Thailand's Universal Coverage Scheme: Achievements and Challenges

An independent assessment of the first 10 years (2001-2010)

Synthesis Report

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Lists of abbreviations

CSMBS	Civil Servant Medical Benefit Scheme
CUP	contracting unit for primary care
DRG	diagnosis related group
GGHE	general government health expenditure
GDP	gross domestic product
GNI	gross national income
HITAP	Health Intervention and Technology Assessment Program
HSRI	Health Systems Research Institute
ICER	incremental cost-effectiveness ratio
ILO	International Labour Organization
IHPP	International Health Policy Program
MWS	Medical Welfare Scheme
MOPH	Ministry of Public Health
NGO	nongovernmental organization
NHSB	National Health Security Board
NHSO	National Health Security Office
PCU	primary care unit
PHO	Provincial Health Office
QALY	quality of life year
SHI	Social Health Insurance
SQCB	Standard and Quality Control Board
SSO	Social Security Office
SSS	Social Security Scheme
TRT	Thai Rak Thai Party
UCS	Universal Coverage Scheme
WHO	World Health Organization

Executive Summary

After four decades of health infrastructure development and three decades of designing and implementing a number of different financial risk protection schemes, Thailand achieved universal health coverage in 2002. This meant that all Thais were covered by health insurance guaranteeing them access to a comprehensive package of health services. Although many factors contributed to this achievement, the most significant was an ambitious reform known as the Universal Coverage Scheme (UCS).

Within one year of its launch in 2001, the UCS covered 47 million people: 75% of the Thai population, including 18 million people previously uninsured. The other 25% of the population were government employees, retirees and dependants, who remained under the Civil Servant Medical Benefit Scheme (CSBMS), and private-sector employees, who continued to have their health-care costs paid for by the contributory Social Security Scheme (SSS). The UCS was remarkable not only for the speed of its implementation, but also because it was pursued in the aftermath of the 1997 Asian financial crisis when gross national income was only US$ 1,900 per capita, and against the advice of some external experts who believed the scheme was not financially viable.

Even more impressive was the impact made by the UCS in its first 10 years. The UCS improved access to necessary health services, improved equity of service utilization and prevented medical impoverishment. Between 2003 and 2010, the number of outpatient visits per member per year rose from 2.45 to 3.22 and the number of hospital admissions per member per year rose from 0.094 to 0.116. Data from 2010 point to a very low level of unmet need for health services in Thailand. Impoverishment, as measured by the additional number of non-poor households falling below the national poverty line as a result of paying for medicines and/or health services, decreased significantly from 2.71% in 2000 (prior to the UCS) to 0.49% in 2009.

The UCS led to a significant increase in government health spending and a marked decline in out-of-pocket expenditure and, importantly, the rich-poor gap in out-of-pocket expenditure was eliminated. Moreover, the UCS increased equity in public subsidies, and overall health expenditure was very "progressive" or pro-poor.

A clear indication of the scheme's success is the high percentage of UCS members who express satisfaction with it — 90% in 2010, up from 83% in 2003. Also, although many contracted health-care providers were unhappy with the UCS in its first few years, their satisfaction rates rose from 39% in 2004 to 79% in 2010.

Despite this impressive list of accomplishments, in some other important areas that were part of the ambitious UCS reform, such as the strengthening of primary health care, effective primary prevention and reliable referral systems, there is less evidence of the anticipated impacts. Moreover, assessing the lack of significant progress towards harmonizing the three insurance schemes revealed a set of important challenges related to politics and the power dynamics of institutional reform.

These are some of the highlights from a comprehensive assessment of the UCS's first 10 years. Conducted in 2011, the aims of this assessment were to review the scheme's performance and to shed light on what did and did not work, and why. The assessment was also undertaken in order to offer policy recommendations for the UCS in the future, and to provide lessons that may help other countries on the path towards universal health coverage.

Study teams focused on five areas of inquiry: policy formulation, the contextual environment, policy implementation, governance and impacts. The results of the assessment are shown in this synthesis report and in the individual papers from the study teams, which are available at www.hsri.or.th.

The UCS, with its overarching goal of an equitable entitlement to health care for all Thais, has three defining features: a tax-financed scheme that provides services free of charge (initially, a small copayment of 30 baht or US$ 0.70 per visit or admission was enforced, but this was terminated in 2006); a comprehensive benefits package with a primary care focus, including disease prevention and health promotion; and a fixed budget with caps on provider payments to control costs. A number of mechanisms have been set up to protect UCS beneficiaries, such as an information hotline, a patient complaints service, a no-fault compensation fund and tougher hospital accreditation requirements.

Politicians, civil society and technocrats all played major roles in pushing through the UCS reform, from securing Parliament's commitment to universal health coverage through to policy design, implementation and evaluation. Experience gained from prior health insurance schemes, both positive and negative, proved helpful in designing the UCS. A rapid roll-out was possible because in 2001 Thailand already had a firm foundation upon which to implement the scheme: an extensive network of government-owned district health facilities, well established health policy and systems research institutions, public health administration capacities and a computerized civil registration system.

The UCS design called for significantly different financial, governance, organizational and management arrangements that included new institutions, new relationships and new ways of working. The most noteworthy innovation was the creation of the National Health Security Office (NHSO) to act as purchaser on behalf of UCS beneficiaries, which meant that the Ministry of Public Health (MOPH) no longer wielded control over government spending on health-care services. The architects of the scheme believed that involving a wider range of agencies and stakeholders in decision-making processes would improve efficiency, transparency, responsiveness and accountability. The policy intention was to use financing reforms to strengthen the whole health system by shifting its focus towards primary health care. Research evidence was critical in building support for the UCS policies and in countering fierce resistance to change from some stakeholder groups.

Policy recommendations for Thailand

The assessment shows there were some extraordinary achievements in the first 10 years of the UCS. However, the UCS is an ongoing, long-term reform and further work is needed to address a number of challenges. Based on the insights gained through the assessment, two sets of policy recommendations — one set related to the unfinished agenda and one to the future agenda — are offered with a view to sustaining and improving the UCS over the next 10 years.

The unfinished agenda

Thailand took a pragmatic approach to implementing the UCS, doing what was possible and putting on the back burner some of the more difficult aspects of the original policy design. For example, the NHSO was established as a new public purchasing agency, but the existing CSMBS and SSS were left relatively untouched. The financing of health-care services changed, but this had limited impact on re-orienting the existing inequitable allocation of the health workforce. Moreover, the role of the MOPH in the provision of services changed less than was intended. It is important to press ahead with these unfinished items on the reform agenda.

Governance and strategic purchasing

- Continue to strengthen the governing bodies of the UCS to ensure social accountability and transparency, and to manage and prevent conflicts of interests among governing body members. Expand the role of civil society and community representatives and appoint objective and independent ex-officio members in order to protect the UCS against political manipulation and dominance by any particular interest group(s).
- Address the problems in the relationship between the NHSO and the MOPH so that together they can steer the development of the UCS and the broader health system. If the UCS is to continue to flourish these two institutions must recognize they are mutually dependent and there must be a measure of trust between them.
- Work towards achieving a more equitable distribution of human resources across the country, including by strengthening the MOPH's capacity to develop health workforce policies to improve district-level staffing.

Managing the purchaser-provider split

- Improve the purchasing function and strengthen commissioning of health services at the local level.
- Enhance the district health system's capacity to provide a comprehensive range of services to its catchment population, including improving the effectiveness of the referral system.
- Use the information system better to understand and address quality of care issues. Define indicators and set benchmarks to assess the impact

of the UCS on health outcomes, access to interventions, and primary and secondary prevention of key noncommunicable diseases.

Harmonizing the three public health insurance schemes

- Reduce inequities in benefits and level of expenditure, and address inefficiencies across the schemes.
- Streamline operations by standardizing common features, for example the benefits package, the information system and the payment method.
- Generate evidence on the strengths and weaknesses of each scheme to inform ongoing and future scheme harmonization.

The future agenda

The future agenda covers a number of issues that have taken on greater importance since 2001 and that will become even more critical in the future.

The private sector

- Engage more with the private sector in the provision of publicly-funded care especially in urban areas, and establish a single regulatory system for public and private health-care providers in Thailand. It will be difficult to pursue national health objectives in the absence of co-operation between state and private systems. In many countries that have achieved universal coverage, private-sector hospitals and doctors are regarded as part of the public scheme because money is coming from the public purse.

Decentralization

- Undertake the research and analysis required to find a more effective balance between centralization and decentralization. The national purchasing framework needs some degree of decentralization to the local level in order to link with the local authorities and to allow increasing community engagement in decision making.
- Explore whether more local commissioning of health services would be more efficient than provincial purchasing, especially for primary health care.

Epidemiological transition and the ageing of the population

- Identify innovative ways to minimize the reliance on high-cost tertiary care through greater investments in disease prevention and health promotion and by addressing the social determinants of health outside of clinical settings. In addition, appropriate long-term care models need to be developed, which will require adapting the character and range of health facilities and services.

Quality monitoring, quality assurance and health technology assessment

- Develop methods to use routinely collected data to monitor, assess and improve quality of care, including clinical outcome assessment. At present this is an unexploited opportunity in Thailand.
- Continue building institutional capacity for health technology assessment to inform the purchase of cost-effective interventions and thereby improve value for money.

Policy implications for the rest of the world

Many factors contributed to the successful implementation of the UCS policy, including political and financial commitments, a strong civil service acting in the public interest, active civil society organizations, technical capacity to generate and use research evidence, economic growth, and policies to increase fiscal space. While some countries may find this list daunting it is important to realize that all these elements can be developed over time. Countries must find their own path to universal coverage — while no blueprint emerges from this work, the Thai reform experience provides valuable lessons.

Managing the process

As important as it is to bring different stakeholders together to listen, consult, negotiate and compromise, it is essential that the leaders of the reform have the power to resolve conflicts and to drive through the necessary changes. Otherwise countries risk getting stuck in the design stage, stalled by interest groups that feel threatened and are resisting change. Countries need a concrete plan to manage the reform process. It is also important to build capacity, not just to

design a universal coverage scheme, but also to manage its implementation, including capacity for learning from the experience and tweaking the scheme as it is implemented.

Designing the system

Three design elements are essential to achieve universal coverage: extension of access to services, cost containment and strategic purchasing. Financing reform must go hand in hand with ensuring physical access to services. There is no point giving people a theoretical entitlement to financial protection if they have no access to local services or if it is too costly to access services outside the community in which they live. Thailand was in a good position to implement the UCS policy because for decades the government had invested in building local health infrastructure.

Cost containment mechanisms are critical because unless costs are controlled it will be difficult to cover the whole of the population and to provide adequate services; such mechanisms ensure long-term financial sustainability. Two such features of the UCS are the emphasis on primary health care (which was historically weak in Thailand) as the main first level of care, and the payment mechanisms, which use capitation and case-based payment within a global budget to fix the total cost. The third design element, strategic purchasing, is necessary to manage the rationing of services and to direct the provision of care to those areas where need is greatest.

Evaluating the universal coverage reform

This assessment demonstrates the Thai desire to learn from experience and to be open to external scrutiny. While important for Thailand, country case studies of universal coverage reform are needed to build up the knowledge base about how best to introduce and strengthen universal coverage. In the interest of promoting universal health coverage, the international advisors and Thai researchers involved in this assessment hope that more countries will undertake similarly open and comprehensive evaluations. All countries and stakeholders have much to learn from each other.

Chapter 1
Introduction

Why this report?

Universal health coverage goes hand in hand with social justice, health equity and a nation's responsibility to uphold two basic human rights: the right to health and the right to social security. Most of the world's high-income countries have achieved universal coverage; among low- and middle-income countries, Thailand has been a trailblazer. After four decades of health infrastructure development and three decades of designing and implementing a number of different financial risk protection schemes, Thailand finally achieved universal coverage in 2002. This meant that all Thais were covered by health insurance guaranteeing them access to a comprehensive package of health services.

Although there were many contributing factors — political, economic, social and health-system related — the most significant was an ambitious reform known as the Universal Coverage Scheme (UCS). Launched in 2001 and financed through general tax revenues, the scheme rapidly expanded and within a year was providing coverage to 47 million people (75% of the population): 18 million previously uninsured people and members of two existing publicly subsidized schemes (the Medical Welfare Scheme and the Voluntary Health Card Scheme). The other 25% of the population were government employees, retirees and dependants, who remained under the Civil Servant Medical Benefit Scheme (CSBMS), and private-sector employees, who continued to have their health-care costs paid for by the contributory Social Security Scheme (SSS).

The UCS was remarkable not only for the speed of its implementation but also because it was pursued in the aftermath of the 1997 Asian financial crisis when gross national income (GNI) was only US$ 1,900 per capita, and against the advice of some external experts who believed the scheme was not financially viable.

This report is an assessment of how the UCS performed in its first 10 years. The assessment was undertaken to better understand the extent to which the

scheme was implemented as designed and the extent to which it achieved its intended impact. Other equally important purposes were to shed light on what did and did not work and why, and to make recommendations to inform future UCS policy decisions. Another aim of the assessment was to capture any lessons that may help other countries on the path towards universal coverage. To those countries yet to make the commitment, this report has a clear and simple message: universal coverage is possible in a lower-middle-income country (which Thailand was until 2011[1]).

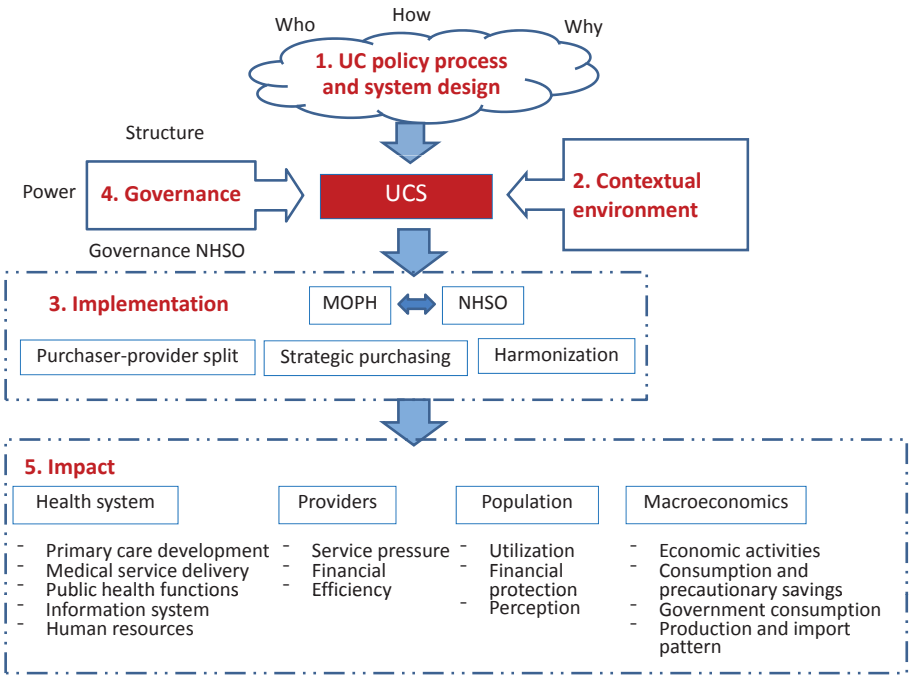
Many low- and middle-income countries are taking steps to move closer to universal coverage through public financing mechanisms[2], and some countries, for example China, Ghana, India, the Philippines, Rwanda, South Africa and Viet Nam, have looked at the Thai experience in relation to their health reforms. Increasingly, countries are extending health coverage within the broader context of striving for improved social protection of the whole population as stated in the International Labour Organization's Social Security (Minimum Standards) Convention No. 102[3].

This interest at country level is reflected in the increased attention that universal coverage is receiving internationally. It was the topic of *The World Health Report* in 2010[4] and a World Health Assembly resolution in May 2011 requested the WHO Director-General "to convey to the United Nations Secretary-General the importance of universal health coverage for discussion by a forthcoming session of the United Nations General Assembly"[5]. Universal coverage is also a focus of the International Labour Organization's activities in the area of social health protection as outlined in the World Social Security Report 2010/2011 on providing coverage in times of crisis and beyond[6] and related measurements[7]. Another example is the Global Task Force for Universal Health Coverage, which aims to align institutional efforts and support progress in countries by "convening thought leaders, addressing key technical challenges and complexities, and propelling the global movement for universal health coverage as it continues to gain momentum"[8].

How was the assessment undertaken?

The comprehensive assessment of the UCS's first 10 years (2001-2010) focused on five areas of inquiry: policy formulation, contextual environment, policy implementation, governance and impacts. The scope of the study is shown in Figure 1.

Figure 1: Scope of the UCS assessment, 2001-2010



UCS = Universal Coverage Scheme; MOPH = Ministry of Public Health; NHSO = National Health Security Office

Research teams for each of the five areas were led by senior Thai investigators, with guidance provided by a group of international experts (all contributors are listed at the beginning of this report). Financial support was provided by the Health Systems Research Institute (HSRI), WHO Regional Office for South-East Asia, the Prince Mahidol Award Conference and the National Health Security Office (NHSO). All studies were undertaken in 2011 using a combination of research methods that included primary and secondary data analyses, literature and document reviews, in-depth interviews with key stakeholders, and surveys and

online questionnaires. Annex 1 provides details about the methodology used for each of the five research areas.

It is important to note that the evidence required to assess a major health-system reform like universal coverage is very different from that needed to evaluate intervention effectiveness. Unlike discrete clinical interventions, the UCS reform created new institutions and institutional arrangements comprising a multitude of interventions moulded by a range of contextual factors. This assessment tried to take stock of this complex change over a decade. Assessing the impact of a major reform, therefore, is an imperfect science. Despite the reasonably strong evidence found to support the assertions in this report, especially from national representative household surveys, it is necessary nonetheless to exercise some caution in attributing impacts exclusively to the reform.

About this report

This report is a synthesis of the reports from the five investigator teams, which are available at www.hsri.or.th. Chapters 2 and 3 highlight the contextual factors that set the scene for the introduction of the UCS and the unique convergence of political commitment, civil society involvement and technical capacity that explains why Thailand succeeded in achieving universal coverage in 2002. Chapter 4 describes the goal, strategic objectives and key features of the UCS policy, and Chapter 5 outlines the institutional arrangements that were set up to govern and manage the scheme. The following two chapters draw attention to how the scheme was implemented and governed between 2001 and 2010, and the challenges of doing so. Chapter 8 is an assessment of the extent to which, by 2010, the UCS had accomplished its main objectives: equitable access to quality health care, financial risk protection (reducing out-of-pocket payments thereby preventing catastrophic spending and impoverishment) and financial sustainability. The scheme's impacts on the health system and its significant macroeconomic impacts are also briefly described. The penultimate chapter discusses the challenges ahead for the UCS. The report concludes by making recommendations to Thai policy-makers on how to sustain and improve the scheme and by noting a number of lessons that may be of interest to other countries and international development partners in their efforts towards achieving universal coverage of health care.

Chapter 2
Setting the scene: background to the UCS reform

Building on a strong foundation

Although the introduction of the UCS is generally considered a "big bang" reform, rapidly and successfully extending coverage to previously underserved populations, it needs to be understood in the context of a long-term drive by successive governments to increase financial risk protection and improve coverage of health services via a series of incremental changes that began in the 1970s.

The right of every Thai citizen to access health care and the right of the poor to free health care were addressed in the 1997 and 2007 constitutions, and access to health services for all was part of the 8th National Social and Economic Development Plan (1997-2001).

The 2007 Thai Constitution[9] describes the rights of citizens to public health services and welfare as follows:

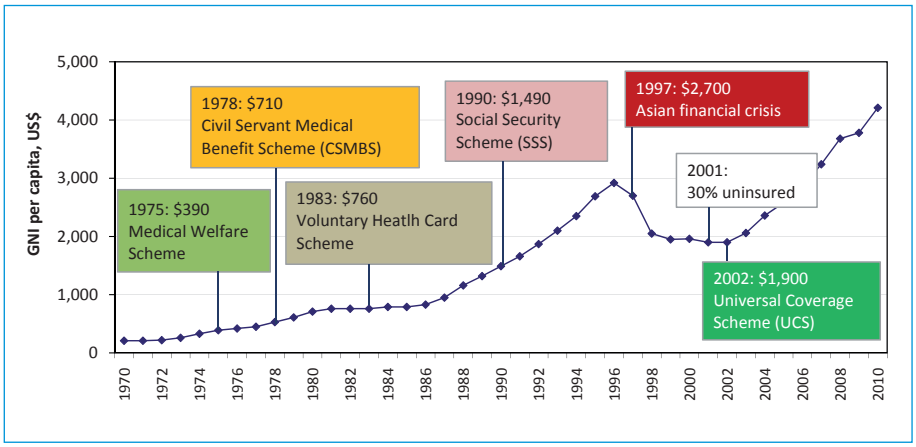
> *A person shall enjoy an equal right to receive standard public health services, and the indigent shall have the right to receive free medical treatment from State infirmaries. The public health service by the State shall be provided thoroughly and efficiently. The State shall promptly prevent and eradicate harmful contagious diseases for the public without charge.*

Three decades of economic and social development (see Box 1) also contributed to the achievement of universal health coverage.

As Figure 2 illustrates, by 2001 Thailand already had 25 years of experience with pre-payment health financing reforms that also involved some subsequent pooling of resources to spread the financial risks of ill health. Figure 3 shows that

health insurance coverage increased from 34% of the population in 1991 to 71% by 2001.

Figure 2: Thailand's path to universal health coverage against GNI per capita, 1970-2010



Sources: GNI per capita from World Bank at http://data.worldbank.org/data-catalog/GNI-per-capita-Atlas-and-PPP-table; chronological events were summarized by the authors.

Box 1: Thailand at a glance

Thailand is a constitutional monarchy in Southeast Asia with a population of 67 million. The economy has performed well in recent years with an average annual GNI growth rate of 5.2% between 2000 and 2008. Upgraded to an upper-middle-income country by the World Bank in 2011[1], Thailand's GNI per capita, US$ 4,210 in 2010, is lower than the average of US$ 5,884 for this income group. The economy is export led, with exports accounting for more than two thirds of gross domestic product (GDP). The unemployment rate is low: 1.4% of the total labour force

in 2008. Of the 35 million employed, 51% are in work categories associated with the informal economy, namely self-employed workers (31%) and unpaid family labour (20%).

Economic growth and social policies that include a national social protection floor[2] have resulted in significant poverty reduction, from 49.7% of the population in 1988 to 8.1% in 2009. However, income inequality as measured by the Gini index (the degree of inequality in the distribution of household income in a country) has not reduced from its level of 42.5 reached in 2004.

Thailand's Human Development Index was 0.682 in 2010, ranking it 103rd out of 187 countries with comparable data. This index represents a broader definition of well-being and provides a composite measure of three basic dimensions of human development: health, education and income. In 2010 the adult literacy rate was 94% (the youth literacy rate was 98.1% in 2005) and life expectancy at birth was 74.1 years.

Thailand achieved the health Millennium Development Goals in the early 2000s, well in advance of the 2015 targets[3]. The total fertility rate dropped from 2.0 in 1992 to 1.6 in 2009, below replacement level, as a result of a high contraceptive prevalence rate (81%). In 2009, antenatal care and skilled birth attendant coverage was 99-100%, the maternal mortality ratio was 48 per 100,000 live births, and the under-five mortality rate was 14 per 1,000 live births.

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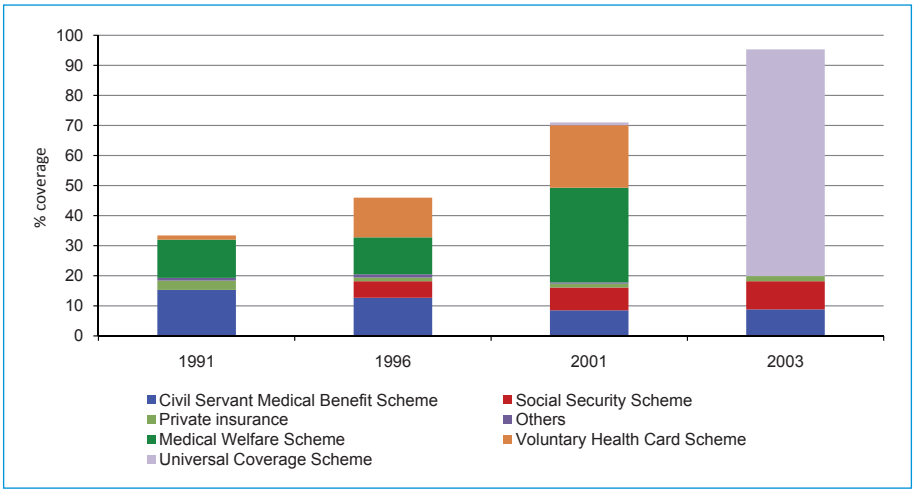
2. The social protection floor is base on the idea that everyone should enjoy at least basic income security sufficient to live, guaranteed through transfers in cash or in kind, such as pensions for the elderly and persons with disabilities, child benefits, income support benefits, and/or employment guarantees and services for the unemployed and working poor. Together, these transfers should ensure that everyone has access to essential goods and services, including essential health services, primary education, housing, water and sanitation. See: *Social protection floor for a fair and inclusive globalization. Report of the Social Protection Floor Advisory Group*. Geneva: International Labour Office, 2011.
3. Waage F, et al. The Millenum Development Goals: a cross-sectoral analysis and principles for goal setting after 2015. Lancet 2010; 376: 991-1023.

Figure 3: Coverage of health insurance, 1991-2003



Source: National Satatistical Office, the Health and Welfare Surveys in 1991, 1996, 2001 and 2003.

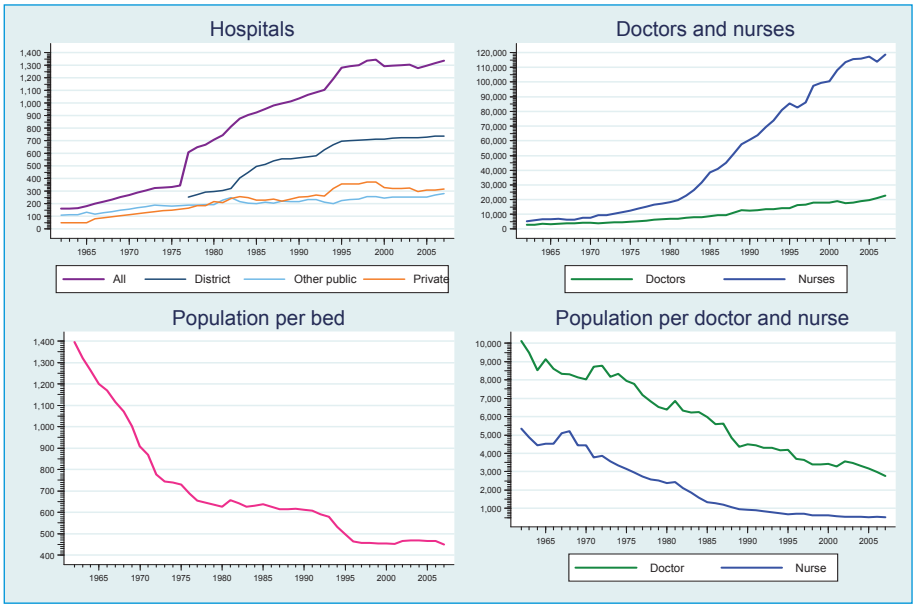
Extensive geographical coverage of health-care facilities owned by the Ministry of Public Health (MOPH) was the key foundation for implementing the UCS as it meant that members of the scheme, many of whom lived in rural areas, had access to services. As shown in Figure 4, Thailand began building more hospitals and educating more nurses and doctors in the 1970s, and as a result, population per bed and population per nurse and doctor ratios had significantly improved by the late 1990s.

The focus of this effort was on developing the district health system throughout the nation. A typical district's catchment population of around 50,000 is served by a district hospital with 30-120 beds and 100-300 staff including general doctors, nurses, dentists, pharmacists and all other personnel, and by 10-15 subdistrict health centres, each with 3-5 paramedical staff. A policy of mandatory rural service for all health professional graduates, which started first with medical doctors and nurses in 1972 and later expanded to cover pharmacists and dentists, improved staffing at the district level.

In addition to health financing and health services, Thailand had other capacities that were critical for the rapid roll-out of the UCS. Relatively strong research capacity and the well-established Health Systems Research Institute meant that

country-specific evidence was available to inform the scheme's design. Public administration and MOPH institutional capacity both at headquarters and provincial health offices were crucial in implementing and managing the reforms. Finally, a computerized civil registration system used to record all births and deaths in the country facilitated the enrolment of members in the new scheme and allowed for duplications among the three health insurance schemes to be highlighted and reconciled once everyone was registered.

Figure 4: Health system developments, 1965-2005



Source: Patcharanarumol W et al (2011). Why and how did Thailand achieve good health at low cost?[10]

The driving force behind the reforms and other contextual factors

Despite the gradual extension of health coverage in Thailand since the 1970s and a strong tradition of health and social policies in favour of the poor, at the turn of the millennium it was clear that more needed to be done to achieve universal coverage (and improve access to health care). Although the Medical Welfare Scheme provided cover for the poor, the elderly, the disabled and children under 12, access for the "near poor" was far from certain. Approximately 30% of

the Thai population (18 million people) — mostly informal sector workers in lower socioeconomic groups — had no health insurance and no automatic access to free medical care, although exemptions from fees were granted by hospitals on a case-by-case basis. Out-of-pocket payments accounted for 33% of total health expenditure in 2001 and such payments for medical care as a percentage of household income were highest among the poor.

The 18 million uninsured were the driving force behind the UCS. However, certain contextual factors were also significant because they were contributing to health inequities and/or hampering efforts to address them.

Despite the work described above to build district health systems, the distribution of the health workforce was strongly skewed in favour of urban areas and the central region, largely because growth of the private health sector stimulated an internal brain drain of health professionals from rural areas to bigger cities, particularly to private hospitals in Bangkok. The shortage of key specialists in some provincial hospitals made it difficult to support referrals from district hospitals and health centres.

At the same time, ongoing civil service reforms aimed at downsizing the public sector were constraining the health system's ability to meet demand because the MOPH owned almost all district hospitals and health centres, educated and trained most nurses and midwives, and paid the salaries of all health professionals working in the public sector.

In 2001, as shown in Figure 2 above, Thailand had not yet recovered from the 1997 Asian financial crisis. By August 1997 Thailand had committed to a US$ 20.9 billion rescue package from the International Monetary Fund and on three occasions in that year the Minister of Finance and the Governor of the Bank of Thailand took measures to increase revenue and cut expenditure (see Table 1). Importantly, safeguarding the government budget for health and the social safety net as well as the wage policy continued to support the objective of minimizing the impact on commodity prices of a significantly depreciating baht. The increase in the minimum wage for the year 1998 was limited to 2-3%.

Table 1: Thai Government's measures to generate revenue and cut expenditure, 1997

	Impact on the 1997/98 budget	
	Billions of baht	Percent of GDP
A. Measures adopted in August 1997 as part of the original IMF programme		
Expenditure cuts	59	1.1
Increase in VAT from 7 to 10%	66	1.2
B. Measures taken on October 14		
1. Expenditure cuts	100	1.9
1.1 Administration, defence, security	22	0.4
1.2 Community and social services	28	0.5
1.3 Transport and telecommunications	36	0.7
1.4 Others	15	0.3
2. Revenue measures	17	0.3
2.1 Excise on beer, spirits and tobacco	7	0.1
2.2 Import duty on cars and luxury goods	10	0.2
C. Measures taken on November 4		
1. Expenditure cuts	35	0.7
2. Revenue measures	16	0.3
2.1 Excise on automobiles	7	0.1
2.2 Others	9	0.2

Source: http://www.imf.org/external/np/exr/facts/asia.pdf

Chapter 3
Why the UCS was launched in 2001: the convergence of political commitment, civil society mobilization and technical know-how

Since the late 1990s, a group of like-minded "reformists" in the MOPH and the Health Systems Research Institute, an independent quasi-public institution linked to the MOPH, had been systematically documenting health inequities and developing evidence-based policy options to tackle them, including radical financing reforms to achieve universal coverage. However, the concerted action required to translate this evidence into policy was limited because of the economic downturn and a general lack of political support. While the governments of this period supported better targeting of the poor and the socially disadvantaged, they considered universal health coverage unaffordable. What changed to make the seemingly impossible possible? The successful launch of the UCS in 2001 was due to the convergence of three facilitating factors: political commitment, civil society mobilization and technical know-how. Luck also played a role.

The political window of opportunity awaited by the reformists came during the run-up to the 2001 national election. Armed with the results of an assessment showing that universal coverage was "financially and programmatically feasible"[11], they attempted to make it a political priority. While they failed, once again, to convince the governing Democrat party of its merits, they found the rival Thai Rak Thai (TRT) party more receptive. Universal health coverage became one of TRT's nine priorities and its campaign slogan "30 baht treats all diseases" quickly captured the public's attention: a 30 baht co-payment, equivalent of US$ 0.70, was affordable by most, and the poor who were covered by the Medical Welfare Scheme would be exempted from the co-payment.

The reformists not only reached out to the politicians, they also developed close ties with nongovernmental organizations (NGOs). Box 2 analyses the vital role of civil society in agenda setting and legislative processes, and briefly describes how

NGOs evolved from an external lobby group into a part of the political process.

After winning the election on 6 January 2001 (248 of 500 parliamentary seats) and forming a coalition government, Prime Minister Thaksin Shinawatra was eager to move quickly in order to deliver a key campaign promise and consolidate public support. He announced that one of the Government's first priorities would be to push through bold financing reforms to achieve universal coverage within a year. He appointed Mrs Sudarat Keyurapant as Minister of Public Health and Dr Surapong Suebwonglee as her Deputy Minister. Universal coverage was considered financially feasible because, after pooling all existing resources in the MOPH budget for health-care services, the estimated funding gap (30 billion baht in the first year) could be easily filled by the Government, even though it represented 53% of total government health spending pre-reform (see Chapter 4 for details).

Many of the key decisions required to launch the UCS were made during a one-day workshop convened by the Prime Minister on 17 March 2001, including: using general tax revenues as the funding source; the 30 baht co-payment for any visit or admission; the key services constituting the benefits package; and the per capita capitation rate. Before the end of the day, the timeline for implementation was also agreed: the scheme would be launched in six provinces in April 2001, in an additional 15 provinces by June 2001, and nationwide by April 2002. The first six provinces were those previously piloting the payment reform of the World Bank's Social Investment Project from 1998 to 2001[12].

Box 2: Civil society's role in establishing universal health coverage in Thailand

Civil society played a leading role in securing Parliament's commitment to universal health coverage. In October 2000 a group of 11 Thai NGOs led by Senator Jon Ungphakorn formed a united front and announced their intention to support universal coverage. Ungphakorn, a social activist and founder of the AIDS Access

Foundation, raised the idea of universal coverage among NGOs after meeting with MOPH and HSRI health reformists who were seeking new avenues for reform after failing to bring their own draft bill before Parliament.

The civil society group launched an awareness-raising campaign advocating equal benefits for all, increased participation of the people in health management, and better consumer protection. With technical support from the health reformists, the group produced a draft National Health Security Bill and set out to gain thousands of signatures. The 1997 Thai Constitution motivated civil society groups to participate in the policy agenda-setting process and a new law in 1999 allowed 50,000 electors to propose a bill regarding citizens' rights and the role of state. The draft bill was submitted to Parliament in March 2001. However, while Parliament was auditing the list of supporters, the TRT Government completed its own draft bill, which was submitted for consideration in November 2001. Even though Parliament accepted the Government's draft and rejected the people's draft, five members of the civil society group were brought into the universal coverage policy formulation process as members of the parliamentary commission set up for the second reading of the draft bill. One year later, after a second and third reading, the National Health Security Act was enacted on 18 November 2002 with very strong support from civil society.

Source: Siriwan Pitayarangsarit. The introduction of the universal coverage of health-care policy in Thailand: policy responses. Bangkok: NHSO and IHPP, 2010.

With political backing secured, the technocrats took the lead. A core policy development team was formed to take forward the provisional plan and debate policy options. To formulate specific policies the MOPH set up 10 working groups, each with representatives from the public health-care sector, consumer groups and private health-care providers. Many functional departments within the MOPH were involved and played a role in translating UCS policy into an operational reality. A committee known as the "War Room", chaired by the Deputy Minister

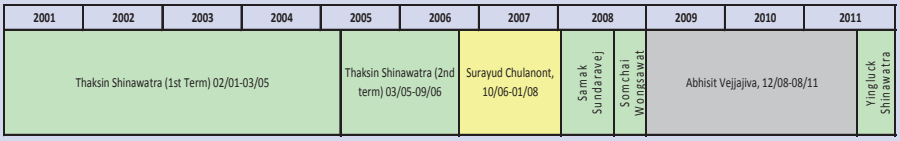
of Public Health, was set up to coordinate and monitor activities pertaining to policy implementation and to solve emerging problems.

The high-level political commitment to the UCS that drove the process in the beginning continued throughout the scheme's first 10 years, despite several elections and changes of government (see Box 3). There were nine health ministers and six MOPH permanent secretaries between 2001 and 2010. The UCS was supported by all political parties because it was a hugely popular policy among the Thai people. Having experienced the benefits of the scheme — better access to care and less out-of-pocket spending — it is hard to imagine its members would be willing to give them up. Given that the scheme's beneficiaries represent 75% of the voting public, it is unsurprising that the questions of how to sustain and improve the UCS have featured in every election campaign since 2001.

Thus, when Prime Minister Surayud Chulanont's 2006 post-coup government replaced the Thaksin regime, it not only continued to support the UCS, but took steps to extend it, in particular abolishing the co-payment and adding renal replacement therapy (dialysis) to the benefits package. Likewise, Prime Minister Abhisit Vejjajiva's Democrat Party, also a fierce critic of TRT and its reincarnations, continued to support the UCS when it assumed power in December 2008. Both leaders, however, distanced their governments from the TRT banner "30 baht treats all diseases", opting instead to use the more generic term "Universal Coverage Scheme".

The decision to abolish the co-payment was partly a technical argument and partly political manoeuvring. The NGO constituencies were never comfortable with the co-payment and voiced their concerns during the 17 March 2001 workshop and regularly thereafter on the ground that even 30 baht was significant for poorer people, in particular those with chronic conditions requiring regular visits to health-care facilities. And although there was an exemption for the poor, there was evidence of its uneven application[13]. Another argument was that there was no co-payment for most services provided to SSS and CSMBS members.

Box3: Coalitions, elections and a coup: Thai politics, 2001-2011



Note: Those named above have held the post of Prime Minister. Green shaded boxes refer to TRT and successor parties established by the same group of politicians; the yellow shaded box is the coup-appointed government; the grey shaded box refers to the Democrat Party and its coalition partners. All parties other than the TRT and Democrat parties have had strategic alliances with either the TRT or Democrat parties.

The years between 2001 and 2011 saw considerable political instability in Thailand, with seven governments, five general elections and one coup d'état. Prime Minister Thaksin Shinawatra of the Thai Rak Thai (TRT) party initiated the UCS after the January 2001 election; he served two terms: 2001-2004 and 2005-2006. Prime Minister Thaksin was overthrown in the September 2006 coup, and Prime Minister Surayud Chulanont served from October 2006 to January 2008. In the December 2007 general election, the Palang Prachachon Party or People's Power Party (PPP) — the reincarnation of TRT* — won a majority; however, a coalition government led by Prime Minister Samak Sundaravej lasted just nine months (January to September 2008), followed by Prime Minister Somchai Wongsawat of the PPP, who held power only until the end of the year (September to December 2008). Following a court judgement that led to the dissolution of PPP and suspension of some PPP MPs, and a shift in the allegiance of some medium to small coalition parties, the opposition leader Abhisit Vejjajiva of the Democrat Party gained majority support and formed a new government. Prime Minister Abhisit served from December 2008 to August 2011, when the Democrats lost the July 2011 election to the Pheu Thai Party (another reincarnation of TRT) led by Prime Minister Yingluck Shinawatra, the younger sister of Thaksin.

* When TRT was dissolved by the Election Commission for violating the Electoral Law, the ex-TRT MPs established a new party called PPP; the Pheu Thai Party was the next reincarnation, formed in 2008 when PPP met the same fate as TRT.

The proponents of the co-payment raised concerns about the potential moral hazard arising from overutilization of free treatments and argued that a charge would help increase system efficiency by limiting pressure on overburdened service units. However, the annual revenues generated from the co-payment were only around 2 billion baht, while the costs of administration and collecting revenues were thought to be substantial (there was no explicit assessment of administrative costs at the time). The recent push to restore the co-payment probably reflects a political wish to reclaim the "30 baht" slogan, as there is no clear evidence to support such a policy on increased cost from moral hazard.

Despite considerable political turbulence, the UCS continued to thrive, partly because the leadership of the National Health Security Office (NHSO) — the institution set up in early 2003 to administer and manage the UCS — was relatively stable. Dr Sanguan Nittayaramphong, a senior policy-maker in the MOPH, played a pivotal role. In the early days he functioned as the bridge between the MOPH "intellectuals" and the politicians, notably Deputy Minister Dr Surapong Suebwonglee with whom he had a close relationship and shared similar experiences, as both had worked in rural district hospitals. Dr Sanguan's contact with TRT initially carried some personal cost because the UCS was not universally supported in MOPH circles. He led the team that designed the UCS and in 2003 he became the NHSO's first Secretary General, a position he held until his death in late 2007. His successor, Dr Winai Sawasdiworn, was promoted from Deputy Secretary General and had been involved in UCS since its inception.

Chapter 4
The UCS policy: a brief overview

This chapter describes the goal and strategic objectives of the UCS, explains the three features that define the scheme and why they were chosen, and summarizes how the UCS in its first 10 years (2001-2010) differed from the two other public health insurance schemes.

Goal and strategic objectives

The stated goal of the UCS is "to equally entitle all Thai citizens to quality health care according to their needs, regardless of their socioeconomic status". This goal is based on the universality principle: the UCS was conceived as a scheme for everybody, not one that targets only the poor, vulnerable and disadvantaged.

The strategic objectives of the UCS are:

- to focus on health promotion and prevention as well as curative care;
- to emphasize the role of primary health care and the rational use of effective and efficient integrated services;
- to foster proper referrals to hospitals;
- to ensure that subsidies on public health spending are pro-poor, at the same time ensuring that all citizens are protected against the financial risks of obtaining health care.

The policy intention was to use the UCS (a financing reform) to strengthen the health system by shifting its focus towards primary health care. Primary health care is more cost effective than hospital outpatient services and lowers transportation costs shouldered by patients. In deciding on the financing mechanism, Thai policy-makers relied heavily on experience gained from earlier reforms, particularly the SSS and CSMBS. They took note of the cost increases associated with fee-for-service reimbursement and the fact that capitation, which had been used by the SSS since 1991, was providing adequate health-care services to its members. To increase the likelihood of the UCS succeeding, policies were to be informed by the best available research evidence, and monitoring and evaluation were to be part of the policy process from the start.

Three features define the UCS:

- a tax-financed scheme free at the point of service (the initial co-payment of 30 baht or US$ 0.70 per visit or admission was terminated in November 2006);
- a comprehensive benefits package with a primary care focus;
- a fixed annual budget with a cap on provider payments.

Tax-financed scheme free at the point of service

General tax was chosen as the main source of financing because it was the most pragmatic option and it was believed to be the most progressive (in Thailand the rich pay a larger share of their income to taxes than do the poor). Although a few economists held the view that the rich should pay for their health care separately and that public involvement should be limited to basic safety-net provision for the poor, this "targeting ideology" was rejected. Targeting had been applied de facto since 1975 but still left 30% of the population uninsured. Evidence from a subsequent assessment of the Medical Welfare Scheme indicated that targeting remained problematic throughout the implementation period because not all who qualified were covered and because entitlement cards were issued to the non-poor[14]. Moreover, this approach was contrary to the constitutional right and entitlement of *all* citizens, not some, to affordable health care. And since the rich pay progressive personal income tax (37% of net income) as well as corporation taxes (30% of net income) it was argued that they deserved equal entitlement to financial risk protection. Thus the weight of opinion in policy circles and among the public swung decisively in favour of the universality principle.

Senior policy-makers took the view that in practice universality was likely to mean a tax-financed scheme: if politicians wanted to reach universal coverage as quickly as promised, using general tax revenues was the only choice. Collecting premiums from scheme members would have involved technical complications, and was also politically unpalatable.

The advent of the UCS greatly simplified the budget allocation process: the total UCS budget equals the capitation rate multiplied by the total number of UCS members in that budget year. Table 2 below shows details of how the capitation

rate is calculated. Prior to 2001 the Budget Bureau exercised substantial discretionary power in allocating the health budget to the MOPH: it was negotiated on an individual programme basis, and there were thousands of programmes. Critics alleged that this led to special pleading, favouritism and sometimes even corruption in the budget approval process[15]. The new system introduced greater transparency because the capitation rate was negotiated on the basis of evidence concerning utilization, unit cost (inclusive of salaries, overtime and other allowances) and annual fiscal capacities.

Another change was that the annual budget negotiations became more than a backstage power struggle between the NHSO and the Budget Bureau. As a result of the public's interest in the UCS, negotiations became a high-profile, controversial (and sometimes heated) public debate, widely covered in the media, with civil society and patient groups producing evidence to support their calls for an increased rate. Box 4 provides illustrative examples of how the two leading English-language daily newspapers covered the debate in 2006.

While the annual capitation rate eventually approved tended to be lower than the amount requested, the budget allocated to support the scheme increased steadily over the 10-year period. Although the total number of UCS members remained constant at around 47 million, the UCS budget rose from 1,202.4 baht (US$ 35.40) per capita in 2002 to 2,693.5 baht (US$ 78.80) per capita in 2011 (see Table 2). This was a 71% real term increase, mostly driven by increased utilization and rising labour and material costs of providing medical and health services. Resources were found to fund the rate rise, even in 2009 when GDP fell by 2% and all ministries had to make spending cuts.

A central administrative database capable of providing robust evidence on health-service utilization put the NHSO in a strong position to negotiate with the Budget Bureau. Introducing new service items into the benefits package, and thereby deepening financial risk protection, was another strategy used by the NHSO to secure a higher capitation rate. A crucial factor in the first few years was Prime Minister Thaksin's recognition that the scheme was underfinanced and his commitment to increasing the capitation rate.

Table 2: The rising UCS capitation budget approved by the Budget Bill, 2002-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Outpatient	47.8%	47.8%	37.6%	38.8%	38.7%	33.1%	27.4%	31.9%	34.7%	35.8%
Inpatient	25.1%	25.1%	38.1%	39.8%	36.5%	42.3%	49.6%	45.6%	44.0%	41.9%
High cost	2.7%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Accident and emergency	2.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dental care	0.0%	0.0%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Prevention and promotion	14.6%	14.6%	15.8%	15.0%	13.1%	12.5%	11.5%	11.4%	10.9%	10.4%
Capital replacement	6.9%	6.9%	7.3%	5.5%	7.5%	7.2%	6.6%	6.5%	6.0%	5.5%
Emergency medical services	0.8%	0.8%	0.8%	0.7%	0.6%	0.5%	0.5%			
Disability						0.2%	0.2%	0.2%	0.2%	0.3%
No-fault liability										0.1%
Quality based pay									0.2%	0.2%
Special medicines								0.2%	0.2%	0.3%
Antiretroviral medicine					3.4%	4.2%	4.3%	2.8%	2.3%	2.3%
Renal replacement therapy								1.4%	1.2%	2.5%
Chronic diseases									0.3%	0.5%
Psychiatry										0.2%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Capitation, baht per capita, at current price	1,201.4	1,201.4	1,308.7	1,396.4	1,718.0	1,983.4	2,194.3	2,298.0	2,497.2	2,693.5
at 2007 price	1,406.8	1,380.9	1,463.9	1,495.1	1,756.6	1,983.4	2,081.9	2,199.0	2,312.2	2,404.9

Source: NHSO, various years.

Comprehensive benefits package with a primary care focus

Because the Medical Welfare Scheme, Voluntary Health Card Scheme, CSMBS and SSS all offered comprehensive benefits packages to their members, it was agreed from the beginning that the UCS would also cover a comprehensive range of essential health services. The package was almost identical to that of the SSS, covering outpatient, inpatient and accident and emergency services; dental and other high-cost care; and diagnostics, special investigations, medicines (no fewer than are included in the National List of Essential Medicines) and medical supplies.

Box 4: Press clippings from 2006 illustrating the public debate over UCS funding

Govt B30 health-care system 'short of cash'
[Bangkok Post, 31 January 2006]
While the merits of the universal 30-baht health care scheme are not in doubt, its efficiency is being compromised due to budget constraints, a seminar was told yesterday [...] With the 30-baht scheme, the poor had greater access to health-care services and medical treatment, but only 10% of people suffering life-threatening illnesses survived. "This is largely due to budget limitations," Supasit Pannarunothai, dean of Naresuan University's Medical Faculty told a seminar on the universal health-care scheme at the Thai Journalists Association. He said the government should boost the subsidy which currently stands at 1,659 baht per head per year.

Bt 30 plan in critical condition [The Nation, 9 February 2006]
[...] nearly five years into its implementation, the Bt30 scheme remains under-funded despite government promises to find the appropriate financing. Consequently, the country's state health care system has witnessed a mass exodus of white-gowned professionals leaving state hospitals for better working conditions and pay in private medical institutions.

Thammasat to quit Bt30 scheme [The Nation, 24 February 2006]
Financially strapped Thammasat University Hospital is to pull out of

the government's low cost health care scheme, saying it had gone into the red by Bt105 million since the services started five years ago. From the next fiscal year, beginning on October 1, the Patum Thani hospital will cease providing services to about 75,000 people registered under the scheme, Thammasat director, Surapol Nitikraipoj said. Only critical patients and those referred by a small hospital will be accepted under the scheme where they are normally treated free of charge, he said.

Big boost for Bt30 scheme [The Nation, 21 March 2006]

Public Health Minister, Pinij Charusombat, who chairs the NHSO board, said yesterday it would seek a subsidy of Bt2,089.20 per head for the 2007 fiscal year compared with the current Bt1,659.30 per person. [...] the proposed figure came after brainstorming sessions with relevant parties, including academics, he said.

Health-care programme needs more staff, funds
[The Nation, 29 September 2006]

Panelists at a seminar on reform of the national health-care programme expressed support yesterday for the Bt30-per-medical-visit scheme. However, they made many recommendations on how the scheme could be improved. The seminar, organized by the Thai Journalist Association, invited many outstanding figures as panelists. These included Ammar Siamwalla, an advisor to Thailand Development Research Institute (TDRI), Dr Yuppadee Sirisinsuk, a lecturer at the Chulalongkorn University's Faculty of Pharmaceutical Sciences, Phu Kradeung Hospital Director Dr Kriangsak Watcharanukoolkiat and health-care activist Jon Ungphakorn... Ammar suggested the scheme should have more workers and more funding...Yupadee agreed the scheme should receive more subsidies through various funds...Kriangsak said medical staff should receive better remuneration and those assigned to work in remote areas should get extra...Jon recommended a short-term measure for the Bt30 per visit scheme. 'For the short term, the Public Health Ministry should not exert its control over the National Health Security Office so it can represent people — not the Public Health Ministry,' he said.

The UCS also included clinic-based preventive and health-promotion services provided in health centres. As the CSMBS and SSS did not include these in their benefits packages, the UCS filled the gap by including these services for the whole Thai population within its annual budget (see Table 2). In 2011 the NHSO spent 1.27 trillion baht (US$ 4.2 billion) of which less than 11% went to clinical preventive and health promotion services, and nothing went to primary prevention and health promotion outside the clinical setting. The latter were supported by the MOPH regular budget and the Thai Health Promotion Foundation (ThaiHealth), an independent quasi-public body established by law in 2001. ThaiHealth is chaired by the Prime Minister, is financed by 2% "sin taxes" collected from producers and importers of alcohol and tobacco, and generates annual revenue of about 3 billion baht (US$ 100 million).

The initial benefits package that was part of the roll-out across the nation in 2001-2002 was guided by historical precedents, based on what other health insurance schemes were covering. However, subsequent inclusion or exclusion of an intervention was guided by a health technology assessment, including cost-effectiveness analysis, budget impact assessment, equity and ethical considerations and supply-side capacity to scale up. Box 5 describes the decision-making process. Added to this mix of criteria were demand-side factors related to changing population expectations for health care. Inclusion of dialysis for persons with chronic renal failure, for example, remains controversial as it costs more than four times GNI per capita for a single quality of life year (QALY) gained and will consume a huge part of the UCS budget over the long term.

Box 5: Evidence drives expansion of the benefits package

The Benefit Package Subcommittee of the UCS was set up to ensure adequate access to services and to consider the inclusion of new interventions. Technological advances and the proliferation of new medicines, diagnostics and interventions called for the introduction of a systematic and transparent mechanism to decide which interventions would be covered in the package. At the request of the Subcommittee, a major review of international

experiences was carried out by the Health Intervention and Technology Assessment Program (HITAP) and the International Health Policy Program (IHPP) in 2009. Working in collaboration with national partners, HITAP and IHPP examined the development of benefits packages in seven health technology assessment agencies and produced a draft guideline that was adopted after several rounds of stakeholder consultations.

The guideline covers the selection of new interventions for appraisal with full engagement by stakeholders in a transparent manner. Stakeholders include policy-makers, medical specialists or representatives from the Royal Colleges, public health experts, medical device and pharmaceutical industry representatives, civil society organizations, patient groups and the general public. The guideline also recommends economic appraisal of selected interventions using incremental cost-effectiveness ratio (ICER) and budget impact analysis.

The ICER threshold of one gross national income per capita for one QALY gained was applied by the Benefit Package Subcommittee. This process has not only resulted in evidence-based decisions being produced and applied in a transparent manner, it has also strengthened and sustained institutional capacities in generating evidence on ICER, budget impact assessment, and other ethical and social considerations.

A fixed annual budget and a cap on provider payment

It was acknowledged that more resources would be required year on year, and that the fiscal challenges of a tax-financed UCS would need to be carefully managed. A fixed annual budget and a cap on provider payment, known as "closed-end" approaches, were considered the best options to control costs and ensure the financial sustainability of the scheme. As described above, the annual budget is proposed, negotiated and approved based on a capitation rate that includes the cost of offering the whole range of the benefits package

to a member in a year multiplied by the total number of UCS members. The cost of a service is the product of the unit cost and the utilization rate of that service; the unit cost also covers salaries and other related staff costs. Unit cost is derived by estimating total annual operating expenditure of each hospital as the numerator, while denominators are the number of outpatient visits and the number of inpatient cases multiplied by a cost weight.*

The UCS approach to closed-end provider payment brought radical changes to how the budget was spent. Prior to UCS, apart from staff salaries, operating budgets and resources were allocated to health facilities through the Provincial Health Office (PHO) based on utilization rates and number of beds, which could be easily influenced by politicians. Under the UCS, the outpatient budget is allocated based on age-adjusted capitation and the total number of UCS members in a locality, with some adjustments to ensure the financial viability of the contract provider network in remote areas, the size of the catchment area and the number of health centres in the network. There is a fixed cost for district hospitals and more recently a fixed cost for small general hospitals. For inpatient services, a global budget is calculated for each of the 13 public health regions (Bangkok is one region and each of the other regions cover five to six provinces), and inpatient expenditure is reimbursed based on the cost weight of the Diagnosis Related Groups† (DRGs) generated by each hospital but capped by the regional global budget. In 2001 DRGs were already being used by MOPH hospitals in a pilot exercise for the Medical Welfare Scheme: as this was not a new mechanism there was little resistance from health providers.

The global budget is necessary to constrain total inpatient spending because DRGs alone can be manipulated by pushing patients into a higher cost DRG, often referred to as "DRG creep"‡ or gaming. With conventional DRGs,

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* A cost weight is the ratio between unit cost per admission and unit cost per outpatient visit and is derived from a small number of sample hospitals conducting conventional costing exercises with the application of step-down cost allocation methods.

† The Diagnosis Related Group (DRG) system is used to classify different hospital inpatients into one of a set of specified groups (each called a DRG) based on discharge diagnosis, co-morbidities, length of stay, discharge status and other key parameters. Cases classified in the same group consume similar resources or similar cost weights. The cost weight is applied to pay the hospitals for the cost attached to each case.

‡ Claims for reimbursement can be manipulated by hospitals changing the reported case mix so as to inflate the relative weight attached to the DRG used, for example, by adding extra procedures or co-morbidities.

reimbursement per cost weight occurs at the beginning of the year and the total budget by the end of the year depends on the total weight of services produced and claimed, which is uncontrollable without a global budget. The global budget results in retrospective payment and lower reimbursement per cost weight. It should be noted that between 2002 and 2011 the DRG-based inpatient budget never used funds allocated to other components of the benefits package such as outpatient care or prevention and health promotion.

Capitation for outpatient services and the global budget for inpatient services notionally included all staff costs. However, in the allocations to contracted provider networks, salaries were, from 2003 onwards, first top-sliced and allocated to where health staff were working — the higher the level of staff, the larger the level of total budget per capita. Non-staff operating costs were allocated equitably based on registered population size and adjusted for age structure; the larger the number of members over 60 or under 5, the higher the budget, reflecting higher use rates among these two groups. See the full report on UCS implementation at www.hsri.or.th for details on how UCS budgets and salaries were managed from 2002–2011.

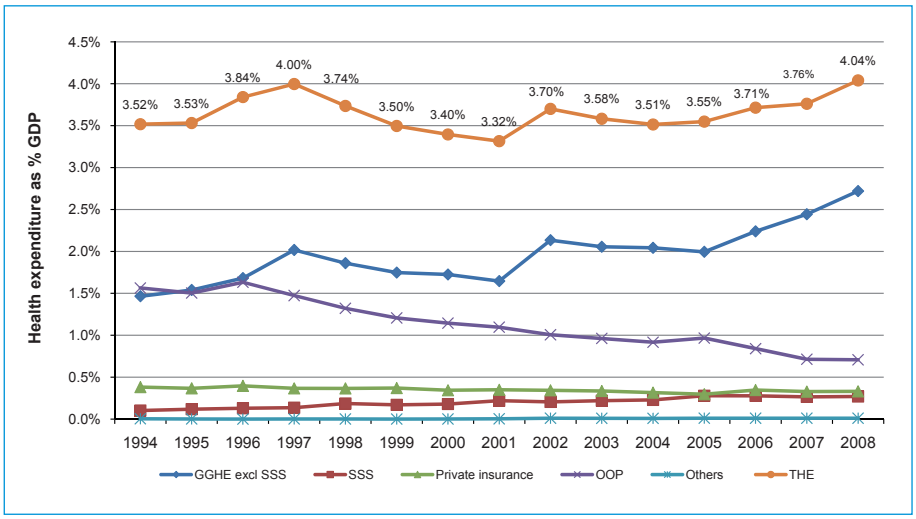
Another reason why a closed-end approach to provider payment helps to control costs is that it minimizes the risk of supply-side moral hazard. Medical providers have no financial incentive to induce unnecessary demand, which they have with a fee-for-service payment method. On the contrary, because providers have a financial incentive to minimize costs, a major concern with the UCS is the under-provision of services, about which the NHSO must remain vigilant. Regular monitoring of outpatient and inpatient utilization rates using routine administrative datasets and household surveys in collaboration with the National Statistical Office, medical audits and adequate capitation adjusted by age group are among the measures the NHSO uses to address this concern.

Not poor health care for poor people

The Thai Government's financial commitment to the UCS in its first 10 years was significant (see Figure 5). After the scheme was launched, general government expenditure on health increased from 84.5 billion baht (US$ 1.9 billion) in 2001 to 116.3 billion baht (US$ 2.7 billion) in 2002, and then it climbed steadily year on year to reach 247.7 billion baht in 2008 (US$ 7.4 billion). This was a 76% real term increase from 2002[16], the result of increased utilization of health services and the rising cost of production.

During this period expenditure on the SSS remained static and out-of-pocket payments by households decreased from 33% of total health expenditure in 2001 to 15% in 2008 (on a par with the average in OECD countries). Also, because there was steady growth in Thailand's GDP, total health expenditure as a percentage of GDP remained relatively stable, hovering between 3 and 4%.

Figure 5: Health expenditure as % GDP by source of finance, 1994-2008, current year price



GGHE = general government health expenditure; SSS = Social Security Scheme; OOP = out of pocket; THE = total health expenditure

Source: International Health Policy Program, the National Health Account of Thailand 1994–2008.

The UCS differs from the two other public health insurance schemes in several important respects: its comprehensive package includes clinical prevention and health promotion; the purchaser/provider contract model uses capitation for outpatients and global budget plus DRGs for inpatients; and clients must be registered with a contracted provider within the district health system to access services. Differences aside, all three schemes cover a full range of essential health services; thus the UCS cannot be seen as poor health care for the poor. However, there is a need to generate more evidence on the potential under-provision of services for UCS members.

Table 3 summarizes the characteristics of the three health insurance schemes that have covered all Thai citizens since 2002. The UCS and SSS capitation rates are similar but the UCS rate should be higher as it draws members from all age groups, including children under 5 and adults over 60, while the SSS covers only adults aged 15-60 years. CSMBS expenditure is thought by most analysts to be more than four times higher than the other two schemes because fee-for-service payment creates incentives for providers to prescribe more diagnostics and medicines. Research evidence shows large practice variations between the UCS and CSMBS[17]. For instance, the CSMBS spends more on branded drugs and less on generics, has a higher caesarean section rate and has longer hospital stays for most DRGs.

Table 3: Characteristics of Thailand's three public health insurance schemes after achieving universal coverage in 2002

Scheme	Population coverage		Financing sources	Benefits package	Purchasing relation	Access to service	Per capita expen-diture 2010
Social Security Scheme (SSS)	Private sector employees, excluding dependants	16%	Payroll tax financed, tri-partite contribution 1.5% of sal-ary, equally by employer, employee and govern-ment	Comprehensive: outpatient, inpatient, accident and emergency, high-cost care, with very minimal exclusion list; excludes prevention and health promotion	Contract model: inclusive capitation for outpatient and inpatient services	Registered public and private competing contrac-tors	US$ 71
Civil Ser-vant Medi-cal Benefit Scheme (CSMBS)	Govern-ment em-ployees plus dependants (parents, spouse and up to two children age <20)	9%	General tax, non-contributory scheme	Comprehensive: slightly higher than SSS and UCS	Reimburse-ment model: fee for service, direct disbursement to public providers for outpatients; conventional DRG for inpatients	Free choice of public providers, no registration required	US$ 367
Universal Coverage Scheme (UCS)	The rest of population not covered by SSS and CSMBS	75%	General tax	Comprehensive: similar to SSS, including prevention and health promotion for the whole population	Contract model: capitation for outpatients and global budget plus DRG for inpatients	Registered contractor provider, notably within the district health system	US$ 79

Chapter 5
New institutions and new ways of working

Before the UCS, the public health-care system in Thailand was highly centralized and strongly bureaucratic, with organizational and management structures divided into central and provincial administrations. As most health-care facilities were owned by the MOPH, the MOPH had leading roles in both health-care financing and service provision, and it had responsibility for overall health system governance. Private hospitals were licensed and re-licensed by the MOPH, but public and private health professionals were, as required by law, regulated by their respective professional councils.

The UCS design called for radically different governance, organizational and management arrangements that included new institutions, new relationships and new ways of working. The policy intention was to ensure transparency, responsiveness and accountability by involving a wider range of agencies and stakeholders in decision-making processes.

The National Health Security Act promulgated in November 2002 mandated the establishment of the NHSO and its governing body, the National Health Security Board (NHSB). The NHSB is chaired by the Minister of Public Health, and is responsible for setting policy, making decisions on the benefits package, deciding on appropriate provider payment methods, and setting rules and guidelines. The NHSB's 29 other members include representatives from various stakeholder groups: government officials (8), local governments (4), NGOs (5), health professionals (4), private hospitals (1), and experts in insurance, medical and public health, traditional medicines, alternative medicines, financing, law, and social science (7). The NHSB also has 11 subcommittees that assist in policy development.

The Standard and Quality Control Board (SQCB) is another important body responsible for setting standards and guidelines on service quality and standards of health facilities. The majority of SQCB members are representatives of health professionals and providers.

Among other things, the NHSB submits the annual budget proposal for approval by the Cabinet, and submits an annual report on performance of the implementation of the UCS and all expenditures to the Cabinet, Parliament and Senate within six months of the end of the fiscal year. The Board appoints the Secretary General of the NHSO on a four-year contract, which can be renewed once. Table 4 below outlines the institutional arrangements for the governance of the UCS.

Table 4: How the UCS is governed

Managing agency	National Health Security Office (NHSO), an independent public agency by law is responsible for managing and operating the UCS
Head of agency	Secretary General, selection committee, appointed by Governing Board
Governing bodies	National Health Security Board and Standard and Quality Control Board
Resources	• NHSO staff (800) • Administration budgets, 1.29% (2010) • Tax financed, NHSO has no role in collecting premiums from UCS members • Capacity to mobilize know-how from outside research institutes
Management Information System	Well established, comprehensive, huge scope to maximize its use
Use of evidence	Widespread application of evidence (see Box 5 on the Benefit Package Subcommittee as one example). IHPP and HITAP gradually developed national health technology assessment capacities. The National Essential Drugs Subcommittee requires full economic assessment, cost effectiveness analysis, budget impact assessment, in addition to safety and clinical efficacy before adding new drugs to the national essential drugs list.

The NHSO manages the scheme and is accountable to the NHSB, to the 47 million UCS members, and to the Thai Government. The NHSO was set up to use its financial power to gear the service delivery system to meet the health needs

of its beneficiaries and to improve efficiency by purchasing care from local contracted units, typically a district health system network. Thus, the NHSO required all contracted hospitals to set up one primary care unit for every 10,000-15,000 registered beneficiaries. In a typical rural area, the contracted hospital is a district hospital serving a population of 50,000 (as described in Chapter 2) and can have up to five primary care units. The whole district provider network is known as the "contracting unit for primary care" or CUP. The CUPs deliver primary-care services and arrange the referral of patients to secondary and tertiary-care services.

UCS members are automatically assigned to a CUP linked to their local district hospital (based on their address as specified in their house registration document) and therefore have little or no choice of provider, especially in rural areas where almost all district hospitals are owned by the MOPH and all MOPH hospitals and primary care units are obliged to contract with the NHSO.

Although the NHSO can contract with private providers, few private hospitals and almost no private clinics or pharmacies in the provinces are capable of providing the comprehensive range of services in the benefits package. As a result, the vast majority of UCS members receive services from provider networks linked to MOPH district hospitals. In larger cities other public and private hospitals are able to serve as contractor providers, and some catchment populations have been allocated to these networks. In 2010, 54.6% of the 3.7 million members living in Bangkok were registered with private clinics and hospitals (see Table 5), but the national average was far lower: only 5.7% of UCS members were registered with private-sector networks in 2010.

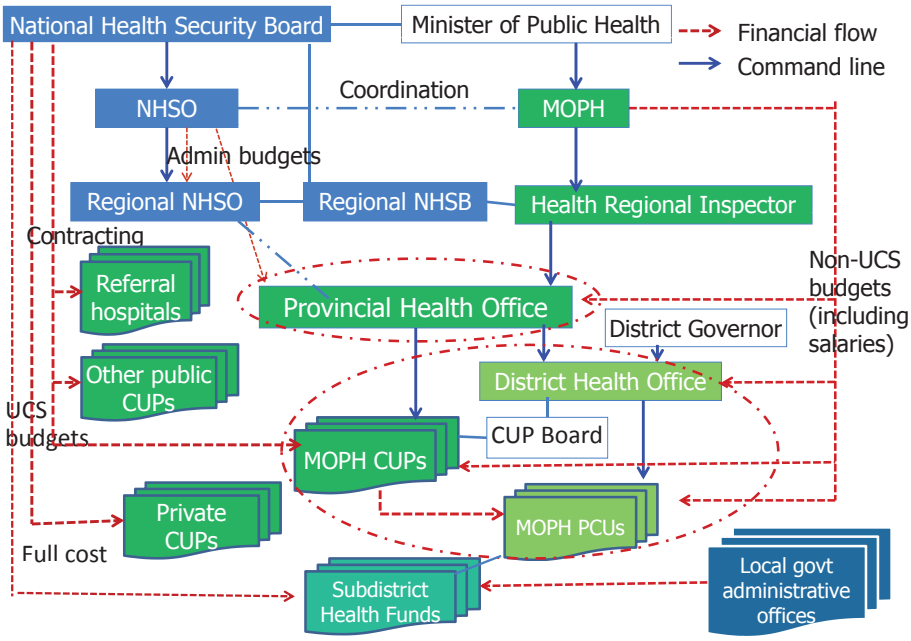
Table 5: Registration profile for UCS members in Bangkok, 2010

Contractor provider network	UCS members in Bangkok, 2010	%
Private clinics	1,508,013	41.1%
Private hospitals	495,013	13.5%
University hospitals	134,608	3.7%
Other public hospitals	1,527,018	41.7%
Total UCS members	3,664,652	100%

The original vision for the UCS was that the NHSO, rather than the MOPH, would act as the fund manager and that the MOPH would relinquish its authority over MOPH health-care facilities, which would come under the devolved control of local government or "area health boards". However, the plan to establish autonomous hospitals did not progress beyond a single pilot institution and the MOPH continued functioning as the major provider (see Figure 6). With financial authority transferred to the NHSO, it is understandable that the MOPH did not favour the devolution of its health facilities.

As the following chapter elaborates, the purchaser-provider split proved to be the biggest challenge faced by the UCS during its first decade, far more difficult, for example, than registering 47 million people in the new scheme and finding the public resources to cover 18 million previously uninsured people. The latter was done in the first year; the former has yet to be completed and may be further delayed by ongoing power struggles and institutional conflicts between the MOPH and the NHSO.

Figure 6: UCS institutional arrangements



Chapter 6
Implementing the UCS: institutional conflicts and resistance to change

As in many health systems around the world, the UCS has been shaped by a number of contextual factors, micro-political struggles between actors and interest groups, and shifting coalitions that have had more or less influence at different times. Understandably, some elements of the original design were dropped and others implemented in a modified form. This chapter looks at three elements that proved the most difficult to implement: the purchaser-provider split; strategic purchasing and the equitable distribution of resources; and the harmonization of the three existing public health insurance schemes.

Purchaser-provider split: anything but cut and dry

The centrepiece of the reform was the proposal to replace the old arrangements, whereby the MOPH channelled funds to its administrative tiers and service units (the so-called supply-side financing) with a system that split purchaser from provider and allocated funds in line with activity (demand-side financing). This was motivated by the contractual relationships between the Social Security Office (SSO) and public and private hospitals, which resulted in health-care providers being more responsive and accountable to SSS members compared with the integrated model of the Medical Welfare and Voluntary Health Card Schemes, where the MOPH held and allocated budgets to hospitals and health centres under its jurisdiction without clear links to the number and profile of members registered with them.

The thinking behind the purchaser-provider split is reflected in the views of an NHSO executive:

> *The separation between provider and system manager (purchaser) is crucial. The purchaser must stand on the people's side while the MOPH stands on the provider side. Following the separation, this reduced the provider's power in holding the money and making*

> *decisions on how to use it [...] If there was no such separation, there is no one to safeguard and protect the people's right to health care […] However, how well the purchaser performs depends on the vision of the office, including a system design that ensures good governance.*

Many of the changes required to realize this division of roles and responsibilities fully were highly controversial, and problems were exacerbated by the political decision to implement the UCS well before the core institutions and mechanisms were in place. There were conflicts between the MOPH and NHSO, some slowing of the planned reform timetable, and various difficulties in UCS implementation at central and peripheral levels (discussed below).

In 2001, when almost no MOPH executives agreed that purchasers should be separated from providers, only strong political leadership stopped them derailing the reforms. Ministry opposition was unsurprising given that this would strip senior Ministry civil servants of their financial power. The difficult relationship between the two institutions arose partly from attempts by MOPH "conservatives" to slow the pace of reform, but was worsened by some NHSO statements which struck an unnecessarily critical and adversarial tone. For example, the use of language such as "squeezing fat" or "get rid of fat in the system" to justify changes in patterns of resource allocation went down badly in tertiary hospitals and large facilities in the central region. This turned some professionals and senior administrators against the NHSO.

An NHSO executive explains:

> *We used the wrong approach at the beginning, 'squeezing fat'. This implied that they were the problem and needed improvement. We enjoyed too much power to deal with them […] In the later phases, we changed the message to 'the overall system needs improvement' and adopted a 'participatory approach' with professional groups. Then we got a better response from them.*

Resistance was so strong that MOPH leaders tried on more than one occasion between 2001 and 2010 to bring back the previous system, usually when there was a change of government. In the end, they lost these battles.

In 2002 all major MOPH programme budgets (provincial, district and subdistrict health services, and subsidies for the Medical Welfare and Voluntary Health Card Schemes) were pooled, making available a total budget of 26.5 billion baht. The estimated shortfall of about 30 billion baht needed to start nationwide implementation of the new scheme was allocated by the Government. Although this entire sum was initially managed by the MOPH, the capitation-based UCS budget passed via the CUPs to the provider facilities, which meant that the MOPH's annual supply-side budget allocation dried up completely. All that remained was some funding for major capital investments and small budgets for the Food and Drug Administration and the Medical Science Department. Moreover, the MOPH failed to secure from the Budget Bureau adequate funding for its normative and stewardship functions, such as disease surveillance (Department of Disease Control) and public health services (Department of Health). As a result, provincial and district health offices had to "request" funds from the CUPs to maintain these legitimate functions in their jurisdiction, which further strained relationships.

Full financial power over MOPH facilities was not transferred to the NHSO until fiscal year 2007 (October 2006–September 2007). During the previous three years the NHSO had contracted with the MOPH rather than with MOPH service units, as had been required by the National Health Security Act. Ministry conservatives argued that this arrangement was necessary to smooth the transitional period. However, this gave anti-reformists more time to resist the change and allowed Ministry executives to introduce financing changes that weakened the impact of capitation funding. The MOPH steered the new system through the initial implementation phase and was instrumental in modifying some aspects of the evolving UCS. Yet the Ministry was unable to halt the loss of its financial power, and evolved (reluctantly) from overall system manager to become the manager of a network of major MOPH providers under the UCS, as well as continuing to perform other stewardship functions such as setting rules and regulations and health-system oversight.

In addition to conservatives in the MOPH, the contra-reform alliance that was highly vocal during the first decade of UCS included the private sector and professional organizations. This alliance was often at odds with the NHSO's pro-poor policies, which were supported by reformists and civil society organizations. While the private sector fared well in providing services to more than 60% of SSS members, fewer than 5–6% of UCS members were registered with them. The alliance between MOPH conservatives and for-profit private hospitals was clear, for example, in their opposition to including dialysis in the UCS benefits package. The policy supported the use of home-based peritoneal dialysis, which was well suited to rural patients unable to travel to urban centres for haemodialysis, but represented a huge potential loss of profit to hospitals providing haemodialysis services.

Redefining institutional roles and relations: muddy and murky waters

The separation of purchaser from provider created governance problems that have yet to be resolved. As the main purchaser for the UCS, the NHSO is accountable to the National Health Security Board, which in turn is accountable to tax payers and reports to Parliament. The MOPH, the main health-care provider, is responsible to the Minister of Public Health. The NHSO was established as an autonomous body while the MOPH is a government ministry. Both the NHSO and MOPH have their own policies and development plans and there is no overarching national health policy coordination.

One immediate problem confronting the NHSO was how to exercise its purchasing function in local areas, and what organizational infrastructure would be needed to support this. Initially, the NHSO assigned the Provincial Health Office (PHO) to run provincial branches, which meant that both purchaser and provider roles were invested in a single organization. PHOs were accountable to the NHSO and MOPH, but in reality, the primary allegiance of most PHOs was to the MOPH because of the traditional lines of command and control in the MOPH organizational hierarchy and the fact that the provincial chief medical officer is appointed by the MOPH permanent secretary. These dual responsibilities led to conflicts in UCS implementation. After 2006 the NHSO transferred the devolved purchasing role to 13 regional branch offices, which then liaised with PHOs to formulate local

health strategies and agree on performance requirements for the service units. This reduced role conflict, but still left PHOs in the complicated position of maintaining relations with the MOPH and NHSO, when both might claim jurisdiction over aspects of the management of local health systems.

There is a widespread perception that clarification of, and agreement about the roles and responsibilities of purchasers and providers is needed. The unclear boundary in the first 10 years of the UCS exacerbated tensions between the MOPH and NHSO. Financing is still not fully aligned with purchasing responsibility. Purchasing in an emerging economy like Thailand cannot simply mean buying existing services. Because not all necessary services are provided in all provinces, there is a need to develop new services and ensure that all necessary services can be equitably accessed by UCS members through referral, mobile services or outsourcing to other competent providers. Between 2002 and 2010 the MOPH was not successful in securing new capital investment funds from the Budget Bureau and the NHSO financed a capital replacement programme. There were conflicts when the MOPH had to use the replacement budget for new capital projects, and in any event this was not sufficient for major construction projects.

Recently there has been increasing interest in using the term "commissioning" to address the negative connotations associated with the term "purchasing". In Thailand there is a widely shared view that health-care professionals do not sell services to a purchaser; they are "professionals" acting in the best interests of their patients. Commissioning also implies close cooperation between purchaser and provider, and might open the way for a more collaborative, non-adversarial version of purchasing, better aligned to Thai culture.

A problem which has persisted since the UCS was launched has been the tension between different organizations, interest groups and stakeholders. Many of the policy adjustments made as the UCS was implemented have involved power swings between the MOPH and NHSO, or between organizations at different levels such as the PHOs and CUPs, and central intervention has sometimes been needed to control the behaviour of particular actors. However, by 2010 there were signs of positive developments in this area, with some local government organizations beginning to play a bigger role, and more scope for community involvement in

local health funds and local government health promotion projects.

With the increasing involvement of municipalities and subdistrict administrative organizations, together with NHSO branch offices and PHOs, there is an expanding administrative infrastructure at regional and provincial levels. However, the mixed arrangements that are emerging risk excessive system complexity and even a degree of organizational fragmentation, so future policies need to be informed by research evidence regarding the organizational framework required to deliver universal health coverage at the local level (see Box 6 below).

Box 6: The impact of decentralization on the UCS

Decentralization had limited impact on the implementation of the UCS. The Plans and Process for Decentralization to Local Administrative Organizations Act of 1999 mandated ministries, including the MOPH, to develop action plans for the decentralization of functions, resources and staff to the elected Local Administrative Organizations (LAOs) by 2010. The Act also set a target for increasing the share of the central government budget that should be transferred to LAOs from 9% to 35% by 2006. In 2006, the law was amended to remove the 2006 deadline and reduce the minimum share of the national budget to be transferred to 25%, with a target of 35%.

Devolution of health centres to Tambon Administrative Organizations (TAOs) and municipalities was initiated in the second action plan for decentralization, prepared in 2006. Under the guidelines for devolution developed by the MOPH, devolution of a health centre can only occur when two criteria are met. First, the TAO/municipality must meet "readiness" criteria to manage the health centre: the LAO must have received a good governance award and demonstrated capacity for and commitment to health by establishing a Public Health Section in the TAO and contributing resources to a community health fund. The latter is an NHSO initiative to encourage local governments to lead and commit resources to disease

prevention and health promotion activities; the NHSO contributes to a community health fund with a condition that the local government provides matching funding. Second, at least 50% of health centre staff must support devolution of their health centre and be willing to transfer to LAO employment, including the health centre head. With these exacting criteria, by 2009 only 28 of the 8,000 health centres owned by the MOPH had devolved to TAOs. Regarding decentralization of hospital management, only one of more than 600 district hospitals has become autonomous under the provisions of the 1999 Public Organization Act.

In summary, at the end of 2011 continuing tensions were manifest not only between the NHSO and MOPH, but also between the reformist and conservative factions in the MOPH, between pro-poor and private-sector for-profit ideologies, between organizations at different levels of the system, and between different sectional interest groups within the civil service and the medical profession.

Health workforce: more difficult to redistribute according to need than anticipated

Strategic purchasing is another major component of the UCS design. The idea was that money should follow patients (registered members in the catchment area), reflecting the distribution of population need for health services across the nation rather than the (skewed) historic allocations to the administrative and service units. The new capitation-based funding stream that went to the CUPs aimed in part to allocate health resources more equitably between rich and poor provinces. In the UCS's first 10 years this was only partially successful, primarily because during this time the MOPH failed to provide leadership in addressing the problem of inequitable distribution of staff. Although the non-salary component of the UCS is allocated based on population size, age profile, utilization and various other factors (see full report on UCS implementation at www.hsri.or.th) the same cannot be said for the salaries of health-care professionals.

The Thai health-care system has long suffered from relatively high staffing levels in the central region and the large urban centres. Historically, once a district was designated a municipality, a provincial hospital was established no matter how large the population it served. Many provinces in the central region thus have more than one provincial hospital and human resource density favours this region more than the peripheral rural areas.

The capitation allocation in the first year of the UCS (2002) included salaries and meant financial deficits for provincial hospitals with a relatively high concentration of staff, while those with fewer staff received surplus funding, although those monies proved difficult to use to generate additional services. This led to much controversy and, using its authority to manage the budget during the three-year transitional period, the MOPH removed salaries from the capitation-based allocation in the second year of implementation.

The plan to use the UCS budget to redistribute the budget for salaries was partially undermined because it ran counter to the existing civil service workforce employment procedures. By law, civil service salaries are made in a separate government allocation and cannot be used for other purposes, so that de facto top-slicing of the salary component is unavoidable. The scope for using the UCS to reallocate the workforce was further limited by the MOPH's lack of a clear policy on human resource distribution.

Problems were exacerbated by the restructuring of the MOPH in 2002, particularly the termination of new posts for nurses and pharmacists who had government bonding/compulsory service obligations; they became contract workers employed independently by individual hospitals. Poorer hospitals have limited capacity to employ staff, resulting in tensions due to high staff workloads. The objective to improve the equity of the UCS budget allocation was hampered by the inequity in the staff budget allocation (slightly more than half of the total operating budget), an issue that in retrospect might have been addressed more successfully by the gradual equalization of staff concentration across provinces over several years.

Harmonization of public health insurance schemes

Harmonization of the three public health insurance schemes remains an issue of intense debate in Thai society 10 years after the inception of the UCS. The lack of equity between the three schemes continues to raise questions about whether entitlement to universal health care means entitlement to health care of a similar standard for all Thai people. Recent studies have found inequities in access to essential care offered by the different health insurance schemes, including differences in benefits packages, payment methods and payment rates, and the provision of expensive drugs and high-cost procedures.

The architects of the UCS envisaged achieving universal coverage through the creation of a single fund, a reform proposal that was not supported by the other two schemes. The Social Security Office was worried that its substantial SSS reserves would be used to subsidize the UCS, while the Ministry of Finance, responsible for the CSMBS, argued that generous medical welfare benefits were needed to compensate low-paid civil servants. Additionally, the most reputable tertiary hospitals enjoying income from providing services to civil servants predicted erosion in the quality of care if the CSMBS was combined with the UCS.

In the end, the plan was diluted during the parliamentary process of drafting the National Health Security Act. The compromise agreed among the contending groups was to create a single administrative unit to manage the three existing schemes. This signalled a fundamental ideological shift: the rationale for merging the funds was to create a single system within which equity could be easily managed and achieved, while the aims of a single management unit were to reduce duplication and improve the efficiency of managing the systems, but not necessarily to reduce inequities between the schemes.

Even though the compromise was incorporated in the Act, it continued to provoke significant opposition. To accelerate implementation, the NHSO recommended the establishment of a coordination committee covering the three public insurance schemes, which was set up in April 2004. Its remit was to coordinate and support harmonization in non-controversial areas, while postponing consideration of benefits packages and funding levels. The committee's objectives were:

(1) to cooperate in sharing registration data on beneficiaries across schemes; (2) to support the development of standardized data that could be shared between schemes; (3) to develop a common audit system; and (4) to support data exchange in order to monitor and evaluate the operation of the health insurance system.

A review for this assessment of the minutes of coordination committee meetings held during 2004-2010 found that none of the agenda items concerned the key harmonization issues specified in sections 9-12 of the National Health Security Act. However, the work of the committee resulted in at least three positive outcomes: (1) cooperation between the call centres of each scheme in providing information, not only in relation to the individual scheme, but also regarding the other schemes; (2) improved cooperation and sharing of beneficiary databases between schemes with regular updating to record individual entitlements and prevent duplication; and (3) agreeing to a joint audit system.

Lack of progress towards harmonization and evidence of practice variations and inequities between schemes brought this issue onto the agenda of the National Health Assembly in 2010. The Assembly's proposed solution was to create an advisory body standing above the three public health insurance schemes, responsible for the development of policies to harmonize benefits and entitlements. In response, Prime Minister Abhisit's Government set up the National Health Care Financing Development Office, managed by a board chaired by the Prime Minister. It will exist for three years and its remit is to develop a long-term plan and roadmap for the harmonization of the three public health insurance schemes. However, at the time of writing it is unclear whether the present Pheu Thai-led coalition Government will support an initiative associated with its political rival.

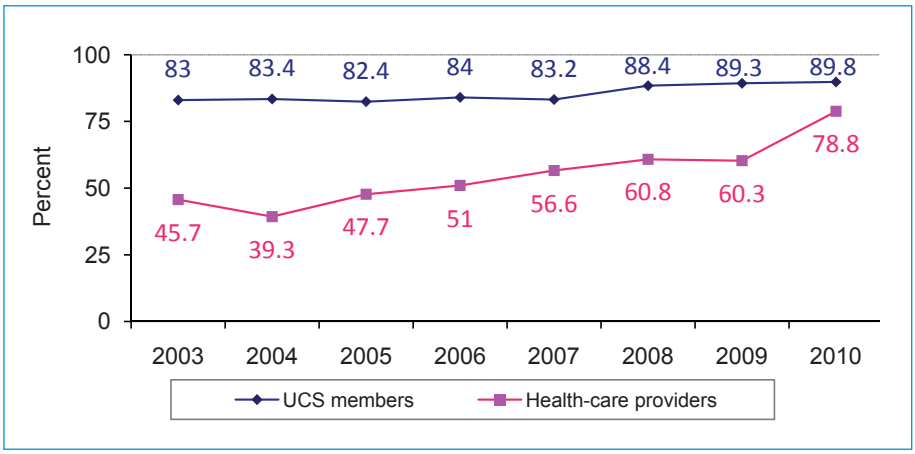
High levels of satisfaction among UCS members and providers

The next two chapters look at whether the UCS was governed well and at the scheme's impact in its first 10 years. One clear indication of success is the high percentage of members and health-care providers who express satisfaction with it (see Figure 7). Recognizing that this was a major determinant of the success or failure of the UCS, satisfaction was regularly monitored by an independent polling

institute, the Assumption Business Administration College (ABAC) which also undertakes electoral polling.

UCS members' satisfaction increased from 83% in 2003 to almost 90% in 2010. Though members of different insurance schemes tend to have different expectations, an exit interview survey of hospital visitors in 2011 revealed that UCS-entitled visitors reported higher levels of satisfaction than those entitled to the CSMBS or SSS in all dimensions of responsiveness except choice, which was lowest among UCS members[18].

Figure 7: Satisfaction of UCS members and health-care providers, 2003-2010



Source: NHSO 2011.

Among health-care providers there was initially a low level of satisfaction with the UCS as measured by job satisfaction, work morale and happiness: 45.7% in 2003 and 39.3% in 2004. Two reasons why the UCS was not better received were inadequate budget allocations, especially to larger hospitals and those located in the central region, and the negative statements made by the reformists about health-care providers. Satisfaction rates improved when the NHSO began to address provider concerns, reaching a high of 78.8% in 2010. Increasing the capitation rate and the proportion of the budget allocated to hospital care helped. The sharp rise in the level of satisfaction in 2010 is best explained by the substantial increase in allowances for health-care professionals in district and provincial hospitals in the previous year. Among the other reasons, the NHSO

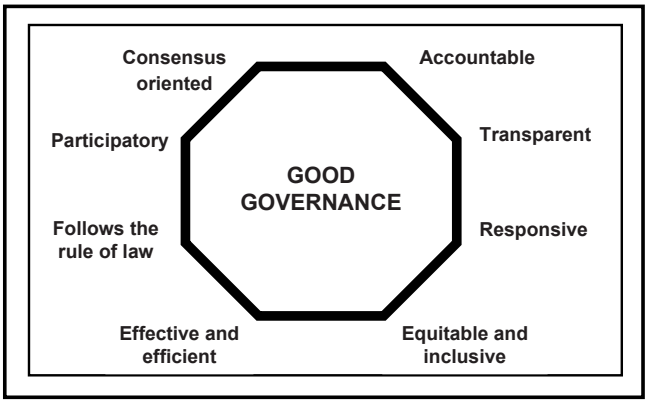
began to give health-care providers more public recognition and to utilize their expertise by engaging them in designing centres of excellence. From the provider perspective, higher satisfaction with the UCS will require improvements in three areas: better understanding among UCS members of their rights and entitlements, appropriate levels of staffing in relation to workload and improved health-service capacities for prompt treatment.

Chapter 7
Governance: good, but room for improvement

The UCS was designed to create a governance structure that allows for better participation (of civil society, patient groups, health-care professionals and so forth) and a transparent decision-making process. Therefore, it was essential to include governance in the assessment of how the UCS performed in its first 10 years in order to identify gaps that need to be filled to maximize the societal benefits from the scheme.

This assessment focused on the performance of the overall governance of the UCS and the roles of the governing committees and subcommittees in steering and implementing the UCS. Strategic purchasing and scheme harmonization were used as two tracers to assess the power structures and interactions among policy actors, conflicts of interest and influences over policy decisions. Researchers used the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) governance model for the assessment[19]. According to the model, there are eight attributes of good governance: accountability, participation, transparency, responsiveness, consensus orientation, following the rule of law, effectiveness and efficiency, and equity and inclusiveness (see Figure 8).

Figure 8: UNESCAP's eight attributes of good governance



The eight attributes are interconnected; for example, there can be no accountability without transparency and the rule of law, and no consensus without participation. Overall, the assessment concluded that governance was "good enough", especially given the national health policy context characterized by the lack of a well-functioning national health authority, the MOPH's monopoly of public health facilities and the shortage of health-care professionals. Some highlights of the results are presented below, including areas of concern. More details along with the definition of each attribute can be found in the governance background paper available at www.hsri.or.th.

The equitable and inclusive attribute has already been demonstrated in this report. A long-term commitment to equitable distribution of resources indicates strong commitment of the central governing bodies to the equity goal of the UCS. One example was the NHSO's decision to allocate extra budget to remote areas, ensuring availability of services to disadvantaged populations.

Participation, transparency, consensus and rule of law

Stakeholder participation under the UCS was found to be structurally and procedurally sound. Decision-making tends to be consensus-oriented and follows the rule of law. This applies to the central governing bodies (NHSB, SQCB and subcommittees) and to the regional and provincial governing bodies (PHSO and subcommittees). Including NGO representatives in the governing bodies also facilitates transparency, since NGO representatives sometimes voice through the mass media their concerns about inappropriate policy decisions, such as the attempt to over-represent private providers in new appointments to the NHSB in 2011[20].

Apart from the official bodies, the NHSO also supports and strengthens the participation of networks of civil society, professional groups and local governments. It introduced representatives of consumers, communities and local governments into the decision-making process by setting up Provincial Health Security Boards (PHSBs) in 2004. It was expected that these third-party representatives would influence the provision of information, the targeting of resources and the introduction of services that respond to local health problems. The PHSB injected more transparency into decision-making and resource

allocation, following the rules and being responsive to health needs. However, the third-party representatives had little knowledge of or experience in UCS management, and so most of the decision-making was left to the representatives of the providers, who were mostly MOPH staff.

Professional representatives still tend to dominate policy decisions in provincial governing bodies (PHSOs and provincial subcommittees) and restructuring is probably necessary to balance the number of voters between professional and non-professional groups. Moreover, the provincial bodies are not being adequately evaluated and participants in the governing bodies at all levels are not adequately informed.

Responsiveness and accountability

Examples of the responsiveness attribute (which is closely linked with accountability) include various mechanisms established by the NHSO to protect beneficiaries: a "1330" hotline, a patient complaints service, a no-fault compensation fund, stepwise quality improvement and tougher hospital accreditation requirements.

A 24-hour national call centre, which has been part of the UCS since its inception, is centralized at NHSO headquarters, with 46 call stations and a flat rate of 3 baht per call from anywhere in Thailand. The two main functions of the centre are providing information services to UCS members and managing complaints. The centre transfers complaints to relevant staff at headquarters or provincial branch offices for further investigation. By regulation, complaints have to be managed and results reported back to plaintiffs within 30 days. Problems that cannot be settled by the relevant staff are passed on to the Consumer Protection Subcommittee, the SQCB and finally, when necessary, to the Civil Court.

Due to increased awareness among UCS members of their right to complain and their entitlement to compensation in cases of adverse events from medical services (deaths, disabilities or injuries), the number of complaints and compensation awards rose sharply between 2004 and 2010 (see Table 6). Compensation awards to UCS members increased from 73 in 2004 to 704 in 2010, and the cost of compensation rose from 4.8 million baht in 2003 to 73.2 million

baht in 2007[21]. Compensation awards to UCS contract providers jumped from 11 in 2004 to 686 in 2010. Complaints registered by UCS members increased from 1,490 in 2004 to 4,239 in 2008 and then levelled off. The three most common complaints were unavailability of hospital beds, being charged by hospitals for eligible services and receiving poor-quality care.

Table 6: Call centre service output, 2004-2010

	2004	2005	2006	2007	2008	2009	2010
Provide information for beneficiaries (x1,000)	495.6	831.6	788.4	720.5	755.3	728.9	777.8
Provide information for providers (x1,000)	17.4	24. 3	30.1	66.3	96.7	40.2	31
Complaints registered by members	1,490	1,864	2,945	2,796	4,239	4,298	4,186
Compensation awards for patients*	73	178	371	433	550	660	704
Compensations awards for providers	11	46	48	197	473	664	686

Source: NHSO annual reports.

* Initial compensation provision for patients having adverse events from treatment according to article 41 of the National Health Security Act.

Ensuring quality of care is the NHSO's responsibility and a key component of responsiveness and accountability, especially in a closed-end payment system where there is a risk of low quality and low quantity of services. Hospital accreditation is one way to monitor and improve quality. By 2008 59% of primary care units had met NHSO's accreditation criteria[22]. Meanwhile the proportion of hospitals fully accredited to contract for UCS work increased from less than 10% in 2003 to more than 20% in 2010. Those with level 2 (a step lower) accreditation increased from less than 20% to 60% during the same period. With NHSO financing since 2007, the number of accredited hospitals has increased at a much higher rate compared with the first few years of the UCS.

Effectiveness and efficiency

The NHSO's administrative costs were less than 1% over the decade, in part because the Office has no responsibility for generating revenue or collecting premiums from UCS members (some high-income countries spend 10-15% of their health insurance budget on administrative functions[23]). From one perspective this indicates highly efficient resource utilization by the NHSO, but it also suggests underinvestment in administrative functions such as financial auditing and accounting. These weaknesses are illustrated by the widespread use of cost estimates in budgetary planning. As a result, deviations of fund distribution from the approved budget categories were common and may have jeopardized trust among stakeholders and policy-makers.

The efficient use of resources was evident in terms of mobilizing bargaining power to procure high-cost cancer drugs through compulsory licensing[24] and centralized negotiations to purchase medical supplies such as artificial lenses for cataract surgery and stents for revascularization in patients with acute myocardial infarction. In 2009 a more systematic and evidence-based approach to selection of interventions in the benefits package was introduced as the standard decision-making process (see Box 5).

However, there have also been examples of less efficient resource use. For instance, after almost a decade of sustained financial support for the development of primary care, evidence of improved outcomes is scanty or inconclusive. For example, prevention of chronic noncommunicable diseases did not achieve the expected outcomes, and in 2009 screening for combined risk factors of cardiovascular disease was reported to cover less than 30% of at-risk UCS members in 10 of the 13 NHSO administrative regions[25]. The hospitalization rate for early stage cervical cancer stagnated even though it was supposed to be detected and brought to early treatment by the Pap smear programme[26]. The upgrading of health centres to PCUs and more recently to health promotion hospitals also failed to deliver the expected outputs[27].

Different levels of performance between primary care (including disease prevention and health promotion) and specialized care may be due to a number

of factors. Interest in and commitment to primary care development within the MOPH was relatively low compared to hospital care. At the operational level, resource allocation was biased to favour district hospitals rather than the whole district health system[28]. Since the district hospital directors were usually acting as fund holder and chair of the CUP governing board, some used their position to prioritize curative hospital services over primary care development.

Other accountability concerns

The governance assessment revealed a number of other concerns. The length of time it takes to release reports and documents, and the fact that they are not particularly reader friendly, have been impediments to accountability and well-informed participation. Hospital accounting systems were found to be insufficient and not able to disclose accurate and timely information and data. Lack of accurate and timely empirical data (routine data and research) about financial performance and health-care performance (outpatient care, disease prevention and health promotion) significantly compromised policy formulation, monitoring and evaluation.

A related concern is the balance between the need to protect the privacy of individual patients and the need for access to clinical data in the claimed datasets in order to assess performance and hold providers accountable. In the first 10 years of the UCS most of the effort was focused on protecting patient privacy and so, for example, researchers and evaluators had no access to anonymized patient records and datasets.

Finally, priority setting and trade-offs were not consistently explicit in all policy processes and this compromised accountability and led to conflict.

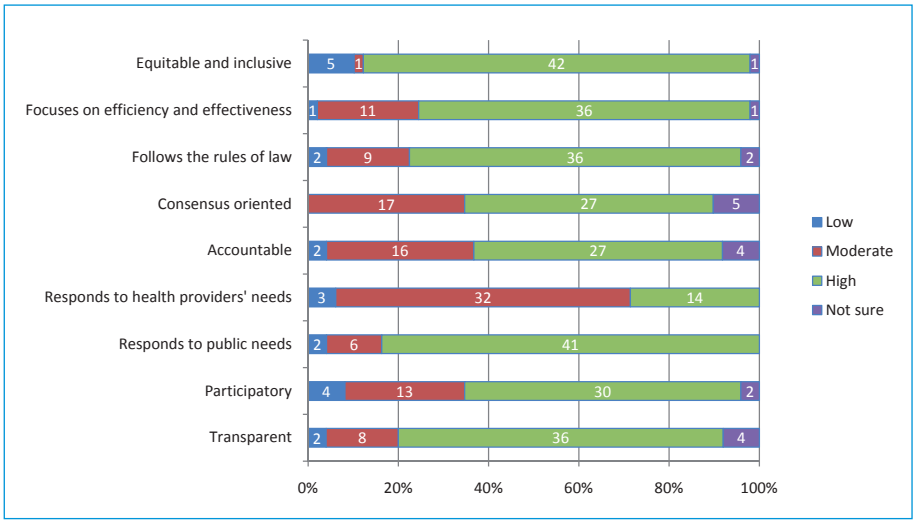
Overall governance of the NHSB and its subcommittees

Overall, the governance arrangements associated with the NHSB, the Benefit Package Subcommittee, the Financial Subcommittee and the Strategic Coordinating Subcommittee were mostly rated at a high level across a range of attributes. The results from an NHSB survey are summarized in Figure 9 below.

It is important to note that the survey results tended to have a positive bias due to the 36% response rate (the electronic questionnaire was sent to 166 people) and to the fact that most who responded were enthusiastic about the NHSO. Bearing this in mind, respondents rated the NHSB's conduct as follows: had a high level of transparency (72%), listened to all stakeholders (61%), responded to public needs (84%), responded to health providers' needs (29%), demonstrated responsibility to decisions (57%), was consensus oriented (55%), followed the rule of law (74%), focused on efficiency and effectiveness (71%), and focused on equity (86%).

The NHSB's governance performance was rated satisfactory with the majority of respondents assigning a high to moderate degree in all components. Only a small proportion of respondents rated the governance attributes for the NHSB at a low level. Findings from similar surveys of the three subcommittees (strategic coordination, financing and benefits package) followed the same pattern.

Figure 9: Results of NHSB survey assessing governance of the UCS, 2011



Source: web-based survey on overall governance of the NHSB and its subcommittees.

Chapter 8
Significant positive impacts in the first 10 years

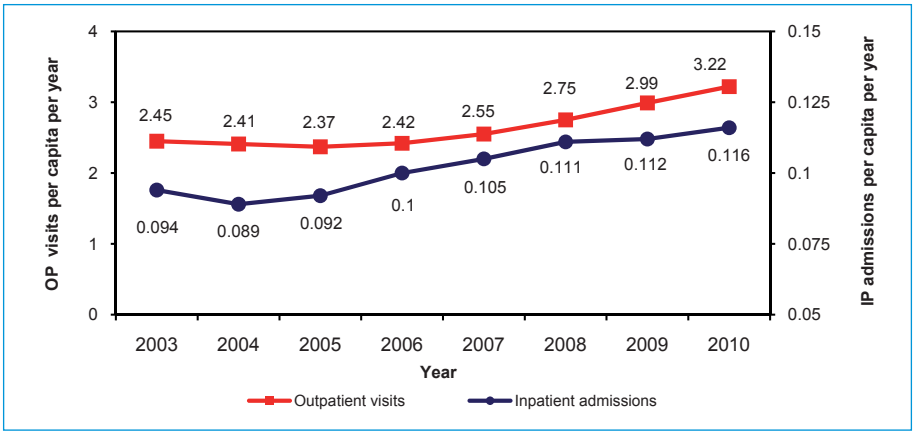
The UCS was set up to improve equitable access to quality health services, to reduce out-of-pocket payments by households, and to prevent catastrophic health expenditures and medical impoverishment. The evidence presented in this chapter (and in the full report on impacts available at www.hsri.or.th) shows measurable progress in all three areas a short time after the UCS was launched, with year-on-year improvements through 2011. The scheme also had positive spill-over effects on the health system and at the macroeconomic level.

Increased utilization and low levels of unmet need demonstrate improved access

The gradual increases in the rates of outpatient and inpatient visits by UCS members indicate improving access to care. The number of outpatient visits per member per year rose from 2.45 in 2003 to 3.22 in 2010, and the number of hospital admissions per member per year rose from 0.094 in 2003 to 0.116 in 2010 (see Figure 10). It is important to note that the increase in utilization cannot be attributed solely to the UCS because there are no reliable household-level data on health-care utilization prior to the UCS (the 1996 and 2001 Health and Welfare Survey conducted by the National Statistical Office were reviewed and found difficult to use). Also, there is no counterfactual situation where utilization may have increased as a result of higher household incomes, increased expectations, and greater availability of public and private health-care services.

Contracting with the district health system means that the rural poor who are UCS members can effectively use services when needed; and empirical evidence shows a pro-poor outcome of health-care utilization for outpatient and inpatient services, particularly at health centres and district and provincial hospitals[29] (Figure 11).

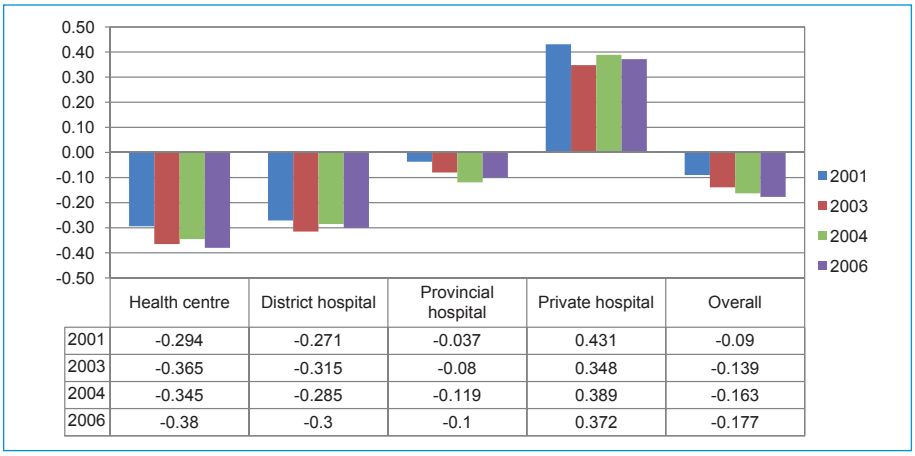
Figure 10: Service utilization rates among UCS members, 2003-2010



Source: NHSO annual reports 2009 and 2010.

As a result of a long-standing partnership with the MOPH, between 2003 and 2007 the National Statistical Office was able to conduct Health and Welfare Surveys annually, instead of every five years, in order to assess the UCS's impact on health-care utilization. At the same time, the NHSO developed and improved the accuracy and scope of the routine administrative dataset on utilization.

Figure 11: UCS improved equity in service utilization (ambulatory care, concentration index)



	Health centre	District hospital	Provincial hospital	Private hospital	Overall
2001	-0.294	-0.271	-0.037	0.431	-0.09
2003	-0.365	-0.315	-0.08	0.348	-0.139
2004	-0.345	-0.285	-0.119	0.389	-0.163
2006	-0.38	-0.3	-0.1	0.372	-0.177

Source: analysis from the Health and Welfare surveys 2001, 2003, 2004 and 2006.

Data from the first survey of its kind in Thailand, conducted jointly by the National Statistical Office and the IHPP in 2010, point to a very low prevalence of unmet need for health services overall, though UCS members had a higher prevalence than CSMBS and SSS members. As Table 7 shows, only 1.44% and 0.4% of respondents said they had unmet needs for outpatient and inpatient care respectively. The main reasons given were lack of time to seek care, uncertainty about the availability of effective treatment and geographical barriers (the travelling distance to receive care was too great).

Table 7: Unmet need for outpatient and inpatient care, 2010

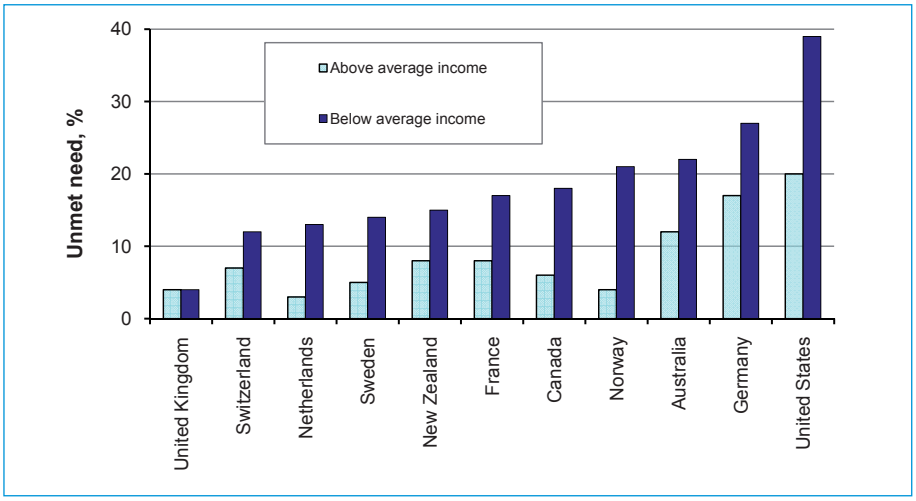
	Outpatient, %	Inpatient, %
Prevalence of unmet need, national average	1.44	0.40
CSMBS	0.80	0.26
SSS	0.98	0.20
UCS	1.61	0.45
Reason for unmet need		
Too far to travel	13.6	17.4
No time to seek care	24.3	17.2
Cannot afford to pay for treatment	1.3	16.7
No one to accompany them to hospital	3.5	9.6
Not sure there is effective treatment	16.3	5.6
No confidence, having bad impression of providers	5.3	2.3
Cannot afford transportation fee	1.3	0.0
Other reasons	34.4	31.3
Total	100	100

Source: analysis from the 4th wave of Panel SES 2010.

This nationally representative household survey applied standard OECD methods: all individuals were asked whether there was a time in the previous 12 months when they felt they needed outpatient and/or admission services but did not receive them; this was followed by a question as to why the need for care was unmet. This study prompted the NHSO to collaborate with the National Statistical Office and include these questions in the biennial Health and Welfare Surveys.

The proportion of total unmet need in Thailand due to unaffordable cost of care, 1.3% for outpatient and 16.7% for inpatient services, compares well with several OECD countries[30] (see Figure 12).

Figure 12: Unmet need for health care* due to costs in 11 OECD countries, by income group, 2010



* Either did not visit doctor with medical problem, did not get recommended care, or did not fill/skipped prescription.
Source: OECD.

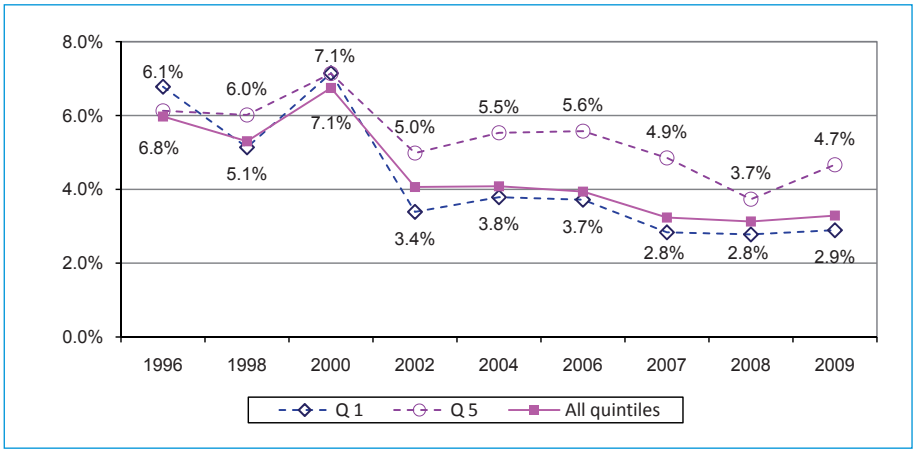
Decreasing catastrophic expenditures and household impoverishment

Since the UCS was introduced there has been a declining trend in the incidence of catastrophic health expenditure, defined as out-of-pocket payments for health care exceeding 10% of total household consumption expenditure. The incidence dropped from 6.8% in 1996 to 2.8% in 2008 among UCS members in the poorest

quintile; among members in the richest quintile the incidence dropped from 6.1 to 3.7% in the same period (see Figure 13). There was a statistically significant difference (p<0.001) in the incidence of households experiencing catastrophic expenditures between the poorest and richest quintile for all years, except in 2000 (p=0.667).

Impoverishment as measured by the additional number of non-poor households falling below the national poverty lines as a result of payment for medicines and health services including outpatient and inpatients reduced significantly from 1.97% and 2.71% in 1996 and 2000 respectively (prior to UCS) to 1.2% and 0.49% in 2004 and 2009, respectively. There was still a degree of impoverishment after universal coverage was achieved because some people who chose to opt out of their scheme and pay out of their own pocket for outpatient and inpatient services in private hospitals[31] faced catastrophic spending.

Figure 13: Incidence of catastrophic health expenditure* by wealth quintile, 1996-2009

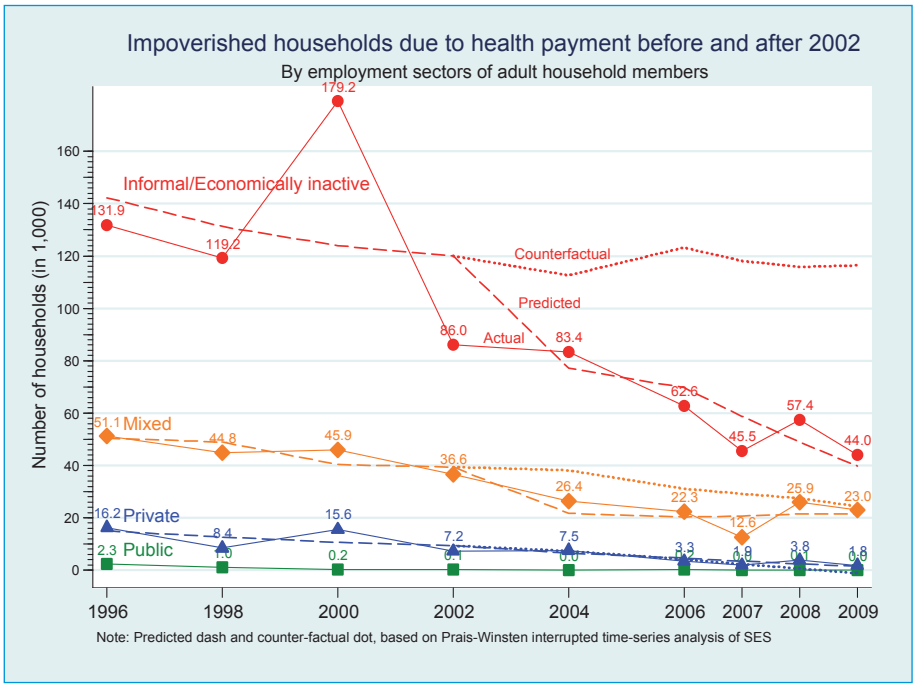


* Catastrophic health expenditure refers to household spending on health care >10% of total household consumption expenditure.

An analysis conducted at national, regional and provincial levels concluded that there was a decreasing trend in health-impoverished households with one or more UCS member, and that the degree of poverty reduction in this group was stronger than the overall trend during the same period.

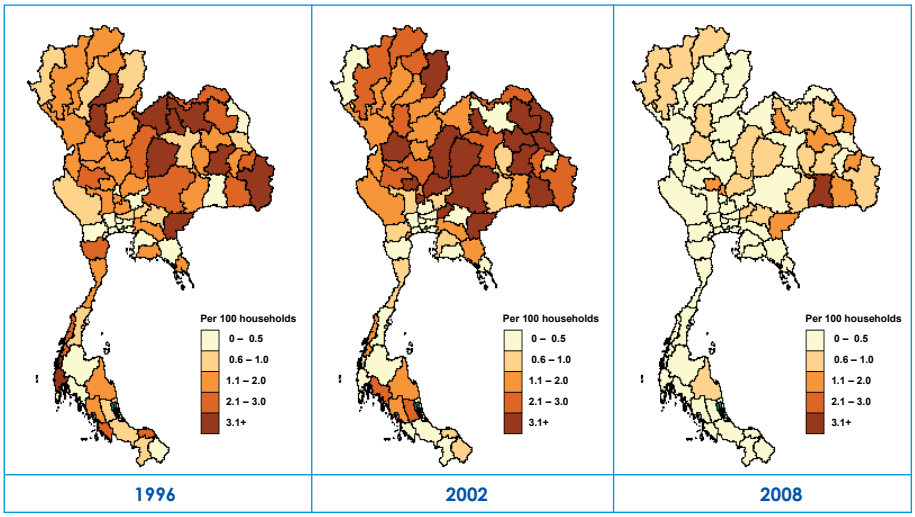
In Figure 14 below, among informal sector households (namely members of the Medical Welfare and Voluntary Health Card Schemes and the uninsured prior to the UCS in 2001 and all UCS members after 2002), the solid lines are the actual data, while the dash lines represent the predicted number of impoverished households based on actual data, and the dotted lines represent the counter-factual scenario had there been no UCS policy introduced in 2001-2002. The gap between the counterfactual scenario and the predicted line is the total number of households prevented from being impoverished from health payments — clearly the result of the UCS.

Figure 14: Trend in health impoverishment of households in various employment sectors



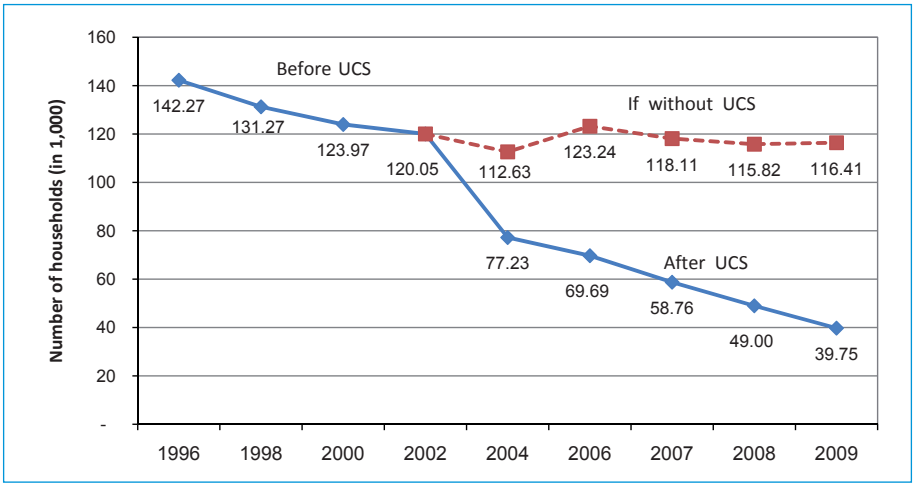
The impact of the UCS on mitigating health impoverishment was as impressive at the subnational level as it was at the national level. As shown in Figure 15, the province-specific incidence of impoverishment reduced significantly after 2002, when the UCS was implemented nationwide. In the poorest rural northeast region of Thailand, the number of impoverished households dropped from 3.4% in 1996 to 2.3-2.4% in 2002-2004 and to 0.8-1.3% in 2006-2009.

Figure 15: Household health impoverishment map, prior to UCS (1996), at the time of UCS implementation (2002) and post-UCS (2008)



The comprehensive benefits package and the low level of out-of-pocket payments protected a cumulative total of 291,790 households from health impoverishment between 2004 and 2009 (the areas between the predicted lines based on UCS and if without UCS between 2004 and 2009) (see Figure 16).

Figure 16: Number of households protected from health impoverishment, 1996-2009



Difficult to measure but important impact indicators

Data showing high levels of member and provider satisfaction, improved access and equity and better financial protection are clear indicators of the significant positive impact of the UCS. Evidence related to other important impacts such as quality of care, overcrowding and coverage of specific interventions was more difficult to gather and interpret systematically. For example, although hospital log books reflect waiting times for certain elective surgeries, data are not transmitted to national level for regular monitoring of waiting lists.

Another example was the limited data available to assess variations in preventable mortality such as stroke and myocardial infarction, which is partly determined by prompt access to care, effective referral and quality standards of treatment, and partly influenced by patients' socioeconomic characteristics.

One study of clinical practice variations[17] revealed that widely available lower-cost medicines are not prescribed optimally for CSMBS patients and that UCS patients with advanced cancer or leukaemia may not receive the expensive interventions required to prolong survival. The study also found that prospective closed-end payment for hospitalization used by the UCS and SSS does not result

in poor outcomes of care, especially for acute life-threatening illnesses. Although UCS patients had longer hospital stays than CSMBS patients for coronary heart disease interventions, and in-hospital mortality was three percentage points higher, these differences may be because UCS patients had inadequate continuity of care over the long period of their illness. High mortality due to haemorrhagic stroke among hospitalized UCS patients and rapid progression of chronic kidney disease in ambulatory diabetic UCS patients are likely to reflect inadequate measures to prevent complications.

As approximately 50% of the 47 million UCS members have lower socioeconomic and education status than CSMBS members, this is an important factor to allow for when evaluating health outcomes. The recent creation of disease registries for thalassemia and end-stage renal disease to track trends in care and mortality will provide an opportunity in the future to assess evidence on mortality outcomes and five-year survival rates across the three public health insurance schemes.

Spill-over effects on the health system

The implementation of the UCS impacted on all functions of the Thai health system; many of the scheme's impacts on health system financing, governance and service delivery have already been described in this report. Increased investment in primary care by the UCS increased technical quality and improved coordination between providers at the district level. Financing reforms, particularly the use of strategic purchasing by the UCS, led health-care providers to make major functional and organizational adjustments in order to contain costs and increase efficiency.

In addition, the UCS contributed significantly to the development of Thailand's health information system through hospital electronic discharge summaries for DRG reimbursement, accurate beneficiary datasets and data sharing. But such improvements came at a cost. The creation of the NHSO's disease management system increased workloads, and some health-care providers even at health-centre level hired additional IT staff to work on the data in order to improve their claims rate. On many occasions the information collected was used only for payment processing and so opportunities to utilize these valuable data for better health-care management and evaluation were lost. Moreover,

the financial incentives provided by the NHSO to promote data submission induced some providers to submit fraudulent data and were perceived by some health-care managers as indirectly jeopardizing the reporting systems of non-UCS programmes without similar incentives.

The UCS posed other major challenges to the health system. The initial phase of the UCS saw higher staff workloads that demanded rapid adjustments from health-care providers in order to satisfy the increase in patient demand. The focus of the UCS on curative care meant that public health functions, especially those that did not receive UCS funding, suffered from decreasing resources and lack of attention from policy-makers and health-care staff. The weakest link was in the area of the health workforce and the lack of commitment to finding a sustainable solution to the long-standing problem of shortages and maldistribution of key health professionals. This requires a multisectoral approach beyond health financing, including effective coordination of the private health sector, education and training institutes, and other stakeholders.

The NHSO emerged as a key player, while the MOPH's roles in governance and priority setting were in decline. However, these two roles are necessary to ensure the availability of essential public health services and a better balance between medical care and public health interventions. The MOPH needs to regain some of its lost power through the effective use of evidence in policy and strategy development and active monitoring, evaluation and supervision, so that the Thai health system can become even more effective, efficient, equitable and socially accountable.

Macroeconomic impacts of the UCS

Using existing datasets such as socioeconomic surveys, national health accounts and national input/ output tables (see Table A3 in the Annex) the macroeconomic impacts of the UCS were assessed on three dimensions: government consumption, household consumption and savings, and production activities.

First, the change in consumption patterns induced by the UCS had a redistributive effect, namely reducing household direct payments for health care. Government consumption shares in education and health increased proportionally more in

the north and north-eastern regions than in Bangkok as a result of the UCS. Even though the UCS removed uncertainty in health spending by households, a study undertaken as part of the 10-year assessment concluded that the scheme has not led to a decline in precautionary savings.

Second, increased government health spending on the UCS has not had significant negative effects on other public expenditures. The assessment found no evidence that the UCS crowded out public spending on education, social welfare or other economic sectors because total government expenditure increased significantly.

Third, the UCS has had a significant impact on the medical production sector in Thailand. Expenditures on goods such as medicines and medical supplies have "crowded in" more economic activities, amounting to as much as 1.2 times that of the original spending. More importantly, it was domestic production that benefited most, with imports accounting for only 12-31% of these increases. Medical production activities have positive effects on various sectors, particularly chemical, trade, electricity and water, mining and quarrying, and transportation and communication.

Chapter 9
UCS in the next 10 years: the challenges ahead

The UCS has made measureable progress towards achieving its overarching goal of an equitable entitlement to health care among all Thais and establishing the three defining features of the scheme. But like all national health system reforms, the UCS faces stresses and strains that will demand continued attention and further reforms during the next decade and beyond. A 2011 World Bank report[32] on the public sector in Thailand highlights three key health-system challenges: (1) inequalities in utilization and spending across the three insurance schemes; (2) mounting cost pressures; and (3) fragmentation of financing and unresolved issues concerning the respective roles of central and local governments. While these issues apply to the whole of the health system, they are all relevant to the UCS and the scheme will need to be part of solutions to address them.

Many of the existing and future challenges for the UCS relate to the three unfinished agendas described in Chapter 6: the purchaser-provider split, strategic purchasing and the equitable distribution of financial and human resources, and harmonizing the three health insurance schemes. This chapter first highlights a complex set of institutional and managerial issues that are inherent in all three agendas. This is followed by a discussion of what some experts believe to be the most pressing challenges in the decade ahead: managing the growth of the UCS in the light of fiscal sustainability, an ageing population, technological inflation, vested interests among some groups of health professionals and rising consumer expectations.

Continuing towards full implementation of the UCS

Resolving the power struggles between the MOPH and NHSO, and balancing the scale efficiencies of centralization with the need for these institutions to be more responsive and accountable to the populations they serve, are two major challenges.

While the creation of a purchaser-provider split was a key element of the UCS reforms, competition and "hard" contracts do not sit easily with Thai professional and administrative cultures, and so the system still depends on a mixture of a command-and-control structure and strong relational networks. The future challenge is to remove the dysfunctional remnants of hierarchical MOPH governance, while developing a form of "soft" contracting appropriate to the Thai context.

Commissioning by area-based or local health authorities is one possible solution that warrants further investigation. Health boards, with or without a full purchaser-provider split, have been utilized successfully in several universal coverage systems[33,34]. They provide a means of planning area-based services at arm's length from the central agencies, and can act to support a common national strategy, while retaining flexibility to plan local services according to local needs. Strong area-based bodies might have more success at strategic purchasing than the NHSO has achieved at national level.

Of course, any such move would require further necessary parallel reform of the MOPH's workforce allocation policies, and strong political will would be needed to implement it. Moreover, such reorganization would require substantial preparation for the transfer of functions from the present NHSO to branch offices, PHOs and local government organizations. In particular, purchasing and commissioning capacity would need to be developed substantially, especially in areas such as planning, needs assessment, priority setting, and monitoring and evaluation of the health system at district and subdistrict levels.

Achieving a better balance of power among organizations and actors at central, regional and district levels is crucial for long-term stability. Any solution is likely to involve a degree of decentralization and greater devolution of decision-making authority to organizations in local areas. In charting the way forward, it will be important to consider the negative findings from some other countries where devolution has resulted in increased fragmentation and increased gaps in service provision.

As for accelerating progress in harmonizing the three health insurance schemes, there are challenges and opportunities ahead. As discussed in Chapter 6,

political rivalry may prevent the National Health Care Financing Development Office, set up in 2010, from meeting its three-year mandate to address this issue. At the same time, institutional rivalry also looks set to continue. In 2011 the SSO, which is led by the Minister of Labour, demanded the transfer to the SSS of around 6 million UCS members who are spouses and children of SSS members. Given that the SSO's governing body is only represented by employers, employees and government[35], doubts have been cast on its legitimacy and capacity to manage these additional 6 million members. The request for full capitation for spouses and children not adjusted for age is also hard to justify in light of the substantial reserves in the Social Security Fund for sickness, disability and death compensation.

On a positive note, the SSS is considering using DRGs instead of capitation for inpatient care. A related challenge will be to convince the CSMBS, which is already using DRGs for inpatient activity, to switch from fee-for-service to capitation for outpatient services. It would be a positive step towards cost containment and harmonization if all the public schemes used similar provider payment methods. Movement of members from one scheme to another is already being facilitated by shared beneficiary datasets, but seamless transition and continuity of treatment for chronic diseases has yet to be realized. Moreover, there are significant disparities in utilization across schemes. For example, utilization by older CSMBS members is particularly high, raising the question of whether there is extensive over servicing of this group and/or under servicing of the elderly in the UCS.

In the absence of standardized benchmarks and indicators, a systematic assessment of practice variations has not been possible and, as indicated above, there is little evidence relating to how outcomes vary across the three schemes. These are critical gaps: comparative analyses across the three insurance schemes on strengths, weaknesses and outcomes are important to inform policies on harmonization.

Managing the growth of the UCS

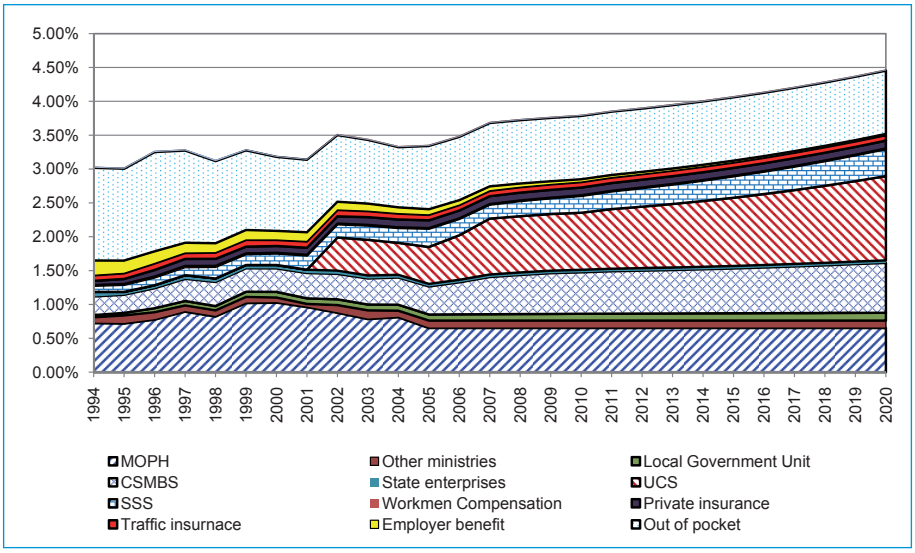
All nations committed to universal coverage are struggling with the issue of long-term affordability as factors such as rising production costs, demographic

change, economic development, increased demand and technological advances put upward pressure on total health expenditure.

In assessing this issue it is important not to lose sight of the fact that Thailand's health system without the UCS probably would have seen much greater and faster private-sector growth, more health-care impoverishment and higher total health expenditure. Therefore, the "sustainability" of the scheme itself looks more positive relative to a situation without the UCS.

Projections of health expenditure through to 2020[36] indicate that total health expenditure as a percentage of GDP will continue to expand to about 4.5%, a figure that is thought to be within the Government's fiscal capacity (Figure 17). Nevertheless, vigilance and active management will be required to ensure government spending on health does not increase more rapidly than financing capacity.

Figure 17: Total health expenditure as percentage of GDP, 1994-2020



Note: This projection is based on analyses of key datasets from various sources including demographic and economic projections, health and welfare surveys, national health accounts from 1994 to 2006, hospital input-output reports and administrative inpatient databases and the social budgeting models of the International Labour Organization. The regular production of National Health Accounts helps improve the precision of the projection, and total health expenditure should be re-estimated when new data become available.

Source: Hennicot JC, Scholz W and Sakunphanit T. Thailand health-care expenditure projection: 2006–2020. A research report. Nonthaburi, National Health Security Office, 2012.

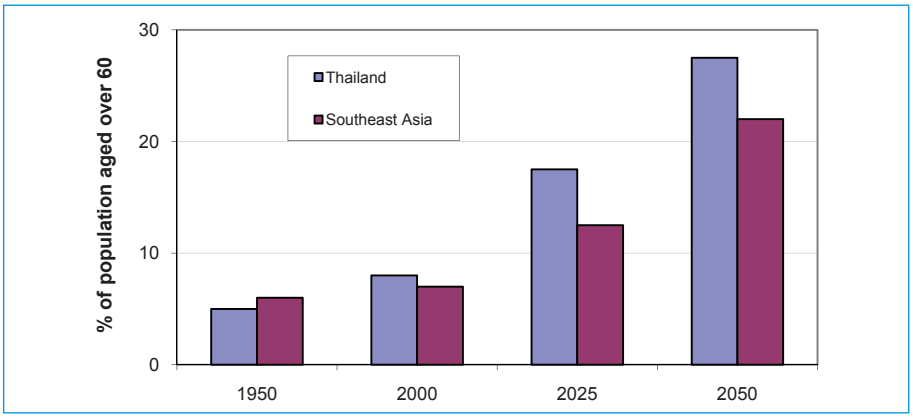
The UCS can help stem the inherent inflationary tendencies of the health sector in at least four ways. First, the NHSO, as a single purchaser acting on behalf of 47 million members, has huge financial power and proven capacities to increase value for money and regulate the provider market, which can help to control costs.

Second, continuing with the UCS closed-end payment mechanisms of capitation for outpatient care and DRGs under a global budget for inpatient care will help to limit incentives from the provider side to choose branded over generic medicines or to generate excessive prescriptions, diagnostic procedures and treatment interventions.

Third, the UCS mechanisms that critically assess all new interventions and drugs based on evidence of cost effectiveness, long-term budget impact and other ethical concerns prior to inclusion in the benefits package make a significant contribution to reining in technological inflation, physician pressure for unwarranted adoption of new technologies and growing consumer expectations. Effective performance of these mechanisms is dependent on institutionalizing capacity for health technology assessment in HITAP and IHPP and developing other tools such as certificates of need for investment in major medical devices.

Fourth, the UCS focus on preventive and health promotion services and effective primary care gatekeeping can help to avoid the high costs of secondary and tertiary care. The current emphasis on clinical preventive and health promotion services (immunization, antenatal care, family planning, cervical cancer screening, screening for diabetes and hypertension, and so forth) is important, but these interventions do not address lifestyle determinants of ill health such as use of tobacco and alcohol, unhealthy diet and lack of physical activity. The UCS needs to allocate additional resources to address these factors more effectively, especially given the rapidly ageing population of Thailand and the consequent growth in noncommunicable diseases (Figure 18). In 2010 a National Health Assembly resolution endorsed a national policy to focus long-term care more on community and household-based services with an effective interface with clinical services, instead of on institutional care.

Figure 18: Magnitude of population ageing, Thailand and Southeast Asia



Sources: Institute for Population and Social Research, Mahidol University, Population Projections for Thailand, 2005-2025, 2006; and United Nations, Department of Economic and Social Affairs Division, World Population Ageing 1950-2050, Population Division, New York, 2002.

Finally, rising consumer expectations are putting upward pressure on health-care expenditures in many middle-income countries. The design of the UCS around a comprehensive benefits package and the use of primary care gatekeeping will go some way to keeping these expectations in check. Increasingly, members know what services and interventions they are entitled to and are becoming more informed about why some services are excluded. The NHSO will need to continue to invest in effective communication strategies and public and civil society engagement, supported by reliable evidence and accurate data.

This is especially important given that there are three public health insurance schemes among which consumers will compare relative benefits packages. The NHSO must continue to show UCS members that their benefits package is comprehensive and on a par with that of the SSS, and that they do not need the augmented services provided by the CSMBS. To succeed, these efforts will need to be matched by equal efforts from the Government to address the limitation of service capacity in the district health systems, where most UCS members are registered, while building trust and confidence that referral backup ensures equal access to quality secondary care for all.

Chapter 10
Recommendations and lessons

Policy recommendations for Thailand

Based on the insights gained through the assessment, two sets of policy recommendations — one set related to the unfinished agenda and one to the future agenda — are offered with a view to sustaining and improving the UCS over the next 10 years.

The unfinished agenda

Thailand took a pragmatic approach to implementing the UCS, doing what was possible and putting on the back burner some of the more difficult aspects of the original policy design. For example, the NHSO was established as a public purchaser, but the CSMBS and SSS were left relatively untouched. The financing of health-care services changed, but this had limited impact on re-orienting the existing inequitable allocation of the health workforce. Moreover, the role of the MOPH in the provision of services changed less than was intended. It is important to press ahead with these unfinished items on the reform agenda.

Governance and strategic purchasing

- Continue to strengthen the governing bodies of the UCS to ensure social accountability and transparency, and to manage and prevent conflicts of interests among governing body members. Expand the role of civil society and community representatives and appoint objective and independent ex-officio members in order to protect the UCS against political manipulation and dominance by any particular interest group(s).
- Address the problems in the relationship between the NHSO and the MOPH so that together they can steer the development of the UCS and the broader health system. If the UCS is to continue to flourish these two institutions must recognize they are mutually dependent and there must be a measure of trust between them.
- Work towards achieving a more equitable distribution of human resources across the country, including by strengthening the MOPH's capacity to develop health workforce policies to improve district-level staffing.

Managing the purchaser-provider split

- Improve the purchasing function and strengthen commissioning of health services at the local level.
- Enhance the district health system's capacity to provide a comprehensive range of services to its catchment population, including improving the effectiveness of the referral system.
- Use the information system better to understand and address quality of care issues. Define indicators and set benchmarks to assess the impact of the UCS on health outcomes, access to interventions, and primary and secondary prevention of key noncommunicable diseases.

Harmonizing the three public health insurance schemes

- Reduce inequities in benefits and level of expenditure, and address inefficiencies across the schemes.
- Streamline operations by standardizing common features, for example the benefits package, the information system and the payment method.
- Generate evidence on the strengths and weaknesses of each scheme to inform ongoing and future scheme harmonization.

The future agenda

The future agenda covers a number of issues that have taken on greater importance since 2001 and that will become even more critical in the future.

The private sector

- Engage more with the private sector in the provision of publicly-funded care especially in urban areas and establish a single regulatory system for public and private health-care providers in Thailand. It will be difficult to pursue national health objectives in the absence of co-operation between state and private systems. In many countries that have achieved universal coverage, private-sector hospitals and doctors are regarded as part of the public scheme because money is coming from the public purse.

Decentralization

- Undertake the research and analysis required to find a more effective balance between centralization and decentralization. The national

purchasing framework needs some degree of decentralization to the local level in order to link with the local authorities and to allow increasing community engagement in decision making.

- Explore whether more local commissioning of health services would be more efficient than provincial purchasing, especially for primary health care.

Epidemiological transition and the ageing of the population

- Identify innovative ways to minimize the reliance on high-cost tertiary care through greater investments in disease prevention and health promotion and by addressing the social determinants of health outside of clinical settings. In addition, appropriate long-term care models need to be developed, which will require adapting the character and range of health facilities and services.

Quality monitoring, quality assurance and health technology assessment

- Develop methods to use routinely collected data to monitor, assess and improve quality of care, including clinical outcome assessment. At present this is an unexploited opportunity in Thailand.
- Continue building institutional capacity for health technology assessment to inform the purchase of cost-effective interventions and thereby improve value for money.

Policy implications for the rest of the world

Many factors contributed to the successful implementation of the UCS policy, including political and financial commitments, a strong civil service acting in the public interest, active civil society organizations, technical capacity to generate and use research evidence, economic growth, and policies to increase fiscal space. While some countries may find this list daunting it is important to realize that all these elements can be developed over time. Countries must find their own path to universal coverage — while no blueprint emerges from this work, the Thai reform experience provides valuable lessons.

Managing the process

As important as it is to bring different stakeholders together to listen, consult, negotiate and compromise, it is essential that the leaders of the reform have the power to resolve conflicts and to drive through the necessary changes. Otherwise countries risk getting stuck in the design stage, stalled by interest groups that feel threatened and are resisting change. Countries need a concrete plan to manage the reform process. It is also important to build capacity, not just to design a universal coverage scheme, but also to manage its implementation, including capacity for learning from the experience and tweaking the scheme as it is implemented.

Designing the system

Three design elements are essential to achieve universal coverage: extension of access to services, cost containment and strategic purchasing. Financing reform must go hand in hand with ensuring physical access to services. There is no point giving people a theoretical entitlement to financial protection if they have no access to local services or if it is too costly to access services outside the community in which they live. Thailand was in a good position to implement the UCS policy because for decades the government had invested in building local health infrastructure.

Cost containment mechanisms are critical because unless costs are controlled it will be difficult to cover the whole of the population and to provide adequate services; such mechanisms ensure long-term financial sustainability. Two such features of the UCS are the emphasis on primary health care (which was historically weak in Thailand) as the main first level of care, and the payment mechanisms, which use capitation and case-based payment within a global budget to fix the total cost. The third design element, strategic purchasing, is necessary to manage the rationing of services and to direct the provision of care to those areas where need is greatest.

Evaluating the universal coverage reform

This assessment demonstrates the Thai desire to learn from experience and to be open to external scrutiny. While important for Thailand, country case studies of universal coverage reform are needed to build up the knowledge base about how best to introduce and strengthen universal coverage. In the interest of

promoting universal health coverage, the international advisors and Thai researchers involved in this assessment hope that more countries will undertake similarly open and comprehensive evaluations. All countries and stakeholders have much to learn from each other.

Concluding remarks

The UCS covers 75% of the Thai population, provides a comprehensive (and growing) package of services and deepening financial risk protection, and relies on general tax as its source of funding. In its first 10 years the scheme was adequately funded, aided greatly by GDP growth and strong political commitment. Although the UCS is subject to political interference and fiscal constraints, two "immunities" help protect the scheme, especially in terms of financial support and the benefits package. First, the UCS has gradually become an integral part of Thai society — it belongs to the people. Second, budget negotiations between the NHSO and the Budget Bureau are "on the record" and evidence based.

This assessment found that the UCS has improved health equity in Thailand: the poor and previously uninsured have increased access to health services free at the point of delivery, government budget subsidies are pro-poor, and there has been a marked reduction in household impoverishment resulting from health payments.

Further gains in equity will require fine-tuning the allocation of resources according to health needs, defining objective criteria to assess health needs, improving the distribution of the health workforce across primary, secondary and tertiary care and geographical regions, and striking a balance between centralized and decentralized administration. Strong leadership will be needed to resolve unhelpful institutional rivalries and to ensure that future UCS policy reforms are in the public interest.

In paying due attention to resolving the challenges facing the UCS in the coming years it will be important not to lose sight of the critical success factors that have contributed to the achievements to date and that must continue to be priorities. The path ahead for universal health coverage in Thailand should remain focused on equity, evidence, efficiency and good governance.

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Annex: Framework for assessing the Thai Universal Coverage Scheme

In order to assess the success of Thailand's Universal Coverage Scheme (UCS) a framework was developed that identified five key areas of inquiry: policy formulation, contextual environment, policy implementation, governance and impacts (see Figure 1 in the main report). The specific objectives were as follows.

1. To assess the dynamicity of the UCS policy process in two stages: agenda setting and policy formulation between 2002 and 2010.
2. To review major chronological changes in government policies and overall health system governance during 2002-2010.
3. To assess the implementation of the UCS regarding budget negotiations and strategic purchasing, institutional capacities to manage the scheme and harmonization of the three public health insurance schemes, as well as to assess UCS's performance.
4. To assess the scheme's governance bodies in terms of their roles and functions, and the degree to which the UCS ensures transparency, accountability and responsiveness to its beneficiaries.
5. To assess the impacts of the UCS on the health system, providers, households and macroeconomics.

The assessment was primarily concerned with the UCS and not with the other prepayment health insurance schemes in Thailand.

The assessment was divided into five terms of reference (TOR) according to the five key areas and specific objectives outlined above. Each TOR developed appropriate conceptual and methodological approaches led by a team of national researchers with inputs from international experts. The key results of these assessment areas are reflected in the synthesis report. More detailed documents for each of the study areas are available at www.hsri.or.th.

This annex sets out the specific objectives and methodologies employed for each area of assessment.

TOR 1: UCS policy process and system design

The UCS had an explicit design spanning six key areas: source of finance; budget requirement for the programme; allocation methods to provinces; provider payment methods; primary health care as gatekeeper; and private provider collaborations. This part of the assessment looked at why and how these features were secured in the policy formulation process across the four interrelated functions of financing universal health coverage: revenue generation, pooling, purchasing and sustainability.

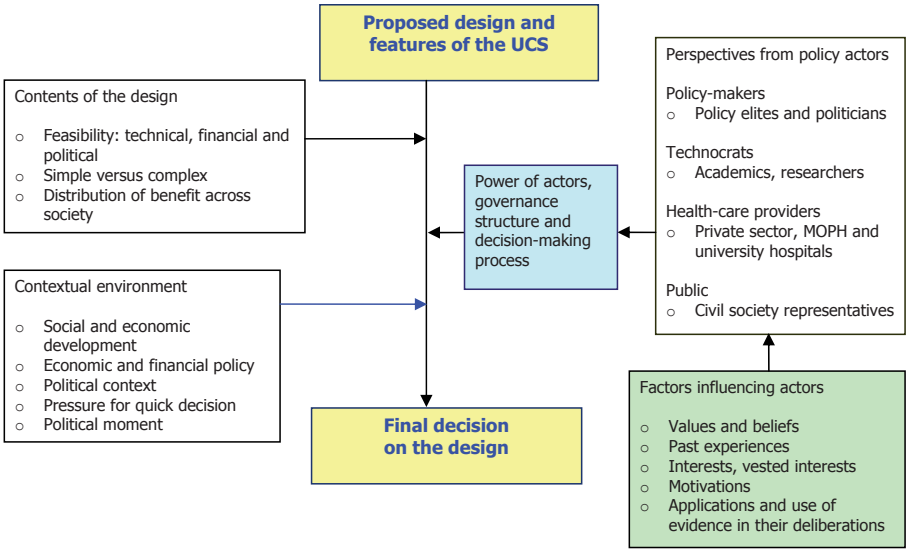
Objectives

1. To explain and contrast how and why the four interrelated financing features evolved as the UCS was designed.
2. To explain how and why different actors with varying powers, influences and positions, in different contexts, influenced the shaping of these inter-related key features.

Conceptual framework

Using the conceptual framework below (Figure A1) this study sought to explain how and why different actors' decisions on specific design features were shaped and evolved over time, taking into account their interests, the influencing factors and the contextual environment. The design of the UCS was the outcome of the power struggles among different actors, the governance structure and the mechanisms that were used to make decisions.

Figure A1: Framework for assessing the UCS policy process and system design



Methodology

The study applied qualitative methods, including documentary reviews and semi-structured in-depth interviews with key informants. Documentary reviews covered relevant published literature, government grey literature, conference and workshop proceedings, and decisions by the governing body of the UCS related to the four features. This study maximized the use of literature compiled during 2001-2002 and reviewed relevant literature from 2003 to 2008.

Research team: Viroj Tangcharoensathien, Siriwan Pitayarangsarit, Hathichanok Sumalee, Phusit Prakongsai, Walaiporn Patcharanarumol, Jiraboon Tosanguan and Nucharee Srivirojana.

TOR 2: Contextual environment affecting the implementation of the UCS

Several parallel government reforms and policies between 2001 and 2010, both endogenous and exogenous to the health sector, may have had an impact on the implementation of the UCS policy. These include: restructuring the MOPH,

decentralization, downsizing the public sector, promoting Thailand as a medical hub, the enforcement of compulsory licensing, new allowances for health-care professionals working for the MOPH, and overall governance of the whole health system, among others.

Objectives

1. To review in chronological order the major relevant changes to government policies between 2002 and 2010.
2. In the light of the UCS, to review: the governance of the health-care system in Thailand; the roles of related organizations and their interactions; and how the system evolved and was regulated between 2002 and 2010.

Methodology

Literature reviews and in-depth interviews with key informants within the MOPH, NHSO, other public insurance schemes, Ministry of Finance, Health Systems Research Institute and networks were the main approaches used in this study.

Research team: Vinai Leesmidt, Pinij Faramunayphol, Nusaraporn Kessomboon, Boonchai Kijsanayotin, Kanchit Sooknark and Supasit Pannarunothai.

TOR 3: UCS policy implementation

Of the many reform components that the UCS introduced, three main ones were chosen for this assessment since they are unfinished agendas requiring further reform. These include: the purchaser-provider split; strategic purchasing; and harmonization of the three current public health insurance schemes.

Objectives

1. To assess how the Thai UCS purchaser-provider split model was implemented between 2002 and 2011, paying attention to institutional arrangements, contractual relationships and constraints in its implementation.
2. To assess the extent to which a strategic purchasing model has been adopted by the UCS and how well it performed in terms of planning and budgeting of

the UCS, managing public salaries in the budget allocation, purchasing of targeted services, evolution and unbundling of payment methods, and monitoring and auditing.

3. To assess progress and problems in moves to harmonize the three public health insurance schemes from 2002 to 2011.

Framework for the assessment

The analysis of the implementation process rests on three main theoretical influences. The overarching conceptual framework was based on Gill Walt's policy process approach[1], which examines implementation actions in terms of contexts, content, process and actors. However, the Thai "policy subsystem" comprised a range of organizations and actors who were involved in concerted action but also sometimes in conflict[2,3]. Over time, competing "advocacy coalitions" emerged that supported particular policy positions, often as a result of agreements or compromises supported by key agencies or actors. At different moments actors at national, regional, provincial and district levels became involved in shaping the roll-out of the UCS, so that policy implementation had both top-down and bottom-up aspects.

Methodology

The evaluation of the UCS implementation process involved a policy analysis, literature review and a small-scale empirical study. Official documents and international and Thai language publications relating to the three key areas were identified and reviewed. Areas not examined in sufficient depth in the existing literature were investigated via new in-depth qualitative interviews with key informants. In total, 14 informants were interviewed: a former deputy minister of public health (a politician); three current senior administrators from NHSO; two former permanent secretaries of the MOPH; two current senior MOPH administrators;

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three researchers from the Thailand Development Research Institute, the Health Systems Research Institute and a university; and three senior administrators from the Comptroller General's Department, the SSO, and a consumer protection group. The interviews took an open-ended form, loosely based on prepared interview guide questions, but with different items included to reflect the particular role of the respondent.

Research team: Samrit Srithamrongsawat, David Hughes, Jadej Thammatach-Aree, Weerasak Putthasri and Songkramchai Leethongdee.

TOR 4: Governance of the UCS

After 10 years of implementation it was crucial to assess the governance of the UCS in order to identify whether or not there were gaps that needed to be filled to maximize the scheme's societal benefits.

Objectives

1. To assess overall governance of the UCS.
2. To assess the roles of the governing committees and subcommittees in steering and implementing the UCS.
3. To assess the power structures, interactions, interests and conflicts of interest among policy actors (ex-officio representatives, non-government and civil society organizations, technical experts and private-sector representatives) in various committees and subcommittees and at different levels of government, and their influences over two tracer policy decisions: strategic purchasing and scheme harmonization.
4. To use case studies to demonstrate the effect of different governance patterns (both successes and pitfalls) during a decade of UCS implementation.

Conceptual framework

As described in Chapter 7 of the synthesis report, the UNESCAP governance model[1] was adopted in this part of the assessment.

[1] http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp.

Methodology

During June-September 2011 the investigator team undertook in-depth interviews with related stakeholders, as well as a document review, to explore whether overall governance, the strategic purchasing process and the attempts to harmonize schemes were done in accordance with good governance principles. Each governance attribute was assessed on a positive to negative scale. Organizational levels were categorized as macro (NHSO, NHSB and subcommittees), meso (Bangkok Metropolitan Branch Office and Provincial Branch Offices) and micro (hospitals and clinics). Qualitative data from documentary reviews and in-depth interviews were analysed using thematic analysis and triangulation.

In addition, the investigator team used the UNESCAP governance model as a base upon which to construct an online questionnaire consisting of four parts, including 36 itemized questions to assess the overall governance of the UCS and the governance of the three subcommittees (benefits package, financial and strategic coordination). Each question was constructed using the rating scale: none, low, moderate, high and not sure. The survey was done using a web-based tool available at http://www.surveymonkey.com.

Research team: Paibul Suriyawongpaisal, Thira Woratanarat and Rassamee Tansirisithikul.

TOR 5: Impacts of the UCS

The impacts of the UCS on health systems, on MOPH hospitals, on households/population and on the macro-economy were assessed in four different studies.

TOR 5.1: Impact on the health system

Implementing the UCS required several major reforms that inevitably impacted on the health system in a number of different ways.

Objectives

The aim of this study was to assess the positive and negative impacts of the UCS on the Thai health system according to six health system building blocks: governance and leadership, financing, medical products and health technologies, information system, health workforce and service delivery[1].

Methodology

The UCS assessment put more emphasis on health service delivery by exploring in detail the impacts on primary care, medical care and public health services. The focus was on the results of adopting and implementing the UCS in regard to expansion of coverage, the purchaser-provider split, strategic purchasing and the harmonization effort across public health insurance schemes. Both quantitative and qualitative research methods were utilized involving literature and document reviews, secondary data analysis, key informant interviews and focus group discussions. Validation of qualitative findings was done through triangulation across information sources and deviant case analysis.

Research team: Piya Hanvoravongchai, Yongyuth Pongsupap, Jiruth Sriratanaban, Pinij Faramnuanphol, Boonchai Kijsanayotin and Nonglak Pagaiya.

TOR 5.2: Impact on MOPH hospitals

The UCS's closed-end budget and provider payment methods have partly shifted financial risk from purchasers to providers. Moreover, several financial tools have been adopted and implemented in order to drive health-service delivery towards targeted services. Following the introduction of the UCS, an increase in health-care utilization was observed. In addition, a number of hospitals in some areas experienced financial losses. Thus, studying the impact of the UCS on hospitals was crucial in order to improve system management and scheme sustainability.

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[1] World Health Organization. *Everybody's business: strengthening health systems to improve health outcomes. WHO's Framework for Action*. Geneva: 2007.

Objectives

1. To examine trends and patterns in health-care utilization and workload in MOPH hospitals during 2005-2010 in terms of outpatient visits, inpatient admissions and total length of stay.
2. To examine trends and patterns in hospital expenses and unit costs of health services.
3. To examine trends in hospital efficiency and performance.

Methodology

Analysis of secondary databases was the main methodology employed in this study (Table A1). The input–output (I/O) tables reported by hospitals in various years were used in the analysis.

Table A1: Study methodology

Objectives	Key variables or questions	Data analysis
1. Examine the situation and trends in health-care utilization and workload	• Outpatient visits, inpatient admissions, length of stay, average adjusted by relative weight of DRG • Health-care workload of personnel	Descriptive statistics
2. Examine the situation and trends in hospital expenses and hospital unit cost	• Expenses: operating (labour, drugs, medical supplies and other operating costs) • Hospital unit cost	Descriptive statistics and multiproduct hospital cost functions
3. Examine hospital performance	• Efficiency change scores • Technological change scores • Total Factor Productivity Change scores	Malmquist data envelopment analysis (DEA) technique

The study focused on hospitals that had annual performance and financial data available for all years between 2005 and 2010. There were 439 out of 825 hospitals that met these criteria.

Research Team: Watchai Charunwathana and Pongsa Pornchaiwiseskul.

TOR 5.3: Impact on households and populations

As the majority of UCS members live in households with relatively lower economic status compared with members of the two other public health insurance schemes (CSMBS and SSS) this study sought to determine if the tax-financed UCS could maintain the pro-poor government subsidy for health services. In addition, because the UCS was designed to reduce out-of-pocket payments, health impoverishment at an aggregate level, especially for the previously uninsured near-poor households, should have reduced after the UCS was introduced. The impact of the UCS on poverty was examined by comparing the magnitude of impoverished households among the economically inactive and informal employment sectors (the majority of the UCS members) with the rest of the population.

Another part of this study explored whether the closed-end provider payment mechanism compromised service quality, made health-care providers less responsive to people's expectations, and/or jeopardized population health.

Objectives

1. To assess the impact of the UCS on the public subsidy for health services, using a benefit incidence analysis.
2. To assess the impact of the UCS on health impoverishment.
3. To assess responsiveness of the UCS to its members.
4. To assess the impact of the UCS on mortality and morbidity outcomes.

Methodology

The assessment of the UCS's impact on populations and households employed a quantitative analysis of various large-scale, nationally representative, secondary data that were readily available for several years around the UCS implementation period. Table A2 summarizes data sources and analysis approaches used to fulfil the four objectives.

Table A2: Data sources and numerator and denominator used for the analysis

Objectives	Data sources	Analysis	
		Numerator	Denominator
1. Benefit incidence (net public subsidy for health services)	HWS 2003-2009	Costs of outpatient visits and inpatient admissions net of out-of-pocket payment per health facility type	Quintiles of UCS members according to household asset index
2. Health impoverishment	SES 1996-2009	Consumption expenditure net of health payment	Households with economically inactive and informal sectors
3. Responsiveness (UCS uptake and service satisfaction)	HWS 2003-2009 and ABAC Poll 2003-2010	UCS uptake and satisfaction levels	UCS members who were health-care users
4. Mortality and hospitalization	National inpatient datasets 2004-2010	• Deaths at hospital discharge and within 30 days after admission • All-cause mortality and time to death • Admissions with ACSC	Hospital admissions with deadly diseases and those of which death was amenable to care

HWS = Health and Welfare Survey; SES = Socio-Economic Survey; ACSC = ambulatory care sensitive conditions.

Research team: Supon Limwatananon, Viroj Tancharoensathien, Phusit Prakongsai, Chulaporn Limwatananon and Areewan Chiewchanwattana.

TOR 5.4: Impact on macroeconomics

In theory, the UCS in its first 10 years could have had several non-trivial impacts on the Thai economy. For example, a reduction in poverty should have had a significant economic impact. Household consumption patterns and living

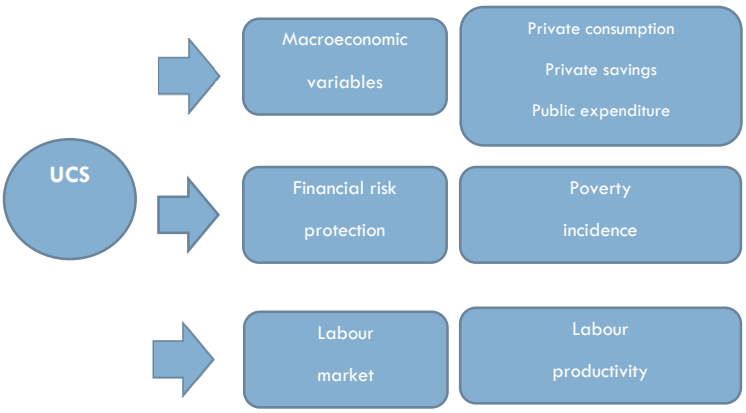
standards should have improved if reduced out-of-pocket health-care expenditure led households to spend more on other goods. The impact could be significant because private consumption expenditure accounts for more than 50% of Thailand's GDP. Moreover, increased income could have led to a change in demand pattern, inducing a shift in production patterns and could also have further affected market prices of goods and services. Therefore, this study used a comprehensive approach to capture the effects of the UCS on the Thai economy.

Objectives

The objective of this part of the assessment was to evaluate changes in various macroeconomic variables of the Thai economy during the implementation of the UCS. The evaluation involved examining changes in: (1) consumption patterns of private households; (2) savings patterns of private households; (3) government consumption; and (4) production activities and import demand.

Conceptual framework

The study covered three aspects of the consequences of the UCS, including both macroeconomic impacts on the economy and microeconomic effects on Thai individuals: (1) changes in macroeconomic variables (including private consumption, private savings, public expenditure, imports and production patterns); (2) individual's financial risk protection (poverty incidence reduced by the UCS); and (3) effects on the labour market through changes in labour productivity. The diagram below depicts the overall conceptual framework of the analysis.



Methodology

An economic analysis of secondary databases was employed as shown in Table A3.

Table A3: Methodology employed in analysing the impact of the UCS on macroeconomics

Issues	Data sources	Analysis
Consumption pattern	The Socio-Economic Surveys in 2001 and 2009	Analysis of demand system equation, estimated Quadratic Almost Ideal Demand System (QUAIDS)
Savings pattern	A survey of household savings conducted by the NESDB in 2007	Statistical analysis and regression analysis based on the life-cycle model of private consumption and the precautionary savings model
Government consumption	National accounts (government consumption by type) and National Health Accounts in various years	Analysis of substitution among health expenditure and other types of government expenditure, and the substitution of UCS for other health-related spending
Production and import pattern	Input-output table of Thailand in 2005 from the NESDB	Analysis of rising demand for health care on changes in import goods and patterns of production

NESDB: National Economic and Social Development Board

Research team: Worawet Suwanrada and Somprawin Manprasert.

Biographies of the international experts

Timothy G Evans, Dean, James P Grant School of Public Health, BRAC University, Bangladesh

Timothy Evans has an undergraduate degree in social sciences (University of Ottawa), a DPhil in agricultural economics (University of Oxford on a Rhodes Scholarship), a medical degree (McMaster University), and a research residency in internal medicine at the Brigham and Women's Hospital with a joint appointment as a MacArthur post-doctoral fellow at the Harvard Center for Population and Development Studies. He was an Assistant Professor, International Health Economics at Harvard School of Public Health as well as an attending physician at the Brigham and Women's Hospital. In 1997 he was appointed the Director, Health Equity at the Rockefeller Foundation in New York. He led the development of a range of programmes from new drugs and vaccines for neglected diseases, to access to HIV treatment, disease surveillance, and the monitoring of inequities in health. He was a co-founding board member of the Global Alliance on Vaccines and Immunization (GAVI) and the Global Forum for Health Research. From 2003-2010 Dr Evans was Assistant Director General – Evidence, Information, Research and Policy at WHO. He pioneered institution-wide strategies for health systems, knowledge management and research and oversaw the annual production of the World Health Report. He led the global Commission on Social Determinants of Health and was a co-founder of partnerships for strengthening health systems including the Health Metrics Network, the Global Health Workforce Alliance, the World Alliance for Patient Safety, and the Providing for Health Partnership. He is currently Dean at the James P Grant School of Public Health at BRAC University and ICDDR,B in Bangladesh.

A. Mushtaque R. Chowdhury, Senior Adviser Health and Acting Managing Director of the Rockefeller Foundation, Bangkok

Mushtaque Chowdhury holds a PhD from the London School of Hygiene and Tropical Medicine, an MSc from the London School of Economics and a BA (Hon's) from the University of Dhaka. In his current positions as Senior Adviser Health and Acting Managing Director of the Rockefeller Foundation he works globally with a particular focus on health systems and disease surveillance initiatives. Prior to joining the Foun-

dation, Dr Chowdhury was a Deputy Executive Director of BRAC in Bangladesh, where he set up and directed its Research and Evaluation Division. He was the founding Dean of the James P Grant School of Public Health at BRAC University in Dhaka. Dr Chowdhury is also a Professor of Population and Family Health at the Mailman School of Public Health of Columbia University in New York. He also served as a research associate at Harvard University's Center for Population and Development Studies. He is on the board and committees of several organizations and initiatives. Some of these include: the International Advisory Board of the Centre for Sustainable International Development at the University of Aberdeen, the Independent Monitoring Board (IMB) of the Global Polio Eradication Initiative of WHO, the Mekong Basin Disease Surveillance (MBDS) Foundation, the Steering Committee of the 2nd International Symposium on Health System Research and the Advisory Committee of the International Field Epidemiology Training Programme (IFETP) in Thailand. He is also a member of the international evaluation teams for the Thai Health Promotion Foundation and the Thai Universal Health Coverage (UHC) Scheme.

David B Evans, Director of the Department of Health Systems Financing in the Cluster on Health Systems and Services, World Health Organization, Geneva

David Evans has a PhD in economics and worked as an academic and consultant in Australia and Singapore before joining WHO in 1990. His work has covered the social and economic aspects of tropical disease control, the assessment of health system performance and the generation, analysis and use of evidence for health policy. His current responsibility is the development of effective, efficient and equitable health financing systems, through technical support to countries, generation and use of evidence, capacity strengthening and partnership with other development agencies and initiatives. He was the lead author for the *World Health Report 2010 – Health systems financing: the path to universal coverage*.

Armin Fidler, Lead Adviser, Health Policy and Strategy, Human Development Network, World Bank Group, Washington DC

Armin Fidler holds a Doctor of Medicine (MD) degree from the University of Innsbruck, Austria, a diploma in tropical medicine and hygiene from the Bernhard Nocht

Institute, Hamburg, Germany, and masters of public health (MPH) and science (MSc) in health policy and management, both from Harvard University's School of Public Health. He also earned certificates in management from the Harvard Business School and in public finance and welfare economics from the London School of Economics and Political Science. Dr Fidler joined the World Bank in 1993 in the Latin America and Caribbean Region. He moved to the Europe and Central Asia Region in 1997 and became Manager for Health, Nutrition, Population, responsible for the Bank's health strategy, lending and technical assistance, including analytical and advisory work for the European Union, the New Member States and the countries of the former Soviet Union. In 2008 Dr Fidler was appointed Lead Advisor for Health Policy and Strategy in the Bank's Human Development Network, responsible for global health policy, international health partnerships, health reform in middle-income countries and cross-cutting "health in all policies", such as in the areas of climate change, water and sanitation and road traffic injuries. He is on the Board of Directors at the German School in Washington DC and an Alternate Board Member and Member of the Executive Committee of the Global Alliance for Vaccines and Immunizations (GAVI), and frequently represents the Bank on the Board of the Global Fund to Fight AIDS, TB, and Malaria.

Magnus Lindelow, Brazil Country Sector Leader, Human Development Department, World Bank - Brazil

Magnus Lindelow is the World Bank's Sector Leader for Human Development (Health, Education, and Social Protection) in Brazil and since August 2011 he has been based in Brasilia. He holds a doctorate in economics from Oxford University. At the World Bank he has worked on health system reform, service delivery, public expenditure management, poverty and social protection issues. Over the past few years he has been involved in projects and research in China, Mongolia, Timor-Leste, Cambodia, Thailand, Malaysia, Myanmar, Laos and, most recently, Brazil. He has published books and research articles on impact evaluation of health sector programmes, distributional issues in the health sector, public finance, service delivery, poverty and other topics. Prior to joining the World Bank he worked as an economist in the Ministry of Planning and Finance in Mozambique, and later as a consultant on public finance and health sector issues.

Anne Mills, Professor of Health Economics and Policy, London School of Hygiene and Tropical Medicine, United Kingdom

Anne Mills is known globally for her contributions to health economics and health systems research. Following a long career as researcher and teacher at the London School of Hygiene and Tropical Medicine, she took up the position of Head of the Faculty of Public Health and Policy between 2006 and 2011, and recently became the School's Vice Director for Academic Affairs. She is Professor of Health Economics and Policy and holds degrees from the universities of Oxford, Leeds and London. Her research expertise is built on nearly 40 years' experience of the health systems of low- and middle-income countries, which started with a position as health economist in the Ministry of Health in Malawi between 1973 and 1975. Professor Mills has had extensive involvement in supporting capacity development in health economics in low- and middle-income countries, for example through supporting the health economics research funding activities of the WHO Tropical Disease Research Programme and chairing the Board of the Alliance for Health Policy and Systems Research between 1999 and 2009. In 2006 she was awarded a CBE for services to medicine and elected Foreign Associate of the US Institute of Medicine. In 2009 she was elected Fellow of the UK Academy of Medical Sciences and received the Prince Mahidol Award in the field of medicine. She is President of the International Health Economics Association for 2012-2013.

Xenia Scheil-Adlung, Health Policy Coordinator, International Labour Organization, Switzerland

Xenia Scheil-Adlung is the Health Policy Coordinator in the Social Security Department of the ILO. Her work focuses on extending social health protection embedded in broader social protection floors. She also supports the work of various international partnerships in health such as IHP+ and the Providing for Health (P4H) initiative that joins multilateral and bilateral partners including ILO, WHO, the World Bank, the African Development Bank, GIZ, AFD and others. Prior to joining the ILO she gained long-lasting experience in the Federal Government of Germany where her work focused on social security and specific groups at risk of HIV/AIDS.

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