3. Development of Subsystems in Support of the Universal Health Care System

3.1 Development of Personal Information Database

The social security system is the first state health insurance system that has and use the personal information database for eligible persons. Later in 2001, the MoPH created a preliminary personal information database for use in the universal health care scheme, used on the personal database of the Registration Administration Bureau of the Department of Provincial Administration of the Ministry of Interior. According to the Social Security Office and the household survey, the database of the universal health care scheme in the initial stage had some problems related data accuracy. Duplication of eligibility was found in 12.4% of all eligible persons (April 2002). Later, with the NHSO’s correction, the duplication rate went down to less than 1%.

In July 2005, the government set a policy to integrate the administration of all state health insurance schemes and assigned the NHSO and the Comptroller-General’s Department to jointly manage the Civil Servants Medical Benefits Scheme. Then the effort for improving the personal information database for eligible persons under the CSMBS began to be seriously made and it was expected to be completed by December 2006.

In summary, the personal information database has been improved after using it in the management of the universal health care scheme. It has been actually used and linked to databases of other agencies concerned, causing checking and updating the information on a regular basis. Such checking also occurred as a result of the people being allowed to access and check the information even though the correction can be made only the by authorized official.

3.2 Development of Primary Care and Referral Systems

Recently, there have been policies and operations for development of primary care units in the following aspects:

1) Development of standard criteria for fixed service units and assessment for recognition of service units

The standard criteria of service units reflect the basic need for improving and monitoring the quality of service units in the health insurance system. In the past, the standard criteria focussed primarily on inputs, such as infrastructure, number of personnel, equipment, etc, being stipulated according to the size of population in the designated area (for example, a service unit with one physician is to cover a population of not exceeding 10,000).

The assessment for recognition of service units according to the established criteria prior to providing services under the health insurance system, in the past, focused on private hospitals (as the scheme could not deny the participation of public hospitals). Until 2006, a policy was set to assess both public and private hospitals; the results of assessment of public hospitals will be used for designing a development plan for the next phase.
2) Support for innovations and development of primary care units (as ideal PCUs)

In 2004, NHSO organized a Universal Coverage Innovation Award (UCIA) programme aimed at boosting morale of operational staff and collecting/disseminating outstanding activities for use as examples for other agencies. Also organized was the program for improving the quality of PCUs to become PCUs of excellence or ideal PCUs. Moreover, this effort also aimed to promote the learning process and self-development of each PCU in a continuous manner, under which each PCU was to assess itself according to the developed assessment tool and then prepared a request for funding for improvement of what deemed to be deficient. Out of 1,451 PCUs applying, 562 PCUs were supported, one-third of them being projects related to development of diabetic and hypertensive patient care.

Moreover, in 2005, NHSO and the MoPH’s Department of Health Service Support initiated a programme on health centres’ quality development according to the MoPH standards of community health centres. The aim was to develop 800 health centres; after programme implementation, 530 health centres or 66% of the target met the assessment criteria.

3) Development of a model for development and quality assurance of primary care

During the past decade, hospital quality improvement and accreditation (HA) was the trend that was widely recognized. Most public and private hospitals voluntarily participated in the HA programme. And all state-run health insurance schemes agreed to use the HA system and the central quality development system.

However, the HA system focused on quality development of hospitals, not covering services at primary care units. So the NHSO recognized the importance of the development of a system for improving primary care quality and accreditation by supporting the Health Care Reform Project to conduct a research project on this matter. At present, a project proposal is being developed.

4) Development of Personnel Capacity and Infrastructure

During the first phase of the universal health care system, the capital replacement fund was part of the capitation budget and allocated for structural improvement at the primary and specialized care facilities. Mostly, it was for the expansion of excellent centres, but there was no policy on investment in primary care structure.

Later, the NHSC gave more importance to investment in human capital. In 2005, a capital replacement fund of 100 million baht (2.8% of total capital replacement fund) was allocated for manpower development at the primary and specialized care levels. But, actually only 10% of such

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1 Resolution of the coordinating committee of the Comptroller-General’s Department, the National Health Security Office, and the Social Security Office, No.5, 29 March 2006, Novotel Thipwiman Resort and Spa, Phetchaburi Province.
2 This Project Office has been renamed as Community Health System Development Institute.
3 Initially, 30% of capital replacement fund was allocated for investment in specialized care facilities, especially cancer centres, heart disease centres, and emergency medical service centres. Later, the proportion has gradually declined to only 10% in 2006.
budget was used for workforce development at the primary care level. At the regional level, 130 resource persons were trained so that they would help establish 12 regional training centres and further train 1,800 trainers at the provincial and district levels. In 2006, the NHSC allocated another 1,062 million baht or 17.2% of total capital replacement fund for the development of infrastructure and personnel at the primary care level, aimed at establishing 200 community medical centres (CMCs), expanding training programmers for primary care units, providing compensation for trained personnel and supporting the reduction of outpatients’ numbers at large hospitals.

Giving importance to primary care units recently, especially when the universal health care policy is implemented, has resulted in a change at primary care units to a certain extent, particularly an increase in the number of personnel (Table 8.4).

**Table 8.4** Proportion of personnel at primary care units before and after the implementation of universal health care policy (excluding physicians, dentists and pharmacists), 2004

<table>
<thead>
<tr>
<th>Item</th>
<th>Health Centres</th>
<th>PCUs at community hospitals</th>
<th>PCUs outside community hospitals</th>
<th>PCUs at regional–general hospitals</th>
<th>PCUs outside regional–general hospitals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>442</td>
<td>76</td>
<td>17</td>
<td>3</td>
<td>3</td>
<td>577</td>
</tr>
<tr>
<td>Proportion of PCUs with personnel:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>declining (%)</td>
<td>11.09</td>
<td>14.47</td>
<td>5.88</td>
<td>0.00</td>
<td>33.33</td>
<td>11.61</td>
</tr>
<tr>
<td>unchanged (%)</td>
<td>42.53</td>
<td>38.16</td>
<td>35.29</td>
<td>33.33</td>
<td>33.33</td>
<td>41.77</td>
</tr>
<tr>
<td>rising (%)</td>
<td>46.38</td>
<td>47.37</td>
<td>58.82</td>
<td>66.67</td>
<td>33.33</td>
<td>46.62</td>
</tr>
</tbody>
</table>

**Source:** Supatra Srivanichakorn et al. Assessment of Situations at Primary Care Units in 36 Provinces, August 2004.

**Note:** “personnel” in this study include technical nurses, technical staff, health administration officers, health officers, and dental hygienists.
Besides the investment in the development of primary care units, recently there have been efforts to develop other mechanisms that are supportive of primary care services including:

1) **Policy on reduction of workload of outpatient departments at large hospitals**

In 2006, the MoPH announced its commitments to the Thai people, one of which was developing state hospitals as “modernized hospitals” according to the “quick and non-crowded service” principle. The aim is to reduce overcrowding at 12 large hospitals using the strategy on developing primary care units in urban areas and distributing patient care workloads to such primary care units. In this effort, the target hospitals are to improve the quality of primary care units, create public confidence in the units, and establish an efficient referral system.

2) **Development of referral systems and admission coordination centres**

A referral system links to each other the health services at all levels to ensure continuous care and access to essential care. An efficient referral system must have a two-way mechanism for referring “patients” and “information” about health problems and medical treatment the patient has received at each level.

In the past, the referral system in Thailand was efficient to a certain extent. After the implementation of the universal health care policy, the rural referral system has been improved and become more efficient with the establishment of the geographical information system (GIS) and the categorization of contracted service units of the NHSO, which has established “referral service units” and a private hospital can participate as a “referral service unit” resulting in the availability of more channels for referrals.

A “referral coordination centre” was established to coordinate with hospitals with capacity to care for heart disease patients and a register of patients waiting for heart surgery. In this effort, the centre can coordinate with another hospital with fewer patients on its waiting list for surgery and the patient can undergo a surgery faster. Besides, the centre has coordinated inpatient admissions at hospitals in Bangkok. According to the cumulative data of the NHSO as of March 2006, patients in Bangkok needed assistance in seeking beds for admission for various reasons, namely, admissions at private hospitals not participating in the project (72.99%), no beds available at treating hospitals (11.01%), patients requiring care beyond first hospital’s capacity (13.69%), seeking beds for patients under other welfare schemes (2.04%), and others (0.28%). It was found that beds could be obtained for 64.4% of the cases. The centre can coordinate with a number of private hospitals to join the bed reservation project by revising the payment system as a special incentive for hospitals participating in the project.

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3.3 Coordination among Various Health Insurance Schemes

The three state-run health insurance schemes have different characteristics, creating management difficulties for health facilities and double standards of medical care. The universal health care scheme was created based on the lessons learned from other schemes, especially the social security scheme. So both systems are not quite different.

Although there are tides against the integration for solidarity in the management of state health insurance schemes, agencies responsible for the three schemes, including the Social Security Office, the National Health Security Office, and the MOF’s Comptroller-General’s Department see the importance of coordination so that the management systems of the schemes are in the same direction, supportive of each other for their maximum efficiency, and minimizing inequalities among the schemes.

So there was a cooperation agreement among the three agencies\(^5\) to establish a committee on coordination for development of health insurance systems in 2004, comprising executives from the three agencies, with the top administrator of each agency taking turn as chairperson on a one-year term basis. The Secretary-General of NHSO was chairperson for the first year. As a result of the establishment of the committee and other working groups set up at a later date, some joint development outputs are as follows:

1) **Central standards of health insurance funds.** The standards include the standard data set and coding system, the standard fee schedule, use of the hospital accreditation system as the central system for quality development of contracted hospitals, and the standards of contracted hospitals at different levels.

2) **Development of databases for common use.** The databases developed are the health insurance eligibility database of Thai people, the hospital profile of all hospitals participating in the schemes, and the database on service utilization of eligible persons.

3) **Coordination for reduction of duplication.** The achievements of this effort include the development of health service practice guidelines (HSPG), assessment visits to tertiary hospitals,\(^6\) analysis of data on service utilization of eligible persons under the Civil Servants Medical Benefits Scheme for reduction of duplication of personal data, development a system for hospitals to serve as claimants for eligible persons in case of outpatient service (no need for an outpatient to pay first as practised in the past), and examination of service fee compensation for appropriate cost containment with the NHSO taking the lead in such an effort.

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\(^5\) Cooperation agreement among the Comptroller-General’s Department, the Social Security Office and the National Health Security Office for development of health service systems, 19 January 2004.

\(^6\) Initially, there was an effort to coordinate joint visits for assessing contracted hospitals, but there were some problems related to differences in health insurance systems; so the universal health care scheme uses the area-based mechanism for this purpose while the social security system uses the central mechanism.
3.4 Revisions of the National Essential Drug List, 1996, 1999 and 2004

The drug expenditure estimate for Thailand in 2001 was 46,639 million baht or 27.4% of overall health expenditure, which is rather high compared with those for other countries or even developed countries. Measures for controlling the use of non-essential drugs are necessary; and one of the measures is to develop a “national drug list” to select and compile a list of drugs essential for health of Thai people. The sub-committee on national drug list development, under the National Drug Committee, was the key mechanism in this effort.

Drug list development has been continually undertaken from the “1979 MoPH Drug list” and the “1981 National List of Essential Drugs” to the “1996 National List of Essential Drugs” that was based on the WHO guidelines covering basic drugs significantly required for people’s health care and resolving national health problems. It was later on revised in 1997, in accordance with the 1997 economic crisis, based on the ability to pay and socio-economic impact. The 1999 National List of Essential Drugs included four lists, one of which is for hospitals and health care facilities including drugs that were classified according to their pharmacological and therapeutic properties into 23 groups, totaling 932 items.

The most recent revision of the national drug list was undertaken in 2004, taking into consideration several aspects of changes in the health system, namely: (1) burden of disease, (2) health service reforms, especially with the universal health care system, (3) improvement of efficiency under the “good health at low cost” policy, and (4) development and promotion of rational drug use according to the health service practice guidelines (HSPG). The drugs in the 2004 National List of Essential Medicines are classified into five sub-lists or lists as follows:

List A means a list of medicines for use at all levels of health facilities.

List B means a list of medicines for indications or certain diseases for which medicines on List A cannot be used or ineffectual, or which can be used in lieu of List A temporarily in case List A medicines cannot be procured.

List C means a list of medicines that are used for treatment in areas of specialty by an expert or by someone who has been authorized by the director of that particular health facility with an established measure for monitoring their use.

List D means a list of medicines which have several indications, but only some indications are appropriate or have a tendency to be incorrectly prescribed, or have a high cost and their indications and conditions for use have to be specified.

List E means a list of medicines for a special project of a state agency.

In the early stage, the process of revising the drug list was quite slow. In 2005, the NHSO supported the process so that the list is up to date and medical professionals as well as the general public are more confident in the quality of medicines.