept. 2015)

ลำดับ	ชื่อ	สกุล	ตำแหน่ง	
1.	Ms. Prasobsri	Ungthavorn	Representative from the Royal Thai College of Pediatricians	Chairman
2.	Mr. Suphan	Srithamma	Director-General of the Department of Medical Services	Member
3.	Mr. Paisarn	Dunkum	Representative from FDA office	Member
4.	Mr. Anuwat	Supachutikul	Representative of the Healthcare Accreditation Institute	Member
5.	Mr. Akom	Pradittasuwan	Director of Bureau of Sanatorium and Art of Healing	Member
6.	Mr. Somsak	Lolekha	Representative from the Medical Council of Thailand	Member
7.	Ms.Krisada	Swangdee	Representative from Thailand Nursing and Midwifery Council	Member
8.	Mr. Paisan	Kangvonkit	Representative from the Dental Council	Member
9.	Mr. Amnouy	Preukpakpoom	Representative from the Pharmacy Council of Thailand	Member
10.	Mr. Jesada	Anucharee	Representative of Lawyers Council	Member
11.	Mr. Pongpat	Patanavanich	Representative from private hospitals	Member
12.	Mr. Vijai	Amaralikit	Representative from Municipality agencies	Member
13.	Mr. Paibul	Upattisaring	Representative from Provincial Administrative Organizations	Member
14.	Mr. Phatarapol	Champarat	Representative from Subdistrict Administrative Oraganizations	Member
15.	Mr. Surin	Koocharoenprasit	Representative from Other Forms of Local Administrations	Member
16.	Ms. Kannika	Panya-amornwat	Representative from Nursing and Midwifery Practitioner group	Member
17	Mr. Kamol	Sredchaiyan	Representative from Dentist group	Member
18.	Mr. Apichart	Pengrungrojchai	Representative from Pharmacist group	Member

ลำดับ	ชื่อ	สกุล	ตำแหน่ง	
19.	Ms. Wiboolphan	Thitadilok	Representative from The Royal Thai College of Obstetricians and Gynecologists	Member
20.	Mr. Vajarabhongsa	Bhudhisawasdi	Representative from the Royal College of Surgeons of Thailand	Member
21.	Mr.Tanin	Intragamtornchai	Representative from the Royal College of Physicians of Thailand	Member
22.	Ms. Kanda	Chaipinyo	Representative from Physical Therapist group	Member
23.	Ms. Chomyoung	Budrach	Representative from Occupational Therapist group	Member
24.	Ms. Rattana	Thinnaithorn	Representative from Communication disorder therapist group	Member
25	Mr. Weerapong	Kriengsinyod	Representative from NGOs for agriculturists	Member
26.	Ms. Supaporn	Thinwattanakul	Representative from NGOs for children or youth group	
27.	Ms. Yupadee	Sirisinsuk	Representative from NGOs for people with HIV or chronic diseases	Member
28.	Mr. Jon	Ungpakorn	Representative from NGOs for slum communities	Member
29.	Mr. Sumitchai	Hattasan	Representative from NGOs for minority groups	Member
30.	Mr. Kidapol	Wattankul	Family medicine expert	Member
31.	Mr. Ronnachai	Kongsakon	Psychiatry expert	Member
32.	Ms. Rujirang	Wantanatas	Thai traditional medicines expert	Member
33.	Mr. Somjai	Tosukolwan	General expert	Member
34.	Mr. Chatree	Bancheun	General expert	Member
35.	Mr. Yuth	Potharamig	General expert	Member
36.	Mr. Winai	Sawasdivorn	Secretary-General of NHSO (Nov.2011-Jun.2015)	Secretary
	Mr.Prateep	Tanakijjaroen	Acting Secretary-General of NHSO (Jun.2015-Nov.2015)	

Authority and duties of the Health Service Standard and Quality Control Board

In accordance with section 50 of the National Health Security Act B.E. 2545 (A.D.2002), the Health Service Standard and Quality Control Board has been designated the following authority and duties;

1. To control the quality and standards of network and service units pursuant to Section 45;

2. To monitor the health services provided by health care units ensuring they meet a suitable level of service and quality pursuant to section 5;

3. To prescribe the measures controlling the quality and standard of health care units and networks of health care units;

4. To propose and submit pricing guidelines for the treatment of diseases to the Board and setting up regulations prescribing expenses for health services to health care units pursuant to section 46;

5. To set up and enforce rules, procedures, and conditions allowing complaints to be filed when rights are violated due to health service procedures or neglect. Investigating to determine the complaint's validity irrespective of the parties involved;

6. To report the results of inspections, quality control and standardization of health care units and networks of health care units to the Board. In addition, notifying the health care units or their authorizing agencies of these results in order to improve, modify, monitor, and evaluate the effect of standard and quality improvement;

7. To support the participation of citizens in monitoring and inspecting health care units and networks of health care units;

8. To provide payment of preliminary aid to a beneficiary who is subject to damage or injury caused by any service provided by a health care unit and the wrongdoer is non-apparent, or the wrongdoer is apparent but such beneficiary can not be reimbursed within a period deemed appropriate pursuant to such regulations, procedures, and conditions as prescribed by the Board;

9. To establish channels through which the public can be involved in all aspects of health service development;

10. To perform other duties prescribed by the Act, other laws or by the Board.

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