

# HEALTH SYSTEMS RESEARCH: AN AGENDA for HEALTH REFORM



**HEALTH SYSTEMS RESEARCH INSTITUTE**

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# **Health Systems Research: An Agenda for Health Reform**

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# EXECUTIVE SUMMARY

The Thai people now face health problems that are different from those they have encountered in the past. Some of new challenges are epidemiological transition from communicable diseases to behaviour related diseases, inaccessibility of services due to the rising cost of medical care or ineffective health service systems, and inadequate information for self-care and sound selection of services. At the same time the national health service system is facing rapidly increasing health expenditure at a higher rate than that of the gross national product. With the changing population age structure, the existing health service systems cannot effectively respond to the needs of certain groups of citizens. Changes in the environment, rapid development of medical and information technologies as well as changes in politics and the overall managerial system for national health development have also had a considerable impact upon current health service systems.

To ensure effective problem solving and sound health system development to improve the health of the people under the principles of social justice and effective use of resources, three main components of the national health service system must be taken into consideration.

First, the concerned parties or institutions which are interacting in promoting good health, namely the people themselves, the national health service systems and the government.

Second, the institutions or social mechanisms whose roles involve the behaviour and attitudes of the people towards the health service systems, and the government, e.g. the public information system, and the financing system, as well as community/interest groups including private

businesses engaged in health and medical technologies.

Third, the overall social set-up of the country comprising the physical environment, socio-economic and political conditions, and the national public policy.

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## **STRATEGIES FOR NATIONAL HEALTH SYSTEMS REFORM**

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Based upon a comprehensive study of related social components and factors affecting health, efforts have been made to develop appropriate strategies for building up the people's good health under the principles of equity and efficiency, with particular reference to the main objectives of the eighth Five-Year National Economic and Social Development Plan which emphasizes human resource development.

The key strategies for national health systems reform appear as follows:

- (1) reorganize the structure and relationships among health service organizations at all levels within the overall national health service system;
- (2) reorientate the role of the government in health development;
- (3) promote the people's active participation in health care services;
- (4) encourage the establishment of semi-private organization as a mechanism for health systems reform;
- (5) promote the role of the mass media in health information dissemination;
- (6) devise an effective managerial system to promote environments conducive to good health;
- (7) develop health service systems responsive to the current population structure;
- (8) promote the role of the private sector in health development.

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## **MISSION AND PLAN OF OPERATION**

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The Health Systems Research Institute is mandated to build up adequate knowledge and understanding essential for long-term national health development on a continuing basis, which will contribute towards the health and quality of life of the people as a whole. Based on a systematic review of its first four-year operations (1993-1996), and considering the current situation in health systems research as well as the potential of all related research institutes, HSRI has formulated its medium-term plan for the years 1997-2001 with corresponding strategies as follows:

(1) build up understanding among all concerned sectors of the medium-term and long-term scenarios for health systems research which will constitute a frame of reference for intersectoral collaboration;

(2) promote research primarily for health systems reform adopting a collaborative approach that will take into consideration the needs of users of research results and of research institutes both within the country and overseas;

(3) collect and compile local and international research findings to be used as baseline data or references for overall health systems research;

(4) promote the research capacity and quality of HSR in concerned institutions throughout the country on a continuing basis;

For implementation of the aforementioned strategies, HSRI has formulated four major programmes of action as follows:

### **1. Programme on Research Promotion for Health Systems Reform.**

Its aim is to identify alternative approaches to health systems reform, including guiding principles for health systems development and other relevant public policy development.

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**2. Programme on Development of HSR Capacity.**

Its aim is to develop the national potential, particularly among medical and health personnel within the health service delivery systems and researchers of related disciplines as well as to build up an effective database for HSR.

Field personnel will also be encouraged to make use of HSR as a tool to tackle problems within the community, in the course of which their capability of conducting research will be enhanced.

**3. Programme on Promoting Utilization of HSR Findings.**

Its aim is to disseminate findings from HSR for policy formulation as well as to set up a people-oriented database enabling the general public to have access to information essential for healthy living and to gain a better understanding of the health service systems.

**4. Programme on Supporting Health Systems Research**

Its aim is to initiate a process for developing future policy direction and corresponding programmes for health systems research with active intersectoral collaboration and an effective managerial mechanism supporting ongoing research while bearing in mind effectiveness and accountability.

These four major programmes of HSRI will be directed towards health systems development that will be beneficial to the majority of the population while making the best use of existing resources thus corresponding to the national objectives of sustainable quality of life and human resource development.



# THE THAI PEOPLE'S HEALTH PROBLEMS AND THEIR HEALTH SYSTEMS

The health status of an individual is contingent upon various predetermining factors ranging from physical build, individual behaviour, interaction with others, and the social and physical environments, to socio-economic and political conditions as well as access to data and information, all of which interact and impact upon health.

When sick person is in need of treatment or care, it is naturally the function of the health service systems to provide the necessary services in order to solve his health problem. If the existing health service systems cannot adequately and effectively respond to the needs of the people, it is likely that their plight will be compounded by the problems they face while seeking the services from such systems.

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## PROBLEMS FACED BY THE THAI PEOPLE

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In the past, the major health problems of the Thai people used to be communicable diseases and the inaccessibility of essential health services due to unequal distribution of service centres and health personnel. Under changing conditions and the rapid development of medical technologies, many communicable diseases have been eradicated or mitigated. Moreover, the health service infrastructure now expands throughout the country with 9,000 health centres covering all sub-districts, 700 community hospitals covering 90% of the districts and full coverage of general and regional hospitals and medical centres at the provincial level. In 1994 there was a total of 1,331 hospitals and 113,191 hospital beds in the country. The ratio of doctors and nurses

to total population was 1:4,207 and 1:1,229 respectively.

Even though certain health problems have been successfully solved, the rapid socio-economic changes have brought about new problems caused by rural-to-urban migration, shift of labour from the agricultural sector to the industrial sector, changes in health behaviour and lifestyles, pollution and other environmental problems as well as emerging diseases. The new problems can be classified as follows:

### **1. Problems concerning accessibility to essential health services**

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Despite the considerable increase in coverage of health service centres and a more favourable ratio of health personnel to total population, problems of accessibility to health care services still exist in the form of:

- long waiting time when seeking services from government hospitals which are always overcrowded;
- high cost of health care services charged by private hospitals or even some government hospitals which, in certain cases, may entail debt or cause severe economic problems to the consumers;
- refusal on the part of hospitals to render services, in particular to emergency or accident cases if the ability to pay the bills cannot be proved;
- inaccessibility to specialized care, which is still limited particularly in the case of patients suffering from cancer, chronic kidney failure, and handicapped persons needing regular rehabilitation and the elderly who are suffering from chronic degenerative diseases and need continuing care;
- distance between place of abode and health service centres both in rural and congested urban areas, particularly as regards transport of critically ill patients or emergency/accident cases.

It is evident that today's health problems cannot simply be solved by increasing coverage of health service infrastructure or merely treating

the diseases patients' once they have occurred. Careful study of all underlying problems should be made in order to find appropriate measures for comprehensive problem-solving.

## **2. Problems concerning the quality of services**

In parallel with the expansion and increased coverage of health care services, the quality of care has improved considerably but mainly from the service providers' perspective.

Even though measures have been taken by hospitals to increase essential preventive care and the efficiency of curative care to reduce time of treatment and hospital admission days per patient, to strengthen personnel development as well as to acquire high technology for more effective treatment, the problem of "quality" as perceived by the people who receive the services needs further attention in regard to:

- inadequate information about the illness because of the extremely limited time for consulting doctors or other service providers;
- inadequate information about treatments such as special examinations or screening test, together with statement of their costs, which prevents patients from making a choice that might avoid unessential or costly services;
- inadequate information and advice on essential self-care, which could speed up the healing process or prevent recurrence of the disease;
- lack of convenience in obtaining services particularly in regard to waiting time, overall environment, supportive services such as reception, cleanliness, attitude of service providers in their human relations;
- low professional standard of doctors or other service personnel which might cause complications or even death;
- delayed in receiving preventive care or screening, though readily available, until the illness becomes severe.

It can be seen that the people's perceptions of the quality of services are different from those of the service providers and could not be tackled simply by increasing the scope of services or acquiring high-tech equipment and more qualified personnel. It is the issues relating to human behaviour, the organizational set-up, continuing quality surveillance and other client-oriented problem-solving measures that should be given due consideration.

### **3. Problems concerning inadequacy of essential and accurate information on health**

Even though Thai people today are better educated and have more access to data and information, chances are that some of the information is inaccurate and inappropriate which might cause misunderstanding and have a negative impact upon health. There is, therefore still a need of more accurate information which could contribute towards good health.

Problems in this context may differ according to the individual's health status, level of education, economic status, lifestyle and occupation, but, in general they can be addressed as follows:

- people should be given more information on toxic substances which are harmful to health so that they could avoid any contact or protect themselves more effectively;
- at the onset of an illness, people should be adequately informed about basic self-care, the drugs that can be obtained without a prescription or data about available health service institution;
- on admission to a health service institution, patients should be adequately informed about their illness and methods of self-care, this being essential particularly in cases of chronic diseases;
- people who are interested in self-care and need information on appropriate health behaviours should be given accurate knowledge and information on self-care and their motivation should be encouraged;

- people should be warned against inaccurate information from advertisements for health products which may have a negative effect upon health or result in compulsive and unnecessary use or over-consumption;
- people should be made aware of their basic human rights to protect themselves from inappropriate services or should take part in consumer protection movements;
- people need to be told about the sources of essential health information which are often not made readily available by health care personnel and health service institutions.

Under the current economic and social structure, the problem concerning inadequate or inaccurate health information cannot be solved only by wider information dissemination. Other approaches, such as developing mechanisms to promote more extensive health information distribution, introducing measures for controlling inaccurate or misleading information and encouraging active participation of all related sectors and the mass media in health information dissemination, should be given due consideration.

#### **4. Problems concerning unsafe environment**

The Thai people today are severely threatened by pollution both in their daily living and working environments which have become hazardous to health.

- Traffic accidents now rank first among the leading causes of death of the Thai people, with a rapid increase from the rate of 12.4 per 100,000 population in 1989 to 31.5 per 100,000 in 1994.
- The pollution problem has become highly critical in Bangkok with the quantity of dust in the air at 3.4 times above the acceptable standard. This problem now extends to other large provincial cities. Water pollution now affects the major rivers of the country while the agricultural sector is facing the problem of inappropriate use of chemicals, fertilizers and insecticides.

- Problems pertaining to unsafe workplaces, accidents caused by machine operations and high-risk working environments greatly affect the quality of life of workers, particularly those in the industrial sector.

Even though the aforementioned problems are acknowledged by both the public and private sectors and studies on various aspects of this issue have been made, there is still a need to further develop effective strategies and actions to tackle them. This process requires more active intersectoral collaboration, with participation by the people, particularly in policy development and development of legal and financial measures, these problems are to be solved.

Apart from environmental problems, the hectic lifestyle in large cities has caused serious mental health problems in Thai society. People have to live in heavily congested areas, struggling to survive in a highly competitive, materialistic society while individual families are losing their potential to provide physical and mental support to their members. Even the stronger family ties in rural areas are gradually weakening due to the higher incidence of rural to urban migration.

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## **PROBLEMS PERTAINING TO THE HEALTH SERVICE SYSTEMS**

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Besides the problems experienced by the public, current health service systems are facing a number of problems arising from the rapid changes in socio-economic conditions and population composition, the sharp increase in health expenditures, and use of new medical technologies. In addition, the stagnant managerial mechanism, and the slow process for national health development, all require effective and urgent adjustment and reorientation.

The main problems can be classified as follows:

## **1. Problems concerning changes in the overall health situation**

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### **- Changes in morbidity and mortality patterns**

Morbidity patterns continue to change with a substantial reduction in the incidence of preventable communicable diseases and an increase in chronic and degenerative diseases, behaviour related or non-communicable diseases and diseases caused by an unsafe environment such as traffic accidents, acts of violence, and environmental pollution as well as unhygienic and high-risk working environments.

While the number of cases of malaria, diphtheria, pertussis and tetanus has fallen markedly, other infectious diseases such as diarrhea, haemorrhagic fever, tuberculosis and AIDS remain pervasive health problems. Changes in morbidity and mortality patterns can be well observed in the morbidity and mortality data, as well as surveillance findings of certain groups of diseases including those of the Nationwide Health Surveys conducted during the past two decades.

In the process of health systems reorientation and problem-solving, efforts must be made to adopt a holistic approach as the underlying causes of current problems are multidimensional. Heart disease, cancer, and traffic accidents, for example, are attributed to socio-economic changes and corresponding changes in behaviour and lifestyle, and thus can not be handled by medical technologies alone without other essential support. The AIDS pandemic, even though infectivity is not so virulent, has specific behavioural and value-oriented implications, making it one of the most difficult diseases to prevent or control. Moreover AIDS has become a chronic disease which needs continuous attention and consumes a large amount of resources both in terms of manpower and budget. At the same time these behaviour-related diseases have greatly reduced the quality of life of the population and also caused a great loss of manpower in the productive age group.

It is envisaged that current health service systems and medical technologies currently geared towards treating acute diseases should be reorientated to effectively respond to the increasing prevalence of chronic diseases, with stronger emphasis on health promotion and a change in

behaviour patterns. Such reorientation requires research studies into the realm of behaviour, perceptions and values of the people as well as approaches for system reorientation which could build up favourable health behaviours and disease prevention measures. Such research studies should also help in developing health service systems which could more fully meet the changing needs of the people, and better equip them with appropriate technologies to help reduce the incidences of chronic diseases, as well as the number of handicapped cases or death of patients, through early detection. In addition service networking by involving individual families and communities in taking care of chronically-ill patients at home or within the community needs to be further investigated.

**- Changes in population structure**

Thanks to the Population and Family Planning programme, Thailand achieved the target of reducing the population growth rate down to 1.2 per cent by the end of the seventh Five-Year Development Plan. During the 25 year period from 1969-1994, maternal mortality and infant mortality rates had declined from 2.27 per 1,000 to 0.1 per 1,000 live births and from 87 per 1,000 to 20 per 1,000 live births, respectively. However the problem of low birth weight (below 2,500 grams) still accounts for 8% of newborns. Based on a study conducted in 1993, growth and development of one-fourth of Thai children were below standard.

As for the population structure, the proportion of the aging population increased considerably, from 7% in 1990 to 11% in 1992. Apart from focusing on child development due consideration must also be given to the aged with corresponding plans for health promotion and other comprehensive services to increase their quality of life and capability of leading a productive life without being a burden on the family and society.

It is also observed that the rapid socio-economic development in the past decade has further widened the gap between the rich and the poor. Underprivileged groups have emerged as a result of imbalanced growth such as the low-income workers who work in a high-risk



environment, labourers and the handicapped. These groups need specific health care which should be accommodated within the national health service system as well as other supportive programmes of occupational promotion so that they could better contribute to national development.

Recently the migration of overseas labour from neighbouring countries, both legal and illegal, has brought about considerable health and social problems. Some migrants come with diseases that have already been eradicated in Thailand. This has caused an unnecessary financial burden and affected the employment of Thai labour.

## **2. The rising cost of health expenditure**

During the past two decades Thailand has experienced a sharp increase in health expenditure particularly during the years 1980-1992, whereby the rate of increase was around 15.4% per year, which is higher than the approximate 10% growth rate of the gross national product. In real terms, the country's health expenditure, which was 38,568 million Baht in 1978, increased to 148,455 million Baht in 1992, or almost a four-fold increase in about 15 years. Per capita health expenditure, which was 852 Baht in 1978, increased to 2,568 Baht in 1992, or nearly 5.9% of the gross domestic product.

It is unfortunate to note that, despite such a sharp increase in health expenditure, certain groups of population still remain underserved. This phenomenon shows that increasing the health expenditure or government health care services does not necessarily result in easier access to effective services.

The rising health expenditure was also caused by the increasing cost of health care services, particularly those of the private sector which targeted high-income groups and made extensive use of expensive high technologies and ultra-specialized services. The rapid increase of private hospitals in large cities has brought about the problem of brain-drain and consequently a shortage of qualified personnel in the government health infrastructure, particularly in the rural areas.

There is thus a need for health systems reform to arrive at an appropriate mix of public and private health care services with special reference to health expenditure, health financing and payment systems in public and private hospitals. Situational analyses and studies of data and experiences from other countries that are running a wide variety of health financing systems would help in the search for the most appropriate health financing system and effective cost containment strategies which are cost-effective and ensure equity in obtaining health care services.

### **3. Modern medical technologies utilization**

We now live in a world of discovery and advanced technologies. In the realm of medicine and public health, modern medical technologies continue to be developed and introduced to the health care market. Radiation technology, magnetic resonance and radioactive substances are combined with computer technology in modern diagnostic equipment. New medical technologies for treating diseases, such as MRI, non-invasive operation by using laser, as well as equipment and medicine for intensive care and rehabilitation have been introduced. These new technologies have helped in prolonging life, increasing quality of life, alleviating pain and reducing hospital-admission days of patients.

Technologies pertaining to genetic engineering, immunology and virology are also being developed to tackle the problems of AIDS and other emerging viral and bacterial-borne diseases. Whereas an effective medicine for killing viruses has yet to be developed, new drugs have helped in preventing viral growth. Pharmaceutical research and development to produce new drugs for treating cancer as well as new drugs and vaccines employing immunology and genetic engineering technologies are well underway.

Thailand is highly receptive to new medical technologies. A report from the International Association of Producers and Distributors of Medical Technologies indicated that the rate of market expansion in Thailand has been the highest among Asian countries with a growth rate of 24% per year in 1993, while growth in China, the largest Asian market, was only 23%. This evidence may imply that Thailand is well

advanced in access to modern medical technologies. On the other hand, we may have too many of them when compared with countries of a similar level of socio-economic development or even with better-countries off. Such technologies are also found to be heavily concentrated in Bangkok, with instances of overuse which not only causes a financial burden on the people but also has a direct effect upon the country's health expenditure.

It is therefore essential to review the current use of modern medical technologies, in regard to the following: imports to be proportionate to the number of target groups or incidence of diseases, the distribution of such technologies, criteria for their use, and direct sales advertising in order to ensure effective utilization and avoid a negative impact on health as well as unnecessary expenditure.

#### **4. Problems pertaining to the government bureaucratic system**

The Thai bureaucratic system is fairly centralized and characterized by a lack flexibility in adjusting to the changing environment. As government health service systems which cater for the majority of the Thai population are under this bureaucratic set-up, they are not flexible in adjusting themselves to meet new challenges effectively.

It may be true that the conventional bureaucratic system has helped solve certain health problems quite effectively, particularly those with a wide coverage such as infectious diseases. Expansion of basic health services and even reduction of the population growth rate have also been achieved. Measures have been taken for delegating authority and flexibility in budget allocation and management. These initiatives have increased the potential of the government health service systems in tackling the problems to a certain extent.

However current socio-economic and political changes have made, people more highly motivated and they now wish to participate in planning for their future. They have therefore become more demanding for quality health care services. Delegation of authority and promotion of the people's participation are now driving forces inherent in all the managerial systems for national development.

In the health service sector such forces are extremely important, particularly in enhancing the people's role and responsibility as to their own health. This approach needs to be based upon careful analysis and testing of alternative models for decentralizing power and authority. This is because the quality of services might be impaired through decentralization; and hence, in certain cases, regionalizing of services might be a better answer. Whatever approach is decided upon, it must lead to an increase in the quality and efficiency of services rendered to the people.

The problems of the people and the health service systems are two sides of the same coin and each can not be tackled separately as the underlying factors of the problems of both sides are interrelated. The government health service systems are essential components of the national health system which interact and are influenced by other related systems and mechanisms functioning in the society such as national policy and plan, health policy, financing and fiscal policies, financing of the health systems, private health care services and role of the people in the community. The major systems' components and their interrelations are reflected in Figure 1.

Close analysis of the health service systems' major components and mechanisms reveals a large number of sub-systems contained therein, as reflected in Figure 2.

In the process of problem-solving and overall national health development to enhance the quality of life of the people, there is a need to make a system approach by considering all the system components and their interrelations in order to arrive at guiding principles and effective strategies for health systems development both at the micro and macro levels.

Figure 1 Major components and mechanisms of the Health Systems

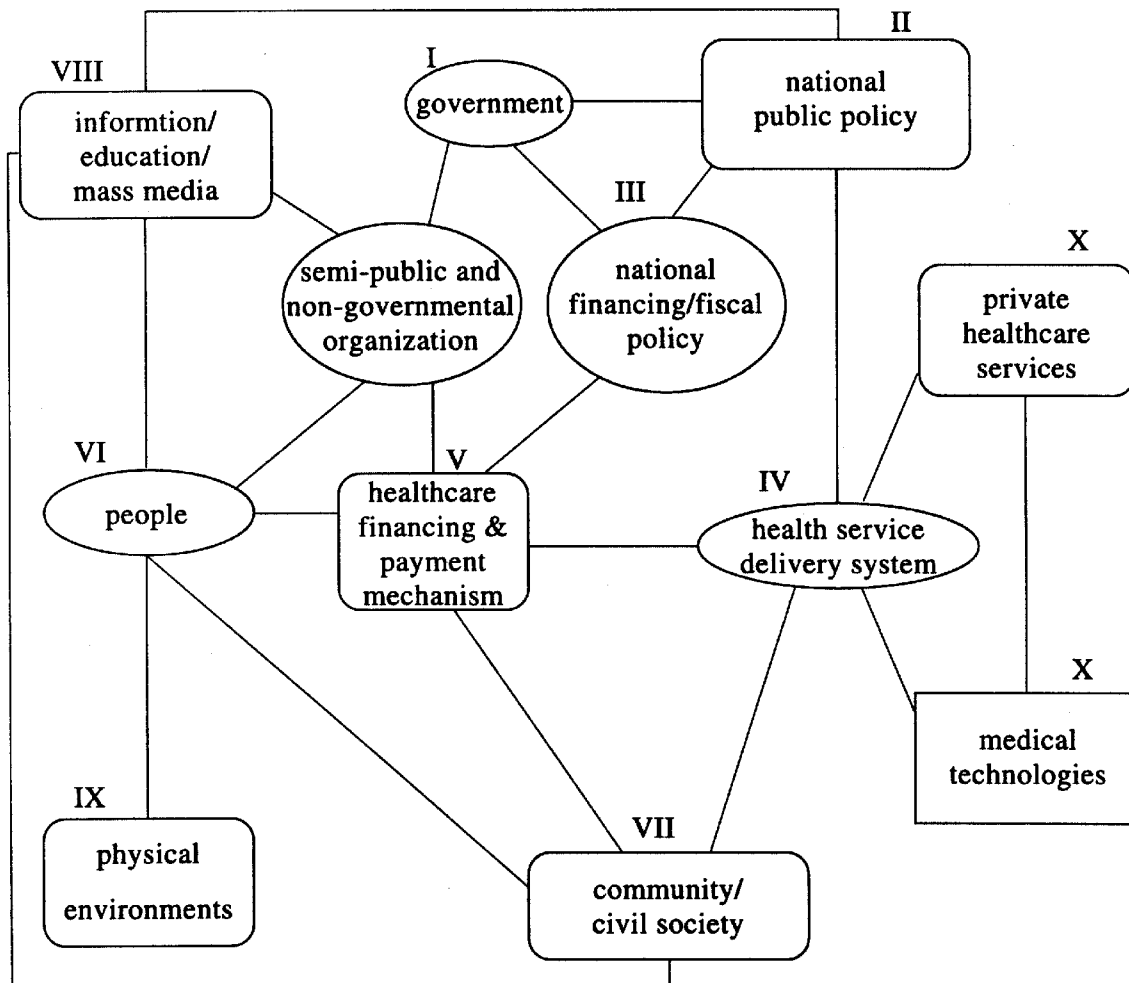
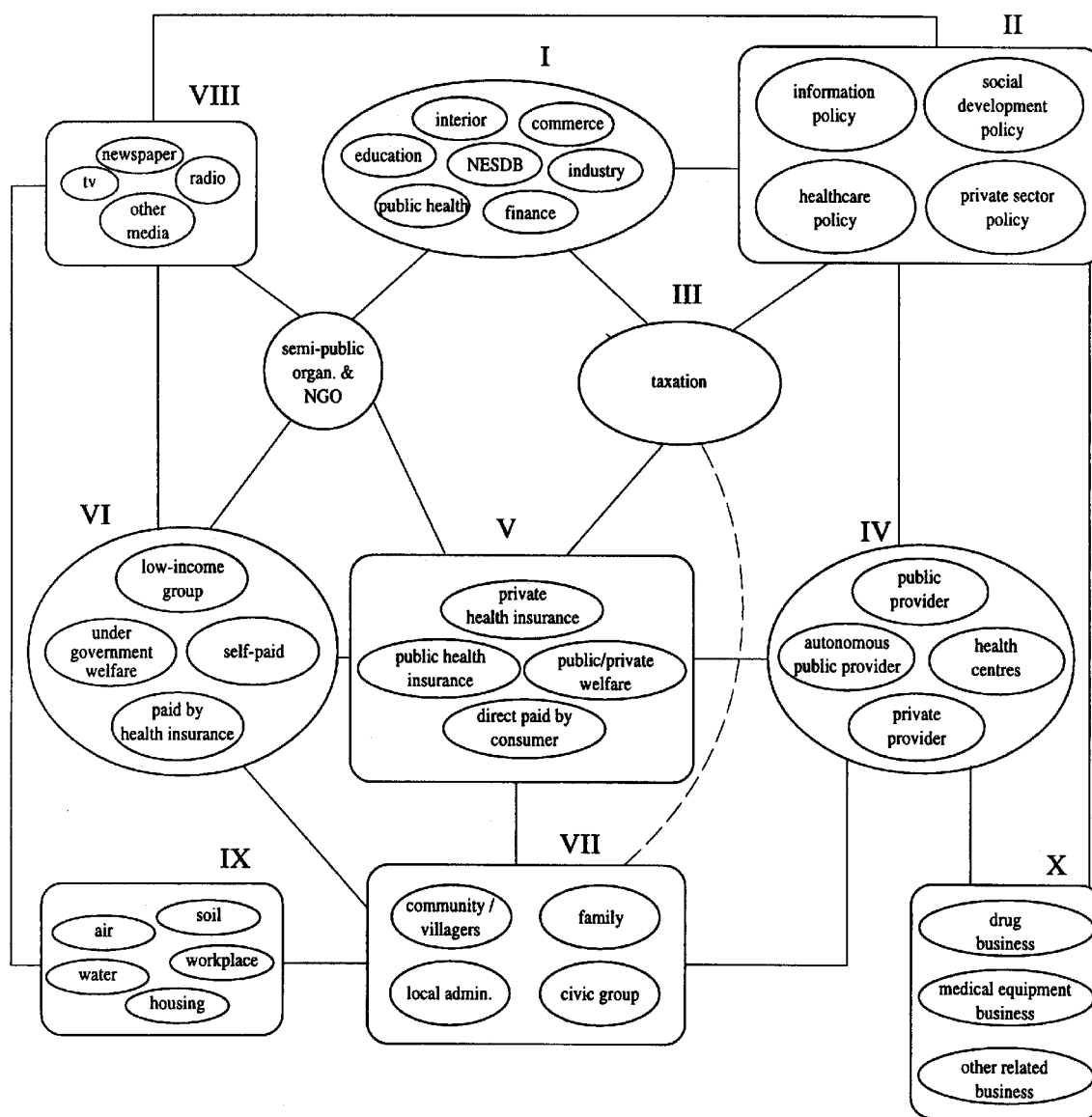


Figure 2 Sub-components of the major components and mechanisms of the Health Systems



# MAIN STRATEGIES FOR HEALTH SYSTEMS REFORM

A comprehensive analysis of the problems affecting the people and of the existing health service systems including an intensive system analysis to understand the nature of interactions among system components and mechanisms, taking into account the philosophy, policy and strategies of the eighth Five-Year National Economic and Social Development Plan, were used as a basis for formulating the strategies for health systems reform.

The eight strategies being developed appear as follows:

## Strategy No. 1

### **Reorganize the structure and relationships among health service organizations at all levels within the overall national health service system**

In order to reorganize existing health service systems and the relationship among system components to improve services to the people by more effective use of personnel and budget, to enhance the systems' capability of providing services that are responsive to the people's health problems, to prevent the cost of health care increasing too sharply, and to solve the problem of inaccessibility, key strategies have been developed as follows:

#### **1. Develop the capacity of the government health service systems**

The objective is to make the government health services capable of rendering effective services to the majority of the population, that is both to the underprivileged groups who are eligible for free services and to those who may be able to pay the fees. If the latter were charged more realistic fees, it might result in increasing the quality of government health services

and stabilizing the cost of health care in private hospitals which currently is rising sharply. There should also be more effective mechanisms for screening persons who are eligible for free services in order to avoid unnecessary expenses and thus making fullest use of existing financial and human resources. These new approaches require "total quality management", which means strengthening managerial capacity, revising the payment mechanism or remuneration system to be more consistent with those of the private sector in order to avoid a high rate of providers.

## **2. Increase efficiency of primary care and the referral system**

This could be done through increasing the efficiency of primary care provided by health centres and community hospitals while initiating new models for primary care in urban areas to reduce an unnecessary influx of patients to large hospitals. The existing referral systems should also be improved so as to make it easier for primary level health service centres to send their patients for treatment to secondary or tertiary level health care institutions whenever necessary. These referral systems might well cover private clinics and polyclinics which constitute essential components of the primary care facilities. This would enable large hospitals to provide better care for complicated cases by using their full potential. When the patients' health has improved, they could be referred to community hospitals or health centres or even receive care within their own communities or individual families.

## **3. Upgrade health service systems which are not well planned and well organized**

In response to emerging needs, some of the health service systems which are not well planned and well organized should be upgraded by increasing their efficiency and effectiveness, for example:

- emergency care when patients need prompt attention and easy access to emergency services. This need could be met by setting up well fitted out mobile units or fully equipped ambulances to transport victims safely and promptly to appropriate emergency units. At present emergency services are available only when the victims arrive at the hospital. Efforts must also be made to solve the problem of hospitals refusing to provide services as in cases where



the victim or his relatives cannot provide evidence that they are able to pay the bills.

- service systems for treating high priority diseases when effective technologies for disease prevention and treatment are already available should be rigorously reorganized to better serve the people. For instance developing effective screening systems for cancer and genetic diseases could help reduce the magnitude of the problem and social burden involved as severe sickness could be detected and treated promptly.

## Strategy No. 2

### Reorientate the role of the government in health development

Development of the capacity of the government health service infrastructure as reflected in strategy No. 1 does not mean that the government should continue to be responsible for the overall health care system of the country. It is timely that the government reorientate its role to that of policy maker whose major task is to monitor health development to ensure that it is proceeding in the desirable direction. Following this principle, the government should limit the growth of its health service infrastructure and reorientate its role as follows:

#### 1. Developing mechanism for health policy formulation and monitoring its implementation in the desirable direction

The government should strengthen intersectoral collaboration for overall national development (not just for the health sector) with the aim of increasing the quality of life of the population. It should also set desirable directions for the public and private health care authorities in providing essential services for the benefit of the general public.

This includes formulating guiding principles for utilization of medical technologies and equipment and criteria for their use, strategies for appropriate distribution of medical equipment based on real needs and problems in order to make the best use of expensive technologies without affecting the overall national economy. Most importantly care must be taken

to avoid a burden being placed on the people by the unnecessary use of expensive technologies or equipment.

## **2. Reorientate the role of the government in regard to the national health expenditure**

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To control the rapidly increasing health expenditure and make sure that health services are cost-effective, the following actions should be taken:

- reorientate the government budget allocation system for health care services, which used to follow programme budgeting principles, and make it more effective by taking into consideration the achievements against target of each health care organization as one of the criteria for budget allocation.
- enhance the role of the government in monitoring the cost of health care services provided by both the public and private sectors by developing an accountable system to designate ways and means to purchase services whose costs are to be covered by the government while stipulating precise guiding principles for services whose costs are to be covered by the patients themselves.

## **3. Reorientate the role of the government in monitoring its own health service institutions**

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Government hospitals and health centres should be given more freedom in managing their own operations which could help increase efficiency in financial and personnel management while continuing to render essential health services in accordance with the national health policy and receive a regular government budget. If the government could reorientate its role from health service provider to purchaser of quality services, it would then create healthier competition between public and private hospitals with respect to quality and efficiency.

## **Strategy No. 3**

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### **Promote the people's active participation in health care services**

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To promote the active participation of the people or communities in taking care of and being responsible for their own health, the following measures should be taken:

**1. Promote the participatory role of community organizations or communities in solving their own health problems**

Community organizations or communities themselves could effectively participate in solving their own health problems or managing the health service centres to a considerable extent. This may mean total decentralization of authority to the community or joint undertakings depending upon the absorptive capability of the community and the readiness to participate in development activities while bearing in mind changing trends and further developments needed in the future. It has been observed that some strong and viable community organizations or communities have been able to play an effective role in environmental conservation, which has favourable effects upon people's health.

**2. Promote the people's participation in protecting their rights in regard to health**

The people's active participation in all aspects of health development should be promoted, whether this be consumer protection, defending their rights when facing problems concerning health services, forming group for the purpose of information dissemination, scrutinizing and following up publicity on products that may be harmful to health, or simply helping each other in primary health care at the community level to avoid unnecessary visits to health centres or hospitals.

**3. Encourage individuals to have an appropriate health behaviour**

Each individual should be adequately informed about the health risks arising from undesirable behaviour such as cigarette smoking, drinking, drug addiction or other high-risk behaviours. Aside from direct dissemination of information on health, regulatory and financial measures such as increasing taxation of consumers goods that may be harmful to health should be introduced. Campaigns for building up social values among the general public to reduce, avoid or give up high-risk behaviours should also be organized.

## **Strategy No. 4**

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### **Encourage the establishment of a semi-private organization as a mechanism for health service systems reform**

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A non-profit semi-private organization is deemed most appropriate for creating desired changes as it would be flexible in adjusting its functions to meet everchanging conditions in the society. Such an organization could serve as an effective mechanism for mobilizing efforts from all relevant public and private organizations, and the general public to jointly tackle health problems and reorganize current health systems to be more responsive to changing conditions and needs.

#### **1. Mechanism for health promotion**

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Its role would be to develop a long-term scenario for health promotion, with a budget allocated by the government to promote activities, mechanisms or environments that are conducive to good health e.g. promote dissemination of accurate data and information concerning health to the general public by concerned agencies and organizations both of the public and private sectors, and encourage healthy behaviours through the mass media. The mechanism should be highly receptive to changes and ready at all times to reorientate its strategies and managerial style in accordance with changes in the environment, society, the mass media or business systems that may affect or have an impact on health.

#### **2. Mechanism for controlling quality of health care**

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Naturally people want to have good quality health care, but enhancing the quality of health care services, be it in the public or private sector, usually takes a long time. Health service institutions at each level have their own special features and are thus different in regard to readiness and motivation. Regulatory measures as well as follow-up and quality monitoring by a mechanism which is under the control of the public sector might not be effective as there would be no commitment on the part of the health care institutions themselves. Establishment of a semi-private organization as the focal point for quality control is recommended. This type of organization would be better able and more willing to ensure that all

concerned sectors collaborate and take part in formulating long-term scenarios and plans of action in accordance with prevailing conditions, thus ensuring sustained quality control of health care services.

### **3. Mechanism for purchasing health care services**

A semi-private organization responsible for managing the funds allocated by the government for purchasing health care services as well as the proceeds from payments by the clients themselves should be established. This is to increase purchasing power, take rational decisions in selecting services and make best use of existing resources in terms of post and type of services received. As users of services, the people could also be involved in managing the funds, with support from the government.

## **Strategy No. 5**

### **Promote the role of the mass media in health information dissemination**

The general public do not have easy access to essential health information both for self-care and for sound selection of health service providers. In a situation where the mass media have a strong influence upon the people's awareness and decision-making, the private sector has made wide use of the mass media in publicizing its products. If the information given is accurate and sound it will be useful for consumers but if it is misleading, inaccurate or conducive to building up inappropriate values and beliefs concerning health and consumers' behaviours, it may be harmful to the people's health.

The recommended strategies for promoting an appropriate role for different types of mass media and relevant commercial systems appear as follows:

#### **1. Promote the capacity of the mass media in providing accurate and appropriate health information and value orientation**

As the mass media have a strong influence upon the people's awareness and decision-making in the IT era, it is extremely important to strengthen their role in providing the general public with accurate, unbiased

and appropriate health information. This might be done through setting up control and feedback mechanisms in order to reduce inaccurate or inappropriate information dissemination. Whenever possible a mechanism or legal framework requiring the mass media to increase their role in health promotion should be set up for the purpose of reducing unnecessary health expenditure in the long term.

## **2. Promote stronger commitment to professional and business ethics among the mass media**

Publicity including commercials on health-oriented products and services may cause misunderstandings or generate wrong values and beliefs concerning health and consumer behaviours. Control of publicity through the mechanism established by the Consumers' Protection Committee of FDA regulations may be effective to a certain extent but at the same time it is necessary to promote, within the relevant sectors an awareness and commitment to professional and business ethics, including social responsibility. Another possible approach is to support crosschecking within the profession, which might be more effective and sustainable than control by a government mechanism.

## **Strategy No. 6**

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### **Divise an effective managerial system to promote environments conducive to good health**

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Environmental problems in Thailand have had an ever-increasing negative impact on the physical as well as mental health of the Thai people. In order to solve the health problems caused by the environment, there should be a strong intersectoral mechanism to promote a better environment. It should involve all concerned sectors both within and outside the Ministry of Public Health including the private sector, individuals and communities.

The health-oriented strategies include the following:

**1. Develop an effective surveillance system to monitor the environmental impact on health**

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Even though efforts have been made in environmental quality monitoring, they have not been strongly motivated, and sustained support of all concerned sectors has been lacking. Development of an effective surveillance system would keep the society informed of the impact of the environment upon health, and lead to more collective efforts for preventing and reducing the magnitude of the problem.

**2. Promote environments that are conducive to good health**

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This means promoting healthy environments for the people, whether in urban areas or in the workplace. Efforts must be supported by public policy or financial incentives such as tax reductions, together with provision for training and teaching/learning experiences as well as technologies and other essential inputs for ensuring better environments.

**3. Promote the role of community organizations/people in environmental conservation**

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Community organizations and the people themselves have critical roles in looking after and promoting healthy environment such as forest and river conservation, provided they proceed in the right direction.

**Strategy No. 7**

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**Develop health service systems responsive to the current population structure**

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Following current changes in population structure and the projected health problems, health systems development must be geared towards four major target populations as follows:

**1. The labour force**

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This group is composed mainly of industrial workers and farmers who face health risks different from those of the general public and therefore need their own specific health care system, and corresponding measures, for providing essential services. The aim of the key strategies to be implemented for this target group are to ensure safe working environments, reduce or prevent physical contact with toxic substances and to develop an

appropriate system for providing prompt health services.

In addition, for industrial workers and employees of private business firms, efforts should be made to introduce measures on the working environment and health, which are complementary. These should be effective by addressing problems of sickness and of the handicapped, and might even prevent loss of life.

## **2. The elderly** .....

The current population projections indicate that the proportion of elderly will continue to increase. The health needs of this group are different from those of the general public not only in terms of type of service but also in terms of quantity and quality. Strategy No.1 directed towards reorientation of the health service systems to provide all essential services with quality and efficiency could help reduce the problems of the elderly to a certain extent. But the more important input for this group is to develop complementary measures and systems which would ensure their good health and their capability to use their potential for the benefit of society as a whole. This is to build up the attitude that the elderly are not a social burden but can continue to serve society because of their extensive experience.

## **3. The handicapped** .....

Thanks to improved health care and medical technologies, people now live longer but the number of handicapped persons is also on the rise. Traffic accidents are the major cause of disability.

Apart from providing essential health care services for the handicapped to ensure proper living and quality of life, it is important to promote their capability to help themselves and to lead a productive life according to their potential. There is also a need to build up a new attitude that the handicapped are not totally dependent upon the society but can continue to live a productive life with pride and dignity.

## **4. Young children** .....

Even though the number of children under five years of age has decreased following the success of the national family planning programme,



the quality aspect of health care for young children still remains to be improved. Findings from research on child development indicate that growth and development of roughly one-fourth of Thai children throughout the country are below standard. Meanwhile the rapid socio-economic changes have caused changes in relationships among family members or even the complete break-up of individual families. This has had negative effects upon the national policy and strategies for human resource development.

## **Strategy No. 8**

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### **Promote the role of the private sector in health development**

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Changes with structure of the economy both in the Thai context and at the global level towards a system of free enterprise have underscored the importance of the private sector's role in national development.

In the field of public health a specific condition exists in that the free market mechanism can not function at its best because health service providers themselves can generate demand for utilizing services. Countries with well developed systems of free enterprise have set up rules and procedures to contain the cost of medical care services provided by the private sector at an appropriate level to ensure that the general public have access to all essential health care services at affordable cost.

Meanwhile in other countries where free enterprise is fully exercised there have been many instances of health care expenses skyrocketing out of control, thus affecting the low-income population.

Promotion of the appropriate role of the private health care business can be divided by type of business as follows:

#### **1. Health care service business**

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The Thai Ministry of Public Health has directly and indirectly supported private sector participation in organizing health care services to reduce its workload and provide a possible alternative for those who could afford to pay for extra conveniences. However, experiences in Thailand and elsewhere have shown that competition among private hospitals is extremely high, particularly in utilizing costly technologies and medical

equipment. This competition coupled with imperfect information of the consumers have often resulted in a sharply rising cost of services which not only placed a burden on individuals or their families but also affected the national health expenditure as a whole.

On the other hand, the people who seek health care services from the private sector would expect high quality services and if their needs are not met or if mistakes are made in the course of treatment, they will certainly complain or sue the service provider, a trend which is currently on the rise.

While the government exercises control over the private hospital business, the latter tries to find appropriate measures for protecting itself. This defensive mechanism is unproductive for both sides. It is essential for the government to monitor the private sector and ensure that its role in providing health care services is properly carried out and of real benefit to the general public.

## **2. Pharmaceutical and medical supply business**

The pharmaceutical and medical supply business in Thailand is well advanced and has high potential. Should it be actively supported by government mechanisms and motivated to improve its quality control measures to meet international standards, the country would become more self-reliant as regards pharmaceutical and medical supplies. There would also be a better chance of its expanding its sales to markets in neighbouring countries and thus fostering the growth of the national economy.

# HSRI AND THE DEVELOPMENT OF HEALTH SYSTEMS RESEARCH

Combining the eight strategies as mentioned in Chapter 2 into a strategic plan for health systems development would require reliable information and a database derived from research studies or intensive and continuous research and development endeavours. Whereas certain strategies can be implemented without additional research provided that accurate baseline information is already available, others would require pilot studies to find appropriate approaches for successful implementation or even further research and development to support ongoing implementation. In addition, if information from overseas on state-of-the-art and actual experiences could be collected, this would help shorten the trial and error experiments which are usually costly and time-consuming. However such experiences should also be carefully studied and analysed to fit current health conditions and problems within the Thai context.

It is obvious that health systems research is essential for the development of a comprehensive national health system. WHO has underscored that health systems research is one of the essential tools for bringing about "Health for All" and recommended that each country undertake health systems research itself to meet the country-specific socio-economic, political and cultural characteristics and conditions which impact upon the health of their own people.

The Health Systems Research Institute was established by the Royal Decree on HSRI enacted in 1992 and started its operations in the fiscal year 1993. Its mission was clearly stated as an institute to promote health systems research and mobilize all concerned sectors to participate in the process of health system research for the purpose of obtaining useful information for

health policy formulation or improving the approaches for effectively solving the health problems of the country.

HSRI, like other research and development institutes, has gone through the process of learning how to undertake intersectoral and interdisciplinary researches. Development and adjustments to its implementation plan are also part of a continuing process to cope with current health conditions and problems. This is to ensure that HSRI can build up a body of current knowledge for health systems reform.

## THE FIRST FOUR YEARS OF HSRI

During the first four years (1993-1996) HSRI concentrated upon two types of research, namely (1) policy-oriented research which will impact upon the whole population, and (2) area-based research whose results will be beneficial to the people residing in the area under investigation. In parallel with research, efforts have been made to develop its forward plan for promoting use of research findings and increasing HSR capacity. HSRI major activities and corresponding expenses appear in Table 1.

**Table 1** Major activities and corresponding expenses of HSRI for the period 1993-1996

Activities	Expenses (in Baht)			
	1993	1994	1995	1996
1. Policy-oriented research	1,109,185.00	18,791,727.26	40,417,164.00	38,071,438.00
2. Area-based research	253,000.00	3,447,880.00	950,000.00	10,300,700.00
3. Development plan for promoting use of HSR findings and increasing HSR capacity	322,931.59	2,028,426.56	9,071,658.83	8,173,021.80
4. Office management	2,569,922.15	7,546,636.49	8,381,782.69	10,877,788.40
Total	4,255,038.74	31,814,670.31	58,820,605.52	67,422,948.20

Detailed activities in each specific area are summarized as follows:

### 1. Policy-oriented research

HSRI has gradually increased its support for policy-oriented research conducted by researchers both within and outside the Ministry of Public Health (MoPH) as appears in Table 2.

**Table 2** *Number of policy-oriented research projects, corresponding expenses and responsible agencies supported by HRSI during 1993-1996*

	1993	1994	1995	1996
No. of supported research projects	8	21	50	39
Total expenses (in Baht)	1,109,185.00	18,791,727.26	40,417,164.00	38,071,438.00
Expense per project (in Baht)	138,648.-	894,844.-	808,343.-	976,190.-
Ratio of within MoPH's by outside MoPH	7/1	15/6	21/29	11/28

The areas covered by the policy-oriented research projects are in line with the six major programmes of health systems research as designated by HSRI. Highlights of research conducted under each programme appear in Table 3.

**Table 3** *Highlights of policy-oriented research supported by HSRI during 1993-1996*

Programme area and project title	Findings submitted to	Tangible results
<b>(1) Programme on the National Health System</b>		
- The Act on Medical Care Institution and Consumers' Protection B.E....	Ministry of Public Health, Parliament	1. Protection of citizens who use services of the private sector which accounted for at least Baht 76,500 million per year 2. Revision of the Royal Decree on Health Service Institution B.E. 2504 is pending following Dissolution of Parliament in 1995
- Performance Evaluation of Public Health Service Centres and Community Hospitals under Bangkok Metropolitan Administration	Health Bureau of the Bangkok Metropolitan Administration	1. Increased efficiency of BMA's services for the people in Bangkok with annual expenses of at least Baht 100 million per year 2. Models obtained for reorganizing the metropolitan health service centres to meet the needs of the people, particularly the underprivileged groups residing in the urban area 3. Better understanding of the strength and weaknesses of the services and financing systems of the metropolitan health centres

**Table 3** (continued)

Programme area and project title	Findings submitted to	Tangible results
- Research and Development on Urban Health Centre, Maharaj, Nakhon Ratchasima Hospital	Ministry of Public Health, Nakhon Ratchasima Regional Hospital	1. Increased efficiency of health and medical care services for the underprivileged population 2. Better access to medical care services by the underprivileged living in urban areas
- Rapid Provincial Health Survey	Ministry of Public Health	1. Model for community-based provincial health survey adopted for the purpose of monitoring and evaluating the health situation, coverage of services and health behavior of the people 2. Provincial authorities know the health situation and trends within their province and ability to use the project findings in target setting and budget allocation to solve health problems 3. Findings used in making projections of different target populations in the province who will be receiving public or private health care services 4. Findings used in reorienting strategies for approaching specific target groups like the underprivileged 5. Increased capability of provincial personnel in community-based research, data collection and analysis 6. Replication of the model throughout the country will make available provincial data to health professionals for more indepth studies 7. MoPH was able to reduce overlapping and irrelevant report and record forms, thus reducing the workload of provincial personnel

Table 3 (continued)

Programme area and project title	Findings submitted to	Tangible results
<b>(2) Programme on Health Financing Research</b>		
- Research Study on Civil Servants Medical Benefit Scheme Policy Reform Phase I	Comptroller-General's Department, Ministry of Finance	<ol style="list-style-type: none"> <li>1. Recognition of the weak points of the current system for controlling disbursement of medical care reimbursement</li> <li>2. Recommendation on a management system capable of controlling unauthorized disbursements</li> <li>3. Recommendation on a new approach to reimbursement which could contribute to budget savings</li> <li>4. Recommendation on means for restructuring the financing system in the long term by setting up the Central Saving Fund for a Civil Servants Medical Benefit Scheme</li> </ol>
- Research for Setting up a Group Purchasing System for Drug Procurement	Ministry of Public Health	<ol style="list-style-type: none"> <li>1. A group purchasing system is being applied at the provincial level</li> <li>2. A common drug list was drawn up for use by health centres and community hospitals to increase efficiency in drug management</li> <li>3. It is estimated that a saving of about Baht 1,374 million could be made in the annual budget for purchasing drugs</li> </ol>
- Study on Contracting the Private Sector to Provide Non-Clinical Services in Government Hospitals	Ministry of Finance Bureau of the Budget	<ol style="list-style-type: none"> <li>1. Contracting out certain non-clinical services, like cleaning or security services to the private sector was found to be more practical</li> <li>2. A saving of Baht 200 million was made in the annual budget for cleaning services at government buildings and hospitals by contracting out to the private sector</li> </ol>

**Table 3** (continued)

Programme area and project title	Findings submitted to	Tangible results
- Study on Budget Allocations for Low-Income Population	Ministry of Public Health	<ol style="list-style-type: none"> <li>1. Appropriate criteria for budget allocations for various low-income groups and underprivileged persons were set up to ensure equity and a more even distribution of services to people in different regions</li> <li>2. Increased efficiency of budget usage, which accounted for not less than Baht 200 million per year</li> </ol>
<b>(3) Programme on Development of Quality and Efficiency of the Health Service Systems</b>		
- TQM Trials in Public Hospitals	Ministry of Public Health through team of Advisors to the Health Minister	<ol style="list-style-type: none"> <li>1. Hospitals registered under the project undertook quality development activities on their own interest initiative</li> <li>2. Considerable improvement in quality of hospital services</li> <li>3. Consumers obtained best quality services for the money spent</li> </ol>
- Development of Manual for Quality Assessment of Social Security Main Contractor Hospitals	Social Security Office Private Hospitals Ministry of Public Health	<ol style="list-style-type: none"> <li>1. Development of hospital standards and a handbook for hospital standard assurance inspection for use by the Social Insurance Office in its audit procedure to ensure quality services for insured persons</li> <li>2. Hospitals that are not registered under any social insurance scheme can use these standards for internal quality control</li> <li>3. Increased quality of public and private hospital services for the benefit of insured persons and the general public</li> </ol>



Table 3 (continued)

Programme area and project title	Findings submitted to	Tangible results
<b>(4) Programme on Development of Human Resources for Health</b>		
- Criteria, Method and Instruments of Performance	Ministry of Public Health	1. Reduced conflicts and increased efficiency in personnel management
Appraisal for Senior Officials of the Ministry of Public Health (admin. levels 8-10 and tech. levels 9-10)		2. Performance evaluation tools set standard for rational evaluation
		3. Increased efficiency in overall personnel management
<b>(5) Programme on Health Behavioural Research</b>		
- Medical Rehabilitation Service System in Thailand	Office of Rehabilitation for the Handicapped, Sirindhorn National Centre for Rehabilitation	1. Data collected on current problems within the system, e.g. data on surveillance of the handicapped, managerial and support systems, and the needs of the handicapped
		2. Policy recommendations and study reports presented to all concerned agencies for use in programme planning and implementation
<b>(6) Programme on Health Situational Analysis and Trend Assessment</b>		
- Development of Effective Health Information System for Follow-up and Evaluation of Phase 1: Mid-decade Goal for Child Health in Thailand	Ministry of Public Health	1. Set up of a health information system capable of evaluating the Mid-decade Goal for Child Health
		2. Increased efficacy of the Child Health Development Programme in Thailand

## 2. Area-based Research

HSRI has supported area-based research conducted by field personnel at the provincial level as the findings could be directly and immediately applied for the benefit of the rural population. The objectives of area-based research appear as follows :

- (1) to solve provincial health problems and allow each province to formulate its own research objectives ;
- (2) to develop the research capability of field personnel to the extent that they are able to make use of the body of knowledge and

findings from area-based research in upgrading the quality and efficiency of health care services in their respective area. At the same time, the capability of personnel working in the field will be fostered in the long term.

From 1993 to 1996 HSRI has supported area-based research in 16 provinces, namely Samut Prakarn, Ubon Ratchathani, Ayutthaya, Chanthaburi, Phichit, Nong Khai, Trang, Ratchaburi, Yasothon, Lopburi, Chiang Mai, Chiang Rai, Lamphun, Lampang, Mae Hong Son and Bangkok, with research highlights as appear in Table 4.

**Table 4** *Highlights of area-based research supported by HSRI during 1993-1996*

Programme area and project title	Findings submitted to	Tangible results
<b>(1) Programme on Development of Health Information Systems and Capability of Personnel</b>		
- Samut Prakarn's Sampling Survey Information System for Health Management	Samut Prakarn Provincial Public Health Office (PPHO)	1. Increased coverage of child immunization targeting at least 30,000 children under the Polio Eradication Programme 2. Comprehensive health services provided to industrial workers with active public and private sector participation in the first year of study
- Model Development of Essential Management Information System for Health in Phichit Province	Phichit PPHO	1. The system provided data for planning, monitoring and evaluating health centres' activities 2. Increased efficiency of the health centres' operations
- Development of Information System for Preventing and Controlling Road Accidents in Nong Khai Province	Nong Khai PPHO	1. Establishment of a network of all concerned agencies for controlling issue of motorcycle licences 2. Forty dangerous locations on public roads in Nong Khai province designated for long-term action
- Development of Technical Capability of Provincial Field Personnel in Yasothon Province	Yasothon PPHO	1. Increased technical capability of 20 provincial personnel in undertaking quantitative and qualitative data analysis 2. Increased effectiveness of work undertaken by provincial personnel

Table 4 (continued)

Programme area and project title	Findings submitted to	Tangible results
- Research for Controlling Accidents: A Leading Health Problem in Trang Province	Trang PPHO	<ol style="list-style-type: none"> <li>1. Reduced rate of accidents in Trang under the auspices of the Provincial Committee for Accident Control</li> <li>2. Reduced the rate of untimely deaths or handicapped cases caused by accidents, thus saving costs as well as sustaining the economic productivity of the working population</li> </ol>
<b>(2) Programme on Development and Management of Health Service Systems</b>		
- A Model for Development of a Hypertension and Diabetes Control Programme, Chanthaburi Province	Phra Pokklao Hospital, Chanthaburi PPHO	<ol style="list-style-type: none"> <li>1. Collection of baseline data and development of a hypertension and diabetes case-finding which located at least 5,000 cases</li> <li>2. Increased effectiveness and continuity of services as a whole</li> <li>3. Reduced complications from hypertension and diabetes</li> </ol>
- Health Systems Research and Development at Provincial Level	Ayutthaya PPHO	<ol style="list-style-type: none"> <li>1. Establishment of a primary care centre in the urban area of Ayutthaya to reduce influx of patients into the provincial hospital</li> <li>2. Set up of a model for providing comprehensive primary care services to local people which could be used for further adjustment and replication</li> </ol>
<b>(3) Programme on Increasing Quality of Health care Services</b>		
- Drug Use Evaluation (DUE) of Cefotaxime at Potharam Hospital	Ratchaburi Provincial Hospital	<ol style="list-style-type: none"> <li>1. Set up of guiding principles and measures for evaluating the use of Cefotaxime and determine whether it is appropriate and financially justified</li> <li>2. Introduction of a procedure for "drug utilization review" to gradually change the drug prescribing behaviour of doctors</li> <li>3. Increased efficiency in drug prescription, saving costs to the government and to the people</li> </ol>

**Table 4** (continued)

Programme area and project title	Findings submitted to	Tangible results
- The Result of Using Fasting Blood Sugar Chart Record on Diabetes Patients	Potharam Hospital	1. Diabetes patients were able to control the level of blood sugar themselves by using the graph book 2. Reduced mortality and handicapped cases caused by diabetes 3. Increased effectiveness of diabetes control, saving costs incurred in treatment of complications, and prolonging life

The area-based research has helped establish a corps of at least 80 "implementers-cum-researchers" in the provincial health offices, Ministry of Public Health hospitals and other associated organizations during 1993-1996. More than 25 senior staff members from universities have assumed the role of technical advisors in the rural areas. They have helped transfer technology to field personnel and have thus generated close and tangible collaboration between technocrats and implementers in specific areas. This may lead to effective intersectoral cooperation for health development.

### **3. Development of Plan for Promoting Use of Research Findings and Increasing HSR Capacity**

During its first stage of operations, HSRI developed its four-year plan for the period 1993-1996 by mobilizing ideas and opinions from health professionals and technocrats in all related fields. The detailed plan for HSR has served as a framework for major programmes and corresponding priority research areas.

Each year current and emerging health problems are carefully analysed for the purpose of readjusting or reorienting the plan, which is then made known to all concerned agencies. The same process of programme planning and reorientation was employed in the development of the master plan for HSR for the period 1997-2001.

Activities for promoting use of the HSR findings include direct presentation of research reports and recommendations to the agencies likely

to make use of such findings, publication of a HSR quarterly journal since 1994, publication of research reports which contribute towards health systems development, and a monthly newsletter as well as current situation reports on specific issues such as accidents, tobacco smoking, and the environment. The HSRI's publications have been distributed to all concerned agencies and individuals in order to awaken social awareness of the problem areas covered therein.

HSRI has also supported the development of the research capacity of all concerned agencies both within and outside the Ministry of Public Health to strengthen the health systems as well as the personnel therein with a view of encouraging more extensive use of research findings in health development. During the first four-year plan, eight fellowships were given to health professionals within the Ministry and four to university teaching staff. HSRI plans to increase fellowship grants to at least 8 to 10 persons per year to strengthen their capability in regard to health systems research.

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## **EXPERIENCES AND NEW DIRECTIONS FOR HSR**

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Apart from fulfilling its mission as stipulated in the medium-term plan, HSRI has regularly reviewed and evaluated its own operations, with an intersectoral evaluation team acting as outside auditor. Based on past operations and experiences, the new directions for its research can be summarized up as follows:

### **1. Development of HSR should adopt a more holistic approach to the systems**

Even though, during the first four-year plan, HSRI had designated six major priority programme areas which included Programme on National Health System Development, Programme on Health Financing, and Programme on Development of Quality and Efficiency of the Health Systems, research projects which were supported under each programme were often fragmented as no holistic approach had been taken to determine their inter-relationship. Findings from each individual research project may be useful in health policy formulation and health system development but they are still area-specific and there is a need to reorient major research programmes

to reflect a more holistic approach to the systems, with priority research areas directed towards solving current problems at critical points within the systems.

## **2. Building up more awareness of the importance of HSR**

HSR is a new field of research that needs to be properly introduced to all concerned groups from the policy makers or executives to technocrats as well as to the general public in order to build up a full understanding of its role in generating a body of knowledge essential for medium-term and long-term health systems development. However, HSRI should not merely be a research funding agency whose purpose is to assemble new data and information but should aim at building up a body of knowledge useful for bringing about desirable changes in or reform of the national health system. In this regard HSRI has to broaden its mission by mobilizing policy makers, executives or those who will benefit from HSR to take part in planning and programming of HSR as well as monitoring progress and promoting the use of research findings or disseminating relevant knowledge and information to the general public.

## **3. Development of HSR capacity**

Even though the capacity to engage in health systems research does exist among researchers of various disciplines such as Medical Sciences, Public Health Sciences as well as Economic or Social Sciences, they tend to concentrate on priority areas of their own discipline with scant reference to the national health system as a whole. During its first four years, HSRI has tried to strengthen a multidisciplinary approach in HSR but this effort needs to be stepped up to ensure more effective and closer collaboration. For this purpose, researchers in all relevant sectors should be identified in order to mobilize their efforts in strengthening multidisciplinary HSR, which would have a real impact on national health systems development.

While HSRI's mission is to initiate research in certain priority areas or to solve important problems that require immediate attention, the Institute should eventually delegate its role in managing some major programme areas to other technical agencies or universities in order to promote more active intersectoral collaboration in health systems research.

#### **4. Development of a health information system**

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In the process of promoting and supporting HSR, the institute has collected and compiled various types of data and information. If processed as a whole, they could reflect the current situation and problems within the health systems both at the macro and micro levels and thus could be used as basic information for policy or strategic plan formulation or for reorientation of the health systems to meet changing conditions. However the data and information collected are often made use of by each individual project within a certain period without generating any systematic health information and documentation system in support of more extensive or long-term use. In the long term, a computerized health information system should be developed, or the existing system whereby data collection is fragmented by programme area such as data on health expenditure, data on national resources for health, and data on health expenditure of the government should be upgraded or streamlined.

A concerted effort is required for the development of an effective database for health systems development, which will be useful to all, through close collaboration with the organizations who own the data as well as with those who are its users.

#### **5. Development of area-based HSR**

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During the first four year's of operations, the objectives of HSR for solving area-based problems, reorienting existing health systems or developing working models for replication were achieved to a certain extent.

However there is a need for continuing development of various aspects of HSR to make it more effective, particularly by increasing the understanding and commitment of provincial health authorities and technical personnel in health systems development through area-based research and focussing on the issues that are under their direct responsibility. Area-based research should lead to more appropriate, relevant and effective problem-solving and not be carried out solely for building up the research capacity or merely for the sake of acquiring new knowledge.

Successful area-based research is one of the crucial prerequisites for health systems development as it will provide data and findings essential for health policy formulation at the national level. In addition, area-based research will help build up the capability of field personnel in data analysis, planning and resource utilization for solving problems and needs within their own communities while providing the groundwork for the decentralization policy whereby more power and opportunity will be given to the regional and provincial administrations in managing their own problems.

#### **6. Promotion of area-based problem solving through integration of technical support into HSR**

The emphasis will be on increasing the capability and readiness of provincial personnel and the health systems to meet future challenges in the long term rather than concentrating on projects to solve particular area-based problems. The development process will therefore include a comprehensive analysis of all aspect of the work done at the provincial level by a team composed of administrators and technical and field personnel. It will also call for the setting up of a collaborative network of educational institutions or agencies working in the field to enhance effective intersectoral collaboration.

The network for intersectoral collaboration thus established will enable technical staff of universities to understand the real problems and needs for data and information on each area through area-based research. This is a better approach than the conventional one, whereby university researchers go to the field to investigate issues in which they alone are interested. In adopting this new approach, HSRI has an important role in promoting collaboration between provincial health authorities in the field and regional universities or technical institutions in undertaking joint area-based research whose results will be useful for health systems development. In this case HSRI staff need not provide any technical support in order to promote sustainable development of the HSR capacity of field personnel.



## **7. Collaboration between research organizations and technical organizations**

While HSRI has a distinct role in analysing needs for technical development and building up a body of knowledge for health systems development, the Ministry's technical departments and divisions are directly responsible for actual reorientation or reorganization of their respective health systems. There are also funding agencies that support research for national development such as the Thailand Research Fund and National Research Council. These agencies may have different roles and responsibilities but they need to be mobilized in support of health systems research because health problems and national health systems development have to be dealt with in a broad context and through a multidisciplinary approach. Collaboration between research organizations and technical organizations will ensure the best use of limited research resources, avoid duplication or overlapping of research efforts and facilitate distribution of work. For example HSRI, while assuming responsibility for undertaking research for health systems reform, collaborate in research in other areas which may be under the responsibility of the Ministry's technical departments e.g. research on the role of the mass media or research on air pollution control.

## **8. Development of capacity in research management**

At the next stage, HSRI will envisage the need to promote the capacity in research management among research organizations, technical personnel and concerned executives in order that they could be more effectively involved in HSR. The overall process of HSR begins with situational analysis and needs assessment, then proceeds to the identification of all concerned parties within the health system, establishment of a common framework for and approaches in conducting research and actual research collaboration, culminating in the use of the research findings in the decision-making process for solving the people's health problems through health systems reorientation. The overall process needs to be managed efficiently so that it can be carried out systematically, with sustainability and quality being important factors.

As the conventional approach in supporting research by simply providing funds for research based upon individual needs can not yield

tangible results likely to contribute towards health systems reorientation, HSRI aims at mobilizing all related organizations and technical personnel to join in building up the capacity for research management in their respective agencies in order to make the fullest use of available resources in promoting HSR in the long term.

## **9. Budget limitations**

During the past four years there has been inadequate funding support for HSRI's plan of operation. Since 1994, HSR activities have increased far beyond the allocated budget. Even though some funds were obtained from foreign sources they were fairly limited due to the following circumstances:

First, Thailand has become a newly-industrialized country whereby foreign assistance has been markedly reduced, including funds for research purposes. Health-oriented research studies currently receiving support are only those that are part of the funding agencies' agendas such as research on a drug and vaccine for AIDS treatment which do not directly involve HSR.

Second, the main purpose of HSRI is to promote research, useful for the development of the national health system. Research projects funded by foreign sources are constrained in that the outcome of the investigations must be of interest to the funding agencies; hence the results can not contribute fully towards health systems development. Dependence on foreign sources will thus limit the opportunity for researchers to direct their efforts to studying and analysing the issues that are directly relevant to the Thai situation and provide useful findings for health systems development.

# VISION, MISSION, STRATEGIES AND MAJOR PROGRAMMES OF HSRI

Based on a detailed analysis of current health conditions and future trends, the strategic plan for health systems reorganization including experiences gained from past operations and the current situation of HSR, the medium-term HSR plan for the years 1997-2001, encompassing the vision, mission, strategies and major programmes of HSRI, was formulated as follows:

## VISION

*Thailand has made continuing efforts to reorganize and develop its health systems in response to the changing economic and social conditions through searching and making use of the new knowledges obtained through the process of HSR.*

HSRI will serve as the key mechanism for mobilizing resources from a interdisciplinary group of researchers to build up a body of knowledge through HSR as well as disseminate the findings to the general public and to policy makers and administrators in all concerned sectors throughout the country. This is for the purpose of problem-solving and reorganizing the health systems to be more effective due to greater efficiency while also serving the needs of people in all walks of life. It is expected that HSR will help increase the awareness of all concerned sectors and the general public of the role they can play in health systems development. In the long term it is expected that HSR will be accepted by policy makers, administrators and technical personnel in all related sectors as one of the key processes in formulating health or health related policies, strategies and plans of operation.

## **MISSION**

To build up a common understanding among and joint efforts by all concerned sectors through the HSR process, with the main objective of developing health systems that ensure the best use of limited resources in upgrading the health and quality of life of all Thai people.

## **STRATEGIES**

1. Build up a common understanding among all concerned sectors of the medium-term and long-term plans for HSR, to be jointly formulated and used as guidelines for intersectoral collaboration.

2. Promote research which is primarily directed towards health systems reform under a partnership approach whereby the needs of data users and research organizations, both within the country and overseas, are taken into consideration.

3. Collaborate with and foster cooperation among research funding agencies, including technical departments of the Ministry of Public Health, in support of HSR.

4. Develop the capacity and quality of HSR in concerned organizations throughout the country on a continuing basis.

## **MAJOR PROGRAMMES**

In support of the aforementioned strategies, HSRI has designated four major programmes as follows:

1. Programme on research promotion for health systems reform
2. Programme on development of HSR capacity
3. Programme on promoting the use of HSR findings
4. Programme on supporting HSR

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## **1. PROGRAMME ON RESEARCH PROMOTION FOR HEALTH SYSTEMS REFORM**

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Research promotion for health systems reform can be divided into two major components:

1.1 Research for Health Sector Reform which aims at building up understanding of the crucial elements and approaches to health systems reform;

1.2 Research for Developing the Public Health Policy, which aims at increasing understanding of the need for sectoral policy support; Some of the policies of other sectors may affect health such as economic, environment and social welfare policies. All these policies may have an impact on the quality of life of important underprivileged groups.

HSR on health systems reform will help built up a body of knowledge essential for total health systems reform and reorientation of the health service systems to be capable of meeting the current and future needs of the people more appropriately by providing quality services while making maximum use of existing resources both of the public and private sectors.

### **Important programme areas**

HSR on health sector reform can be divided into five programme areas as follows:

#### **1. HSR for reorganizing the structure, role and responsibility of the health service systems**

HSR will be directed towards developing effective ways and means of reorganizing the structure and relationships of the government health care delivery systems at different levels in order to increase their responsibility in rendering better quality services to the people throughout the country. This also includes research for developing a more appropriate role of the private sector in providing health care services to their clients to ensure a sound national health service system.

HSR for developing new models or service systems to cater for emerging health needs and changing disease patterns will also be

undertaken in parallel with research for increasing the capacity of the health service systems.

## **2. HSR for health care financing reform**

Health care financing reform is one of the essential requisites for reorganizing the structure and relationships of the health service systems to become more efficient and capable of providing health security for the general public.

HSR for health care financing reform aims at studying different approaches in resource mobilization and allocation in order to make policy recommendations on the role and responsibilities of the government in health care financing. However this does not mean that the government only decides upon the amount of allocations and the ways and means for allotting health care resources. What is more important is that the government strengthen its role in stipulating rules and regulations as well as guiding principles for controlling the cost of medical and health care services in both the public and private sectors. It is envisaged that a sound pricing policy will help control the cost of health care, which is rising sharply, to make it more appropriate and reasonable.

## **3. HSR for developing systems for health care consumers' protection**

As the people are becoming more health conscious and have higher expectations of receiving quality health care services, a gap exists between the clients' expectation and the nature of services provided. Litigations involving service providers have been occurring more often. Furthermore the health service system itself can generate undue demand for health care by taking advantage of poorly educated clients. It is therefore essential to develop an appropriate system for health care consumers' protection to help provide accurate knowledge and information to the general public, promote quality control and standardization of health care services and establish effective managerial principles to ensure access of the people to quality health care corresponding to their health needs.

Appropriate application of medical and health care technologies is another issue of great concern in consumers' protection. In this case HSR

can serve as a tool to promote the use of appropriate technologies based upon individual problems and needs, and avoid unnecessary utilization. Moreover, the people must be adequately and accurately informed about the use of each type of technology and the cost involved. In this regard, the health services should be encouraged to establish partnerships for sharing the use of high-cost health care technologies instead of investing in ultra-specialized technologies in an attempt to increase their competitiveness.

#### **4. HSR for promoting health and quality of life**

Even though it is increasingly realized that health promotion and disease prevention are main determinants of good health and a better quality of life and also help decrease the incidence of preventable diseases and reduce health expenditure both of the individual and of the country as a whole, health promotion activities have been rather limited. Emphasis has been placed merely on promoting healthy behaviours and lifestyles while system approach in health promotion requires a much larger framework as good health depends upon many determining factors, including the physical and social environments.

It is therefore essential to undertake HSR to develop a suitably structured system for health promotion with a national focal point to be responsible for coordinating and managing health promotion endeavours. This organization should make sure that the government budget allocated to the concerned agencies is properly utilized as well as initiate innovative approaches to health promotion, or introduced measures which will have an impact the behaviour and health of the people in the society as a whole.

In addition, studies should be undertaken to promote health and quality of life for specific population groups such as the elderly, labourers, young children and the handicapped who have not received adequate care. There is a need for collecting information on the characteristics of each target group, their needs and expectations, as well as on the social and environmental factors that affect their health and well-being.

It is also essential to undertake HSR on environmental issues such as pollution problems in megacities, water quality in rivers or water sources throughout the country, environmental deterioration and extensive use of

insecticides and chemical fertilizers, all of which have negative effects upon the health of the general public.

There are various approaches in undertaking research to obtain essential baseline data for solving specific problems. On the one hand, research could be directed towards a comprehensive study of the nature of the problems and their underlying causes in order to formulate policies and strategies for effectively solving them while, on the other hand, research findings could be used as a tool to develop a model for generating an environment that will contribute to good health which need not be research merely within the framework of health.

**5. Research for developing a policy on decentralization of authority and promotion of the people's participation in health development**

Decentralization of authority from the central administration to the rural administration has been agreed upon by all concerned sectors as an essential measure for promoting equity and efficiency of the overall national development system including health. With the setting up of the Tambon Administration Organizations composed of representatives of the local communities, participation by the people in managing and solving their own problems has increased considerably, resulting in an improvement in their quality of life. Research in this programme area will be directed towards generating a body of knowledge essential for increasing the effectiveness of central-to-rural decentralization as well as enhancing the appropriate role of rural administrative organizations in promoting health and quality of life in their respective areas.

Another research objective in this connection is to develop a more active and assertive role of the people and community organizations in health and quality of life development. Since the outset of the primary health care programme in 1977, there has been a continuing effort to encourage the people's participation in development activities. During the past two decades the number of community organizations such as the consumers' group and environmental conservation group, has increased considerably. The role of the mass media concerning health and consumer behaviour as well as the patterns of media exposure have also undergone



major changes with the advancement of information technology. Hence there is a need for reorientating and increasing the role of the people themselves and the community organizations to make them receptive to such changes and more assertive in addressing and solving their own problems, which could be achieved through research and development.

In addition there is a need to further develop an effective database for health systems development in all areas that are essential for health policy and strategic plan formulation. During its past four years of operations, HSRI has undertaken R&D projects for establishing two essential databases, one on drug expenditure and the other on the overall health expenditure of the country. The next step is to build up an information system for assessing the financial burden imposed on the country by each major health problem, as well as information systems on major causes of death among the population and human resources in the field of health, etc.

Details of the research programme on health systems reform are given in Chapter 5.

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## **2. PROGRAMME ON DEVELOPMENT OF HSR CAPACITY**

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In introducing HSR as a crucial step in the overall process of health planning and problem-solving, there is a need to begin with HSR capacity development among concerned personnel on an interdisciplinary basis. Doctors and other health personnel including public health staff, epidemiologists, economists and social workers both within the health sector and other related sectors are to be included under the programme on HSR Capacity Development to ensure increasing use of HSR in the managerial or clinical work they are undertaking in their respective fields.

### **Objectives**

1. To strengthen HSR expertise among technical personnel in the health service systems so that they will be able to analyse research needs, undertake HSR and use the findings for problem-solving jointly with the management;

2. promote HSR capacity among technical personnel in all related disciplines to enhance their participation in health systems research;
3. establish an information system to support HSR and to facilitate local researchers' access to a reliable database.

### **Strategies**

1. assign technical personnel from research organizations to support area-based research conducted by field personnel with the aim of using HSR in the process of problem-solving;
2. support advanced study and research training of engaged personnel in HSR through collaboration with local and overseas universities or training institutions;
3. collect data and information concerning HSR and set up effective databases to assist researchers in the process of literature review.

### **Major programme areas**

There are three major programme areas for HSR capacity development, as follows:

#### **1. Promotion of area-based research**

The objective of this programme is to develop HSR capacity among health personnel within the health service delivery system who are responsible for planning and managing programmes for solving health problems in their respective areas at the provincial, district or sub-district level. HSR capacity also needs to be developed among technical personnels in hospitals (both small-scale and large-scale), training institutions, health manpower development institutes and other technical centres in order to enable them to conduct HSR in the process of solving their managerial or technical problems.

In carrying out area-based research, there will be close collaboration between the health administrators, HSRI's technical personnel, researchers and implementers in the field, all of whom will join in the undertaking and make use of the findings in decision-making or solving area-based

problems. It is envisaged that the overall process will help increase their knowledge and understanding of HSR as a tool for decision-making and problem-solving.

However, problem-solving may not be made possible by any single research endeavour as there are many other actions needed for a successful outcome such as regular follow-up and evaluation or conducting further studies that may be necessary. Therefore, if the key actors as aforementioned have increased, their HSR knowledge and capability to use the findings in solving area-specific problems as well as realize the need for additional studies, then the objective of this programme will have been satisfactorily attained. However the question of timeliness in conducting the research, its technical back-up and whether the data is of standard quality should also be taken into consideration.

The major criteria for funding area-based research are the level of interest and the receptiveness of the management and field experimental team which will undertake the whole process of HSR, starting from data analysis, social preparation, identification of a technical support team, essential training prior to actual research, data analysis and use of research findings in solving area-based problems, and then disseminate the documented findings to other areas with similar characteristics and problems.

## **2. Fellowship grants to researchers for advanced study**

It is envisaged that the existing researchers who are specializing in medical and health care research could be mobilized to take an active and effective role in HSR should they be given an opportunity to continue their studies in this field, particularly at renowned overseas universities or training institutes. Such study abroad would also help establish technical collaboration and a network among domestic and overseas institutes in the area of HSR.

Following on a needs assessment study, it was found that, whereas Thai researchers have different training needs, most of them would like to continue their studies abroad up to Ph.D. level which is extremely costly. While there are agencies such as the Office of Research Promotion Fund, and Office of Civil Service Commissioner which provide fellowships for

Ph.D. studies abroad, HSRI might undertake an alternative approach in providing fellowships grants for advanced studies up to Ph.D. level in local universities charging much lower fees but whose quality of teaching meets international standard. In this case, the fellows could be seen as providing technical support since the programme of studies under these fellowships would help increase HSR capacity in the long term.

Another possibility is to create a close partnership with renowned training institutions within the country on a medium-term or long-term basis to provide advanced studies as well as to enable consultations essential for expanding HSR capacity in all concerned agencies.

In addition, fellowships will be given to researchers who are undertaking HSR in the priority areas support by HSRI. This includes fellowships for further study at overseas institutes, and visits for the purpose of analysing data with experts in renowned overseas institutes as well as participating and presenting research findings at international meetings/seminars/conferences.

Transparency in granting fellowships will be assured by an interdisciplinary committee comprising experts in all related fields to consider applications, which shall be open to all.

### **3. Development of a database for HSR**

Even though there already exist a wide variety of health information and documentation systems in the form of documentation centres and libraries as well as computerized information systems available in the universities, health-science training institutions and technical departments of the Ministry of Public Health, there are still gaps in the systematic documentation of research findings in the priority areas that are useful for health systems development.

Some research agencies such as Mahidol University, National Research Council, National Institute for Science and Technology Research and Thailand Research Fund have initiated a database which in the main, covers only data from researches funded by them. Some of the data can also be searched from BBS (Bulletin Board System) or Internet. The approach to

be used by HSRI during this five-year plan (1997-2001) for establishing a database for HSR will not be replicating its past endeavours. HSRI will appoint experienced persons to collaborate with all concerned organizations and establish an integrated network of HSR information systems for easy access to all essential data and information by both policy makers and researchers. This integrated database would help in the overall implementation of HSR and will facilitate continuous expansion of the body of knowledge for HSR.

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### **3. PROGRAMME ON PROMOTING THE USE OF HSR FINDINGS**

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Promoting the use of HSR findings in decision-making at all levels of health administration constitutes an important objective of HSRI's activities, which is to establish HSR as a crucial input in the overall process of policy and strategic plan formulation as well as implementation of health development programmes. Meanwhile the findings of HSR should be disseminated to all concerned persons including managers, technical personnel, and implementers as well as the general public to generate understanding and acceptance that HSR is an essential component for health systems development both on a short-term and long-term basis.

#### **Objectives**

1. To synthesize technical data derived from HSR to be used in different forms as appropriate for health policy formulation, planning and management as well as provision of health care services to the general public;
2. to disseminate useful information to high priority target groups by utilizing media and approaches best fitted for such groups;
3. to promote understanding among all concerned sectors and groups of the usefulness of HSR in the process of developing health for all.

#### **Strategies**

1. to contract media and marketing specialists to assist in planning and implementation of the programme for promoting use of HSR findings;

2. to build up the capacity and mechanism for transmitting relevant technical findings from HSR to meet the data requirements of each target group;

3. to use appropriate mass media including the printing and electronic media, accessible to all target groups.

### **Major Programme Areas**

The two major programme areas appear as follows:

#### **1. Networking of technical personnel and media specialists**

The main purpose is to set up a network of technical personnel who have access to findings and information from HSR and media specialists who master the art of information dissemination. It is expected that such a network would help transmit HSR findings for wide use by all relevant target groups.

#### **2. Organizing promotional activities and media productions**

This is to ensure that all target groups are informed of the relevant HSR findings and are capable of using them in the process of decision-making or programme implementation as deemed appropriate. The main activities comprise the following:

- 2.1 organize meeting to present HSR findings to specific target groups such as policy makers and technical personnel. All the findings will first be carefully synthesized and then presented in a format specifically tailored to each group, not in the form of an oral report;
- 2.2 publish and disseminate technical documents or research reports concerning health systems development or health systems research which have technical value and meet academic standards. Research reports from any source and not only those on HSRI-funded research will be published either in Thai or English;
- 2.3 issue a HSR journal on a regular basis to allow researchers from all related sectors to publish their work or exchange knowledge

and experiences as well as keep abreast of recent developments within the country or elsewhere concerning health systems reform. The long-term plan includes establishment of linkages with renowned institutions overseas to internationalize the HSR journal;

- 2.4 disseminate useful information on health systems development to technical personnel as well as to the general public in different forms as may be deemed appropriate such as fact sheets, a booklet, posters, and leaflets as well as news items or articles printed in newspapers or through other mass media to promote active participation of all concerned groups, including the general public, in health systems development for health for all;
- 2.5 organize biennial meetings of the HSRI Conference to generate popular awareness among all concerned sectors and the general public of the problems inherent in the national health systems while providing ample opportunity for policy makers, technical personnel, representatives from both the public and private sectors, health personnel as well as the general public to express their opinions or recommend approaches for health systems development. The conference also aims to increase understanding among all concerned parties of the importance of HSR in solving the people's health problems;
- 2.6 present useful data to the general public via the mass media, e.g. radio, T.V., computer networks or other electronic media, in cooperation with existing publicity programmes of other concerned organizations in order to reduce cost.

All the activities will be planned, and implemented in consultation with a private publicity agency on a contractual basis, and monitored by HSRI.

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## **4. PROGRAMME ON SUPPORTING HEALTH SYSTEMS RESEARCH**

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### **Objectives**

1. to seek support in terms of infrastructure, personnel, budget and an information system for effectively managing and promoting HSR within the country;
2. to promote interdisciplinary and intersectoral participation in the process of planning and developing the future direction of HSR.

### **Strategies**

1. designate a small sized collaborative body with high efficiency and flexibility as focal point for intersectoral collaboration in HSR;
2. build up capability and participation of all concerned personnel and agencies in order to strengthen joint efforts in managing and developing HSR in the long term;
3. collaborate with all concerned agencies and personnel both of the public and private sectors in promoting HSR.

This programme aims at establishing HSRI as the focal point for mobilizing all key actors in the national health systems to join in the process of planning and developing the future direction for health systems development as well as participate in actual HSR in priority areas that are mutually agreed upon. Experienced persons will be hired as programme manager/research coordinators as may be deemed necessary, together with a number of assistant researchers hired on a short-term basis and under a system of continuing performance evaluation to ensure quality of services. Special tasks, such as setting up a sound database for HSR or establishing a focal point and network of HSR, will be contracted out to prevent undue expansion of the structure and personnel of HSRI.

For researchers or technical personnel of HSRI there will be a system for manpower development allowing the technical staff to increase their capability on a continuing basis and in accordance with the requirements of HSRI.



# RESEARCH FOR HEALTH SYSTEMS REFORM

Health systems reform is an extremely important issue which needs to be fully understood by all concerned sectors and the general public. HSRI has divided its research agenda for health systems reform into two categories as follows:

1. research for promoting health systems reform;
2. research for supporting implementation of strategies which will have an effect on health systems development or overall social development.

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## RESEARCH FOR PROMOTING HEALTH SYSTEMS REFORM

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Its main objective is to build up a body of knowledge essential for health system reorientation or reform in order to effectively meet the changing conditions and needs of the people while making best use of existing resources, both of the public and private sectors, and being mindful of emerging problems and future trends of health care which would affect the behaviour of both the service providers and receivers of health care services.

The research agenda for health systems reform is subdivided into five programme areas.

## **Programme Area 1**

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### **Research agenda for reorganizing the structure, role, responsibility and capacity of the health service systems**

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The main aim is to identify appropriate approaches for reorganizing the government health service systems to increase their capacity for rendering efficient and quality services to the general public as well as generating a more appropriate role of the private sector in health care services in order to ensure efficiency, equity and best use of resources in the overall health service system.

This programme area is further subdivided into four specific research agendas, as follows:

#### **Research agenda No. 1.1**

##### **Research for reorientating the role and capacity of government health service organizations**

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###### **Vision**

*The government health service infrastructure should be effective in providing essential services to meet the needs of the people both at present and in the future.*

Whereas private hospitals concentrate on providing services to the more affluent member of society in large cities, should the government hospitals and health care service institutions reorientate their managerial system to be more efficient with increasing capacity in rendering services they would have more competitive power and this would result in appropriate cost containment. Furthermore the government should not have to support the better off population who can afford to pay for health care services.

The government should assume a more appropriate role in managing the overall national health service system, particularly by promoting equity in providing services which is still limited. It may no longer be necessary for the government to directly manage all service institutions. It should rather adopt and apply new approaches such as allocating the budgets based upon performance against target instead of stipulating rules and

regulations for direct control purposes.

### Scope of research

In developing the appropriate capacity and role of the government health service institutions, there is a need for research to identify the services the public sector should invest in or concentrate upon, and what the target groups should be. In addition, since the existing government health service infrastructure continues to be under the direct control of the government through the Ministry of Public Health, the question arises how to reorientate the internal managerial system and linkages with the total national health service system for better performance. Should reorientation include budget allocation, staff appointments, a ceiling on their remunerations, financial regulations or approaches in intersectoral collaboration and people's participation? Most important of all is research and development for a new system whereby the government will alter its role from direct management to monitoring the performance of its hospitals in terms of quality, efficiency and accountability.

## Research agenda No. 1.2

### Research for developing efficient primary care

#### Vision

*The people should have access to primary care service centres manned by a team of health personnel providing consultation and services in the vicinity of their residence or office with possibility of referring to secondary and tertiary care institutions, if necessary.*

In establishing efficient primary care service systems of which the people could make the best use, there is a need to reorientate the people's attitudes and behaviour in using health care service at the same time as reforming the existing health system.

In the long term, use of primary care might become mandatory as a basic condition under collective health financing. For example a health insurance system might designate quality primary care centres where insured persons should make first contact, and further referrals could be made as

deemed necessary. This would help reduce the undue influx of patients to tertiary care institutions, bypassing the primary or secondary care facilities.

While collective financing can not cover the majority of the population, reorientation of the structure and relationship among various components of the health system might be useful in reducing travel costs and the long waiting time of patients at tertiary care institutions as well as the inappropriate use of the institutions limited resources in providing simple services that are not suited to the capacity of tertiary care.

It is expected that increasing efficiency of primary care by strengthening the existing network of public and private primary care service systems and setting up an effective referral system will help reduce the burden of tertiary care hospitals.

#### **Scope of research**

Research studies in this specific area will aim at identifying the appropriate role and model of an effective primary care system which will gain the confidence of the people. The research will also include conditions and approaches for restructuring the existing financial and budgeting systems as well as use of health personnel in such a way that primary care will be linked with the upper level of health care under an effective referral system.

In addition, research for identifying approaches for reorientating current practices in purchasing health care services under a collective financing or health insurance system to include primary care service centres as places of initial contact should be undertaken.

Finally, studies should be made on approaches for developing manpower at the peripheral level to be capable of providing quality services to the people.

### Research agenda No. 1.3

#### Research on development of the private sector role's in the health service system

##### Vision

*Private health care systems have the potential of contributing towards total development of the overall national health system which aims at efficiency and equity. Continuing growth or expansion of private health care systems based upon a free market mechanism might have negative effects upon the people, and the owners of private hospital businesses themselves as well as on the country's economy as a whole.*

It is believed that control of the private sector by laws or regulations will have unfavourable effects on the overall development of the health service sector.

Promotion of an appropriate role for the private sector in health care could best be done by adopting new criteria and approaches for purchasing health care services under collective financing which will enable the private sector to increase coverage of their services to include different groups of clients while making full use of their capacity and efficiency in resource management.

It is also essential to develop a mechanism for accrediting and assuring quality of all public and private health care systems as a means for ensuring efficiency of overall resource utilization for health care.

Appropriate strategies and mechanisms for reducing conflicts or avoiding litigation over malpractice or claims for damages should also be developed to prevent negative impacts which may arise as a result of resorting legal procedures.

The expansion of health care services of both the public and private sectors should be systematically planned to respond to the current and emerging problems of the people and to the overall national economic and social development trends.

### **Scope of research**

Research will be directed towards developing a system for monitoring and encouraging private health care organizations to undertake an appropriate role in delivering health care services. The issues to be investigated include: distribution of private hospitals and the desirable pattern of private hospital expansion in each specific area with a view to promoting distribution to underserved areas; reorientation of the health financing system allowing the private sector to participate more fully as service providers under a collective financing system; development of an information system; role of current and future mechanisms in effectively monitoring private health care organizations to better serve the people; and strategies for solving problems or mediating in conflicts between the private health care providers and the patients.

### **Research agenda No. 1.4**

#### **Research for increasing capacity of the health care systems in preventing and reducing the severity of diseases**

##### **Vision**

*Health service systems should have a higher capacity in disease prevention, treatment and reduction of diseases that have emerged due to changing conditions.*

The national health service system needs to be reorientated in its structure, personnel and financing systems to be capable of coping with changing conditions and the new pattern of diseases, particularly in dealing with the health problems arising from accidents, and acts of violence, as well as noncommunicable and chronic degenerative diseases. These problems call for a broad approach ranging from disease prevention to rehabilitation, and require personnel who are well-grounded both in technical know-how and social skills. In addition, the national health system should recognise and adapt to socio-economic and environmental changes as well as take head of health problems caused by intercountry travel and migration, problems that are rapidly increasing following the advent of globalization.

### **Scope of research**

In response to the changing conditions and disease patterns, research will be directed towards health system reorientation in terms of structure, personnel, financing and other aspects, so that the system could contribute towards more effective care of emergency cases, high-risk cases, persons affected by chronic degenerative diseases and emerging diseases. The areas to be studied can be divided as follows:

1. research and development to identify alternative models or systems for emergency care and corresponding inputs such as manpower and financial support to ensure feasibility;

2. comprehensive system analysis of existing health care programmes for emerging diseases of high priority, for which technologies are already available, to see whether they can meet the people's needs adequately and what further actions would be needed to ensure efficiency and effectiveness of the system i.e. study on a system for cancer screening as an essential preventive care, development of a model for comprehensive care including prevention control and a continuing service for high-risk groups or cases with chronic degenerative diseases such as diabetes and hypertension. The comprehensive system analysis needs to look into the aspect of technology, manpower and budget requirements as well as the structure and role of the recommended systems and their relationship with other health care organizations at all levels.

## **Programme Area 2**

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### **Research agenda for reorganizing health service financing systems**

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In parallel with research for reorganizing the structure and relationship of the health care systems under Programme Area 1, health service financing systems should be reorientated accordingly.

Research under this programme area aims at studies of various policy options and approaches for a sound utilization of financial resources for health care with particular emphasis on the government health care financing system. This does not only include studies on the scale of allocations and the approaches the government should take in paying for the people's health

but also covers studies on the criteria and guidelines for purchasing health care for the people under collective financing or health insurance schemes to ensure efficiency, quality and equity, with capability of containing costs at a manageable level.

This programme is subdivided into five specific research agenda, as follows:

### **Research agenda No. 2.1**

#### **Research for reorientating the policy and role of the government in health care financing to ensure efficiency, equity and security for the people**

##### **Vision**

The government should assume a major role to maintaining the people's health security, based on equity, and should designate the health services systems and monitor their performance as well as determine the role of the people in relation to health expenditure and the cost of health care services.

To fulfil these roles the government should institute legal measures, or regulations or set up a mechanism that would discourage health insurance systems which emphasize curative care and depend mainly on a government budget. It should support systems with health promotion and disease prevention as their main objectives. Such systems should have a firm base of people highly motivated towards self-care and cost sharing. A mechanism for managing collective financing through health insurance schemes should be set up to protect the people's interests effectively.

##### **Scope of research**

Research will be directed towards establishing the appropriate role of the government in building up health security for the general public by identifying what frame of reference or regulations are needed for developing effective health insurance systems, what mechanism should be used for controlling and monitoring such systems and to which specific groups, under what criteria and conditions, government assistance should be directed.



In addition there should be analytical studies on the strength and weaknesses of various health insurance or collective health financing systems, recommending approaches for reducing their weakness and enhancing their strength. In case a national health insurance system is desirable what will be the most appropriate managerial mechanism and process? This is to prevent a situation whereby the health insurance business can have profound effects on the national economy and the society, as experienced in western countries.

Research should also cover other related issues which are not within the context of health insurance but could contribute towards good health such as development of criteria governing investment in health of the private sector (e.g. health promotion for their personnel), special services to promote the health of the general public, research and development on health promotion, and procurement and use of health care technologies, due consideration being given to efficiency and equity.

## **Research agenda No.2.2**

### **Research for increasing efficiency and equity in government health care financing**

#### **Vision**

*The system of government budget allocations in support of programmes, projects and health care service institutions should be more efficient and ensure equity in resource distribution.*

A budget allocation system should take into account past performances of health care programmes compared with total budget allocations for such specific programmes instead of applying the current system which is based on detailed line-item allocations. The new system should be supported by a mechanism for evaluating efficiency and equity in the process of planning, budgeting, budget allocation and budget utilization without strict adherence to bureaucratic rules and regulations or an auditing system which may obstruct actual reorientation or redevelopment of the system.

### **Scope of research**

Research under this programme area will be directed towards development of current and future health care financing systems to increase efficiency and equity of resource utilization, namely:

- research on budget allocations to meet the needs of the under-privileged or groups of the population based upon geographical location as well as other specific target groups;

- research on efficiency of budget utilization, cost-benefit and cost-effectiveness of different health care programmes such as comparative cost-benefit study of the health promotion programme and curative care programme;

- comparative cost-benefit study of primary care and tertiary care services;

- research and development of an effective system for allocating and monitoring the budget for curative care services to increase efficiency and equity;

- research for establishing criteria and conditions governing budget allocations for investment, increase in manpower, purchase of technology and manpower development to ensure the best use of government resources for maximum benefit to the people.

### **Research agenda No. 2.3**

#### **Research for reorientating systems for purchasing health care services**

##### **Vision**

*An effective financial management system for health insurances who group together under health insurance plans would give them more bargaining power and provide access to essential data and information for sound decision making as to the health care institutions from which they should purchase the services.*

Health insurance organizations that are capable of paying a considerably large amount of money to hospitals or health care institutions will

naturally become powerful service purchasers. These service purchasers should develop an essential database to be used in bargaining the purchase of such services, which will ensure best use of resources.

### **Scope of research**

Research will be directed toward development of an information support system to facilitate sound decisions by service purchasing organizations on type of services and corresponding costs as well as quality assurance in order to ensure best use of resources. The established criteria and conditions as well as the mechanism and database for effectively managing collective funds for purchasing health care services could then be used as a basis for further development of health insurance systems.

Owing to changing socio-economic conditions, there has been a continuous expansion of health insurance systems with a corresponding growth of service purchasing organizations. If such growth is left to evolve naturally without taking effective measures such as prescribing criteria and conditions, there might be problems in enforcing them at a later stage to ensure efficiency of the systems.

Research efforts could be initiated by a group of health care service purchasing organizations desirous of establishing a new mode of relationship between purchaser and provider of health care to increase efficiency and benefit certain target groups such as persons insured under the civil servants medical benefit scheme, the health insurance system under National Social Security Programme or the government welfare scheme for the low-income population.

## **Research agenda No. 2.4**

### **Research for developing efficiency of the health insurance system**

#### **Vision**

*The efficiency of all health insurance systems in purchasing quality services for the insured, with equitable reimbursement to the health care service institutions, should be developed.*

This could be achieved by developing an effective system for monitoring and evaluating the performances of health care institutions and comparing them with the expenses incurred in purchasing the services. Through this process health service financing under various insurance plans would be more efficiently managed while the insured would receive quality services at reasonable cost and the health care providers receive fees which would be proportionate to the services given. Such a central monitoring and quality assurance system should be capable of containing costs while maintaining the quality of services.

#### **Scope of research**

Research under this programme will focus on existing health insurance plans to identify in particular problems inherent therein as well as their financial status and quality of services and accessibility of services. A comprehensive system analysis will be made in an endeavour to identify options for further improvement in the rates that contracted hospitals, are charged and the method of payment.

In addition there will be research for developing new systems that would reduce cost of services or revising the rate of insurance premiums, including research for setting up a management information system that is capable of controlling expenditure and assuring quality of services.

### **Research agenda No. 2.5**

#### **Research for developing basic techniques in budget allocation and cost containment**

##### **Vision**

*Basic techniques for budget allocation and cost containment should be developed.*

The objective is to undertake research for establishing a management information database at the health care service institutions and the purchasers' organizations to facilitate sound decision-making on investment options, budget allocation and purchase of services. Criteria, standards and indicators should also be developed to be used in the process of budgeting and budget allocation as well as decision-making on the various options of

services to be purchased.

### Scope of research

Essential work in this programme area will consist in research to develop relevant indicators for measuring the burden that diseases place upon society and indicators for measuring equity in providing health care services. It will include research on patient classification under the ISO resource patient classification system and studies on actuarial methodology for health insurance as well as on cost containment measures.

## Programme Area 3

### Research agenda on establishing a health care consumers' protection system

To ensure that the people have access to quality services at a reasonable cost and are adequately informed so that they can make sound decisions on health care services including the use of appropriate medical technologies, a system for health care consumers' protection should be developed along the lines described below.

This programme is subdivided into five specific research agendas as follows:

#### Research agenda No. 3.1

#### Research for developing a mechanism and systems for quality assurance of health care service institutions

##### Vision

*The quality of health care services should be developed to meet international standards, which would result in treatment corresponding to the needs of customers.*

Quality assurance of health care services can not be made possible solely through the efforts of service providers. There is also a need for a mechanism and system for monitoring the quality and standard of services. Other measures for quality assurance should also be investigated such as establishing criteria and conditions for hospitals or health care institutions

which would be contracted to enter into a quality assurance scheme on a voluntary basis, or providing for penalties if any services are found to be below standard.

#### **Scope of research**

Research should be directed towards establishing a “standard for health care service institutions” which is applicable and acceptable to all, with room for further development to meet changing conditions. In addition there is a need to study the type of collaborative mechanism and the role of all related public and private sectors including professional associations and people’s organizations in following up and promoting the quality assurance of health care services on a continuing basis.

Studies should also be made to develop internal motivation for quality assurance in the overall health care infrastructure, with effective mechanism for monitoring and evaluation. Finally, research on the relationship between the national mechanism for quality assurance and the public and private health care service institutions, including the people who will benefit from this process, should be undertaken.

### **Research agenda No.3.2**

#### **Research agenda on developing the capacity of health service institutions in quality management**

##### **Vision**

*Health service institutions at all levels should develop an effective system for quality management to ensure that their services meet the people’s expectations and professional standards.*

An effective quality management system should be developed within both public and private health service institutions at all levels whether or not the National Accreditation System is established. The system should aim at increasing the capacity of personnel and the organization as a whole to meet the needs of the people as well as professional standards.

### Scope of research

Action-oriented research will be promoted to test options in quality management in order to build up a body of knowledge for further development and replication.

## Research agenda No. 3.3

### Research for promoting the people's participation in quality monitoring and development

#### Vision

*The quality of health care services should be increased through participation of the people whose expectations should be taken more fully into account.*

In order to establish a sustainable mechanism for quality assurance of health care services, the people should be adequately informed of and motivated to participate in the process of quality monitoring. Research is needed to establish an appropriate mechanism and process whereby the people could participate in quality control activities based on the specific needs of each target group of the population.

#### Scope of research

Research will address the perceived needs of the people who receive health care services, as well as their role and capacity in purchasing services both in the rural and urban areas, from the public and private sectors. Studies will also be made on the needs of specific groups of the population such as those under public welfare or health insurance schemes.

In addition research and development should be initiated to find appropriate approaches, mechanisms and methodologies to strengthen both formal and informal organizations, including NGO's for consumers' protection and NGO's for public welfare as well as community organizations so that they can take a more active and collective role in educating the public. Health insurance executives, managers or directors of health care services as well as professional organizations should be encouraged to set up a quality control system.

**Research agenda No. 3.4**

**Research for promoting appropriate medical and health technologies**

**Vision**

*Appropriate medical and health care technologies should be applied to increase the quality of services, reduce problems incurred by the use of inappropriate technologies and avoid costs pertaining to overutilization or unnecessary utilization of such technologies.*

In order to ensure appropriate utilization of technologies, there must be a thorough understanding of the nature, functions and utilization of the different types of technology responding to specific health problems to ensure proper disease diagnosis and effective treatment. Meanwhile there is also a need to develop a mechanism or system to ensure that both the providers and clients of health care services are aware of the appropriate of using technologies.

In addition a system for auditing, assessing or stipulating appropriate distribution and utilization of specific types of technology being applied in the overall health service system, such as MRI, and Laser apparatus for Surgery, should be developed together with a system for following up and monitoring cost/benefit and appropriateness of use.

**Scope of research**

Research will look into the compilation of data and information on efficiency and effectiveness of different types of medical and health care technology being used in the health care system including a comprehensive literature review of past Thai and overseas studies on this subject. In addition research should be undertaken to identify an appropriate system or mechanism to disseminate comprehensive information for direct application by service providers or for policy makers to use as a basis for resource allocation or further development of policies and strategies for controlling distribution and use of certain types of technology.



### Research agenda No. 3.5

#### Research for developing a policy promoting domestic industries and businesses in the field of pharmaceuticals and medical technologies

##### Vision

*Thailand should establish domestic industries and businesses for developing and producing pharmaceuticals and high quality medical technologies which would be economically viable and well supported by extensive local and overseas markets.*

This type of industrial and business expansion will enable the Thai people to have access to essential drugs, medical technologies and equipment, and other supplies at lower cost, making them no longer highly dependent upon imported supplies and technologies. In addition, the private sector could further develop and upgrade their products to meet international standards, and thus contribute to increasing the country's exports.

##### Scope of research

Experience from developed countries in expanding their medical and pharmaceutical business overseas through setting up transnational companies demonstrates that, in order to achieve this, a collective approach by all concerned parties needs to be taken in such matters as taxation, development of the national potential for market competition and intercountry negotiations if product manufacturing is to be expanded overseas.

Policies and strategies for promoting research and development on the part of the private sector need to be revitalized with strong incentives to motivate the private sector to invest in research and development of medical technologies. Research should be made in this area to identify an appropriate system for investment promotion. In addition, studies on legal measures and approaches for supporting research and development and manufacturing of herbal or traditional medicines needs to be undertaken.

Finally there should be research into manpower requirements as a basis for the expansion of domestic industries as well as market research for outlets both domestic and overseas.

## **Programme Area 4**

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### **Research agenda for promoting health and quality of life**

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As already mentioned, health promotion needs to be further strengthened and enhanced its role in quality of life development. Health promotion in the context of health systems development is not merely educating the people about appropriate health behaviours to generate behavioural change as the state of health of the people depends on many predetermining factors. Research is thus needed to re-examine the current health infrastructure and approaches to identify ways and means to establish an effective mechanism or national focal point for health promotion. This mechanism would be responsible for budget allocations and formulating strategies for health promotion which would result in appropriate behavioural change, better health and improved quality of life based upon a collective effort of all concerned parties and the people in the society as a whole.

This programme area is further subdivided into specific research agendas as follows:

#### **Research agenda No. 4.1**

##### **Research for health promotion**

###### **Vision**

*Health promotion has an increasingly important role in the overall health care system as it is cost-effective and capable of building up a better quality of life which contributes directly to the welfare of the people and helps reduce problems pertaining to the rising cost of health services.*

Development of overall health promotion requires concerted efforts which include initiation of a taxation and pricing policy for such consumer products as are hazardous to health, campaigns to promote appropriate social values on health directed to individuals and the society as a whole, criteria and conditions for environmental protection to ensure that the people can live in an environment conducive to good health and increased access of the general public to essential information, particularly

through the mass media, on self-care and health promotion. Should there be an effective mechanism for collaboration by mobilizing all health promotion efforts as well as providing essential policy recommendations, a systematic approach to health promotion development would then be made possible.

All relevant public and private sectors, particularly the mass media and the people themselves, should be motivated to undertake a more active and collaborative role in health promotion.

### **Scope of research**

Research will be geared towards the development of effective mechanisms for overall health promotion, recommending their basic structure, managerial approaches, role and responsibilities, and sources of funding as well as the regulatory procedures needed for the successful establishment and functioning of these mechanisms.

Research is also needed to identify suitable approaches for generating healthy behaviour and lifestyles to reduce health risk factors. The findings could be used in the process of policy formulation and reorientation as well as for direct application in current health promotion programmes directed to the people, consumers' organizations and all concerned sectors including the mass media. The behavioural aspects to be investigated include cigarette smoking, drinking, food consumption, and physical exercise. In certain instances, research could be directed towards health promotion for specific target groups such as adolescents, school children, and others.

Last but not least is research for identifying appropriate strategies and approaches for building up a close partnership with the private sector, in particular the mass media, in health information dissemination, and the promotion of healthy behaviour and values that are conducive to good health.

**Research agenda No. 4.2**

**Research for promoting an environment conducive to good health**

**Vision**

*Environmental problems that have a negative impact upon the daily life and health conditions of the people should be effectively tackled to reduce their undesirable effects, while continuing efforts should be made to promote an environment conducive to good health;*

Efforts for solving the problems caused by the physical, work and living environments need to be made through intersectoral collaboration as environmental problems are quite complex and require active participation on the part of the people, the government and NGO's. Further research and development into policy support, a legal framework and financial measures for environmental conservation as well as promotion of the people's participation is essential for ensuring a healthy environment.

**Scope of research**

Research is needed for the development of an effective environmental monitoring system encompassing all concerned sectors and key persons in the society to promptly respond to environmental problems that are hazardous to health. The current environmental monitoring system concerned with air, water or soil pollution largely indicates the problems that have occurred in the environment without clearly stating their impact upon health. A new system which would collect data on the health impacts would be useful for solving the problems faced by each particular group of the population.

Studies to identify measures for promoting a healthy environment, be it healthy city, healthy workplace or healthy home, need to be undertaken to speed up collective efforts for building up an environment that is conducive to good health.

**Research agenda No. 4.3**

**Research for developing the quality of life and capability of specific groups of the population**

**Vision**

*Specific underserved groups of the population, should attain better health and quality of life.*

The elderly, labourers, pre-school children, the handicapped and other specific groups that are underserved as regards their health needs should receive more systematic care under a holistic approach. This does not mean just increasing coverage of health care or welfare services but efforts should be made to build up these groups' capability of leading a productive life according to individual conditions.

**Scope of research**

Research is needed to identify the basic characteristics, needs and expectations of each specific group as well as group composition and environmental factors in the family, community or the society as a whole. The findings could then be used for formulating policies and strategies for taking care and developing the capability of specific groups according to their actual problems and needs.

Evaluation studies on past policy formulation and implementation also need to be made for the purpose of policy reorientation, particularly with reference to the financial feasibility of maintaining welfare services or other assistance schemes for these groups, together with concrete policy recommendations for further promoting their social and economic status.

**Research agenda No. 4.4**

**Research for applying information technology (IT) in transmitting health care information to the general public**

**Vision**

*Information technology (IT) should be applied for health promotion and increasing the capability of the people in self-care with selection of appropriate health care services whenever essential.*

A computerized health care and health service information system with an extensive network and focal points in all concerned organizations having IT facilities will help increase access to essential information for the general public both in the cities and in the rural areas.

#### **Scope of research**

Research should be geared towards development of models or options of IT applications which will help increase access to essential information on health promotion for the general public, be it information on self-care or available health care services.

Feasibility studies on the use of existing information and documentation systems and the corresponding network for disseminating information on health promotion should also be made, including studies on the needs and expectations of the people regarding the use of IT for attaining knowledge on health promotion.

### **Programme Area 5**

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#### **Programme on policy formulation, delegation of authority and promotion of the people's role in health promotion**

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Delegation of authority is a managerial approach which is being applied increasingly in the Thai bureaucracy following the belief in the concerned sectors that it would help bring about social justice and equity in the overall national development system, of which health care is an integral part. To date people's organizations such as the Sub-District Administrative Council have been established to allow people's active participation in overall community development, including health and quality of life.

This programme area is subdivided into three specific research agendas as follows:

## Research agenda No. 5.1

### Research on delegation of authority and health system development

#### Vision

*In the future, development of the people's health will be one of the prime functions of the self-governing district and sub-district administrations with technical, financial and manpower development support from the central and provincial administrations.*

In accordance with this basic principle, some organizations and various health service programmes will be placed under the direct control of the provincial administration while the central administration will designate their appropriate role, and provide technical and financial as well as human resource development support including monitoring and evaluation of their performance.

#### Scope of research

Research will focus on the delegation of authority from the central to the provincial level in order to increase the capacity of the provincial administration in utilizing local and allocated resources to solve area-based problems with full efficiency. To achieve this there is a need to revise current rules and regulations as well as mechanisms and criteria for resource allocation both as regards manpower and budget. The capacity of field personnel in management should therefore be strengthened to enable them to meet new requirements and an additional workload. Systems of ongoing technical and financial support as well as monitoring and follow-up also need to be established at the central level. Research in this area will assist in locating critical points in decentralization, and approaches for monitoring and follow-up to ensure best use of resources for the benefit of the people.

In addition, studies on approaches in supporting the self-governing district and sub-district administrations in managing health care services both directly or in collaboration with existing health infrastructure personnel should be explored, together with studies on their role in introducing new systems for providing specific services under their own initiative and direct management. This is not to place all responsibilities upon the self-

governing administrations but to ensure that their managerial capacity will be strengthened at crucial points that will be of real use to the community.

## **Research agenda No. 5.2**

### **Research on the role of the people and community organizations in health development**

#### **Vision**

*The people should participate actively in health development through different forms of community, thus joining in problem-solving or in developing health service systems to respond to local problems and the needs of the community as a whole.*

Manpower is one of the major resources for overall national economic and social development. Participation of the people in health development does not simply imply meeting together to solve health problems but may mean joining in endeavours, to manage resources for health care services.

Models, scope and intensity of participation vary according to many predetermining factors including the geographical location and specific characteristics of each population group. Health development is usually an integral part of overall community development which is the ultimate goal of community organizations.

#### **Scope of research**

There is a need for a comprehensive study on the different forms and capacities of community organizations in community development with special reference to health. Research is further needed to identify appropriate options for promoting people's participation in overall social and human resource development, of which health is a crucial component.

Studies should also be undertaken to identify the main underlying factors and secondary factors which promote the people's participation in specific activities such as environmental conservation, and AIDS prevention and control. The findings could be used as guiding principles for formulating new approaches or measures for upgrading the role of the people and community organizations in health development.



In some specific areas, research to identify ways and means for mobilizing the people to take part in resource management or management of a health service system at the community level should be explored.

### **Research agenda No. 5.3**

#### **Research for developing the necessary database for long-term health systems reform**

##### **Vision**

*It is essential to establish a database for health policy reform which would reflect the changing trend in diseases, deformities and causes of death, within the different time frames, as well as their impact on national economic and social development.*

Such an information system should include data on past trends in resource allocation and distribution, with continuing input of new data to ensure sustainability of the system. A responsible agency should be assigned to make certain that the system outputs are accurate and up-to-date for analysing them to meet users' needs.

##### **Scope of research**

Research is needed for the development of an information system on drug expenditure, health expenditure, existing human resources in the field of health, and health manpower needs. Research is also needed to establish an information system on the pattern of diseases, deformities and causes of death, including assessment of the current and projected financial burden placed on the country by major health problem.

It is expected that the abovementioned research will cover all essential elements for developing an information system with an appropriate mechanism for data collection and analysis as well as a network linking all the relevant agencies that will make use of the system.

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## **IMPLEMENTATION STRATEGIES**

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The five major programme areas of HSR for health systems reform will be under the responsibility of HSRI which will provide funds and personnel for research and development in accordance with the aforementioned research agendas. The implementation strategies are as follows:

1. HSRI will draw up a high priority research plan and research agenda encompassing the five major programme areas to be implemented in close collaboration with the agencies that will be conducting research and making use of the findings for health systems development. The criteria and conditions for selecting a high priority research agenda are based on the perceived usefulness or impact of research on health systems development, the capacity of researchers, and the interest of health or health related authorities in supporting active intersectoral collaboration on overall research and development. HSRI will taking part in identify the needs of policy makers and senior department staff for research which is directed towards health systems reform and support essential research or even conduct research itself in areas with urgent needs in order to obtain adequate baseline data for decision making;

2. HSRI will collaborate closely with domestic and overseas research funding agencies such as the Thailand Research Fund, National Research Council, international funding agencies, universities or ministries that support HSR to ensure that funds for HSR are utilized efficiently and that they are relevant to the functions of each concerned agency;

3. HSRI will promote direct participation of both public and private agencies with managerial capability in the management of HSR in areas of high priority. Their task will be to mobilize experienced researchers to undertake HSR in specific areas and closely follow-up their performance to ensure quality of research as well as to establish an effective mechanism to disseminate the findings to be used by policy makers, health or health related authorities as well as the general public;

4. HSRI will directly manage some of the high priority research studies which can not be undertaken by other concerned agencies. However,

its role will be fairly limited. The action plan will be formulated jointly with researchers who are highly experienced in their specific field. The process of reviewing and authorizing research projects as well as funding will follow the rules of procedure as established by HSRI, with no exceptions.

# **BUDGET FOR HEALTH SYSTEMS RESEARCH**

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## **1. PRINCIPLE AND APPROACHES IN ALLOCATING BUDGET FOR HEALTH SYSTEMS RESEARCH**

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The International Commission on Health Research has established the basic principle that a developing country should allocate at least 2% of its annual national health expenditure for health research.

In the case of Thailand the projected health expenditure for the years 1997-2001 is around Baht 350,128 million per annum, 2% of which represents Baht 7,002 million. Given that HSR should receive funds equivalent to 5% of the overall budget for health research or around 0.1% of the national health expenditure, the annual HSR operating budget will be Baht 350 million.

HSR has been recognised internationally as one of the essential prerequisites for Health for All development. WHO has recommended that each country take its own initiative in HSR as the health systems vary from country to country according to the country-specific socio-economic and political conditions. Both developed and developing countries will benefit from HSR in health systems reorientation or reform to enhance effectiveness of services, assure best use of health care resources, reduce expenditure and contain the cost of health care within manageable limits.

HSR must be promoted on a continuing basis with adequate funding to keep pace with changing socio-economic and political conditions which have an impact on the health systems and the health status of the people.

## 2. CURRENT FINANCIAL SITUATION OF THE HEALTH SYSTEMS RESEARCH INSTITUTE

Based on the principle for allocating budget for health systems research as abovementioned, the proportion of annual budget allocated for HSRI, which is only 0.03% of national health expenditure is far from adequate for overall HSR operations and allows no room for new initiatives or flexibility in programme development. The allocated budget during the past five years was much lower than requested and remained so, as appears in Table 1.

*Table 1 Requested budget and allocated budget from 1993-1997*

Unit : million baht		
Fiscal year	Requested budget	Allocated budget
1993	25.96	16.4
1994	31.7	27.2
1995	59.3	42.2
1996	82.6	60.2
1997	98.4	71.2

## 3. BUDGET REQUIREMENTS FOR HSR DURING THE SECOND FIVE-YEAR PLAN (1997-2001)

HSRI has proposed two options for medium-term funding of the institute incorporating both the continuing initial capital on a flat rate basis and annual allocations. A detailed description of the two options appears as follows;

**OPTION 1:**

Estimated budget requirements for HSR, including initial capital, at the rate of 0.1% of national health expenditure

**Table 2** *Option 1: Estimated budget requirements for HSR, including initial capital, for 1997-2001 at the rate of 0.1% of national health expenditure*

Unit : million baht						
Description	1997	1998	1999	2000	2001	2002*
1. National health expenditure	259,648	298,595	343,384	394,892	454,125	522,244
2. Proportion of operating budget to be received (0.1% of item 1)	260	299	343	395	454	522
3. Initial capital allocated for the first 5 years	700	700	700	700	700	-
4. Interest gained from initial capital (10% of item 3)	0	70	140	210	280	350
5. Budget needed per annum (item 2 - item 4)	260	229	203	185	174	172
6. Total budget needed per annum (item 3 + item 5)	960	929	903	885	874	172

\* year 2002 is included to reflect sustainability when the initial capital terminates after 5 years

Based on the data in Table 2, the average health expenditure per annum between 1997-2001 is Baht 350,128.8 million, 0.1% of this amount being about Baht 350 million. So the initial capital required for the five-year plan is Baht 3,500 million or Baht 700 million per annum. Given the annual interest rate of 10% and the amount of interest cumulated from the second year, the budget requirements will be higher for the first year and then decrease in proportion to the cumulated interest. Basically the annual budget needed is calculated by subtracting the amount of interest earned each year from the total financial requirements.

**OPTION 2:**

Estimated budget requirements for HSR including initial capital in accordance with actual allocations under the eighth and ninth National Economic and Social Development Plans for 1997-2001 and 2002-2006, respectively.

**Table 3** *Option 2: Estimated budget requirements for HSR, including initial capital, for 1997-2001 in accordance with the 8th and 9th five-year National Development Plans*

Unit : million baht						
Description	1997	1998	1999	2000	2001	2002*
1. National health expenditure	259,648	298,595	343,384	394,892	454,125	522,244
2. Operating budget for HSR	98	120	135	150	175	200
(based on HSRI medium-term plan)						
3. Initial capital allocated for the	400	400	400	400	400	-
first 5 years						
4. Interest gained from initial capital	0	40	80	120	160	200
(10% of item 3)						
5. Budget needed per annum	98	80	55	30	15	-
(item 2 - item 4)						
6. Total budget needed per annum	498	480	455	430	415	-
(item 3 + item 5)						

\* year 2002 is included to reflect sustainability when the initial capital terminates after 5 years

Table 3 shows the annual national health expenditure during the period covered by the eighth National Development Plan (1997-2001). HSRI has estimated the operating budget needed for HSR for the same period based upon HSRI's medium-term plan and expected government financial support. It is envisaged that for the first year of its second five-year plan an operating budget of Baht 200 million will be allocated. Given that the long-term plan of HSRI requires Baht 200 million each year to cover operating expenditure there is need for a Baht 2,000 million initial capital (with interest rate of 10% per annum). The initial capital is to be divided at a flat rate of Baht 400 million per year. Here again the budget requirements will be higher for the first year and then decrease in proportion to the cumulated interest. Option 2 seems to be more feasible than Option 1 considering the current financial situation.

#### 4. BUDGET ALLOCATIONS BY EACH MAJOR PROGRAMME OF HSR DURING THE SECOND FIVE-YEAR PLAN (1997-2001)

Based on the estimated budget under the second option, the annual budget is broken down by each major programme area as reflected in Table 4.

**Table 4** *Estimated budget requirements for HSR during 1997-2001 by the four major programme areas*

Unit : million baht						
Description	1997	1998	1999	2000	2001	2002*
Annual budget requirements	98	120	135	150	175	200
Programme area 1 : Programme on research promotion for health systems reform	29.4	36	40.5	45	52.5	60
Programme area 2 : Programme on development of HSR capacity (mainly for area-based research)	29.4	36	40.5	45	52.5	60
Programme area 3 : Programme on promoting the use of HSR findings	19.6	24	27	30	35	40
Programme area 4 : Programme on supporting HSR (inclusive of general administration)	19.6	24	27	30	35	40

\* year 2002 is included to reflect sustainability when the initial capital terminates after 5 years

The criteria for budget allocation are based on needs assessment by programme area and programme priority. However, as there might be further needs for HSR arising from changes in socio-economic and political conditions, reprogramming of the budget could be made to allow flexibility in programme operations.