Kingdom of Cambodia
Nation – Religion – King

Ministry of Health
Department of Planning and Health Information

Guidelines for Developing Operational Districts

Ministry of Health with collaboration of the
World Health Organization

FOREWORD

Health sector reform in Cambodia is going on a step-by-step basis in line with the Public Administrative Reform Program of the Royal Government of Cambodia and within socio-economic context of the country.

The purpose of the reform is to improve the delivery of quality services to the population, especially in remote areas, through the implementation of district health system.

The health coverage plan, a part of the whole reform, has been implemented since 1996. This plan designates the location and number of health centers and referral hospitals, and defines the catchment areas for these health facilities to deliver services to the population.

At this point, health managers at central, provincial and district level have gained many experiences from implementating the health coverage plan and the changes in the reform process. Such experiences are highlighted in these guidelines for improving the development of the national health system to meet the health needs of the population.

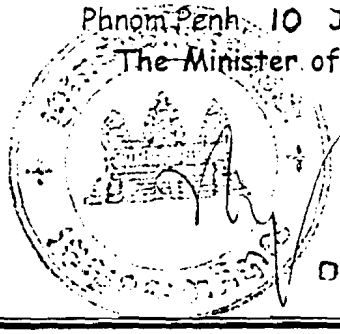
" **Guidelines for Developing Operational Districts** " provides principles in various important aspects - such as strategies for improving health services coverage in remote areas, strengthening of organisational structures, optimising the use of resources - through the delivery of integrated health care.

The book also aims to establish a clear direction for health managers at all levels. Such a direction addresses not only the current situation but also the future vision of the developing health system. In practice, we will face constraints and will need times and adequate resources to remove them. In other words, provinces and districts have different characteristics: geographical, demographic, economic and infrastructure. Therefore, health managers need to review the specific situation in their province and district, and try to apply the guidelines accordingly and properly.

I wish you success in implementing these guidelines.

Phnom Penh, 10 Jan/ 1998

The Minister of Health



DR. CHHEA THONG

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I would like to thank all Core Editor team members, WHO and UNICEF Consultants for their contributions.

Many thanks to my colleagues at the Department of Planning & Health Information, MoH, for their active support for organising workshops successfully.

Finally, I would like to thank to the World Health Organization for their technical and financial support for the development of the guidelines that health sector reforms in Cambodia will benefit from.

December 1997

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Abbreviations

ADB	Asian Development Bank
ADD	Accelerated Districts for Development
AIDS	Acquired Immune-Deficiency Syndrome
ARI	Acute Respiratory Tract Infection
BCG	Bacille Calmette Guerin
BS	Base Stock
CDD	Control of Diarrhoeal Diseases
CMM	Consommation Mensuelle Moyenne
CMS	Central Medical Stores
CoCom	Coordinating Committee
CPA	Complementary Package of Activities
DHDev.C, DDC	District (Health) Development Committee
DHTAT	District Health Technical Advisory Team
DPT	Diphtheria, Pertussis, Tetanus
EDB	Essential Drugs Bureau
EPI	Expanded Programme for Immunisation
FDH	Former District Hospital
HC	Health center
HCP	Health Coverage Plan
HE	Health Education
HETF	Health Economics Task Force
HIS	Health Information System
HIV	Human Immune-deficiency Virus
HP	Health Promotion
IPD	Inpatient department
MCH	Maternal and Child Health
MoH	Ministry of Health
MoEF	Ministry of Economy and Finance
MPA	Minimum Package of Activities
NIPH	National Institute of Public Health
NGO	Non-Governmental Organisation
OD	Operational District
OPD	Outpatients department
ORS	Oral Rehydration Salts
PHA	Provincial Health Adviser
PHC	Primary Health Care
PHD	Provincial Health Department
PHN	Phnom Penh
PHTAT	Provincial Health Technical Advisory Team
PROCOCOM	Provincial Coordination Committee
PSU	Planning and Statistics Unit
RH	Referral Hospital
SHS	Strengthening Health Systems
STDs	Sexually Transmitted Disease
TB	Tuberculosis
TTL	Total
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UK	United Kingdom
WB	World Bank
WHO	World Health Organisation

Introduction

The main reason for this book is to provide provincial and district health managers with clear workable guidelines for implementing the Health Coverage Plan (HCP) their areas, taking into account the current state of the Cambodian health system. This book builds on a previous draft produced in 1996 by the MoH Planning Unit.

Objectives

- To highlight and develop areas that lacked clarity in the initial draft.
- To ensure the information is consistent.
- To develop additional strategies for implementing the health coverage plan in low density provinces and Phnom Penh.
- To improve the delivery of integrated health services to the population.
- To optimise the use of existing resources.

New components

- Additional strategies to improve health coverage in particular areas.
- Transitional period
- Integrated approach to health care
- Essential drugs and supplies
- Budget and finance
- Health financing
- Health information system
- Private sector and contracting health services

Process

The development of these guidelines has been a collaborative process involving people working at different levels within the health system, international organizations and NGOs. The development process included:

- Field visits
- Pre-workshop meetings
- Establishment of Core Editor team
- Workshops
- Development of guidelines: writing and review of initial draft by policy decision makers, finalising , editing, printing, and distribution.

1. Field visits

The Planning and Statistics Unit, in co-operation with WHO, visited provinces, districts and health centres to engage in discussions with provincial and district health service staff in five provinces: Phnom Penh municipality, Kompong Cham, Battambang, Kompot, Takeo and Ratanakiri. The field visits provided useful information concerning two major aspects of the integration of health services, important considerations for developing the workshop agenda: delivery of health services and organisational arrangements.

2. Pre-workshop meetings

The first of two pre-workshop meetings was chaired by H.E Dr. Mam Bun Heng, Under Secretary of State for Health and attended by senior officials of the MoH. The participants agreed on the development process of the guidelines in terms of policy development, use of resources persons from the MoH, and technical and financial support from the World Health Organisation, Strengthening Health Systems (SHS) project. The second meeting was also chaired by Dr. Mam Bun Heng and attended by senior officials from the MoH and heads of national programmes. The purpose was to present the objectives of the guidelines, share information about the field visits, and discuss the role of national programmes in the integration of health services at various levels of the health system.

3. Establishment of Core Editor team

The Core Editor team was established by the MoH on 17 February 1997, composing of 7 members:

1.	Dr. Mean Chhi Vun	Deputy Director, Department of Health. Chairman
2.	Dr. Om Thorn	Director of Kandal Provincial Health Department (PHD)
3.	Dr. Prak Piset Raingsey	Chief of Public Health Office
4.	Dr. Mao Tan Eang	Deputy Chief, Planning and Statistics Unit
5.	Dr. Lo Veasna Kiry	Planning and Statistics Unit (PSU)
6.	Dr. San Chan Soeun	Maternal and Child Health (MCH) Center
7.	Ms. Ung Vanny	Essential Drugs Office

The Core Editors had technical support from WHO consultants, SHS project:

1.	Dr. Henk Bekedam,	Health Planner
2.	Dr. Gita Sunthankar	Associated Professional Officer
3.	Dr. Hun Chhun Ly	Consultant
4.	Miss Sarah Barber	Provincial Health Adviser (Kompong Speu)

The role of the core editors is to:

- Ensure co-ordination with departments/offices at the MoH and national programmes.
- Assist and facilitate the workshops.
- Present progress report on process development to MoH policy makers.
- Finalise the first draft of the guidelines after getting comments from policy makers.

4. Organisation of the workshops:

4.1 Workshops Objectives

The table below indicates dates, participants and objectives of the four workshops held from January to March, 1997. The editors used a participatory approach dedicating 70% of workshop time to discussions. The workshop outputs are represented in these guidelines.

Workshop	Date	Participants	Objectives
WS I	22-23/01	· Department/Offices at MoH involved in guidelines · National programme managers · Provincial and district staff. · International agencies (WHO, UNICEF, MoH/ADB project.) · Provincial Health Advisers of invited provinces · Medicam **In total: 46**	· To develop a definition for integration of health services. · To determine ways in which the integration of health services can be done appropriately. · To determine how to improve efficient use of human, financial, and other resources in the delivery of integrated health services.
WS II	6-7/02	· Health staff from provinces, districts and health center level. · Provincial Health Advisers of invited provinces · Medicam **In total: 45**	· To refine the definition for integration of health services. · To determine the organisational structure that can support integration of health services at provincial, district and health center level. · To determine how to improve efficient use of human, financial, and other resources in the delivery of integrated health services.
WS III	4-5/03	· Provincial and district staff of low density provinces. · Provincial Health Advisers of invited provinces · MSF representative · Medicam **In total: 42**	· To identify constraints and develop strategies in implementing the health coverage plan in low density areas. · To determine the organisational structure which can support integration of health services at provincial, district and health center level in low density areas. · To determine the efficient use of human resources and facilities in the delivery of integrated health services.
WS IV	12-13/3	· MoH · Health staff from Phnom Penh (PHN) municipality, districts and health centres · National hospitals · Municipality Health Adviser · Medicam **In total: 40**	· To develop strategies to overcome constraints identified by PHN Health Department in implementing the health coverage plan. · To determine the organizational structure which can support integration of health services at provincial, district and health center level · To develop the role of national hospitals in supporting the implementation of the health coverage plan of the municipality. · To determine the role of private sector in delivery of health services to population of PHN.

Part 1

The Health System

Chapter 1. Overview

1.1 Background

Prior to 1995, general MoH policy aimed to have a clinic in each commune, a hospital in each district and a provincial hospital in each province. In practice, this system did not meet the population's essential health needs. ***WHY?***

- Most commune clinics did not exist and many existing clinics had poor buildings and equipment.
- Many district hospitals functioned as large commune clinics that provided out-patient clinics, mother and child health care, vaccinations and limited inpatient care. Many medical, surgical and obstetric emergencies were referred to provincial and national hospitals.
- There was no clear difference between commune and district level activities.
- The health staff lacked skills and motivation to address the population's basic health problems in a holistic and integrated manner, because they have been trained to see one type of illness through vertical program training.
- The size of the population covered by clinics and hospitals was either too large or too small, and the location of facilities was often inappropriate.

1.2 Reform of the health system

The MoH's main objective for the health system reform is :

> ***"To improve and extend primary health care through the implementation of a district based health system." (MoH Master Plan, 1994-1996)***

The MoH put the reforms into place to meet the people's essential health needs by:

- Improving the population's confidence in public health services.
- Clarifying and reinforcing the role of hospitals and health centers.
- Establishing each facility's catchment area to ensure coverage of the population.
- Rationalizing the allocation and use of resources.

Reform of the health sector entails important transformations, both financial and organisational, such as :

- Rational distribution of resources based on the health coverage plan: financial, infrastructure, drugs, equipment and human resources.
- Reorganisation of the MoH institutional framework at central, provincial, and district levels.
- Budgetary reform e.g. changes to budget allocation
- A new definition of the health system and the types of services expected at each level of the system. **(Figure 1.1, 1.2)**
- Redistribution and retraining of health staff.
- Introduction of new ways to finance health services.

Since 1994, the MoH has been committed to reorganising the health system placing an emphasis on the district. UNICEF, UNDP, WHO, ADB, and WB have supported these efforts. The reorganisation was first presented in the *Guide for Strengthening the District Health System* in Cambodia (MoH

1995). The reform of the health system is part of the larger National Public Administrative Reform. The public administrative reform shows the government's willingness to rehabilitate and improve public sector effectiveness and efficiency.

1.3 The roles of each level in the health system

Each level has essential functions and is complementary to the other levels (**Figure 1.1**).

1.3.1. The Central level (Ministry of Health, National programmes, Central Institutions)

- **Ministry of Health** supports the district health system by:
  - Definition of health policies and strategies.
  - National planning and support to provincial planning.
  - Monitoring and evaluation of policies and plans.
  - Training of senior staff.
  - Allocation and mobilisation of additional resources
  - Support to provinces and districts to implement policies and plans and deliver services.
  - Research and legislation and coordination of health activities and external aid.
- **Faculty of Medicine, Pharmacy, Dentistry; Central Nursing School (Ecole Centrale des Cadres Sanitaires ECCS):**
  - To provide basic training of health staff
  - Develop training curricula in close collaboration with the MoH department of human resources.
- **National programmes.**[1] The national programmes do not directly implement services but ensure that the programme activities are integrated into district-based health systems. Programme objectives and strategies need to be realistic and follow the changes in the health system.
- **National Institute for Public Health (NIPH)** provides valuable support in assessing the ongoing health situation, evaluating of the impact of programmes, and conducting operational research on the implementation of the developing health system.
- **National Hospitals** train health personnel and undertake research studies, in addition to providing specialised referral services.

General Hospitals	Calmette, Preah Norodom Sihanouk
Paediatric Hospitals	National paediatric, Kantha Botha
Surgical	Preah Kossamak
Obstetrics and Gynaecology	7th January (phased out in June 1997), MCH
Tuberculosis	TB Hospital
ENT	Preah Ang Doung
Specialized services	Pasteur Institute, the National Blood Bank.

1.3.2. The Provincial (Intermediate) level

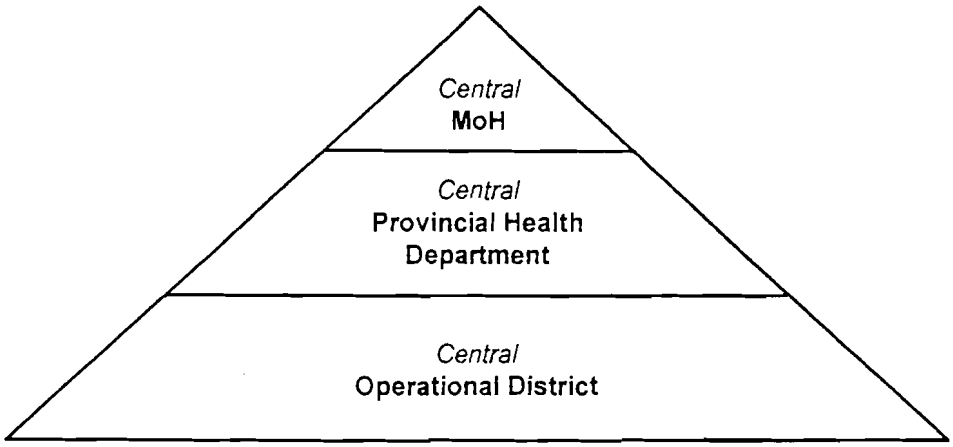
The main role of the PHD is to link the MoH and the operational districts through:

- **Interpreting, disseminating and implementing National Health Policy through strategy development and annual planning.**
- **Supporting the development of Operational Districts by regular monitoring and evaluation.**
- **Ensuring equitable distribution and effective utilisation of available resources.**
- **Mobilising additional resources.**

[1] The role of National programmes are described in Chapter 9.

- **Providing continuing education through the regional training centres.**[2]

Figure 1.1. The three levels of the health system.



1.3.3. The Operational District (Peripheral) level

The operational district is the most peripheral sub-unit within the health system closest to the population. It is composed of health centres and a referral hospital. Its main role is to implement the operational district health objectives through:

- **Interpreting, disseminating and implementing national policies and provincial health strategies.**
- **Maintaining effective, efficient, and comprehensive services (promotive, preventive, curative, rehabilitative) according to the needs of the community.**
- **Ensuring equitable distribution and effective utilisation of available resources.**
- **Mobilising additional resources for district health services, e.g. NGO support.**

To function as a system, it must provide 2 levels of service: the health centre and the referral hospital **(Figure1.2.)**.

A. Health centres

Health centers deliver primary health care through the **Minimum Package of Activites (MPA, Table 1**). Health centers should:

- **Encourage community participation.**
- **Be efficient and affordable (financially and functionally).**
- **Have close contact with the population to cover the catchment area. It must be small enough to maintain contact with the villages, but large enough to justify the presence of health centre with high quality staff.**
- **Provide integrated high quality promotive, preventive and curative services.**
- **Ensure accessibility: financial, geographic and culturally appropriate.**

The priority is to implement the MPA in first level facilities. Other activities can be added to the MPA once it has been fully implemented if resources exist. However, these extra services should not overlap with referral hospital services. The MoH has developed a MPA teaching curriculum and treatment manual to provide health centre staff with clear written instructions for training health staff in their roles.

[2] Stung Treng (north east); Battambang (north west); Kompong Cham (south east); Kompot (south west).

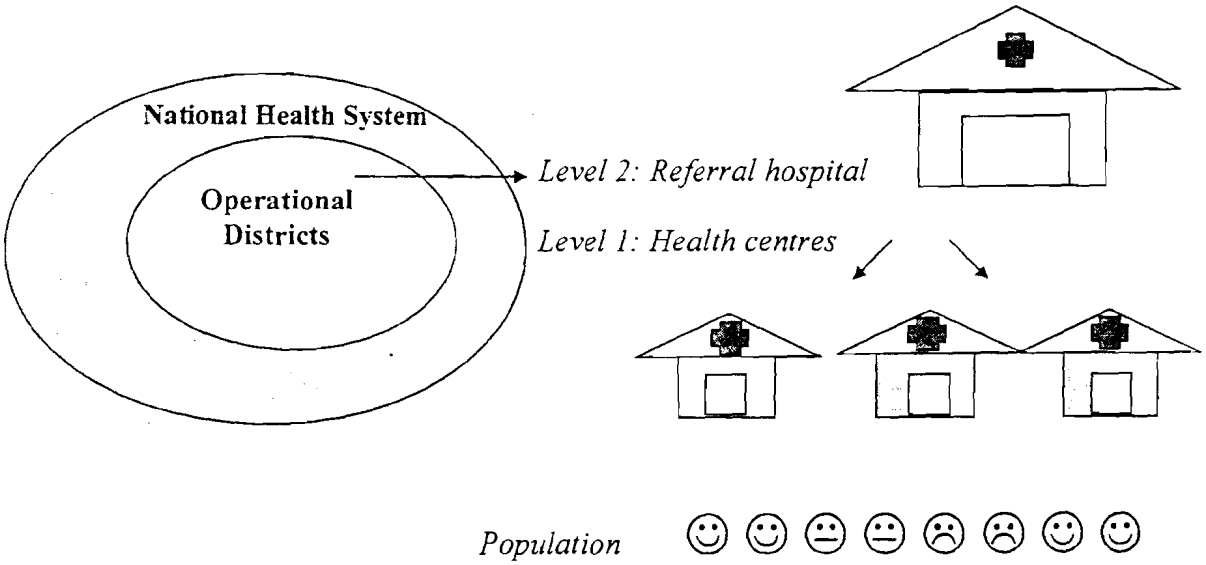
B. Referral hospitals (includes the provincial hospitals)

Referral hospital care is distinct and complementary to health centre care. The objectives of referral hospitals are:

- To provide the operational district population with health services that cannot be delivered by health centres: diagnosis, follow-up and treatment for management of complex health problems.
- To support the health centres in the operational district by clinical training and supervision.

The type of care delivered by referral hospitals is defined by the **Complimentary Package of Activites (CPA Table 1)**. The priority is to implement at least the CPA in all referral facilities, after which other activities can be added to the CPA, if resources exist. The MoH is developing treatment guidelines for referral hospital staff.

Figure 1.2. The National Health System and the Operational District



1.4. The key principles of the primary health care approach[3]

The MoH's main objective for the health system reform is "to improve and extend primary health care through the implementation of a district based health system."

The **primary health care (PHC) approach** is central to the MoH's organisational and financing reforms.

PHC is a broad approach to health development based on four key principles:

- **Universal accessibility and coverage in relation to need.**

  The MoH developed the coverage plan to establish health facilities based on population and geography to increase access. Resources within the health sector can thus be more evenly distributed among the population.

[3] Adapted from PHC concepts and challenges in a changing world. Alma Ata revisted. WHO ARA paper No. 7. 1997.

- **Community participation in health.**
  Community participation in health development is a key strategy of the MoH. The success of local health services depends on the population's interest in health centre development. The purpose of health centre and district development committees is gain community involvement for the development of appropriate local health services.
  Community participation in health also means that people understand their own responsibility and can make decisions about their health. One strategy is encouraging health centre staff to link with existing private providers, including traditional healers and birth attendants, to pass on essential health messages and danger signs for referral.

- **Inter-sectoral action for health.**
  The health of a society is closely related to the:
  - ✓ availability of land and food
  - ✓ existence and access to infrastructure such as schools, roads and water,
  - ✓ level of literacy, especially female literacy.

  The MoH recognises the need for close collaboration with other sectors and established guidelines for co-ordination committees at all levels to facilitate inter-sectoral collaboration among health, rural development, women's association, education, and agriculture.

- **Appropriate technology and cost effectiveness.**
  Health activities are cost effective when:
  - ✓ the allocation of resources yields the greatest benefits.
  - ✓ managers delegate tasks to the least trained person capable of handling them.

  The MoH established cost effective activities at each level of the health system through the Minimum and Comprehensive Packages of Activities (MPA and CPA), lists of basic equipment and qualifications of staff at each level.

1.4.1. What PHC is NOT

The difficulties of trying to implement the PHC approach over the past 20 years have resulted in a narrowed view of PHC and other misunderstandings. The MoH would like to address some of those misunderstandings.

A. PHC is not only community-based.
The principle of community involvement is an important factor in the success of the PHC approach. However, alone it does not take into consideration the changes at all levels of the health system that are required to implement PHC. The creation of community-based programs in isolation of the health system is not sufficient to made substantial progress towards meeting basic health needs.

B. PHC does not consist only of eight essential activities.
The PHC approach outlined the eight minimum activities essential to comprehensive PHC.[4] The purpose of the list is not to select out one or two activities. This leads to fragmented efforts. By selecting out activities, programs compete for scarce resources and staff; the gain of one program can be the loss of another.

Choices must not be made between the eight elements, nor should there be a division between preventive or curative care. The aim must always be to provide an essential level of comprehensive activities based on local needs.

[4] Food supply and nutrition, health education, MCH and family planning, water and sanitation, immunization, prevention of endemic illnesses, treatment of common diseases and injuries, provision of essential drugs.

C. ***PHC does not only include activities in rural areas and health workers with basic training.***
An important aim of PHC is equity. To address equity, the poor must be considered, many of whom are rural. The poor are more vulnerable to illnesses but often lack access to basic care. PHC thus tries to reallocate resources to under-served areas, and develop a referral system to provide access to comprehensive services.

D. ***PHC is not cheap.***
The PHC approach promotes cost-effectiveness. This implies that the cost of the PHC approach is effective in comparison with other alternatives. One example is preventing illness to avoid treatment. Immunisation against polio is less expensive than treatment and lifelong care of individuals suffering from polio.

Cost effectiveness is also important when comparing different program strategies. Programs that train traditional birth attendants (TBAs) to reduce maternal mortality may cost less than training and equipping a hospital to accept obstetric emergencies. The effectiveness of TBA training programs, however, can be limited if access to referral services are non-existent. If the number of maternal deaths is taken into account, the cost of a TBA training program makes it one of the most expensive interventions for reducing maternal deaths.[5]

1.4.2. The PHC approach in the district health system

An operational district health system based on the PHC approach is:

- a self contained segment of the national health system.
- accountable to the needs of a defined population.
- based on what the community wants.
- the functional link for a comprehensive range of health services.

To successfully implement the PHC approach is to address illness in a **holistic** way. This requires health workers to see the social and economic causes of illness, as well as view themselves as working within the district health system. For example, it is estimated that 15% of pregnant woman in Cambodia will require emergency referral hospital services during delivery. To meet the needs of these women, it requires a situation in which:

- *She has appropriate nutrition during her pregnancy.*
- *She has access to basic health services for treatment of illnesses during pregnancy.*
- *She knows about the danger signs during pregnancy and delivery and when to seek help.*
- *She knows which hospital has emergency services.*
- *There is transportation to get to the hospital.*
- *The transportation is affordable.*
- *Her family is willing to take her*
- *It is safe to travel, even at night.*
- *She is willing to go.*
- *The hospital has staff, equipment, and drugs.*
- *The hospital staff have the appropriate training.*
- *The hospital staff treat her humanely.*
- *The care is affordable.*

How can all these important elements link together? The first priority is establishing the district health system as a precondition for the creation of sustainable PHC.

The district health system provides a geographical focus and population base for strengthening the health infrastructure. The establishment of this infrastructure allows district health managers to or-

[5] Safe Motherhood Program Options and Issues, Columbia University, New York, D. Maine, 1991.

ganise, plan, and monitor comprehensive health activities. The infrastructure now in existence makes it possible to achieve much more than individual disease control and promotion programs efforts.

The challenge is to strengthen the district health system, in particular the health centres, to inform and empower local communities and vulnerable populations, health centres, and local leaders. The district health system is the functional and necessary link to all elements of PHC.

Table 1: The Minimum and Comprehensive Packages of Activities (MPA and CPA).

	MPA[6]	CPA

Delivery of services	• Primary curative consultation for treating the most common health problems: malaria, sexually transmitted and diarrhoeal diseases, etc.
	• Emergency care and simple surgery
	• Chronic diseases: TB, leprosy
	• Consultations for healthy infants aged 0 to 4
	  * Vaccinations
	  * Management of malnutrition
	  * Prevention of vitamin A deficiency
	• Care for pregnant women
	  * Antenatal and postnatal care
	  * Anti-tetanus vaccination
	  * Prevention of anaemia
	  * Deliveries and referral of complicated cases to second level
	• Birth spacing
	• Refer patients to the second level for diagnostic, or complex management reasons.
	• Outreach activities
	
	Health Promotion should be integrated into all activities.
		• Referred cases
		• Medical and surgical emergencies
		  * Amputation
		  * Strangulated hernia
		  * Appendicitis
		  * Transfusion
		  * Cardiovascular resuscitation
		• Complicated deliveries
		  * Extra-uterine pregnancy
		  * Obstructed labour
		  * Haemorrhage
		  * Retained Placenta
		  * Caesarean
		• [redacted]
		  * Hernia
		  * Cataract
		• Complicated TB cases
		• Hospitalisation
		• Laboratory diagnosis
		• Radiological and Ultrasound diagnosis
		• Rehabilitation
		• 24 hour ward duty staffed by skilled personnel
		Health Promotion should be integrated into all activities.

Management and training activities	• Gathering information in the catchment area. • Daily recording of data and updating activity and inventory reports. • Management of medical supplies and consumable items. • Support to community health workers. • Meetings in the district. • Maintenance of health centre infrastructure and equipment. • Conduct and participate in management committee meetings.	• Supervision of hospital staff • Management of the hospital health information system. • Yearly planning and evaluation of health activities in hospital. • Participation in monthly provincial meetings • Management of medical supplies and consumable goods in hospitals • Maintenance of hospital equipment and infrastructure. • Financial management • Assist in the training/supervision of health centre staff • Organise the hospital referral system

6 Refer to the MPA manual.

Chapter 2. The Health Coverage Plan

2.1. Overview

The Health Coverage Plan[1] is a framework for developing the health system infrastructure, based on population and geographical access criteria. It aims to:

- **Develop health services by defining criteria for the location of health facilities and their catchment areas.**
- **Allocate financial and human resources**
- **Ensure that population health needs are met in an equitable way through coverage of the whole population.**

2.2. Criteria for the definition of catchment areas and establishment of health facilities

The **catchment area** is the geographic zone surrounding the health facility under its responsiblity. The inhabitants of the area are the target population for the health facility. The criteria to define a catchment area and the location of health facilities must take into account coverage of the entire population and the basic health needs for the majority of Cambodians. The two main criteria are:

- **Population size** is essential for defining catchment areas. It must be large enough to justify grouping resources together. *If it is too small*, it will not generate sufficient workload to maintain professional competencies and motivate staff. *If it is too large*, the quality of care will decrease; communication with the population will be difficult; staff competence, motivation and skills development will be compromised.
- **Geographical accessibility of services** can be defined by distance and terrain (e.g. mountains, rivers, road conditions). *Health center services* must be as close to the population as possible because they are the first point of contact. In low population density provinces, accessibility is the priority, so health posts will be established for smaller populations.[2]

The following should also be taken into account:

- **Quality of Care.** The district level must offer integrated care of good quality.
- **Availability of resources.** Availability of financial, human, material resources are an important consideration in the development of referral services.

Table 2. Criteria for the definition of catchment areas and the establishment of facilities.

Facility	*Population*	*Geographical accessibility*
Health Centre	**Optimal size: 10,000, Range: 8000-12,000** • Above 10,000, the work load becomes too heavy, leading to poor quality of care and less flexibility to manage urgent cases and priorities on a day to day basis. • Below 10,000, the work load is too	**Health Centres should be situated:** **1. Within 10km or 2hrs walk maximum for the catchment area population.** **2. In highly populated villages and on main roads.** **3. In socially acceptable places.** **4. Close to a water source, markets, temples, schools and administrative**

[1] Refer to Appendix 1 for the detailed Health Coverage Plan for Cambodia.
[2] Refer to section 2.3.

	light to justify the concentration of resources. Communes with less than 6,000 inhabitants should be grouped together with other communes to form a catchment area.	**buildings.** **5. Where staff are willing to be posted.** **6. Be accessible for supervision.**
Facility	***Population***	***Geographical accessibility***
Health Centre	• Some heavily populated communes will have to be divided into more than one catchment areas, served by separate health centres.	These criteria should be *flexibily applied* taking into account local constraints, as well as the presence of existing health facilites.
Referral Hospital **(includes provinici al hospitals)**	**Optimal size: 100, 000** **Range: 60, 000 to 200,000+** • Referral hospitals are expensive to run and can only be justified if fully utilized. A hospital becomes inefficient if the population covered is too small. • A district's administrative boundaries are not suitable for defining operational health districts, so several districts have been grouped together under a single referral hospital catchment area.	**1. In populated areas: within two hours drive.** **2. In rural areas: not more than three hours drive or boat journey.** • Accessibility should determine the location of referral hospitals, but existing hospitals should be utilized and developed, if possible. • Referral hospitals should not necessarily be situated in the middle of its operational districts. Instead, they should be located on a main road and in a major urban centre.

2.3. Criteria for low density provinces

In the low density provinces of Stung Treng, Rattanakiri, Mondul Kiri, Koh Kong, and Preah Vihar, some factors result in inadequate health service coverage:

- Cultural and language differences exist.
- Some communes and villages are scattered and isolated with small populations.
- Transport to district towns and between communes is difficult. Some communes get cut off from the district during the rainy season.
- There are problems in posting and retaining skilled staff.

2.3.1. Additional health centre resources

Some health centres in low density provinces could address access and utilisation problems by increasing their resources and functions. Some could have beds for inpatients (5 for general inpatients and 5 for TB inpatients in separate rooms). Radio communication should be installed at health centres and referral hospitals, so staff can call an ambulance and notify referral hospitals about referrals.

2.3.2. Health posts

Instead of increasing the number of health centres to improve coverage, health posts could be created. Health posts should be located in remote areas and function as the lowest level within the district health system and thus the first point of contact with the population in low density provinces:

Criteria for setting up a health post in low density provinces

1. ***Location:***

- *Population*. A post would be located in a remote or isolated commune or village consisting of 2000-3000 inhabitants ideally. For smaller populations, health posts would not be justifiable in terms of resources. Other options include outreach clinics and volunteer health workers.
- *Accessibility*. Distance from a commune or village to the nearest health centre is more than 15 Km (3 hours travel by walking, boat, or road) **with a geographical barrier** (river, mountains, or poor roads).

2. ***Supported by a health centre.***

Health posts will be attached to, supervised and managed by a defined health centre. For example a health centre covering 10,000 people may have several health posts in its catchment area, as in **Figure 2**. The supporting health centre must be fully functional, active, and able to support posts. The health centre's budget should include resources for supporting posts.

3. *Staff.*

A health post will be staffed in the long-term[3] by at least one secondary nurse or midwife, by upgrading and training existing commune clinic staff. The total number of staff should not be more that two.

4. *MPA.*

Health posts will provide basic preventive, promotive and curative care, as specified by the MPA and depending on the skill level of staff i.e. EPI; management of diarrhoea, ARI, malaria; anaemia; nutritional advice; deliveries, simple antenatal and postnatal care; supervision of simple TB/Leprosy treatment; referral for more complicated cases.

5. *Essential Drugs.*

Health posts will receive a quota of MPA drugs from the supporting health centres, according to activities reported on the health centre health information system (HIS).

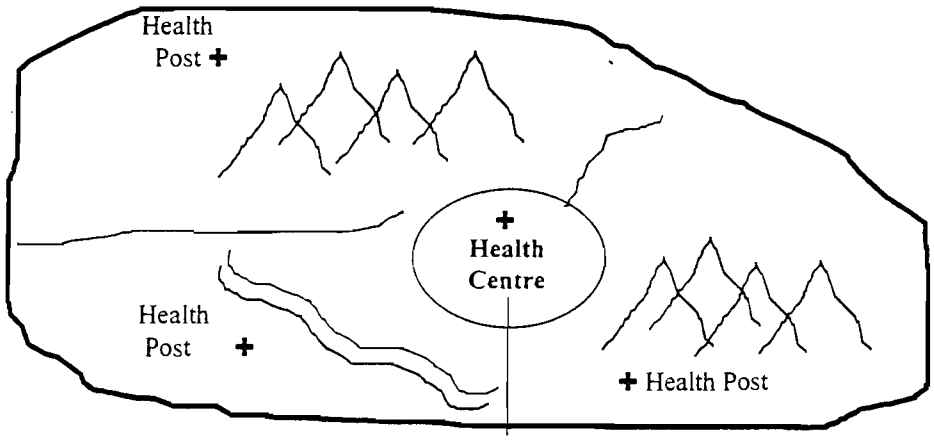
6. *Physical infrastructure.*

- Existing commune clinics can be used as health posts if the building is appropriate. If a commune clinic building doesn't not exist, staff can find other places to work such a staff person's house or pagoda. It is not necessary to construct a new building.

The criteria for setting up a health post should be strictly applied. Health posts are **not commune clinics**, but a means of delivering health care services to remote areas.

[3] In the short term, a primary midwife could be posted.

Figure 2: Division of a health centre's catchment area into health post sections.



2.3.3. *Other strategies*

Health posts are not the only option. Provincial and district health managers can use other strategies to improve access to health services in low density areas. Some strategies might include:

- ***Increasing outreach activities*** through mobile teams based at the health centres to support health post workers or volunteers with regular supervision visits.
- ***Volunteer health workers*** could be based in sparsely populated communes. For example, Rattanakiri has a trained health volunteer in some communes of 400 - 1000 people to carry out health education activities and basic curative care. Volunteer health workers, however, MUST be well trained, well supervised, and strongly supported by a functioning health centre and referral system.
- ***Including traditional medicine*** in planning health services by improving the co-ordination of work between traditional healers and health workers. For example, traditional healers could be trained in basic medical knowledge to serve their own communes. This would overcome language and cultural barriers.
- ***Provision of incentives*** for staff posted to remote and difficult areas. Incentives could be salary supplements, accommodation, training, and allowances for the cost of the posting and transportation.[4]

2.4. Phnom Penh Municipality

Modifications need to be made in the criteria for the coverage plan for the municipality. ***WHY?***

- No land is available for building new health centres; existing health centres need renovations.
- The private sector is a very important part of service provision in Phnom Penh.
- Many large hospital facilities exist in Phnom Penh, therefore a single referral hospital for a given district is not appropriate.
- National hospitals are not ready to function as referral hospitals within operational districts.

These problems illustrate the need for alternative services delivery strategies, especially involving the private sector. A review of the coverage plan by the Municipality and MoH led to revisions.

[4] Refer to Chapter 6.

2.4.1. Operational districts

The 4 operational districts in Phnom Penh are based on:

* Geographical accessibility of public health care services, taking into account the location of main roads, the origin of patients utilising the main health centres and location of municipal health centres.
* Population of 130.000 to 250,000/operational district.

Each operational district has two health centres or former district hospitals, except the western district which has only one. The operational districts will be made up as follows:

Centre:	Chamcar Mon and Prambil Makara districts
West:	Toul Kork, western part of Russey Keo, and most of Dangkor district
North:	Eastern part of Russey Keo and Daun Penh districts
South:	Mean Chey and south Dangkor districts

2.4.2. Health centres

Currently, there are three health centres in urban Phnom Penh with few or no beds, some former commune clinics, and four former district hospitals. The former district hospitals have 5 to 35 beds, and provide the MPA. Few new health centres will be established, but existing health centres expanded to cover a larger population (50,000). No new beds will be added to existing district hospitals or large urban health centres, but they will deliver the full MPA and have additional staff (more than 6).

The health centres would not be responsible for providing ***ALL*** health care services to the catchment population. For some curative services, people have established their own referral circuits in the private and public sector, depending on perceived quality, cost, and distance. The public sector provides important services not available in the private sector, such as preventive care, ante-natal care, immunisations, health education, and TB treatment.

The MoH will allocate public resources to the health centres according to current activity levels with regular monitoring and adaptation. If geographical gaps exist in the provision of services, MoH may consider contracting services to the private sector.[5]

2.4.3. Referral system and National Hospitals

The referral system between health centres and national hospitals needs to be reorganised because people have their own referral circuits among the services offered, and the national hospitals are not under the control of the Municipal health department, and do not form part of a closed referral system.

Some ***POSSIBLE SOLUTIONS*** to establish an effective referral system between national hospitals and health centres in the municipality are to:

- Reinforce the use of referral letters in health centres and national hospitals
- Improve feedback of information on referred patients from national hospitals to health centres.

[5] Refer to Chapter 8, section 8.9.

- Install telephone communication between health centres and national hospitals, so that health centre staff can call an ambulance for emergency cases.
- Ensure the health centre staff know what services are offered at each national hospital.
- Consider bypass fees[6] at national hospitals to deter self-referral.

2.4.4 *Coordination and support*

Co-ordination and support between national hospitals and the municipal health department can be improved.

1. The municipal health department can co-operate with the technical bureau of national hospitals to assist health centres on technical issues such as health information systems, early warning systems, in-service training, clinical meetings or seminars. The chief of the technical bureau could be the contact person for the municipal health department to co-ordinate such activities.

2. Representatives of the national hospital should be members of the DHTAT of their respective operational district.

3. National hospitals should play a role in the preventive activities of their respective operational district, particularly in case of an epidemic such as dengue or cholera.

4. Health centres should communicate with the national hospital in their operational district through the operational district office for clinical and technical issues. The operational district office should also notify the municipal health department in this case.

2.5. Annual targets[7] for the implementation of the health coverage plan

The PHD and the operational districts need to set targets to monitor annually progress in the implementation of the health coverage plan. See **Appendix 2** for: a national overview for the situation before the health coverage plan was implemented, the province estimates in 1997 and targets for the following years, summary sheets for the province and operational districts, and an example from Pursat province.

6 Refer to Chapter 5, section 5.4.
7 The number of health facilities to be setup in the future.

Chapter 3. Transition Period

3.1. Introduction

The MoH approved organizational and financial reforms to improve health services. The reforms take a long time to implement fully, therefore the health system is in a state of transition, changing from one system to another.

- ✓ At **national level,** the MoH is changing from implementing services directly to setting policy, monitoring, and overseeing implementation.
- ✓ At **provincial level,** the PHDs are putting into place new organizational structures to support the integration of health services. The vertical system of supervision, training, and monitoring is changing into an integrated system.
- ✓ At **district level,** staff are taking on new managerial responsibilities. Organizational structures and positions have changed to represent the increased responsibilities of staff in management and technical areas.
- ✓ At **health centre level,** staff are being trained in many technical programmes to better serve the people.

It takes time to reorganise the management of district health services according to the health coverage plan and the packages of activities (CPA & MPA). The MoH, in collaboration with the PHDs has set **targets** for the implementation of the health coverage plan.[1]
When making decisions during the transition, the national, provincial, and district managers must remember the overall goal of the reforms to improve the health services at the health centres and the referral hospitals.

3.2. Health facilities in transition

At the old commune clinics and former district hospitals, the responsibilities of the staff and level of activities will change.

3.2.1. Commune clinics

Before 1995, about 1500 commune clinics existed. Commune clinics will be phased out as health centres take responsibility for the commune clinic services. The MoH will continue to support commune clinics by providing commune kit drugs for basic care until the health centres are established.
If a planned health centre is not functioning yet, budget for commune clinic activities should come from the allocation for the proposed health centre activities. The district should divide the health centre's allocation between the commune clinics until the new health centre is opened.[2]

3.2.2. Former District Hospitals

Nation-wide 121 former district hospitals will become health centres. One of the main activities in former district hospitals was TB inpatient treatment. The MoH will allow some former district hospitals to become ***selected health centres with beds,*** allowing inpatients beds for emergency[3] and TB treatment.
Selected health centres with beds should:

- have less than 20 patient beds.

1 See Appendix 2.
2 See for further details of human resources and budget allocation for the commune clinics, Chapter 7.
3 Serious cases should be referred immediately to the referral hospital.

- have no more than 16 staff assigned, two of whom are medical doctors or medical assistants.

Maintaining beds for emergencies and TB inpatients requires additional staff and running costs, for example, to maintain the buildings and infection control. Therefore, provincial and district managers must evaluate the situation in each former district hospital to determine if the beds are really needed, based on the location, activity level, and existing infrastructure.

If the former district hospital already has good physical infrastructure and equipment, and at least one doctor or medical assistant is currently posted, some beds for former district hospitals can be maintained if ALL of the following criteria apply:

1. The referral hospital does not yet have the capacity to take responsibility for the tuberculosis and general inpatients of the former district hospital. In this case the former district hospital could keep beds until the referral hospital is upgraded.
2. The former district hospital has more than 40 new inpatients per month over one year.
3. The former district hospital is more than 40 kilometres or two hours travel from the referral hospital.

TB beds can only be maintained if a separate room is available for TB treatment.

The MoH realises the importance of tuberculosis treatment. However, the health coverage plan is based on a rational distribution of resources. Maintaining beds in health centres is costly and must be well justified. Provincial and district managers should take responsibility for evaluating the situation in former district hospitals and phasing out beds for treatment of general and TB patients in the majority of existing locations over a period of time following the above criteria.

The MoH Department of Planning and Health Information will regularly review the situation in each province case be case. District and provincial managers should request additional budget and TB drugs for facilities qualifying as selected health centres with beds.[4]

3.2.3. Location of health centres

Construction of new infrastructure for the operational districts will not begin immediately. The provincial and district authorities should develop a progressive implementation plan with criteria for selecting priority health centres for development. The choice of facilities to develop as a priority depends on:

- Level of need (presence or absence of functioning health facilities).
- Population density.
- Population's willingness to support the facility.
- Chance for success.
- Availability of existing and new resources.

3.2.4. Referral hospitals and MPA activities

At present referral hospitals are providing both primary and referral level activities. In the future, they should focus on delivering the CPA and not health centre level services (MPA). To reorganise the activities in the referral hospital, there are two options:

1. Health centres could be established near the referral hospital.

OR

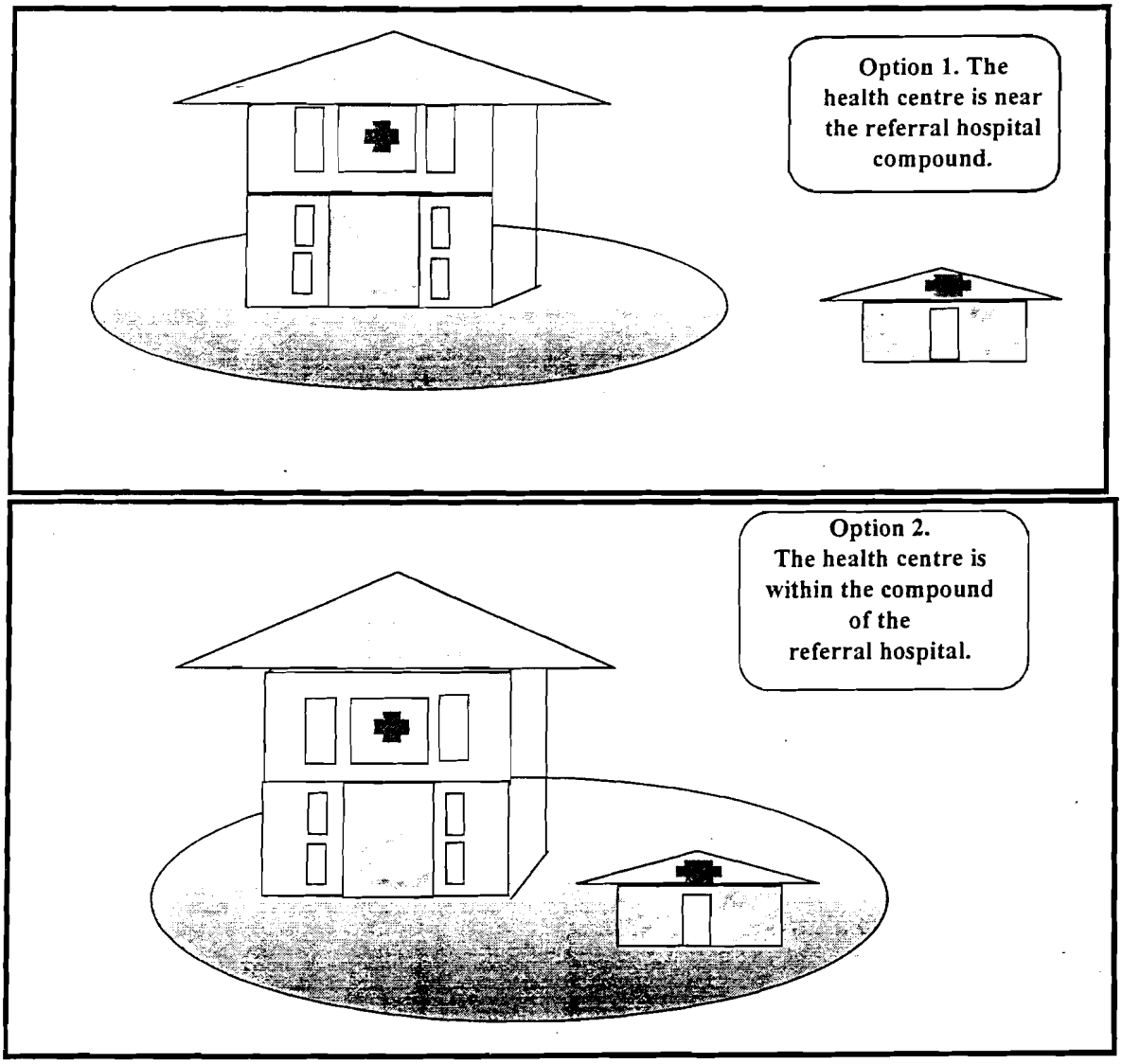
2. Health centres could be established within the compound of the referral hospital.

[4] See details about human resources, budget allocation and drugs for the former district hospitals in Chapters 6, 7, 12.

In either case, the operational district office should create a separate health centre service with a different drug supply and allocation of health centre staff supporting the delivery of MPA for the catchment area directly around the hospital. For this health centre:

- The Vice-Director of the operational district in charge of health centres is responsible for the management of this health centre's services, staff, budget, and resources. The health centre level services should be managed separately and in the same manner as the other health centres.
- The hospital should also develop a separate outpatients where **referral** cases can be seen and treated with resources related to CPA.
- The HIS report would be a separate health centre report.

Figure 3. The location of the health centre for the referral hospital.



3.2.5. Provincial hospitals

Provincial hospitals are under the administration and technical supervision of the PHD. In the Health Coverage Plan, provincial hospitals function as operational district referral hospitals and will also provide CPA services. Well functioning provincial hospitals may be upgraded to regional or provincial referral hospitals.

Chapter 4. The Organisation of the Operational District

4.1. Main elements for developing operational districts

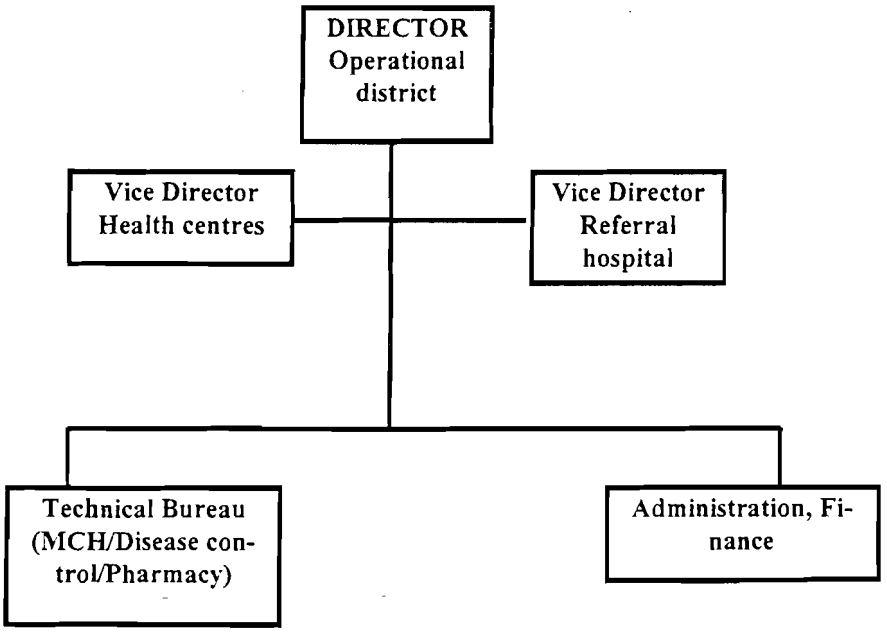
To put into place the operational district health system, the provincial and district management must:

1. **Establish a district health management structure, with clearly defined roles and job descriptions to ensure cohesive management.**
2. **Restructure the district health system to form 2 levels of care.**
3. **Establish an effective referral system.**
4. **Implement the health coverage plan to ensure coverage of the whole population**
5. **Enhance staff capacity to ensure the best use of human resources.**
6. **Manage the budget and other resources appropriately.**

4.2. District organisation

The district organogram (**Figure 3.1, 3.2**) supports the objectives of the district health system to manage resources, thereby improving services at the health centres and referral hospitals. The roles and functions of structures and individuals[1] working within the organogram must be clearly defined and consistent with the organisational diagram. Clarification of roles and lines of authority avoids confusion, duplication of efforts and conflict.

Figure 3.1: District Organogram.



Note: This is essentially the same as the previous organogram, except the Technical and Administration / Finance bureaus are under the vice directors and director of the operational district. This clarifies the organisational structure in agreement with the job descriptions.[2] More than one vice director in charge of health centres is possible, depending on the number of health centres.[3]

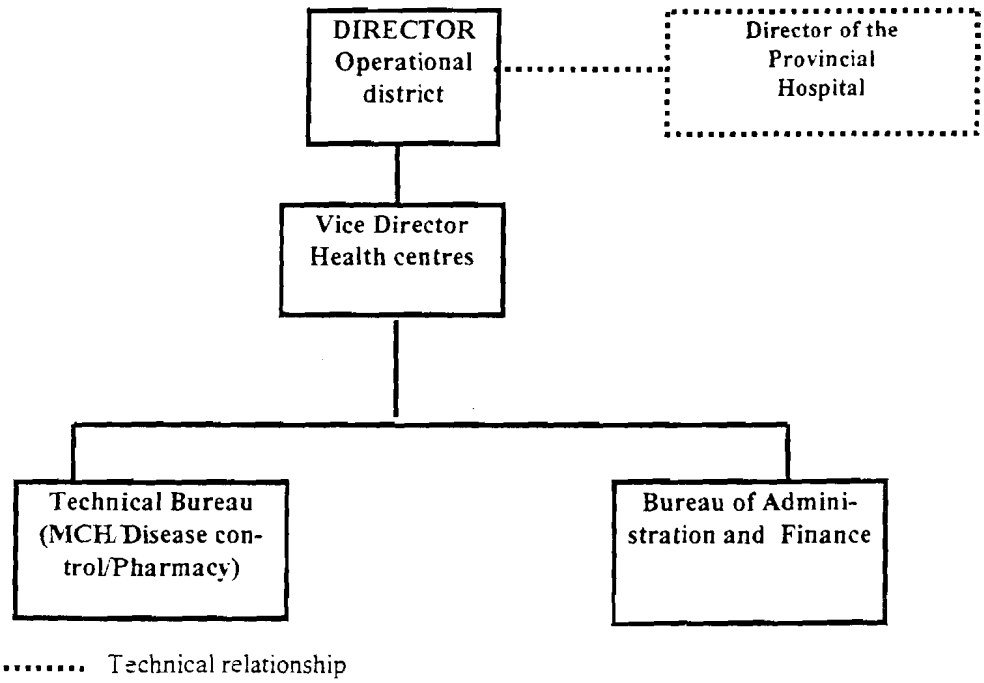
[1] The strength of an organisation relies on well trained staff themselves and not in the positions created for them.
[2] The detailed job descriptions can be found in "Job descriptions for the operational district staff" MoH 1997
[3] MoH Prakas 120 5/3/96: Organisation of the district health office.

Table 3: Activities to be co-ordinated by MCH and disease control

Maternal & Child Health	Disease control
MCH, EPI, Polio, Vit A distribution, Nutrition, CDD, ARI. Birth spacing, Safe Motherhood Initiative, Hygiene, Health education	Tuberculosis, Leprosy, STD/HIV/AIDS, Malaria, Dengue, Schistosomiasis, Eye care, Oral Health, Mental Health, Health Information System (in co-operation with administrative staff)

NOTE: The table does not represent separate units within the overall sections. For example, there should not be a separate person for EPI, CDD, ARI, or each vertical program.

Figure 3.2: The organogram for operational districts with the provincial hospital as the referral hospital[4]



Note: There is no operational district vice director in charge of the referral hospital in this case.

4.2.1. Technical Bureau

The purpose of the technical bureau is to work with the senior district management to monitor and support technical issues, including quality of care and infection control in the district referral hospital and health centres. Although the district technical bureau may not currently have that capacity, it is the role of the PHTAT to train the technical bureau staff, enabling the technical bureau to support the vice directors in monitoring technical areas in the whole operational district.
Some operational districts have a Chief of Technical Bureau. In other districts the Vice-Director in charge of the health centres is the Chief of Technical Bureau. It is the decision of the senior district management to determine the need for a Chief of Technical Bureau depending on staff skills and availability. If a Chief of Technical Bureau is posted, his /her responsibilities should not overlap with the tasks of the Vice-Directors, especially concerning supervision. Health centre staff and hospital staff need to have a clear chain of command.

[4] MoH Prakas 120 5/3/96: Organisation of the district health office.

The chief of the technical bureau should:[5]

- Report to the Vice-Director in-charge of health centres about any activities and technical input for the health centres, or to the Vice-Director in-charge of the referral hospital about hospital activities
- With the vice directors, be responsible for maintaining and upgrading the technical skills of staff, ensuring that limited resources are shared and duplication of efforts avoided.

Example: In Prey Chhor district of Kompong Cham, a supervision team has been set up for the health centres including Technical Bureau, Administration and Finance staff. The team leader is the Vice Director in charge of health centres.

No more than three officers per section in the technical bureau should be employed depending on the workload in the operational district, the number of health centres, and staff skills. **Table 3** gives an overview of the vertical programmes co-ordinated per section. It is crucial for integration that all staff are informed about each programme's activities within the section to prevent activities stopping in the absence of an individual.[6]

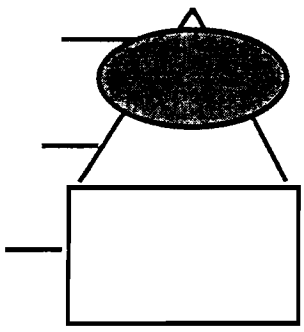
4.2.2. Administration and Finance Bureau

The head of the finance and administration should report to the vice-directors about any activities for the health centres and referral hospital. With the vice directors, he/she is responsible for ensuring that limited resources are shared and duplication of efforts avoided. Only hospitals with more than 120 beds should have a separate administrative office.

4.3. Management structures

The MoH proposes to organise the operational district into three main management structures: the Senior District Management, District Health Development Committee, and District Health Technical Advisory Team (**Figure 4**).

Figure 4: The three management structures at operational district level.



4.3.1. Senior District Management

WHO

- Director of operational district
- Vice-Directors (of health centre and referral hospital)

[5] Detailed job description can be found in the MoH document: Job descriptions of staff at operational health district level.
[6] Refer to Chapter 9.

ROLE and FUNCTIONS

Overall management and decision-making in the operational district health system, accountable to the Provincial Health Department. In co-operation with other district health staff, ensures effective implementation of comprehensive health care services on a day to day basis following MoH policy:

- Ensure and monitor implementation of health coverage plan.
- Ensure the delivery of quality health services through MPA for health centres and CPA for referral hospitals.
- Manage and allocate all district resources (capital, recurrent, equipment and human) to provide adequate and effective district health care services.
- Plan and monitor district health services.
- Ensure community involvement in the identification and assessment of health needs and problems.
- Monitor performance and supervise health centres.
- Co-ordinate staff deployment and training.
- Co-ordinate district health services with other ministries, non-government organisations and the private for profit sector.[7]

WHEN

Meets weekly and as necessary.

4.3.2. District Health Technical Advisory Team (DHTAT)

WHO

- Senior District Management
- At least one person from:
  Maternal & Child Health,
  Pharmacy,
  Disease Control,
  Administration / Personnel
  Finance
  Chief of Technical Bureau (if he/she is posted)

ROLE and FUNCTIONS

Technical advisory team to the Senior District Management allowing it to make better decisions in managing the delivery of health services by providing feedback on all operational district activities.

- Improve co-ordination of all resources in the delivery of health services.
- Ensure the integration of health services and therefore the effective and efficient use of resources in the delivery of health services
- Regularly review and monitor health care services (accessibility, utilisation, and quality).
- Prevent and control public health problems, including disease outbreaks.
- Regularly review and monitor resource management (financial, material and human).
- Plan, implement, monitor, evaluate and supervise district health programmes in an integrated manner.

WHEN

Meets at least once per month or when called upon by the Director.
Meets with all the health centre chiefs and referral hospital director once a month.

[7] Refer to Chapter 8, section 8.7.

4.3.3. District Health Development Committee (DHDev.C)

(**NOTE**: *If a development committee exists already, the District Health Development Committee may not be necessary. The Senior District Management can advise on the need for the DHDC and discuss with the members to determine the chairperson).*

WHO

The DHTAT and representatives from:

1. district authority from each administrative district within the operational district
2. women's association
3. rural development
4. education
5. community
6. each NGO working in the district
7. referral hospital
8. health centres

ROLE and FUNCTIONS

To ensure that district health services are developed appropriate to the needs of the population and provide the link between the district health services and the community:

- Inform public about health policies and developments in the health sector.
- Share annual district health plan and ensure conformity with total development of the district.
- Assist in disseminating health information to members of the public.
- Ensure that improvements in health services meet the needs of the population.
- Ensure community involvement in the identification and assessment of health needs and problems in the district.
- Discuss complaints from members of the public.
- Report on donor funded health projects.
- Solicit funds for health projects from NGOs

WHEN

Meets once every quarter.

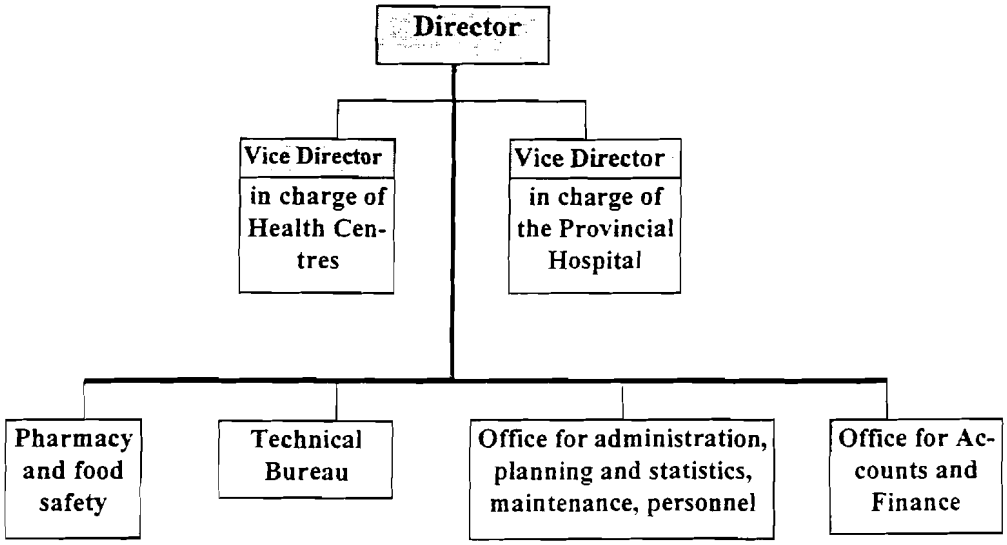
4.4. Provincial Health Department (PHD) organisation

The organisation of the PHD should support the strengthening of the district health services and ensure the delivery of good quality integrated health services to the people in the province (**Figures 5.1-5.2**). Provincial health department organisation consists of three main management structures:

* Senior Provincial Management
* Provincial Health Technical Advisory Team (**PHTAT**)
* Provincial Co-ordinating Committee (**PROCOCOM**)

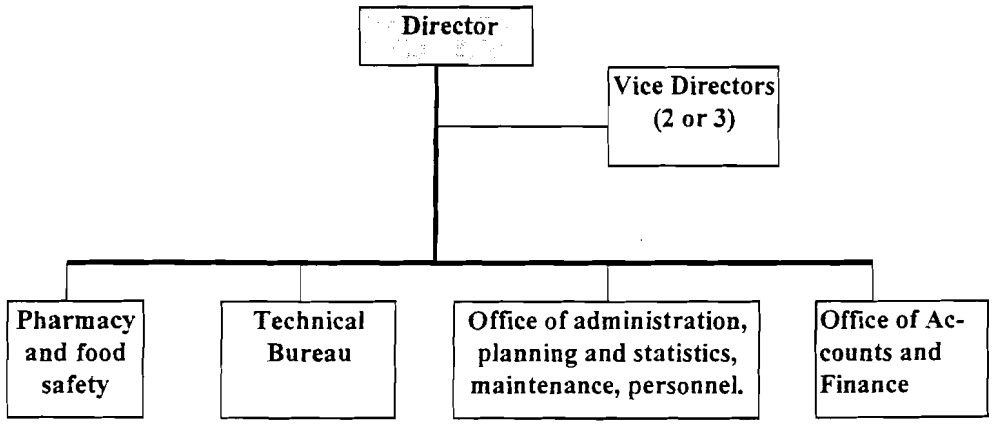
There are two standard PHD organisational diagrams.

Figure 5.1: PHD organisational diagram for a province with one operational district.



Note. In this case the Provincial Health Department is also the office for the operational district, and the Provincial Health Director is the Director of the operational district.[8]

Figure 5.2: PHD organisational diagram.



It is the responsibility of the Provincial Health Director to determine the responsibilities of the two vice-directors and their relationship to the technical bureau, pharmacy, and administration, and finance offices. Due to the workload of the provincial hospital director, it is recommended that he/she is not the vice-director of the PHD. However, the Provincial Hospital Director should be a member of the PHTAT. In larger provinces, there can be two vice-directors with no more than three vice-directors in total.

Components of the Technical bureau

MCH	Disease Control	Health Promotion
MCH/ EPI , Polio Birth Spacing Nutrition ARI/CDD/ Cholera	HIV/AIDS/STD Malaria, dengue fever, Schistosomiasis Tuberculosis/Leprosy	Hygiene/health education Oral Care Eye Care Mental Health

NOTE: These components should not exist as separate departments but as an integrated bureau.

8 Directive no. 4135 5/11/96: Implementation of the administrative structures in the operational district.

4.4.1. Senior Provincial Management

WHO

- Provincial Health Director
- Two vice-directors

ROLE and FUNCTIONS

Overall management and daily decision-making for the provincial hospital and operational districts. Accountable to the Director General of Health Services for implementing National Health Policy and programmes, within the province:

- Direct the PHTAT to develop the annual provincial health plan based on National Health Policy.
- Ensure the delivery of good quality health services through the development of operational districts in the province.
- Strengthen the Provincial (referral) hospital to support the Operational Districts.
- Manage and allocate all resources (human, budget, material, and drugs) to provide adequate and effective health services in the province.
- Collaborate with other sectors and co-ordinate NGOs and other donors.
- Collaborate with and regulate the private sector.

WHEN

Meets once a week and as necessary.

4.4.2. The Provincial Health Technical Advisory Team (PHTAT)

WHO

- The Senior Provincial Management
- The director of the provincial hospital
- Chief of the Technical Bureau (if posted)
- Chief of MCH
- Chief of Disease Control
- Chief of Hygiene and Health Education
- Chief of Pharmacy
- Chief of Administration/Personnel
- Chief of Accounting/Finance
- The Provincial Health Adviser (PHA)

ROLE and FUNTIONS

A technical advisory team enables the senior provincial management to make informed decisions in managing in the delivery of health services. The specific duties are to:

- Improve co-ordination of all resources in the delivery of health services.
- Ensure the integration of health services and therefore the effective use of resources in the delivery of health services.
- Plan, implement, monitor, evaluate, and supervise provincial health programmes in an integrated manner.
- Train health staff and the DHTAT.
- Review and discuss the HIS data and take appropriate action.
- Review and monitor regularly the health care services in the province.
- Review and monitor regularly personnel, financial, material, and drugs management.
- Prevent and control public health problems, including disease outbreaks.

- Ensure effective communication between provincial departments, operational districts and the Senior Provincial Management as a means to promote transparency and problem solving.

WHEN

1. Meets once/month and as necessary.
2. Meets with all the operational district directors at least once per month or when called upon by the Director.

4.4.3. *The Provincial Co-ordination Committee (PROCOCOM)*

WHO

- The PHTAT
- Representatives of NGOs working in health in the province
- Representative of the Provincial Department of Rural Development
- Directors of Operational Districts (optional)
- Representative from the Provincial Governor's office (optional)

ROLE and FUNCTIONS

To facilitate development of provincial health services in accordance with national policy through:

- Improved communication exchange and dialogue between government and non-governmental organisations active in the health sector.
- Improved monitoring and co-ordination of government and non-governmental activities and external resource inputs, to avoid duplication and to maximise impact of interventions.
- Mobilisation of additional resources.
- Promote greater transparency by dissemination of public information, such as financial records.

WHEN

Meets once per month.

Chapter 5. Strengthening Health Facilities in the Operational District

5.1. The health centre

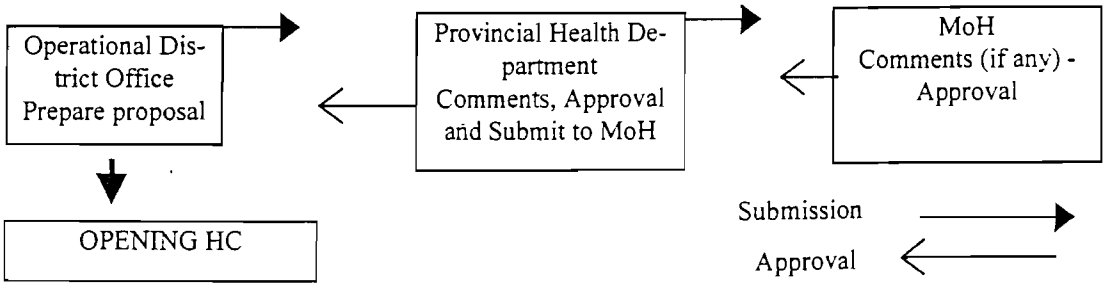
A. The proposal for opening a health centre

The operational district office ensures that any new health centres are in the provincial health coverage plan and prepares the proposal for official approval to open a health centre. The Operational District Director submits the proposal to the Provincial Health Director who forwards it to the MoH Planning unit (**Figure 6**). The proposal should include: (**see Appendix 4**)

1) **Name of the health centre and its operational district.**
2) **Proposed date of opening the health centre.**
3) **Catchment area of health centre: number of communes, villages and total population covered.**
4) **Description of the building. The building should be appropriate for MPA activities. The operational district health office must ensure the construction site can be used for a health centre building. The building should follow the standard design plan of the MoH. For an extension, the building can differ slightly from the standard design. For a new building, the proposal should specify the date of construction and completion, and source of funding.**
5) **Staff numbers and qualifications. There must be a sufficient number of staff with the appropriate qualifications posted to the health centre e.g. one secondary nurse and one secondary midwife (see Appendix 3 for recommended staff numbers). Each staff member should understand his/her responsibilities based on the MPA.**
6) **Staff training. Specify the number of MPA-trained staff, the type of training, when, it took place and how it was funded.**
   If the staff have not been trained, specify when MPA Module 1 training is planned. The staff must receive MPA Module one training following the MoH curriculum. Staff may need training using other MPA curriculum modules especially specific technical modules. This training can be done before the health centre opens or as a part of improving health centre services. The District Health Office can ask for support for organising training from the Provincial Health Department, the continuing education co-ordinators, the MoH (Human Resource Department) or NGOs working in the province.
7) **Equipment & drugs. Indicate clearly what equipment exists at the health centre, and when the MPA drug kit should be delivered.**
8) **If health centres are supported by NGOs, state the name of the organisation, type of assistance and length of time the NGO will provide support.**

The proposal should be submitted to the MoH Department of Planning and Health Information at least 8 weeks before the date of opening. This provides the MoH enough time to plan for the distribution of drugs and supplies. The most appropriate time to open the health centre is the beginning of each quarter in co-ordination with the three monthly drug distribution.

Figure 6 : Proposal for opening a health centre.



B. Steps in setting up the health centre

The Vice-Director of health centres can start setting up the health centre before receiving official permission to open. The following activities should be done before or soon after receiving permission to open a health centre.

1. **Establishment of a health centre team.**
2. **Staff training.**
3. **Gathering information on the population in the catchment area.**
4. **Calculation of target populations and indicators.**
5. **Setting clear objectives.**
6. **Analysis of present level of activities.**
7. **Establishment of a weekly or monthly plan.**
8. **Streamlining and reorganisation of work.**
9. **Community participation.**

Other essential health centre activities discussed in other chapters include:

10. **Health Information System (Chapter 11)**
11. **Organised referral system (section 5.4)**
12. **Community representation and participation (section 5.2.8)**
13. **Supervision by the operational district team (section 5.5.)**
14. **Financing system set up with all of its components in pilot areas (Chapter 8)**

Other activities include monitoring construction or renovation of facilities, and evaluating needs for medical and non-medical equipment. Ideally, new health centres should only open when everything is ready. In this way, the population will benefit in full from the new health system.

5.1.1. Establishment of a health center team (HCT)

A health centre team is made up of the staff working at the health centre, under the authority of the health centre chief. The main role of the HCT is to ensure good quality MPA services to the population. The **HCT** should:

a) **Work with the health centre management committee to discuss and find solutions to problems of running the health centre.**
b) **Review and act upon HIS data**
c) **Plan the next months work and divide the work**
d) **Discuss, monitor, evaluate activities and results on a regular basis.**
e) **Organise a 24 hour service to assist patients coming after hours.**
f) **Maintain the referral system to the hospital**
g) **Encourage the health centre staff to work together as a team to deliver MPA services.**
h) **Meet at least once per month.***
i) **Ensure all staff understand their job descriptions[1] and responsibilities**

*Minutes of HCT meetings should be kept and a copy given to the vice-director in charge of the health centres. The vice director responsible for health centres and the district supervision team are responsible for supporting the health centre teams.

[1] Refer to the MPA manual.

5.1.2. Staff training[2]

In order for health centre staff to deliver good quality MPA services, they need to have the appropriate theoretical and practical training. All health centre staff will be trained in health centre management (module one of the MPA curriculum). Subsequent modules will focus on technical training.

5.1.3. Gathering information about the population in the catchment area

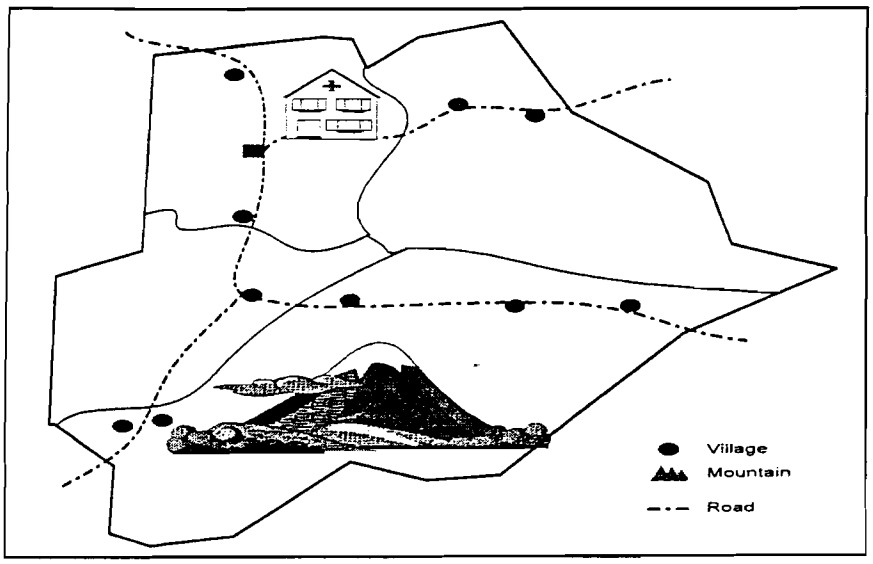
For a health centre to provide effective and equal coverage, the health centre staff should collect information[3] about its catchment area to provide information:

1) **Detailed geography** of the area needed for planning outreach activities, see **Figure** 7.
2) **Demographics** of the catchment area's population size, age-sex structure, ethnic groups and family structure.
3) **High risk groups.** Health centre staff should identify vulnerable groups and those with special needs who may be at risk. For example:

- ✓ *pregnant women, infants and young children*
- ✓ *certain workers engaged in jobs that expose them to injury, poisoning or disease*
- ✓ *elderly who suffer from chronic disease*
- ✓ *contacts of people with infectious diseases such TB*
- ✓ *very poor families and people who live far from the health facilities*
- ✓ *certain ethnic groups due to cultural beliefs or language barriers*
- ✓ *people living in areas prone to flooding, or other climatic change.*
- ✓ *people with a mental illness*

When collecting this information, the health centre staff can use the opportunity to tell the people about the activities in the health centre. Afterward, the health team should draw a map **(Figure** 7) identifying roads, rivers, main landmarks, important villages, and communities at high risk.

Figure 7: Map of the health centre catchment area (village, road, mountain)



[2] Refer to Chapter 6.

[3] This could include a household survey and/or consultation with village or commune chiefs and NGOs.

5.1.4. Calculating target populations and indicators

The health centre team should develop a yearly plan[4], with service objectives. The plan should be in line with health service objectives at the national, provincial and district levels. The objectives should also be realistic, taking into account what the health centre staff can do.
To set service objectives, the staff must calculate **target populations** for specific services. To conduct immunisations, for example, the staff must know the number of children under one year.
In Cambodia, the MoH uses the following estimates to calculate target populations for specific activities:

Table 4: Annual target population estimates

Target population	Estimated %	Estimate for a health centre covering 10,000
Number of children < 1 year	4 % of population	400
Number of children < 5 years	17 % of population	1800
Number of live births (Crude Birth Rate)[5]	4.5% of population	450
Number of problem deliveries	15 % of live births	68
Number of women 15-44 years old	20 % of population	2000
Number of women for birth spacing	Estimated 12 % of population	1200
Number of new expected TB cases	2-4 in 1000 population	20-40

Progress towards an objective needs to be monitored by an **indicator**. An indicator can be a marker of health status, staff activity or resource availability. Some important indicators are:

- BCG coverage
- DPT3 coverage
- % of births attended by a trained health worker
- % of women using a method of birth spacing

To calculate the indicator, information is needed about ***the population, the target group, and the health centre staff activity***. For example, if health centre staff provided 200 BCG vaccinations in one health centre's catchment area of 10,000 people in 1996, coverage can be calculated as:

Activity	# of vaccinations given in 1996	total population in catchment area	target population (children under 1)	health centre's coverage
BCG vaccinations	200	10,000	10,000 x .04 = 400	200/400 = 50%

The BCG coverage in the health centre is 50%. This is an indicator of the staff activity level.

5.1.5. Setting clear objectives

The health centre team can determine clear and measurable objectives for each service using indicators. For any objective it must be clear:

who is the target population ....what is the activity ... who will do the activity... when... where ...

☞ **Problem 1. The provincial EPI programme target for BCG coverage is 85%, and the health centre's coverage is 50% (see example above).**

[4] Making use of the planning cycle (Figure 13, Chapter 10)

[5] Crude Birth Rate is a proxy for the expected number of deliveries.

Objective: In 1997, three health centre staff will conduct eight outreach sessions per month going to every village in the catchment area to increase BCG coverage from 50% to 70%, an increase from 200 to 280 children.

TARGET population:	children under one year
INDICATOR:	BCG coverage
WHO:	health staff conducting outreach
WHA:	village outreach sessions
WHEN:	every month to the end of 1997
WHERE:	every village in the catchment area

☞ **Problem 2. In 1996, 120 women were using birth spacing services in the health centre's catchment area. Many women want the service, and the provincial target for 1997 is 12%.**

Activity	# of women using Birth spacing in 1996	total population in catchment area	target population for birth spacing	health centre's coverage
Birth spacing	120	10,000	10,000 x 0.12 = 1200	120/1200 = 10%

Objective: In 1997,one health centre staff will go with the EPI team, during EPI outreach to villages eight times per month, to provide birth spacing pills and education about all methods to women in the village in order to increase birth spacing coverage from 10% to 12%, an increase from 120 to 144 women.

TARGET population:	women wanting birth spacing
INDICATOR:	% of women in target population using birth spacing
WHO:	health staff conducting EPI outreach
WHAT:	birth spacing consultations
WHEN	every month to the end of 1997
WHERE:	every village in the catchment area

☞ **Problem 3. In 1996, the number of women receiving initial antenatal care was 100. The provincial target in 1997 for initial antenatal care is 40% of pregnant women.**

Activity	# of women provided one antenatal visit in 1996	total population in catchment area	target population	health centre's coverage
1st antenatal visit	100	10,000	10,000 x 0.045= 450	100/450 = 22%

Objective: In 1997, during outreach to villages eight times per month, the health workers will tell every pregnant women who brings a child to the vaccination session about the importance of antenatal care at the health centre, to increase coverage from 22% to 40%, or increase from 100 to 180 pregnant women.

TARGET population:	pregnant women (who bring children to EPI session)
INDICATOR:	antenatal care coverage
WHO:	health staff conducting EPI outreach
WHAT:	education about the importance of antenatal care
WHEN:	every month to the end of 1997
WHERE:	every village in the catchment area

Objectives should not ONLY measure service indicators and quantitative objectives. The health staff should develop objectives for other important activities and quality of service.

☞ **Problem 4. No health centre management committee yet exists.**

Objective: The health centre team will organise a health centre management committee by September 1997, with representatives of the community.

TARGET population:	people in the catchment area
INDICATOR:	a functioning management committee
WHO:	health staff
WHAT:	health centre management committee
WHEN:	before September 1997
WHERE:	for the people in the catchment area

☞ **Problem 5. The health centre management committee exists on paper but does not meet.**

Objective: The health centre chief will chair a health centre management meeting every month in the health centre in 1997 to find out if the people are happy with the health centre's services.

TARGET population:	the people in the health centre's catchment area
INDICATOR:	Number of health centre management meetings
WHO:	health centre chief
WHAT:	health centre management meetings
WHEN:	every month to the end of 1997
WHERE:	in the health centre

Other objectives could include targets for improving:

* *health facilities*
* *training personnel*
* *organisation of the health centre*
* *using health information system*
* *managerial arrangements, structure, roles and responsibilities*

Progress on all the health centre objectives should be monitored at regular intervals to ensure that the targets will be met, and to take action on any problems identified. At the end of the year, an evaluation of the objectives should be done to see if they have been met.

☞ **Problem 6. The quality of care in the curative consultation needs to be evaluated.**

The quality of care in the curative consultation can be evaluated through supervision and upon examination of the health care registers. Quality can be measured by using the MPA treatment guidelines:

Objective: The percentage of children under five receiving oral rehydration salts for diarrhoea in the health centre consultation is 100%, by the end of 1997.

Objective: The number of ARI cases treated according to the MoH protocol in the health centre consultation is 80% by the end of 1997.

If the quality of care and services are good, and patients are treated politely, the population will be confident in the health centre's services. If people are confident, more patients will come to the health centre. Quality of service can be measured by:

- Number of patients receiving an adequate physical examination (blood pressure, temperature, auscultation and palpation; child's weight).
- Number of patients receiving an explanation on the use of any prescribed medicines.
- Average waiting time.

The staff can also compare the general activity level in the health centre with other places by using the number of new consultations/inhabitant per year. This is calculated by dividing the number of new cases in the OPD in one year by the total catchment population.
For a health centre with a catchment area of 10,000 people:

Activity	# of new cases in 1994	total population in catchment area	target population	New cases/ inhabitant/year
New cases OPD consultations	3,500	10,000	10,000	3,500/10,000 = 0.35

For this health centre, the number of new cases per inhabitant per year was approximately 0.35, an indicator of health centre utilisation. This figure, 0.35, is low and means that few people are using the health centre when they are sick. The WHO international standard is 1.0 for urban areas and 0.6 for rural areas. Samrong health centre in Sat Nikhum district of Siem Reap has .76 new consultations per inhabitant per year in 1997.

5.1.6. Analysis of the present level of activities

An analysis of the present level of activities compares the current level of activities and the number of staff. It helps the staff divide up the work by analysing the time needed for each activity.
*The **first step** is completing the previous year's performance chart (tableau de bord).* Using the monthly health information system report, fill out the performance chart (tableau de bord) for the past year and calculate the totals for the year.

The *second step is an analysis of the workload.* To analyse the workload, calculate the amount of time the health care staff spend doing outreach and specific activities at the health centre. To calculate the work load, **list the health centre's present activities:**

- Curative consultations (Including examination of the patient, diagnosis, administration of treatment and registering of information)
- Antenatal and birth spacing consultations
- Deliveries
- Outreach including vaccination sessions
- Sterilisation and maintenance of the health centre and equipment
- Administration

For each activity, calculate the number of times the health staff do the activity on average in one month.

Table 5: Calculating health centre staff monthly workload.

ACTIVITY	Number of times per month	Number of minutes for the activity	Total minutes for the activity in one month	Total hours for the activity in one month
1. Curative consultation	800	10	8000	134.0
2. Antenatal consultation	13	10	130	2.2
3. Birth spacing	20	10	200	3.3
4. Deliveries	10	300	3000	50.0
5. Outreach including vaccination sessions	5	480	2400	40.0
6. Cleaning and maintenance	26	60	1560	26.0
7. Sterilisation	26	60	1560	26.0
8. Writing HIS report	1	120	120	2.0
Total number of working hours per month in the health centre				**283.5**

If the total numbers of hours worked are 283.5 per month then the daily workload is:

283.5 ÷ 26 days open = **10.9 hours**

If the total number of staff is 3, the current number of working hours per day per person is:

10.9 hours ÷ 3 people = **3.6 hours**

The calculation of the work load allows us to the see if the work is divided equally among the different staff. For new health centres, the staff should estimate the expected workload. (They could use information from another health centres in the same district.)

5.1.7. The establishment of a weekly or monthly plan[6]

The health centre chief is responsible for developing a work schedule with the team. The work schedule should be weekly or monthly. It should include consultation hours and outreach activities. It should clearly state who works at what time and where.

For example, in Kompong Chhnang, the staff divide themselves into 3 teams of 2 people each:

Team 1	Team 2	Team 3
Staff A	Staff C	Staff E
Staff B	Staff D	Staff F

Each team is then assigned to work on a morning, afternoon, or evening shift.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday*
Morning	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1or 2or 3
After-	1	2	3	1	2	3	1or 2or 3
Evening	1	2	3	1	2	3	1or 2or 3

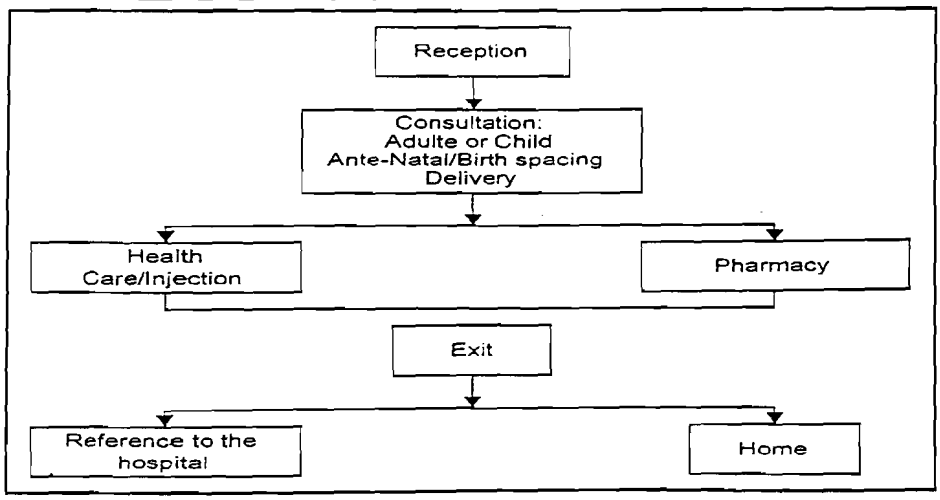
* teams should rotate to provide cover.

This is one way to divide up the work evenly. Each health centre will have to develop its own system depending on the number of staff, staff housing, skills, etc. To provide adequate maternal care cover, a midwife will need to be available at all times.

5.1.8. Streamlining and reorganization of work

The analysis of the health centre's activities and general functioning should detect the running problems and bottlenecks and allow some streamlining. For example:

Figure 8: Patient flow in the health centre



6 Refer to Chapter 10.

- **The patients' movement through the health centre.**

The patients in the health centre do not want to wait too long. The staff should organise the patients' movement through the health centre to limit the waiting period **(Figure 8).** The analysis should include a calculation of the average waiting time for patients. The reception area is the first point of contact in this circuit. It should serve as an arrival and orientation office. The receptionist tells the patient where to go, documents patient details, and settles any payment.

- **The curative consultation.**

The curative consultation is the basic activity in a health centre. It attracts people. However, the curative consultations are sometimes badly organised with too many steps before seeing the nurse, too little time for patient examination, and little privacy. A good curative consultation is:

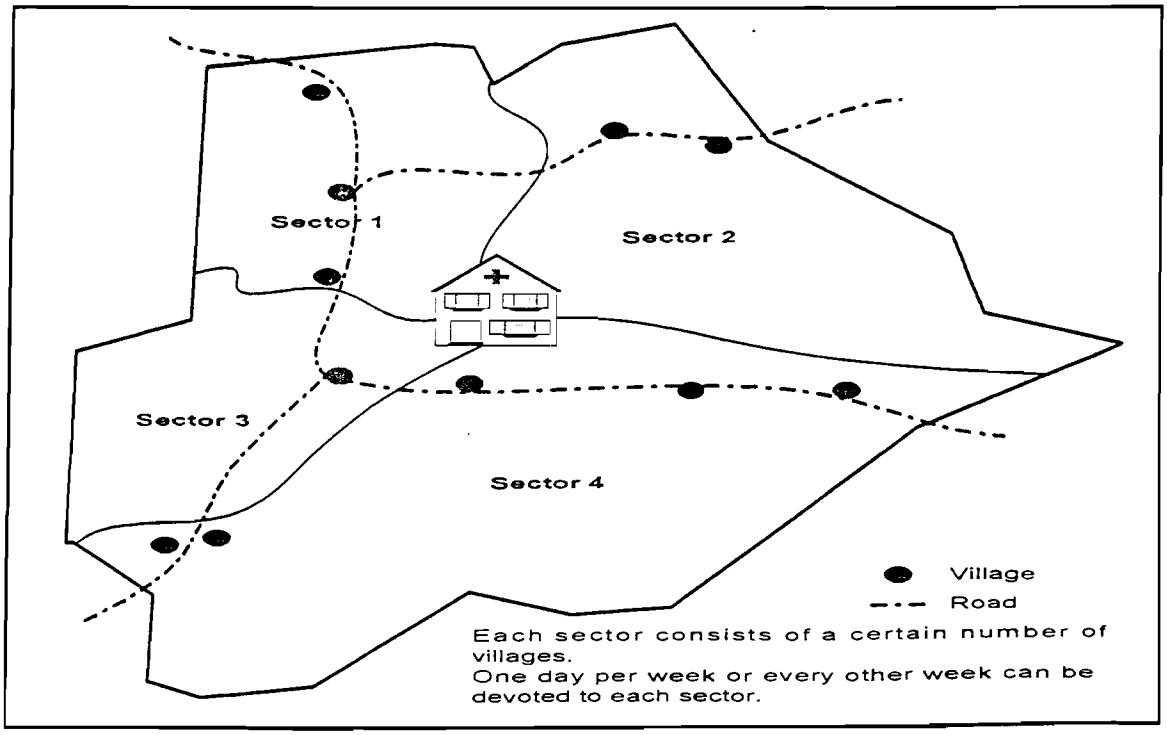
- in a well-lighted room with a door.
- confidential - two curative consultations should not be carried out in the same area.
- done by a trained person.
- when patients receive clear explanations (diagnosis, causes, prevention and treatment instructions, especially about how to use drugs) .

- **The organisation of services[7] at the health centre.**

The health centre's working hours should be determined in accordance with the needs of the community. The whole range of services should be available at all times, so that people do not have to come back to the health centre for different services on different days.

- **The outreach activity sessions.**

Figure 9: Sectors for the outreach activities



Provision of services outside the health centre is a key responsibility. A variety of services should be provided during the outreach sessions:

[7] Refer to Chapter 9. the integration of services

- EPI and Vitamin A
- antenatal, postnatal care, and birth spacing
- basic curative care (for simple cases of e.g. diarrhoea, ARI, worms, eye and ear infections)
- health education
- follow-up of patients with chronic or communicable diseases

Staff can also use this time to inform the community about services available at the health centre. The schedule for outreach activities should be established by the HCT and dividing the catchment area into sectors (**Figure 9**).

5.1.9. Community participation[8]

A health centre is an integral part of the community it serves, therefore community involvement in the functioning of a health centre is essential for sustainability. Community participation increases activity at the health centre, increases the resources available for running the health centre, improves the quality of services and facilitates the delivery of primary health care messages.
Health centres are important to the long term health status of the population and its overall development. They should link closely with other social sectors to work successfully within the community. This link should be formalised by setting up a ***Health Centre Management Committee (HCMC).***

NOTE: if a well functioning commune development committees or other such groups exists, these should be used instead of setting up a new committee.

WHO

- Two members of the health centre team. One should be the head of the health centre.
- Community representatives elected by the population. These should not be in the minority and can include monks, or other representative groups. Women should make up at least 50% of the representatives.
- Representative of the commune authority (optional)
- Representatives from Education, Agriculture, Women's, Association, Rural development etc.
- NGO's.

ROLE and FUNCTIONS

To participate in management and development of health centre services and to provide the link between the health service and the community:

1. Mobilise the population and other sectors for a common cause:
   - STD/AIDS prevention: small group discussions with parents, youth etc.
   - Special campaigns for national immunisation days or other EPI activities by recruiting volunteers, obtaining the support of the village chiefs.
   - Campaigns for the control of disease outbreaks such as cholera-hygiene education at schools.
2. Participate in decision making:
   - Organising transport for referred patients.
   - Introduction and management of user fees[9]
   - Management of the health centre budget.
   - Maintaining health centre buildings.

[8] UNICEF and the MoH are developing practical guidelines for implementing community participation.
[9] Refer to Chapter 8, section 8.3.2.

3. Information exchange to inform the community about services available at the health centre and:
   - Health problems in the community.
   - Health centre activities.
   - Collection and utilisation of user fees.
   - Staff availability.

4. Obtain feedback from the health centre users and find solutions to improve the services and give people a formal way to tell the health workers if they like or dislike the services at the health centre.

It is important that communication between the health centre and the community is organised in two directions.

For example, in Samrong health centre in Sat Nikhum district of Siem Reap, the staff have organised a health centre management team and a feedback committee.

- The **health centre management committee** has representatives of the population that are involved in decision making for issues related to the community. It has seven members and meets once a month.
- The **feedback committee** is composed of the HCMC and two representatives of each village in the catchment area. It provides written results of the health centre's activities and dates of outreach to every village to be posted. It ensures that the people can provide feedback from the villages about the outreach activities to the health centre personnel. It meets once every two months.

5.2. Referral hospital organization

The organisation of the referral hospital should strengthen the district health system by:

1. Setting up a clear management structure,
2. Having clearly defined roles and functions for staff,
3. Effectively delegating management responsibilities.

The hospital director and vice director need to provide overall leadership to the hospital and delegate responsibilities to other senior hospital staff, so as not to become overloaded. In particular, delegation should be as follows:

- **Chief of Nursing** has responsibility for managing the nursing and midwifery services in the hospital.
- **Chief of Medical Services** has responsibility for managing the doctors and medical assistants and technical inputs to patient care through ward chiefs.
- **Chief of Laboratory Services** has responsibility for managing all laboratory services and staff in the hospital.
- **Chief of Pharmacy** has responsibility for the management of hospital pharmacy services and staff.

5.2.1. The Hospital Management Committee (HMC)

WHO

- The Director of hospital
- Vice Director of hospital
- Chief of Medical services
- Chief of Nursing services
- Chief of Pharmacy
- Chief of Administration/Finance and personnel ,

ROLE and FUNCTIONS

Under the leadership of the Hospital Director it should work as a team to solve problems and make decisions to improve hospital management by:

- Ensuring:
  - * implementation of good quality CPA services in the hospital
  - * maintenance of equipment, vehicles and infrastructure
  - * regular review of HIS
- Managing:
  - * hospital resources: personnel, drugs, equipment and supplies, vehicles, budget, foods for patients.
  - * health financing system ensuring community participation.

WHEN

Meets at least once per month and when called upon by the Director of the Hospital.

5.2.2. *The Technical Team*[10] *(only for hospitals with more than 120 beds)*

Under the leadership of a senior doctor, the technical team should work to improve the quality of hospital services.

WHO

- Chief of Medical services
- Chief Nurse
- Chief Midwife
- Representative of doctors, medical assistants, ward chiefs
- NGO staff working in the hospital

ROLE and FUNCTIONS

To monitor and improve the quality of health care (medical and nursing) provided to the patients by:

- Working closely with the Hospital Management Committee.
- Ensuring that National protocols are respected, including infection control measures.
- Monitoring the appropriateness of referrals and give feed-back to health centres.
- Following-up the management of severe patients.
- Training and supervision of health staff in hospital and health centres.
- Use of HIS information

WHEN

It should meet twice per month and when needed for an audit,[11] or a detailed discussion of special cases e.g. a maternal death.

5.2.3. *Other meetings*

The Director of the hospital should ensure that other technical meetings take place:

[10] For hospitals with less than 120 beds, the HMC should undertake this function.

[11] Audit is a thorough investigation of how severe cases or hospital deaths were managed with the staff involved. The objective is to teach better case management, not to blame people. It also serves to check that protocols are being followed e.g. for the management of malaria case. Regular audits can have been shown to improve patient management and reduce hospital deaths.

- **Morning briefing meeting.** Every morning the doctor or medical assistant and night nurses on duty service brief the Hospital Director and the Vice Director or other senior day staff on the current general situation of the hospital and the severe cases.
- **Ward meetings.** Organised by each ward chief with all the ward staff to discuss ward management issues, new patients, and the quality of care. These should be daily for running of the ward, and weekly for training and technical issues.
- **Nurse, midwives meeting.** Organised by the chief nurse or midwife to train nurses and midwives on the main topics, for example: nursing care, infection control, specialised training. This meeting could be held once per month or when called upon by the chief nurse or midwife.
- **Monthly general staff meeting.** With all hospital staff, the vice-director in-charge of the referral hospital chairs this meeting for information exchange.
- **In-service training.** Medical staffs present and discuss technical issues, case presentations etc. weekly or twice monthly.

The hospital director, vice director, or senior managers should also join the **monthly meeting with all health centre chiefs** held by the vice-director in charge of health centres to discuss referrals and the referral system.

5.2.4. Staffing and work schedules

The deployment of staff in each service should be done by the Hospital Director with the assistance of the HMC, taking into consideration:

- The expected workload, competency and motivation.[12]
- The job descriptions[13] for the staff in each service. Each staff member should understand his/her responsibilities.

Hospital staff and services should be available 24 hours, everyday, including weekends and holidays. Nursing and monitoring of patients must be provided by the personnel on duty. The hospital management and chief of each ward should make an duty roster, revise it weekly or monthly. The roster should state who is on duty, where and when. The roster should be posted clearly for all staff.

5.2.5. Quality control

The director of the referral hospital should establish a formal system for improving and maintaining the quality of services and included in the overall monitoring of services. The system should include:

- Review of patient and relative complaints and suggestions for improvement. For example, in the national MCH hospital, user of the hospital can write comments about the services and put them in a box in the entrance hall. All complaints are confidential. Alternatively, the staff could use a simple questionnaire to ask health facility users to comment about the care received and how the service could be improved.
- Audit of serious cases or deaths in the hospital

12 See Appendix 3 for recommended staff numbers.

13 See the MoH document Job descriptions for the operational district staff, 1997.

5.3. Referral System

A referral system is *a two-way communication system of patients and information between health centres and referral hospital.* It is how patients and information are sent to another level of health care within the district system.
Patients must be sent to a referral hospital for further diagnostic investigation, complicated treatment, or emergency cases. After patients are treated at the referral hospital, they should return to the health centres for follow-up and continuing treatment, if necessary. An effective referral network requires:

A. Clear roles for health centres in providing MPA, and referral hospitals and provincial hospitals in providing the CPA. These roles should complement with no gaps and overlap.
B. The referral hospital staff can identify emergencies and serious cases that are self-referrals.
C. An effective link between health centres and referral hospitals through supervision: referral feed-back letters[14] should be given to the health centre staff so they can follow-up. If patients are referred incorrectly or late, the referral hospital staff should give feedback to the health centre staff.
D. Staff to keep accurate patient records at health centres and referral hospitals for monitoring and planning.
E. Staff to use standard referral forms at the health centres.
F. The community understands how the referral system works and why it is necessary. The community should know that an effective system will increase access to quality health care. Quality of care is essential in gaining the people's confidence to use the health system.
G. Preventing self-referral for non-emergency cases by explaining to people why they should go to the health centre first for a referral letter. And in the case of a financing scheme operating at the hospital:

1. No user fee, or charging a lower fee at the hospital for patients referral consultation.
2. Implementing a **bypass fee** for non-emergency cases that are self-referred to the hospital for treatment.
3. Allowing patients with a referral letter to be seen before non-serious patients self-referred.

Patients who come to the hospital with or without a referral letter should not be refused treatment whatever their condition. If patients come without a referral letter, hospital staffs need to explain the referral process to the patient and family.

5.3.1 How to organize referral network at the referral hospital

A. The hospital should organise an outpatient department for referral consultations. This department should be managed by staff with appropriate skills for referral cases e.g. experienced midwife, surgeon etc.
B. The hospital should organise an ambulance, equipped with basic materials and drugs for emergency treatment. Fuel and the driver should be ready to respond to an emergency.
C. A radio communication network between Referral hospitals and health centres is ideal so that health centres staff can call for an ambulance when needed. Staff should work with the local authorities to use any existing radio network.

[14] See Appendix 5 for the standard format.

D. The staff should register and keep a record of each referred case. This record can be used to provide feedback to health centre staff about a patient's condition and follow-up.
E. The staff should think of ways to deter self-referral.

5.3.2 *How to organize a referral system at the health center*

a) Staff should have the ability to assess the patient's condition as to whether or not referral is necessary.
b) Staff should refer to the hospital in the operational district.
c) In emergency cases, staff should be able to prepare patients by providing urgent treatment and organise transport.
d) Staff should write a standard referral letter in all cases. The information should be clear and include the suspected diagnosis and any medication given.
e) Radio communication should be set up with referral hospitals, if possible.

5.4. Supervision

Some general principles for supervision include:

A. **The main goal of supervision is to improve service delivery by assisting the staff to analyse and solve problems.** Supervision includes guiding, teaching, and helping to motivate staff.
B. **Supervision is a monitoring tool.** Supervisors should refer to annual goals and objectives to monitor progress.
C. **The team approach to supervision, information sharing and problem solving is very important.** A team of supervisors who work together can help each other identify and solve problems. They are also using resources more efficiently. Supervising the health staff as a team demonstrates integration and co-operation.
D. **Supervision requires discussion and follow-up.** Supervision visits should include a summary meeting, plans of action, and follow up. Each facility should have a separate file to keep supervision reports used to follow up during every visit.
E. **The lines of supervision between different levels must be respected.** Operational district staff are responsible for referral hospital and health centres activities, therefore, national and provincial staff should always be accompanied by the district supervisor. Likewise in the provincial hospital, for example, provincial supervisors should be accompanied by the hospital staff responsible for daily monitoring.
F. **Supervision and training go hand in hand.** Supervisors are key in identifying formal and non-formal training needs. In addition, supervisors should be involved in training of their staff. For example, a training in the treatment of non-severe malaria should include the health centre staff, vice-director in charge of health centres, and staff in the disease control department.
G. **All health facilities require regular supervision.** All health centres, commune clinics, and referral hospitals need supervision and support. The provincial health technical advisory team is responsible for ensuring that systems of monthly supervision exist for all health facilities.
H. **Regular meetings should be used to link all levels of supervision.** The provincial and district managers need to co-ordinate information from supervision visits to identify problems at all levels and address them during their regular meetings: monthly commune and health centre staff meetings, DHTAT and PHTAT meetings.
I. **Provincial and district staff should always follow an integrated approach.** Supervisors should evaluate technical programs in the context of health facility management, organisation, preventive and curative care, and infection control.

5.4.1. From provincial health department to operational districts

The PHTAT, led by the vice-director in charge of operational districts, should co-ordinate monthly supervision to the operational district in three main areas: technical activities, finance and administration, and the management of the operational district.

A. The technical bureau

The PHTAT should provide support to the district technical staff to ensure that:

- The district technical bureau staff has the skills to supervise drug use, clinical activities, and infection control in the hospitals and health centres.
- There is a regular supervision schedule for all health facilities.
- District technical staffs receive refresher training to upgrade their skills as required.
- Supervisors have supervision tools and use them correctly.
- HIS information is regularly utilised for monitoring.

The PHTAT is in charge of supervision provincial hospital technical activities, including following clinical protocols and infection control standards. The PHTAT should make sure that hospital management conducts day to day technical supervision through daily ward rounds, morning meetings, and technical and managerial meetings.[15] A well functioning provincial hospital can provide in-service training for other referral hospital staff e.g. for upgrading midwifery skills.

B. Finance and administration

The PHTAT need to support the district finance and administration to review:

- Financial management.
- The status of budget requests and reports, monthly expenditure and request forms (MEMR).
- General administration and personnel management
- HIS reports (in co-operation with the technical bureau).
- Maintenance of all relevant health centre information: map and population of coverage area, staff and inventory lists, HIS reports, and supervision reports.

The PHTAT is in charge of supervising the provincial hospital finance and administrative activities.

C. Operational district management

The PHTAT, in particular, the provincial health director and vice directors, ensure that:

- The operational district director and vice-directors know their roles and responsibilities and have the ability to do their jobs.
- The operational district organisational diagram is well understood and the lines of communication and authority respected.
- All management committees meet regularly and understand their terms of reference.

The PHTAT is responsible for supervising provincial hospital organisation and management.

5.4.2. From operational district to health center and referral hospital

The DHTAT needs to organise regular systems for technical and managerial supervision of all health facilities providing services in the operational district, including the remaining commune clinics.

[15] See section 5.3, the organization of the referral hospital.

The **vice-director of health centres** is responsible for monthly-integrated supervision of health centres and can call on the technical staff of the Technical Bureau (who may also be hospital staff) for support and training of health centres. This will also improve communication between hospitals and health centres.

The **vice director in charge of referral hospitals** can call on the district technical bureau for assistance in supervising the hospital, including maintaining clinical protocols and infection control standards through daily ward rounds, morning meetings, and technical and managerial meetings in the hospital.

Supervision from the operational district to health centres and referral hospitals should include: support to technical programs, clinical and preventive care, infection control and hygiene, pharmacy, administration, finance and management.

A. An integrated supervision checklist should be used for health centres to cover all MPA activities: curative care, pharmacy, hygiene and infection control, and finance.[16] The DHTAT should ensure that health centre management committees are functioning and community representation is meaningful.
B. Supervisory reports should be completed for each visit, and results discussed during the weekly management meetings.
C. The Tableau de Bord for health centres and referral hospitals should be discussed during each supervision session.
D. Supervisors should observe staff while providing services and prescribing.

16 The Ministry of Health is developing a checklist in collaboration with the national programmes under the ADB funded project.

Part 2

Effective and Efficient Use of Resources

Chapter 6. Human Resources

6.1. Introduction

The main objective of the MoH Human resource development is to:

> *Ensure that the number and quality of health staff deployed provide an efficient, effective, sustainable and equitable level of service, consistent with the health needs and within the country's economic resources.*

The human resource workforce development plan places priority on *the full implementation of the coverage plan at district level.* Establishment of referral hospitals will necessitate an extensive in-service training and reallocation of staff to meet the requirements[1].

6.2. Upgrading of staff skills

All levels of health staff will require training for their newly defined roles within the health services, to enable them to deliver the defined package of activities (MPA/CPA). All training should be competency based[2] and accredited by the MoH. The MoH has conducted a training of trainers' course for *Provincial training co-ordinators* responsible for skills upgrading.

6.2.1. Health Centre Staff

Under the Asian Development Bank (ADB) funded project, the MoH is developing standard training modules for health centre staff in the MPA. ***ALL*** health centre staff will need training in the appropriate health centre management skills, including **Module One, the MPA Introductory Module,** an initial two week course on health centre management and how to use the MPA reference manual. Subsequent training modules focus on technical training. The MPA Technical Modules will set the minimum standard for skills needed to implement the current MPA

Provincial continuing education, training co-ordinators, in co-operation with the PHTAT, DHTAT, DHDC and NGOs, will identify needs for training. MPA Technical Modules aim to fill the gaps in the existing technical knowledge of health centre staff. The content of the MPA modules will be integrated into the curricula for student nurses, midwives and doctors.

Future training of health centre staff will be based on MoH accredited[3] standard training courses. Some very good non-standardised training modules on MPA have been developed by NGO's. NGO materials in line with the standard content of the MPA modules could be also used or can supplement the MPA Technical Modules, however MoH encourages the use of the standard Technical Modules as the basis for training.

To upgrade **health centre midwifery skills,** the MoH plans three types of training:

(1) **A short obstetric training module** within the new 3 year diploma in nursing training to prepare graduates to conduct a normal delivery and identify risk cases for referral.

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[1] Refer to Human resource work force development plan 1996-2005, MoH 1997.

[2] Competency based means that students will have to demonstrate the acquired the knowledge, skills and attitudes from the training.

[3] Accreditation mechanisms will take time to develop and standards will be based on the content of the MPA curriculum.

(2) **One Year Post Basic Training** following Secondary Nurse /Diploma Training. These midwives will be able to provide a more comprehensive and higher level of midwifery services.

(3) **Upgrading of existing Primary Midwives** working in remote areas (e.g. North Eastern Provinces) with low literacy levels to meet the criteria for entry to secondary level.

All other primary midwives will undertake the appropriate MPA training modules.

The Provincial Continuing Education Training Co-ordinator, is responsible for monitoring the outcome of MPA training courses and discussing needs with the health centre staff and supervisors.

6.2.2. *Referral Hospital Staff*

Key medical, nursing and technical staff in the referral hospital will be trained to deliver a limited range of services in special areas: surgery, anaesthesia, ophthalmology, paediatrics, laboratory, X-ray. Currently the MoH, in co-operation with the Cambodian Surgical Association, is developing minimum standards for quality and safety for surgical patient care before, during, and after operations. For post basic specialist training, the PHD should recruit staff from the districts on the proviso that they return to work in the same hospital from which they were recruited.

All training will be competency based and utilise a problem solving approach. Staffs who successfully undergo the training will receive accreditation.

In addition, the MoH Clinical Treatment Guidelines (the green book) are being revised; distribution is planned for February 1998.

6.2.3. *Provincial and Operational District Health Managers*

Staff will be provided management training following a MoH standardised course. Training will be competency based and focus on solving problems related to required managerial tasks. A short course in district management training is currently being designed by the MoH and WHO, and a longer postgraduate course will be offered by National Institute of Public Health.

6.3. Reallocation and Redistribution of Staff

It is estimated that the staff attrition rate is 3.5%.[4] In overstaffed health facilities, staff leaving service should not be replaced, unless he/she is a specialist. Newly graduated health workers employed by MoH will be targeted to districts and regions with the greatest staff shortages.
Problems which affect posting of staff to remote and difficult areas are:

- lack of housing
- lack of schooling for families
- few opportunities for additional income generation
- high cost of imported commodities and food

Efforts could be made to address these issues through allowances for hardship postings. The issue of primary schooling for children is likely to improve within the next few years as the Ministry of Education, Youth and Sport extends primary education throughout the country. Secondary education for children of health workers posted to remote areas will remain a problem for the foreseeable future.

[4] From Human resource work force development plan, Ministry of Health, 1997.

Recruitment of students for health worker training should target provinces and districts in the greatest need of health workers. After training these graduates could return to their home provinces or districts.

6.3.1. *Incentives and motivation*

A. **Government housing for remote areas.** Some staff housing will be provided at a limited number of health centres. This will be evaluated to determine whether or not it is feasible.
B. **Special allowance for remote areas.** The system of hardship allowances should be modified for staff allocated to remote areas. The purpose of the allowance is to ensure staff are compensated for additional living costs and income lost from few opportunities for private practice.
C. **Motivation.** The Royal Government of Cambodia is examining some initiatives to reform civil servant levels and salaries as part of the National Public Administrative Reform.

Provision of new knowledge and skills together with upgraded working facilities is one step in motivating staff. Health centre and hospital staff must be supported with regular ongoing supportive supervision, [5] particularly for newly equipped health centres.

[5] Refer Chapter 5, section 5.5.

Chapter 7. Budgets and Accounts

7.1. Policy and guidelines for annual budget preparation for operational districts[1]

The budget for staff salaries and family allowances totals the allowances for existing staff plus newly assigned staff (**Chapter 10**). Overtime should be based on Ministry of Economy and Finance (MoEF) rates.

For running costs (**Chapter 11**), the MoH decides the total budget for each operational district and province, and the district managers determine the line item distribution. To determine the Chapter 11 budget for the operational district, there are 2 steps:

Step 1 - Decide the total amount of money for the district for the year
Step 2 - Distribute the total across the individual budget lines

7.1.1 Step 1. Annual budget planning for Chapter 11

For Step 1, the MoH issued a standard "budget formula" for all 71 operational districts.[2] Each operational district has a budget according to the number and type of facilities in the district and the number of people attending the facilities as out-patients or in-patients.

		Annual allocation	Number	Total
	According to the facilities - *for fixed costs*			
1	District Health Office	12,000,000	x ? =	
2	Referral Hospital/Province Hospital	108,000,000	x ? =	
3	Referral Hospital in district town	48,000,000	x ? =	
4	Selected health centres with beds	12,000,000	x ? =	
5	Health Centre providing MPA	4,200,000	x ? =	
6	Health Centre not providing MPA	1,200,000	x ? =	
	Total fixed allocation			
	According to number of patients - *for variable costs due increased activity*			
1	Number of in-patients	10000 per patient	x ? =	
2	Number of out-patients	500 per patient	x ? =	
	Total variable allocation			
	GRAND TOTAL			

The **first part of the allocation** is based on the type of facilities in the district and ensures that equivalent facilities in each district receive the same minimum allocation to pay for their "fixed costs." For example, all referral hospitals based in district towns should receive 48 million riel per year. The fixed costs are those costs that do not depend on the number of patients. The cost of electricity, water, mission, and meetings are similar for all hospitals and health centres.

[1] Detailed explanations with examples is in the MoH National accounting guidelines for the operational district, 1997.
[2] See detailed instructions on how to complete the 1998 budget formula forms in Appendix 6.

The **second part of the allocation** varies according to the number of patients at the health centre or hospital. Clinics and especially hospitals spend more money when they have more patients. For example, the expenditure on patient food or oxygen increases when the number of patients increases. The total budget allocation is the summary of the fixed costs (first part) and variable costs (second part). For example, the budget for a referral hospital with 600 in-patients per year 7000 outpatients per year is:

	Per patient	# patients	Riels
Fixed allocation for a referral hospital	----	----	48.000.000
Variable allocation according to number of patients:			
In-patients	10,000 riel	600	6,000,000
Outpatients	500 riel	7000	3,500,000
Total annual hospital budget			**57,500,000**

7.1.2. Step 2. Budget line item distribution for Chapter 11

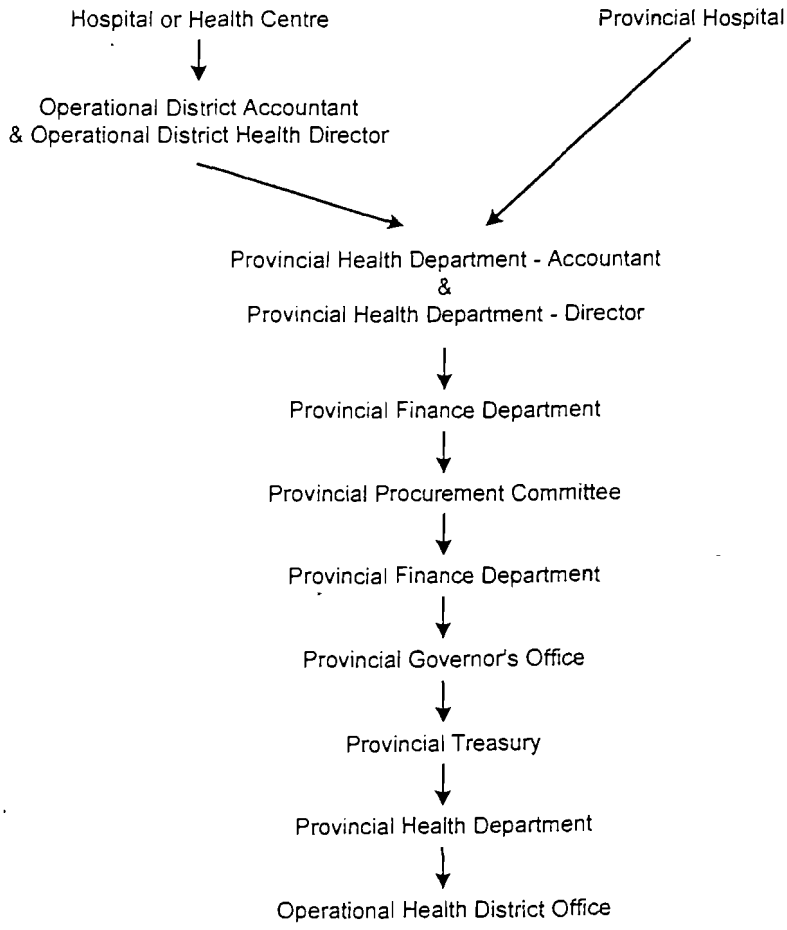
Step 2 is the distribution of the total budget across the individual budget lines for the administrative office, hospital and health centres. The following guidelines and nomenclature are set by the MoEF:

Budget Line	**Criteria for calculating the amount for each line**
Estate costs	
Office rental	Make a list of actual costs to be paid in the year.
Repairs & maintenance	Make a list of repairs planned for the year.
Water	Make a list of actual costs to be paid in the year.
Electricity	Generator - number of hours needed per month x cost x 12 City power – number of klw x cost per klw or number of hours needed per month x cost per hour x 12
Furniture and materials	Make a list of items needed in the year.
Communication costs	Make a list of postage & telephone costs per month x 12
Office supplies	Make a list of office supplies e.g. pens & paper needed
Books & documents	Make a list of items needed in the year
Conferences & meetings	Number of meetings per month X average number of people X 1000 riel x 12
Vehicle costs:	
Vehicle repairs and maintenance	Make a list of repairs expected for the year
Fuel & oil for vehicles	Fuel - Number of Kilometres per month x 12 Oil - Number of Kilometres per month x 12
Vehicle rental	Make a list of actual costs to be paid in the year
Reception costs	
Receptions for foreigners	Number of receptions planned in the year x standard cost
Receptions for nationals	Number of receptions planned in the year x standard cost
Costs of festivals	
National & traditional festivals	Number of staff x amount per person
Uniforms	Number of staff x 40,000 riel per year
Work safety expenses	Make a list of items needed in the year
Training & Education	
Research and experimentation	Make a list of items needed in the year
Technical teaching materials & equipment	Make a list of items needed in the year
Seminars & workshops	Number of workshops x average number of people at each workshop x 1000 riel
Expert contracts	According to the local situation
Publicity	Make a list of items needed in the year
Health specific expenses	
Drugs for hospitals & clinics	provided by CMS except for alcohol - buy locally
Medical supplies, consumable	provided by CMS except for urgent needs

Maintenance of medical equipment	Make a list of repairs planned for the year
Patient food	Number of patient days planned in the year x 1000 riel
Oxygen – new bottles	Number of new bottles required
Oxygen – refills	Number of refills required in the year
Cleaning & sterilisation	Make a list of items needed per month x 12
Patient bedding & clothing	Make a list of items needed in the year
Budget Line	**Criteria for calculating the amount for each line**
Cost of blood donors	Number of donors x amount per donor
Cold chain -ice	Number of days for EPI x amount per day
Cold chain -fuel for fridge	Amount of fuel per week x number of weeks fridge used
Funeral expenses	Number of funerals predicted x amount per funeral
Materials for patient food	Make a list of items needed in the year
Phnom Penh ambulance department	Number of trips forecast in the years x standard cost
Examinations	Number of students to be examined x amount per student
Miscellaneous expenses	Make a list of miscellaneous items forecast in the year
Domestic expenses	
Cost of transport	Make a list of journeys in the year (air, taxi, bus, boat)
Per diem	Number of days mission per month x staff x 5000riel x 12
Accommodation	Number of nights accommodation per month x cost x 12

7.2. Rules of budget implementation

To make an expenditure request (purchase order) it is necessary to send the document through the following route for prior approval:



7.2.1 The procurement regulations

The following table shows the documents required for different levels of expenditure, the process to be followed and the people who sign and authorise the expenditure.

Table 6: Procurement Regulations - levels of payment authority

		Signature required						
Level of expenditure	Documents required and /or the process	District Director	Province Health Director	Financial Controller	Chief of Financial Control	Chief of Procure-ment Committee	Gover-nor	Ministry of Public Works
Supplies								
Less than 100,000	1 price quotation	X	X	X	X			
100,000 – 10,000,000	3 price quotations	X	X	X	X		X	
10,000,000 to 20,000,000	3 price quotations	X	X	X	X	X	X	
20,000,000 to 100,000,000	Domestic Competitive bidding	X	X	X	X	X	X	
Over 100,000,000	International Com-petitive Bidding	X	X	X	X	X	X	
Repair & Maintenance/Construction								
Less than 100,000	1 price quotation	X	X	X				
100,000 to 10,000,000	3 price quotations	X	X	X				
10,000,000 to 20,000,000	3 price quotations	X	X	X	X			
20,000,000 to 100,000,000	Domestic Competitive bidding	X	X	X	X	X	X	X
Over 100,000,000	International Com-petitive Bidding	X	X	X	X	X	X	X

7. 3. District accounting records and budget reports

7.3.1. Accounting Books and Records

1. The district should follow the budget implementation following the "*fiche de suivi des consommation des credits*" in the national accounting guidelines.
2. For cash received from the Treasury the district should keep a cash book showing all receipts and payments. There must be payment voucher for each payment, and a receipt voucher for all income.
3. For all physical assets received the district must keep an proper stock records.
4. For all fixed assets the district must keep an inventory showing when the object was received and the original purchase price.

7.3.2. Budget Reports

Each operational district should complete two budget monitoring reports monthly. These reports should be given to the District Health Technical Advisory Team and the Provincial Health Department:

- Report D1 - Expenditure according to the budget line
- Report D2 - Expenditure according to the place

7.4. Chapter 13, Accelerated Districts for Development (ADD)

The ADDs should calculate their annual budget in the same way as the other operational districts, following the formula above. The ADDs, however, receive their budget for operating costs directly from the MoH Finance and Accounting Office, without going through the provincial authorities. The MoH has an imprest account (*regie d'avance*) with the Ministry of Economy, Finance and Treasury, from which the MoH receives a cash advance distributed to the ADDs.

After spending the cash advance, the ADDs submit all invoices and supporting documents to the MoH finance department. The MoH then check the documents and forwards them to the financial controller at the Ministry of Economy and Finance for a second check. After approval, the financial controller authorises the Treasury to reimburse the imprest account and charges the amount against MoH Chapter 13 allocation. The account is thus reimbursed, and the MoH withdraws additional cash advance funds for distribution to the ADDs following the same process.

7.5. The accounting rules for financing schemes[3]

The MoH has established guidelines for hospitals and health centres for financing systems. Proper accounting records must be kept for:

(1) **Prices charged.** Prices must be agreed by the MoH and be posted clearly at the health centre or hospital.
(2) **Collection of money from the patients.** All patients paying for services at the health centre or hospital must be given a receipt showing how much was paid and for what service. A copy of all receipts must be kept by the health centre or hospital.
(3) **Recording Receipts.** All income received from the patients must be written down in a cash book.
(4) **Making payments.** All staff payments and purchases must first be approved by the head of the health centre or hospital, and the district director. A Payment Voucher must be prepared for every payment showing clearly what the money was used for, and signed by the person receiving the money.
(5) **Recording Payments.** All payments made must be written down in the cash book
(6) **Reconciliations.** Every day the cashier must check the cash in the cash box. It must be the same as written down in the cash book
(7) **Cash security.** Cash must be kept in a secure place.
(8) **Reports.** Every month the accountant or cashier must make a report to show how much money has been received from the patients, how much has been spent on each item, and how much is remaining.

[3] Refer to Chapter 8.

Chapter 8. The National Charter on Health Financing[1]

8.1 Reasons behind the financing charter

Economic considerations are a major part of the MoH reform process. ***WHY?***

- Households spend a lot of money for health care from private providers, resulting in limited and unequal access to health care. The very poor cannot get high quality care in the private sector. Also, people are spending a lot of money on poor care.
- The success of the overall restructuring of the health sector depends on additional funding.
- The health financing charter is designed to support the restructuring of the national health system.

The financing charter is designed to experiment with ways the community can contribute financially to the public health system in a way that improves health care (**user fee schemes**). It also permits the piloting of more sophisticated market-managed reforms.

The MoH developed the financing charter in consultation with MoEF, Ministry of Social Affairs, Ministry of Rural Development, Council of Ministers. The MoH formed the Inter-ministerial Commission on Health Financing[2] and Health Economics Sub-Committee of the MoH[3] to discuss technical issues. Further the Inter-ministerial Commission held the *National Conference on Financing Health Services*[4] inviting the participation of Provincial Health Directors, Provincial Governors, and NGOs. The charter will later be revised to include lessons learned from the pilots.
Experience from other countries shows that successful health financing schemes must:

- Aim to improve service quality.
- Take into account the poor.
- Involve communities in decision making (e.g. level of fee).
- Ensure efficiency.
- Be closely managed, monitored and evaluated.

8.2. Overall philosophy

The Financing Charter aims to test various pilots and create an overall framework. The MoH can thus avoid poorly designed and failed financing schemes. The Health Financing Charter is based on a twofold partnership principle.

1. ***Functional partnership.*** The MoH co-ordinates the public and the private sectors in the goal of providing a health system available to all Cambodians.
2. ***Financial partnership.*** The MoH makes a commitment to match the financial contributions of the people. Community user fees are **not** a substitute for government funding.

1 See the National Charter on Health Financing in the Kingdom of Cambodia. MoH 1996, for details.
[2] Created by the Council of Ministers in August 1995.
[3] Created in July 1995.
[4] Held in Phnom Penh, February, 1996.

8.2.1. Charter objectives

The Health Financing Charter aims to extend quality basic health services nation-wide through the establishment of:

1. ***A policy framework*** to systematically test and evaluate different financing schemes to ensure the schemes support the organizational reform of the health system.
2. ***Minimum standards and pre-requisites*** for all pilot health financing schemes.
3. ***A system for first approving and then monitoring and evaluating*** health financing schemes.

8.2.2. Contents of the Charter

The Charter includes basic economic theory and practical experience from other countries on how to:

- Improve service quality standards for the basic package of activities (MPA/CPA).
- Motivate staff through re-numeration.
- Ensure accountability and transparency in financial management systems.
- Protect the poor.
- Protect the vulnerable and target groups (for example children and TB patients).
- Involve the communities in decision-making.

The Charter also provides a framework for innovative contracting pilots for both the public and the private sectors.[5]

8.3. Designing user fee pilots

The MoH Health Economics Task Force (HETF) has established three steps in the design of a user fee scheme: a costing exercise, community involvement, and establishing an exemption scheme for the protection of vulnerable groups. There is a standard user fee proposal format available from the MoH Planning Unit.

8.3.1. Costing exercise

A user fee scheme has to be determined by examining the costs and income of each facility. There are ***4 steps:***

Step 1
List all inputs (resources) necessary
for providing health services at the facility.

▼

Step 2
Calculate the costs of the inputs.

▼

Step 3
Sum the total amount of income for the facility, including state budget, NGO contributions, and estimated income from user fee system.

▼

Step 4
Adjust the expected income and compare to the
inputs. Revise accordingly.

[5] Refer to section 8.6.

Sustainability is an important factor in developing a user fee scheme. Sustainability refers to the conditions under which a scheme plans to meet the overall cost of health facilities in the future. Some factors to consider in developing a sustainable user fee system include:

- Expected activity of the health facility.
- Number of people exempt from payment.
- Costs to be recovered (drugs and other running expenses; performance related payments[6]);
- Appropriate use of money raised from community.[7]
- Mode for payment for user fee. Some alternatives include: payment per visit, payment per episode of disease, differentiated fee per type of service, pre-payment with possible insurance component for referrals.

8.3.2. *Community involvement*

The community will contribute to the development of the national health system if:

- ***Satisfaction.*** People use health services when they are satisfied with the quality. People will not pay for low quality service.
- ***Trust.*** People need to know what services are available, when, and how much they cost.
- ***Decision-making.*** Community representatives can get involved in the management and quality of the health services for their communities.

The purpose of the District Health Development Committee and Health Centre Management Committees is to involve the community. [8] These committees should represent all members of a community and thus all potential users of a health centres. Women, for example, make up over 50% of the population, therefore the committees should have an equal proportion of women representatives. Minority groups should have representation on health centre committees that cover their populations.
There are different ways to choose community representatives. For example, commune and village chiefs can nominate people. Those nominated can participate in an election held in each village. The election ballots could be secret.

Community representatives on the committee ensure the population in the catchment area has a voice in many areas of health centre management and user fees systems. For example:

HOW THE COMMUNITY MAY GET INVOLVED

What level of fees will be asked for ?

In Oudong district, the health centre staff calculated a fee based on the health centre running costs and then presented this fee to the community representatives for discussion.

How can the poor be protected? How can access to certain services be protected?

During the pilot phase, different methods of exemption schemes to identify the poor should be piloted. In Pursat, the local monks interview people who want an exemption. The monks then decide who should be exempt. In Oudong, village chiefs decide who will get exemption cards.

6 Supplemental staff salaries are according to work quality and quantity to improve the quality of services.
7 49% for performance-related payments, 1% for National Treasury, and 50% for non-salary, recurrent costs.
8 If village/commune development committees already exist it may not be necessary to set up a new one.

How can the money from fees be used?

Community representatives should help make decisions about

- what is the perceived quality of care.
- how to use the money collected from user fees.
- the working hours and performance of staff.

Some of the money will be used for salary supplements.

How should the money be managed and accounted for?

As the money collected at the health facility is from the community members, their representatives have the right to see how this money is managed. Thus they must have access to any accounts, be able to check these and have a complaints mechanism for any irregularities.

How can community complaints be acted upon?

The Health Centre Management Committee (HCMC) and community representatives must follow up on any community complaints. The community representatives must be able to pass on and receive information between village, commune, and health centre. The HCMC, including the community representatives should go to the DHDC if they can not solve a problem locally.

How can the system be evaluated?

The community representatives should be involved in any evaluation of the health services. For example, if few people use the health facilities, the community representatives need to help find out why. People involved in making decisions about the services are more likely to support the health facility.

8.3.3. Protection of the vulnerable and the poor

Some people need to be exempt from paying for health services, such as the poor or certain groups of people (for example: children, TB patients, mine or other war-related injuries, widows). These groups need to be carefully considered when planning a user fee scheme. If too many people are exempt, the income from user fees will be low. If only a few people are exempt, those who cannot afford the services will not use the health centre.

The proper identification of the poor is absolutely critical to a successful user fee system. The MoH encourages different ways to determine who is poor:

- Systematic visits to households of the health centre catchment area in order to measure their expenditures or possessions.
- Focus Group[9] discussions with selected members of the community.
- Preparation of household exemption lists in collaboration with village chiefs, monks, or NGOs.

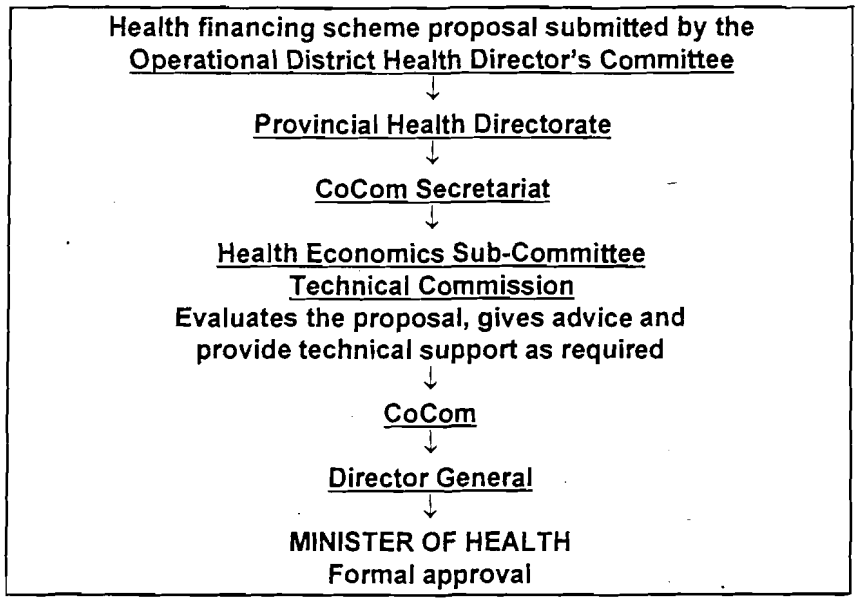
Individual health centre staff must not decide themselves who is exempt from fees. This would not be a fair system and may harm community confidence in the services.

[9] A focus group is a group of people (e.g. a group of mothers in a village, monks or health workers) and a facilitator who stimulates discussion about certain topics to assess knowledge and attitudes.

8.4. Control, monitoring and evaluation

Health financing schemes need to be approved before implementation to ensure compliance with the Financing Charter. **(Figure 10)** The MoH will monitor the impact of health financing reforms in the context of the overall MoH reforms by using selected indicators.

Figure 10: Evaluation of health financing scheme proposals



Selected **impact indicators** will measure:

- **Equity.** *Can anyone use the health services even the poor and vulnerable?*
- **Efficiency.** *Is the population getting good value for their money?*
- **Sustainability.** *Is the system able to function on its own?*
- **Acceptability**. *Are the services what people want?*

Other **process indicators** will measure:

- **Management.** *Is there a functioning Health Centre Management Committee?*
- **Community involvement**. *Is the community representative involved in decision-making?*
- **Feedback to communities.** *Do the people know what services are available, when, and how much it will cost?*

8.5. Limits of the Financing Charter

Financing schemes cannot solve all the problems in the health system. *WHY?*

- ***Geographically***. The charter cannot be extended country wide until sufficient experience is gained from pilot schemes.
- ***Financially***. The charter allows health workers to earn extra income by user fees. This is feasible at health centre level. At a hospital, however, performance related payments could be small if staffing numbers remain large and no external funding exists.
- *Risks*. Health financing involves complex issues for which no universal solution exists. Therefore, it necessary to adapt and try different options effective in other countries.

8.6. Contracting

Contracting is an alternative way to deliver health services. It may lead to rapid improvements in availability and utilisation of the public health services. The Ministry of Health and the AsianDevelopment Bank (ADB) is piloting a project to compare the cost -effectiveness[10] of 3 options (see **Appendix 7**):

1. **Contracting-in.** Private groups and NGOs manage and supervise government staff who continue to provide health services (MPA and CPA).
2. **Contracting-out.** The MoH contracts with private groups and NGOs to directly deliver health services (MPA and CPA).
3. **Control.** The provincial and district MoH staffs continue to deliver health services (MPA and CPA).

Why should the MoH contract for health services? The MoH can reduce the amount of government bureaucracy and time-consuming procedures by contracting outside organisations to provide services to a defined population. Outside organisations are usually more ***flexible,*** especially in terms of staff and employment practises. They can also usually ***respond quickly and appropriately*** to specific circumstances. Contracting could then lead to more efficient and responsive health services.

Contractors may develop:

- Effective incentives to support staff.
- Ways to encourage the public to use the services.
- Supervision and management systems to promote a higher quality of services.

8.6.1. The contracting process

The MoH is developing guidelines for pilot projects for contracting the health services, in co-operation with the Asian Development Bank, several NGOs and Provincial Health Directors.
The MoH will invite bids from contractors. Bids will be evaluated according to a set of standard criteria. After being selected, guidelines for monitoring contracts will be developed in collaboration with Provincial Health Directors, to whom the contractor will report. All contractors must follow MoH technical guidelines and regulations. Bids must include:

A. **Contracting Out.** The contractor submits a proposal **to deliver the MPA and CPA for a district.** The proposal must indicate the overall management approach including:
   * Planned staffing patterns
   * System to be used for hiring and firing
   * Cost recovery
   * Management and supervisory systems
   * Budget

B. **Contracting In.** The contractor submits a proposal to manage and supervise the MoH district staff in providing the MPA and CPA. The proposal must indicate the overall management approach including:
   * Planned staffing patterns
   * Cost recovery
   * Management and supervisory systems

[10] Cost-effectiveness analysis involves assessing the gains (effectiveness) and resource input requirements (costs) of alternative ways of achieving a specified objectives.

* Supplementary budget required. The routine operating budget will be provided and disbursed from the MoH following the established guidelines for ADD- Accelerated Districts for Development.

Further, all contractors must specify target objectives and achievements for the end of the contract. These will be negotiated between MoH and the contractor, based on survey information and local conditions.

8.6.2. *Evaluation of Pilots*

The MoH will evaluate the cost effectiveness of the pilots at the end of four years. The pilots will be evaluated on the basis of:

- Increased utilisation of public health services as measured by service indicators and community based data (e.g. numbers of outpatients per month, immunisation and antenatal care coverage).
- Increased service availability.
- Total cost for achieving the results in comparison to the inputs.
- Equity, sustainability, and acceptability of service provision.

If contracting results in effective and efficient delivery of public health services, the contracting pilots will be extended to other districts.

8.7. Private Sector: For profit organisations

The **private sector** includes organisations and individuals working outside the direct control of the government, including:

1. ***Non-profit*** private organisations, such as NGOs, voluntary and religious organisations.
2. ***For-profit*** organisations and individuals, such as those who work full time or part-time in pharmacies, clinics, hospitals, maternities, and laboratories.

The for-profit health sector in Cambodia has been growing rapidly in the last five years, especially in urban areas because:

1. **Low salaries** force public health staff to work in the private sector to increase their income.
2. **Lack of confidence** in the public health services due to facilities that are poorly equipped and located, and low staff motivation, resulting in low quality public health services not responsive to people's needs.
3. **Informal charges** in public health facilities.
4. **Weak legislation and enforcement** to control private practices and pharmacies.

The expansion of the for-profit health sector in Phnom Penh in particular is due to a concentration of clinicians and pharmacists and increased income opportunities due to the high population density of Phnom Penh.

8.7.1 *Measures to control the private sector*

In 1991, the Council of Ministers issued a decree authorising the establishment of private practices under specific conditions. The MoH put into place a commission to review the credentials of applicants to open private clinics. The legislation for opening a private clinic or pharmacy, however,

is not strictly adhered to. The MoH is unable to enforce sanctions against people without licenses, and unqualified personnel practising medicine.
There are different approaches in working with the private sector.

- More control, both administrative and technical. The MoH would like to exercise tighter control on the authorisation of private clinics and pharmacies. This authorisation would be based on technical indicators e.g. type and quality of staff qualifications; standard of equipment, adequacy of infrastructure etc.
- Collaboration, through *contracting out*[11] to private clinics. It is recognised that a broader range of services could also be contracted out, especially where there are no public facilities.

There is an urgent need to develop appropriate strategies for the regulation of the private and public sector in Cambodia. In particular, the MoH needs to establish a system for registration, annual licensing and effective monitoring. The system would cover all categories of professionals in both the public and private sectors of the health system.

8.7.2 Limitations of the private for-profit sector

1) ***Private hospital services have a limited range of specialised services.*** They treat common and less complicated cases than the public sector.
2) ***Some services are not available in the private sector.*** For example, private doctors do not usually provide maternal and child health, immunisations, and tuberculosis services.
3) ***The quality of private sector health services varies*** and depends on the qualifications of the provider and the resources available.
4) ***Private providers have an incentive to over-prescribe drugs*** and services to make additional income.
5) ***Not all the population can afford services in the private for-profit sector.***[12]

> ***In a recent rural health care demand survey, 45% of farmers went into debt due to an illness in the family. For outpatients, individuals paid on the average $13 per illness episode. Admissions required $62.***

8.8 Collaboration between public and private sectors

The MoH in many countries are evaluating their role in the financing and provision of health care services. **Table 7** shows public and private sectors in financing and provision of health services.

Table 7: The public/private mix in financing and provision of health services[13]

	Health Services Provision	
Financing of Health Services	**PUBLIC (MoH)**	**PRIVATE (Non-MoH)**
PUBLIC (MoH)	• Health services free at point of services	• Services contracted to private providers
PRIVATE (Non-MoH)	• User charges • Private beds in public hospitals	• Medical fees to private providers (e.g. private clinics, pharmacies)

[11] Refer to section 8.6.
[12] Health Care Demand Survey (1996) draft. WHO, NIPH.
[13] Bennet, 1991.

In reality the situation is complex, involving a variety of other individuals and organisations (such as government authorities and professional associations) with a variety of functions and interests beyond financing and provision of health services.

The private health sector in general is more responsive to the needs of the people. Competition in the public and private sector can increase efficiency in the delivery of health services. Therefore, in addition to strengthening regulations, the MoH will test options with the private for-profit and NGO providers to improve quality and value-for-money in the private sector. The options include

- Contracting-out services to NGO or private providers.
- Contracting-in NGO or private management.
- Franchising[14] in the private sector.
- Quality accreditation schemes.[15]

8.8.1. *The private sector in the municipality*

The MoH may contract private for-profit organisations to provide services where there are no public facilities. The cost of these services could come from the Government and user fees.
The government's contribution would be fully or partially based on a fixed payment for a defined number of people in the catchment areas[16], or a block grant (set amount of money for a service). This would also avoid the incentive to over prescribe drugs and services. As part of the contract negotiations, arrangements must take into consideration people who cannot afford the user fees.

14 ***Franchising***: the government can fund to improve the quality of health services delivered by medical associations by training etc. (public funding to private organisation) and the patient pays for the services delivered by individuals of those organisations (private funding to private providers), also see glossary.
15 The MoH makes a contract with a private organization to standardize the quality of services.
16 In Phnom Penh it is difficult to define the number of people in the 'catchment area' because many people live within a two hours walk of the facility.

Chapter 9. Integration of Health Services[1]

9.1 What is integration?

Integration of health services
Health teams at all levels are responsible for preventive, curative and promotive health services appropriate to the community. The health structure brings together separate programme activities to optimise resources.

9.2. How does integration compare with vertical program service delivery?

Currently many national programmes manage their activities and resources vertically. Vertical program management was appropriate for Cambodia in the 1980s when district and commune health workers had few skills and little infrastructure. However, the vertical approach results in:

- fragmentation of efforts
- inefficient use of resources
- a view of health and disease focusing only on specific causes and solutions.[2]

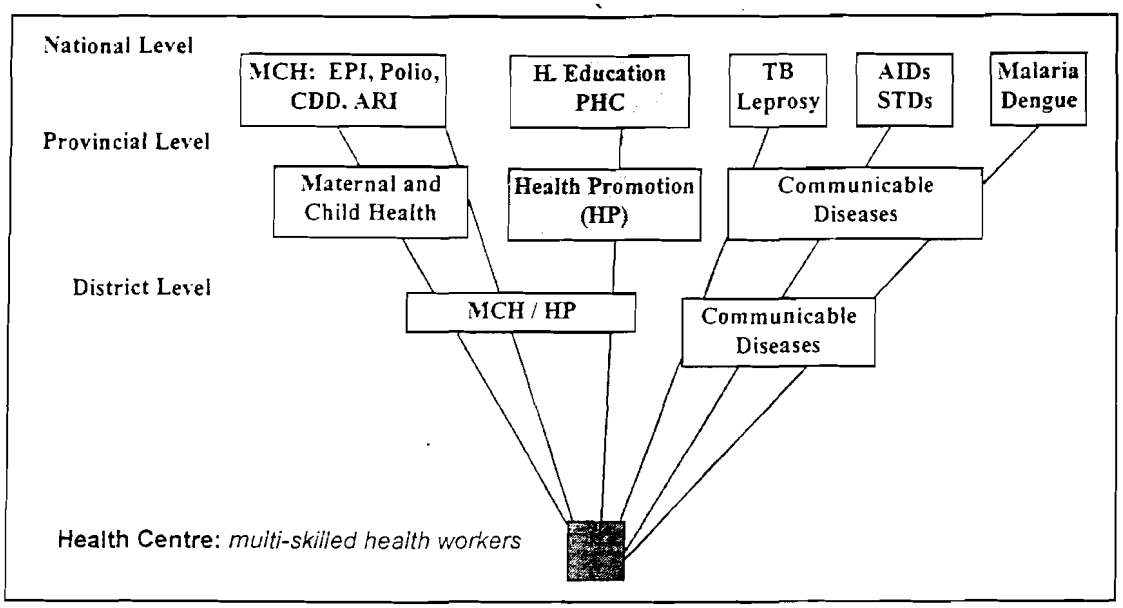
Integrated health service delivery aims to provide comprehensive care within the catchment area of the health centre and referral hospital. The following table compares vertical and integrated service delivery:

Vertical program services delivery	Integrated health service delivery
• Trains staff to treat specific illnesses.	• Increases staff capacity within a defined set of activities (MPA and CPA) to better respond to the community's needs.
• Training needs defined nationally.	• Training needs defined by district and provincial supervisory technical teams.
• Service targets set nationally.	• Ministry of Health defines long term goals from which the provincial and district managers develop strategies and set targets.
• Management structures are vertical and horizontal, resulting in health staff having a range of supervisors both for individual vertical programs and overall management.	• Creates a system of integrated supervision and management, under the direction of the technical teams at provincial and district levels.
• Program managers responsible for management of resources vertically.	• Senior district managers are responsible for overall implementation and resource management.
• Programs can sometimes show dramatic results quickly for individual illnesses.	• Senior district managers can address different health problems simultaneously to achieve greater results over the long term.
• Effective over the short term.	• Aims for sustainability.

Integration puts vertical programme service delivery under the general health services, uses existing infrastructure, and supports the restructuring of the health system **(Figure 11)**.

[1] Adapted from Integration of Health Care Delivery, WHO Technical Report Series, 861, 1996.
[2] Hellberg H (1995) "Tuberculosis programmes: fragmentation or integration." Tubercle and Lung Disease 76, 1-3.

Figure 11: Integration of Specialised Programmes within the Health System.



the more peripheral the level of health services ⇨ the more integrated the health services.

9.3. Examples of integration

Integration of health services requires changes in the way the national, provincial, and district managers train, supervise, and support health staff. Elements of integration cover three main areas:

1. Integration of **services**
2. Integration of **management**
3. Integration within the **organizational structure**

9.3.1. Integration of services

A busy mother brings her baby for immunisation at the health centre on a Monday because it is immunisation day. She also needs her 3 monthly birth spacing injection, but the injections are only given on Tuesdays when the midwife is available. The mother cannot afford to come back, or go to a private doctor for the injection. She goes home without the services she needs.

Integration of services avoids this situation by:

- **Providing coverage for all services every day**. All national programme activities will be integrated in the general services of the health centre and referral hospitals.
- **Providing all health centre staff with the training to be multi-skilled**[3], to be able to give immunisations, family planning services, and the rest of the MPA.

[3] It is recognized that midwives will remain specialists in their field.

9.3.2. *Integration of management*

Integration of management and technical support changes the way district and provincial managers plan, supervise, train, and evaluate activities. For example:

- **Planning.** District and provincial health technical advisory teams write one comprehensive annual plan including all technical program activities and NGO activities.
- **Setting service objectives and targets.** The technical teams can develop comprehensive strategies to address health problems and the needs of the people. For example, a comprehensive strategy to reduce the incidence of diarrhoea could aim to increase the use of ORS, measles immunisation, and health education.
- **Training.** Training should be designed to upgrade staff skills in several areas. Instead of many short specialised courses, resources for training could be combined to cover a broad range of topics.
- **Supervision.** A team or individual conducts supervision to address the delivery of services as a whole.

9.3.3. *Integration within the organizational structure*

Integrating organizational components requires leadership at the provincial and district levels to establish formal mechanisms for improved co-ordination among different levels of the health system, non-governmental organisations, private sector, and community. For example:

- Operational district managers attend the **provincial health technical advisory team meeting** to ensure that provincial strategies support district implementation.
- **PROCOCOM** is one co-ordinating mechanism for non-governmental organisations to link with the provincial health department.
- **Health centre management committees** have representatives from the community to advise on management issues.
- **District development committees** aim to integrate other important sectors such as rural development, education, and women's association.

9.4. Strategies for integration at all levels

The success of integration depends on national, provincial and district managers who need to change their current systems of support, pool resources and work together towards a common purpose.

9.4.1. *National level strategies*

National level vertical program staff maintain specialised knowledge and experience in disease control and prevention. National level supports integration by:

- **Developing concrete guidelines** to provincial program staff in how to support integrated supervision and training within the new operational district structure and within the provincial health organogram.
- **Planning within the operational district structure** where feasible. Supporting the appropriate numbers and types of staff at district level for refresher training.
- **Supporting the provincial managers in developing their own provincial plans**, objectives, and targets in co-ordination with district management and have the skills to monitor and evaluate.
- **Using standard integrated systems** for reporting, accounting, and evaluation instead of creating separate reports.
- **Co-ordinating activities** with other related programmes:

The Essential Drugs Bureau has a pharmacy supervision team that supervises drug management with the provincial and district pharmacists. But they do not supervise the management of TB, leprosy, malaria drugs or contraceptives and vaccines. These drugs are supervised by the separate national programmes using different provincial and district schedules.

⇨ One supervision team would be a more logical use of resources.

9.4.2. Provincial level strategies

The role of the provincial health managers is to ensure that district level has the skills and resources to monitor the service provision in the health centres and hospitals. The PHTAT will need to support integration in those districts where the organizational structure and infrastructure is in place, and advise the national level as to when integration of services and management is feasible at district. To support the implementation of the organizational district structure and integration of services, provincial managers need to:

- **Assess the district level technical training needs**, especially for staff appointed to the technical bureau.
- **Upgrade the skills of the district staff**, in particular those appointed to the technical bureau, and the vice directors. Invite the appropriate technical bureau staff and the senior staff for any refresher training.
- **Determine the role of staff** at the district level who have previously been trained in vertical program implementation.
- **Do not create extra layers of administration and management** within each district by maintaining all the old district structures for vertical programs.
- **Ensure that the senior managers and technical bureau have the tools and ability to supervise health centres and referral hospital.** Provincial level supervision should always be done in co-ordination with the district managers. Provincial hospital supervision should be done with the hospital technical bureau.

Vertical programme staff should always consult with the Director of the operational district, when working in any operational district, and be accompanied by district supervisor.

9.4.3. Operational district strategies

District level integration is key to the reorganisation of the health services. District managers should:

- Conduct supervision in an integrated way. Supervision should evaluate technical programs in the context of health facility management, organisation, preventive and curative care, and infection control.[4]
- Organise refresher training at health centres making sure that all health centre maintain a range of skills.
- Ensure that staff of the technical bureau attend the DHTAT meetings.

Most health centre and many hospital activities relate to vertical programmes. The Senior District Management, therefore, should receive information directly from the technical managers.

[4] See Chapter 5, section 5.5.

Chapter 10. Planning for the Operational District

10.1. What is planning and why is it important?

Planning indicates how health managers will organise their present and future resources to achieve service objectives. Resources are limited, so decision-makers need to set priorities and make choices.

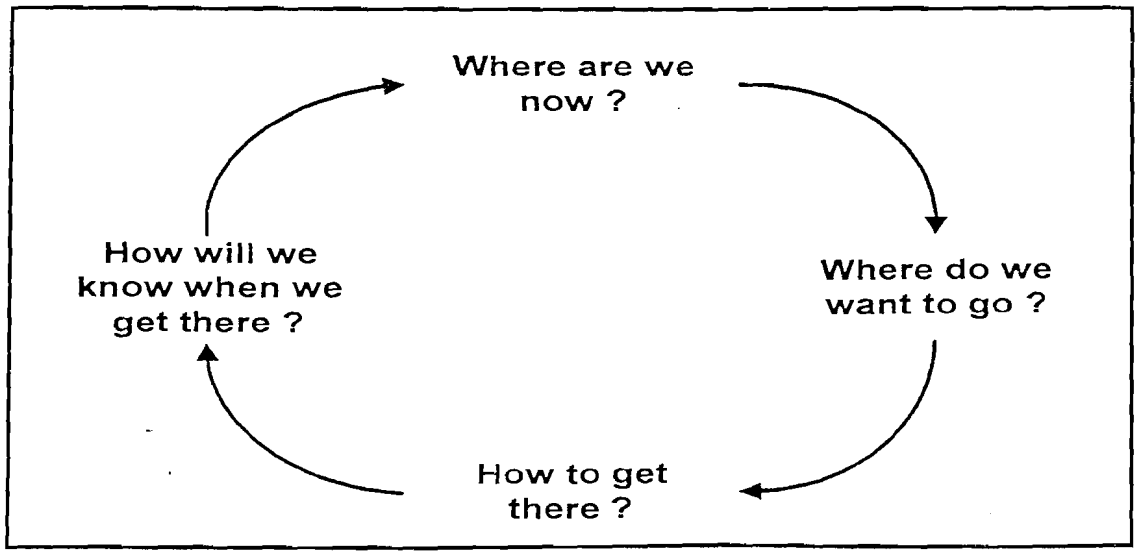
One of the main responsibilities of the DHTAT is to develop an annual plan in order to implement national health policies and strategies, monitor progress, and evaluate health impact. The annual district plan is an essential element in management. It supports district health managers in making decisions on issues such as equitable allocation and efficient use of resources. The provincial health managers use the annual district plans to guide preparation of the annual provincial health plan. The MoH uses the provincial health plans to formulate a comprehensive development plan for the whole health sector including:

- the 3-year Public Investment Plan.
- allocation of resources in preparation of the national health budget.
- co-ordination of external aid, directing it to priority districts and vulnerable / high risk population groups.

10.2. The Planning Process

The planning process requires health managers to work together as a team to develop a vision for the future. The health plan is a concrete translation of this vision.
The DHDC and DHTAT have key roles to play in this process by ensuring co-ordination and communication within the district among health workers, community, local authority, other government sectors, and NGOs.
The MoH (Planning unit), PHD and representatives of NGOs can advise the DHTAT in preparing the district plan. To begin the planning exercise, DHTAT should determine the answers to four key questions, as represented in the planning cycle **(Figure 12).**

Figure 12: The planning cycle.



10.2.1. The planning cycle

At the start of the planning cycle, the DHTAT needs to assess the activities and objectives of the previous year by collecting information on health status, services provision and resources used. The HIS is one source of data[1] .
The PHD should inform the DHTAT on policy changes and provincial strategies and targets, and support the district in the development of its budget. The DHTAT should consult with district health staff and the community to review experience, identify problems and proposals for new actions. The plans should include activities of the district health office, health centres and the referral hospital.

Table 8: The different planning steps.

Step	Question	Process	Activity
1	**Where are we now?**	Situational analysis	• Collect and analyse data • Identify problems • Analyse causes of problems
2	**Where do we want to go?**	Defining main goals and objectives, set targets	• Prioritise problems • Review policies/strategies • Discuss with staff • Identify/estimate resources
3	**How will we get there?**	Develop of plan of action	• Define activities per objective • Define who will do the tasks and when, • Allocate resources • Draft a plan
4	**How will we know when we get there? Are we on the right track?**	Monitoring of activities and resources. Evaluation of planned activities.	• Define who, how and when monitoring and evaluation will be done.

The DHTAT reviews draft plans with technical personnel at PHD and NGOs to improve the quality of the plan, ensure that objectives are in line with provincial planning, discuss requests for additional resources, and improve management procedures.

10.3. Defining goals and objectives[2]

10.3.1. Goals

A goal is a broad statement of intent. The MoH proposes three goals for all operational district offices. These goals are developed further in the district annual plan of action. The 3 goals are to:

1. **Set-up the organisational structure of the operational district.**
2. **Reinforce and reorganise existing health services.**
3. **Expand health coverage.**

[1] Refer to Chapter 11.
[2] Refer also to Chapter 5, section 5.2.4.

10.3.2. Objectives:

An objective has to be **S.M.A.R.T**:

- Specific (Exactly what is to be done),
- **M**easurable (possible to prove that the objective has been realised),
- **A**chievable (possible to implement),
- **R**elevant (to the problem)
- **T**ime frame (related to a specified point of time)

Objectives break down the goal into smaller components and adapt them to specific local conditions. Therefore, objectives vary from one district to another. The DHTAT is responsible for defining the objectives for each of the 3 goals. For example:

☞ **Goal 1: Set-up the organisational structure of the operational district.**
The objectives could be to:
1.1. Set-up the Senior District Management by March 1997.
1.2. Set-up the District Health Technical Advisory Team by May 1997.
1.3. Organise a functioning district health office by May 97.
1.4. Set-up the District Health Development Committee by June 1997.
1.5. Set-up the Health Centre Management Committee by Nov. 1997.

☞ **Goal 2: Reinforce and reorganise existing services.**
The objectives could be:
2.1. Introduce birth spacing in 10 health centres by Sept. 1997.
2.2. Organise a referral system by the end of the Dec. 1997.
2.3. Develop a referral clinic at the referral hospital by October 1997.
2.4. Establish an effective integrated supervision system by July 1997.

☞ **Goal 3: Develop health coverage.**
The objectives could be:
3.1 To build 3 new health centres by Oct.1997.
3.2 Train the staff of the 3 new health centres (MPA Module 1) by Feb. 1998
3.3 To build a new ward for TB patients at the referral hospital by Nov. 1997

10.4. The action plan

For each objective, managers need to define the activities required, who should do these activities, when, what resources are needed, and what is the expected output. The following action plan puts this information together:

Goal 1:

Objectives	Activities	Who	When	Resources needed	Evaluation Output
1.1. 1.2.	1.1.1, 1.1.2 1.2.1, 1.2.2				

For example:

Goal 1: Set-up the organisational structure of the operational district:[3] Objectives 1.1, 1.2 and 1.3:

Objectives	Activities	Who is responsible	When	Resources needed	Output / Evaluation
1.1 Set-up the Senior District Management by March 97	1.1.1 PHD meeting to identify a Director and Vice-Director 1.1.2 Distribution of tasks. 1.1.3 Train the team.	Provincial Senior Management	Jan-March 97	Qualified staff	• Management established, organogram available • Roles and tasks well defined • Job descriptions discussed
1.2. Set-up the DHTAT by May 97	1.2.1 Senior district management identify members 1.2.2 Prepare and Submit the proposal to PHD. 1.2.3 DHTAT first meeting prepare terms of reference	Senior District Management DHDC/ administration DHTAT	10 March 18 March 15 April	Skilled staff	• DHDC agreed on List of proposed DHTAT members • Get approval from PHD • terms of reference established and understood
1.3. Organise the district health office May 1997	1.3.1 Identify appropriate location 1.3.2 Painting and electricity 1.3.3 Buy furniture	Senior District Management	1 March 15 April 1 May	Cost of work and furniture, Chapter 11	• Office set-up and functioning

10.5. Implementation

Without implementation, plans remain theoretical. Successful implementation requires:

1. **Analysis of obstacles**. For each objective, any obstacles or limitations to implementation should be analysed, so potential problems can be anticipated or the objective modified.
2. **Co-ordination of activities.** Decision-makers should ensure that programme activities are executed as planned and services delivered as intended. Staff need to have clear job descriptions and clear lines of responsibility, for effective co-ordination.
3. **Deployment of personnel.** To successfully perform activities, staff need to be deployed in the right numbers, with the right qualifications, at the right time and in the right place.
4. **Allocation of resources.** Managers need to mobilise and allocate financial resources needed to perform the activities.
5. **Appropriate information.** Decision makers need accurate and timely information to monitor and evaluate.
6. **Good communication** of decisions and changes to improve implementation.

[3] All activities should link with organisation and management of the operational district. Refer to Chapter 4 .

10.6. What is monitoring and why is it important?

Monitoring is a continuous process to ensures that planned activities are carried out as scheduled and health managers have the resources to achieve objectives.

The DHTAT needs to monitor regularly to ensure progress in the district's plan. Monitoring is based on regular supervision and analysis of the health information monthly reports and Tableau de Bord. Regular meetings at health centres and referral hospital, using the HIS, provide a very good opportunity to monitor.

Monitoring facilitates daily management by preventing and solving problems to ensure that ongoing activities run smoothly. It also allows managers to update plans according to changes in resource availability or HIS data.

10.7. What is evaluation and why is important?

Evaluation is a systemic way of learning from experience. Using lessons learned can improve current activities and promote better planning by careful selection of alternatives in the future[4].

- **At the national policy level.** The MoH should evaluate national health policies, strategy plans and provide guidelines to support the provincial and district managers in translating such policies into action.
  Evaluation of district plans provides MoH with an analytical and decision-oriented tool for reviewing the existing policies and strategies and if necessary to reformulate them by adapting to changes in the development of the health care system over time.

- **At the implementing level.** Operational health district offices, hospitals, and health centres should evaluate the delivery of health services and programmes.
  The main aim of evaluation is to improve health care delivery activities based on experiences and progress made so far. Evaluation allows district managers to take appropriate action on what is to be done next and how it will be done, and decide on resource allocations

In addition to basic monitoring, evaluations are needed every six months or every year in order to make a global district assessment. Provincial and district health managers should conduct an evaluation to assess progress against goals and objectives set at the beginning of the year. ***How?*** For each objective ask:

1. ***What has been achieved?***
2. ***Have we done what we set out to do?***
3. ***What are the reasons for success or failure?***
4. ***What needs to be done differently in the future (does the objective need to be changed?)***

An evaluation cannot be done unless the objectives of a plan are clear and measurable.

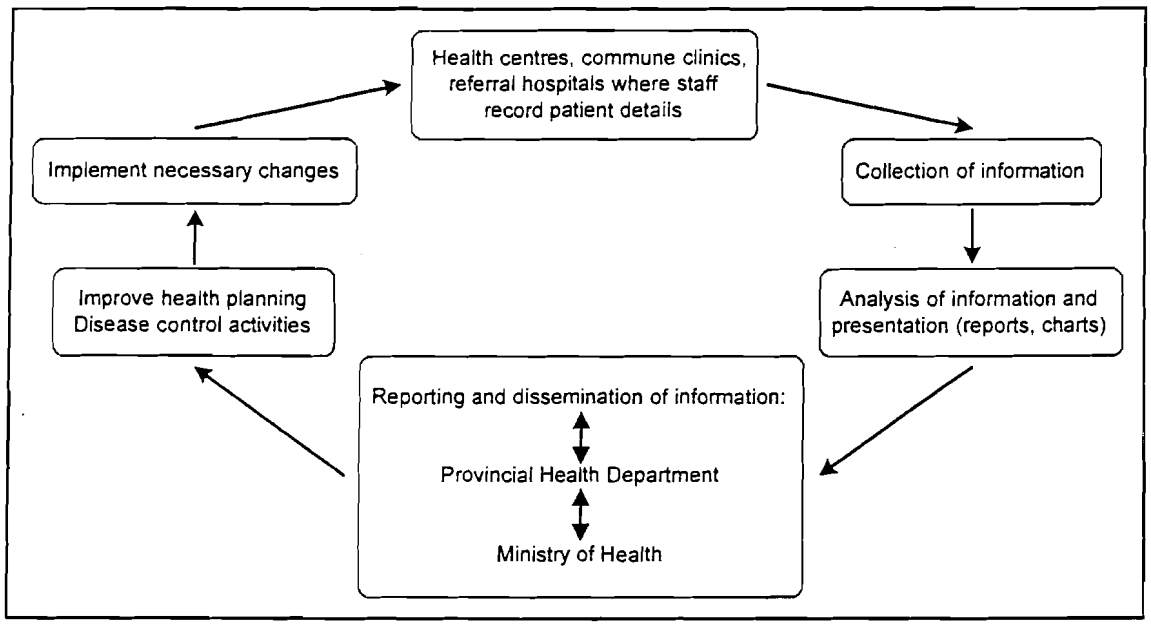
4 JK (1995, pp 11) Health Programme Evaluation. WHO.

Chapter 11. Health Information System[1]

11.1 Introduction

The MoH collects routine health information and reports it from the periphery to the centre. The Health Information System (HIS) is a powerful tool for national, provincial, and district managers set priorities and allocate resources. It is very important, therefore, that the information collected is accurate. **Figure 13** illustrates the steps from when a health worker collects information about patients to how it passes through the system, is analysed and used for planning and priority setting.

Figure 13: Routine District Health Information System[2]



11.2 Reports and objectives

The objective of the HIS is to regularly inform managers at all levels about the health status of the population covered, staff activities, and availability of resources. This information is used for planning and management of health services. The HIS consists of four types of reports:

a) The monthly reporting system
   - **HC1** for health centre
   - **HO2** for referral hospital
   - **DO3** for the Operational District Office (aggregate of data from HC1 and HO2).
   - **PRO4** for the Provincial Health Department (aggregate of data from DO3).

   Staff need to use the standard registers for daily registration and data collection so that the information from the registers can easily be collected for a monthly report.

[1] For more details refer to the Guidelines to the New Health Information System, MoH 1996.
[2] Adapted from Manual of Epidemiology for District Health Management, WHO 1989.

b) ***The alert system*** is a weekly report to collect information about the number of cases, location, and severity of dengue fever, cholera, and acute flaccid paralysis for rapid response. The health centres and referral hospitals send information weekly to the OD. The OD collates the information from all health centres and referral hospitals and sends it the same week to the PHD. The PHD collates the information from all the districts and sends it to the MoH Planning Unit.

The annual inventory report provides information to operational district, provincial, and national managers on how to allocate resources equitably. Four forms for health centre, referral hospital, operational district office, and PHD collect information on human resources, equipment, population and infrastructure.

c) ***Annual statistics report*** is done by the Department of Planning and Health Information and provides an overview of the activities in the public health sector over the past year. It includes health activities and coverage in the public sector: main illnesses seen, service indicators, and public health resources.

The Tableau de Bord is a monitoring tool for health managers to collect and review information monthly about health services. Tableau de Bord forms should be used in the health centre, referral hospital and PHD, and operational district managers.

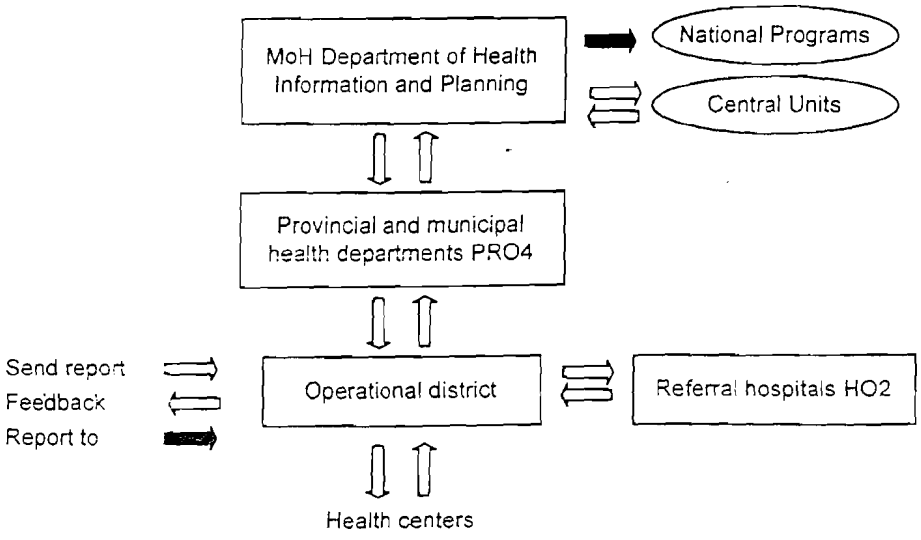
11.3. Other sources of health information

The HIS reports are only one source of information for provincial and district managers. Other sources of information include reports from within the public health facilities and outside:

- Supervision visit reports and observations from provincial managers
- NGO reports
- Surveys e.g. Demographic
- Laboratory and secial disease registers e.g. TB
- Observations or reports from the private sector

11.4. Flow of the health information

The operational districts summarize health center and referral hospital reports for the summary report sent to the PHD. The PHD collates the operational district reports and makes a summary for the MoH Department of Planning and Health Information, who computerizes and analyzes the information for feedback reports to PHDs and national programs.



11.5. Using the HIS reports to plan, monitor, and evaluate activities[3]

Provincial and district levels can use the HIS in many different ways.

11.5.1. Provincial level

The PHD needs to make sure the reports are accurate by identifying and resolving any reporting problems quickly. The HIS is a tool for provincial managers to base distribution of budget and resources, and monitor health status and activity level of health facilities. The PHTA Team should:

A. Review district monthly reports as a regular part of their meeting, including a comparison with the previous month's reports to identify any important health problems that need to be addressed.
B. Identify problems in incorrect reporting and missing reports and follow-up monthly with the operational districts.
C. Give feedback to the operational district health staff during supervision and the monthly meeting with the operational district director.
D. Complete the provincial performance chart (Tableau De Bord) monthly and use it to monitor the performance of the provincial health activities overall.
E. Use the monthly report to base the distribution of budget and resources on the real activity level.
F. Conduct a mid-year review of the HIS to monitor the progress of the districts over six months.
G. Conduct an end-year review as a part of the annual provincial plan.
H. Use the information from the end-year review to set targets for the next year.

11.5.2. Operational district

The DHTAT should use the HIS reports as a tool to monitor health status of operational district and the implementation of health services to:

A. Review of the monthly district report as a part of regular team meetings to determine which diseases or health problems are being reported and where.
B. Completing the operational district performance chart (modified provincial Tableau de Bord) to monitor overall progress in operational district.
C. Identify and correct any reporting difficulties.
D. Give feedback to health facility staff during supervision and the monthly meeting with health center chiefs.
E. Identify any health issues or emergencies that require additional assistance.
F. Use the information as a basis for monthly distribution of budget and resources to health centres and referral hospitals.
G. Conduct a mid-year review of the HIS to monitor progress of the health centres and referral hospital.
H. Conduct an end-year review as a part of the district annual plan.

[3] For more detail refer to Analysis of health information for decision making (Khmer/French) MoH 1997.

I. Use the information from the end year review to set targets for the next year, in co-ordination with the provincial targets.

11.5.3. Health centre and referral hospital

The most important place where health information needs to be used is within the health centres and referral hospitals. If the staff in the health centres and referral hospitals use and understand the information, it will become more accurate and reliable. In particular, the operational district management should work with referral hospital and health centre staff to:

A. Better understand the reporting system and identify any reporting errors.
B. Use the monthly information within the health centre for meetings to identify health problems and plan activities.
C. Complete the performance chart (Tableau De Bord) to monitor performance in the health centre and referral hospital.
D. Make a monthly work schedule for staff by comparing the actual activities, the time needed and number of staff[4].
E. Conduct a mid and end year review as a part of the annual planning.
F. Use the information to set and monitor targets within the health centres, taking into account the actual activities and provincial and district targets.[5]

11.6. The end year review of the HIS

An end of year review of the HIS is an important part of annual planning at national, provincial and district levels. The review will show health staff what they have accomplished during the year and allows the staff to set realistic targets for the next year.

The end of year review should include:

A. **Health resources available (beds, doctors, midwives, etc.)**
B. **number of people that use these resources**
C. **main types of illnesses treated by staff in OPD and IPD**
D. **Progress on important indicators (BCG coverage, PNC coverage, etc.)**
E. **Progress in important health programmes (TB, AIDS, etc.)**
F. **Important diseases that should be identified and followed (cholera, malaria, etc.)**

Health managers should compare this information to the required financial and human resources to evaluate efficiency and cost-effectiveness. The information should be included in the annual plans for all levels.

11.6.1. To determine the human and material resources available

Provincial and district health managers can compare health resources available with what is needed in terms of:

- Type and number of functioning health facilities in each district.

[4] See Chapter 5 section 5.2.5.
[5] See Chapter 5, section 5.2.3.

- % of population with access to facilities.
- Number of hospital beds per district.
- Type and number of staff currently employed and their distribution.
- Expenditure on health centres and referral hospitals.

11.6.2. To determine the number of people those use these resources

A. Utilisation of the OPD: The number of new cases per inhabitant per year. *Example: Prey Veng, OPD, 1996.*

Province	Population	Commune health centres		Hospitals		Total		New cases per inhabitant
		New Cases	Total	New Cases	Total	New cases	Total	
Prey Veng	995,137	235,430	264,963	84,411	88,668	319,841	353,631	319,841/ 995,137 =0.32

The number of OPD new cases in one year divided by the number of inhabitants is an indication of whether or not people use the outpatient department. In Prey Veng in 1996, the number of new cases per inhabitant was 0.32. This figure is low, meaning that few people used the public health facilities when they were sick. *It doesn't mean that few people were sick.* The WHO international standard is 0.60 for rural areas, and 1.00 for urban areas. This figure doesn't indicate why health facilities are not being used more frequently. Provincial and district health managers need to find out utilisation is low, e.g. perceived low quality of service or difficulty in reaching the facility.

This information also indicates that commune level staff provided consultations for most of the new cases in OPD, 73.6% of new consultations (235430 / 319841 = 73.6%). The referral hospitals saw 27% of new cases. If these 27% are not referred patients, it is important to know which types of patient are bypassing the health centres and for what reasons.

Bed occupancy rate indicates how many people are using the inpatient services at the hospital and if the hospital has enough beds to cope with inpatient needs.

B. Bed Occupancy rate. *Example: Sihanoukville, general bed occupancy rate, 1996*

Sihanouk Ville	# beds	total # discharges	average length of stay	# of inpatient days	bed occupancy rate
Mittaphiap	94	2961	7.1	2961x7.1 = 21023	21023 / (94x365)=. 61x100 = 61%
Stung Hav	10	224	5.2	224 x 5.2 = 1164	1164 / (10 x 365)=. 32 x 100 = 32%
Prey Nup	16	262	8.4	262 x 8.4 = 2200	2200 / (16x 365) =. 40 x 100 = 40%
totals	120	3447	—	24387	—
averages	40	1149	6.9	8129	44%

In Sihanoukville in 1996, the average general bed occupancy rate was 44%. There is no standard for this indicator because it varies from place to place, but allows for comparison between facilities. For example, the bed occupancy in Stung Hav is 32%; in Mittapheap, it is 61%. Factors such as long-stay inpatients affect the indicator because the average length of stay is used in the calculation.

11.6.3. To determine the types of illnesses seen by the health staff

A. Main illnesses seen in OPDs. *Example: Kompong Speu, OPD 1996*

Province	Malaria	Diarrhoea	Measles	ARI	STD	Skin infections	Other	Total 1996
Kg. Speu	484[illegible]	3889	28	1595	101	1346	13470	25.276
% of total	*19%*	*15%*	*<1%*	*6%*	*<1%*	*5%*	*53%*	*100%*

In Kompong Speu in 1996, 45% of outpatient consultations treated four infectious diseases: malaria, diarrhoea, ARI, and skin infections. The Kompong Speu provincial and district managers need to know, for example:

- Have there been any changes since 1995? If so why? Has case reporting improved or has there been an increase or decrease in the number of new cases?
- Does training of health staff give enough emphasis to treatment and prevention of these diseases?

B. Main illnesses seen in IPDs. *Example: Pursat 1996*

	cholera	dengue	obgyn	ARI	malaria	meningitis	measles	TB	other	total
No.	3	59	1245	1176	1447	30	260	577	3018	7815
% ttl	*<1%*	*0.8%*	*16%*	*15%*	*19%*	*0.4%*	*3%*	*7%*	*39%*	*100%*

In Pursat in 1996, over 1/3 (34%) of all inpatients were treated for two illnesses, ARI and malaria, and 16% were for obstetrics and gynaecology. This has important implications for hospital planning and resource allocation. Other illnesses that require follow-up are: cholera, dengue, meningitis, and measles.

11.6.4. To monitor progress on important indicators[6]

A. Antenatal consultation coverage. *Example: Siem Reap 1996*

Province	Pregnant women (45/1000[7])	Health centres		Hospital		Totals		1st antenatal consultation coverage
		1st	Total	1st	Total	1st	Total	
Siem Reap	29.402	5282	7650	6468	9624	11750	17274	11750 / 29402 = 40%

In Siem Reap in 1996, 40% of pregnant women went to a health worker for one antenatal consultation. Where do the other 60% of pregnant women seek antenatal care? The PHTAT and DHTAT should find out why the majority of pregnant women don't come for antenatal consultation and take action to improve coverage through outreach or health education.

B. The Return Rate indicates how many women return for a second and third antenatal visit. The *return rate* equals the total number of consultations divided by the number of new consultations. In Siem Riep the return rate for women who came back for a second and third antenatal visit is 1.4 (17274 / 11750 = 1.4). Ideally, the return rate should be 3.0, because a pregnant woman should see a health worker about three times during pregnancy. The DHTAT should find out why pregnant women do not come back, and take action to improve the return rate.

6 Many important indicators are described in Analysis of health information for decision making, MoH 1997.

7 Crude Birth Rate is estimated at 45 per 1000 persons per year and is used as a proxy for the number of pregnant women.

C. **BCG and DPT3 coverage.** ***Example: Takeo 1996.***

		BCG		DPT 3	
Province	**children < 1 (4% of population)**	**doses given to children under 1**	**% of children < 1**	**doses given to children under 1**	**% of children < 1**
Takeo	29386	26917	26917/29386 = 92%	22,280	22280/29386 = 76%

In Takeo in 1996, 92% of children under one year received BCG vaccinations, and 76% received the third dose of DPT. Provincial and district managers should compare the coverage to 1995 to see if there been an improvement and set the target for 1997.

11.6.5. To monitor progress in important health programmes

A number of programmes have their own indicators and collect specific data. Not all of the programme information is included in the HIS, for example: TB, MCH, and malaria. Provincial and district managers should assess these programmes at the end of the year using indicators defined by national programs.

11.6.6. To follow specific diseases

Example: Kampot and Kompong Cham: malaria cases 1996

Province	OPD-malaria	Inpatient - simple	Inpatient - severe	Total cases	Total deaths	Case fatality rate[8] for severe malaria
Kampot	10,473	1155	201	11,829	6	6 / 201 = 3%
Kompong Cham	4805	1022	505	6332	91	91 / 505 = 18%

Kampot had more than twice the number of malaria cases compared to Kompong Cham in 1996. In Kompong Cham, however, a greater number of people had serious malaria, of whom 18% died. Malaria is a serious problem in both provinces, but PHTAT and DHTAT would use different strategies to address the problem.

In Kompong Cham, provincial and district managers should find out whether the severe cases are being reported from one referral hospital and if the diagnosis and management of these cases needs to be reviewed. This may indicate a need for training on management of severe malaria.

In Kompot, provincial and district health technical advisory teams could compare the number of malaria cases to 1995. Has there been a change? Is malaria being over or under reported? What strategies should technical advisory teams use?

In conclusion, reporting is not the goal of the HIS. ***The goal is to use the reports to make decisions and take action.***

[8] (Number of cases dying /total number of severe cases) x 100.

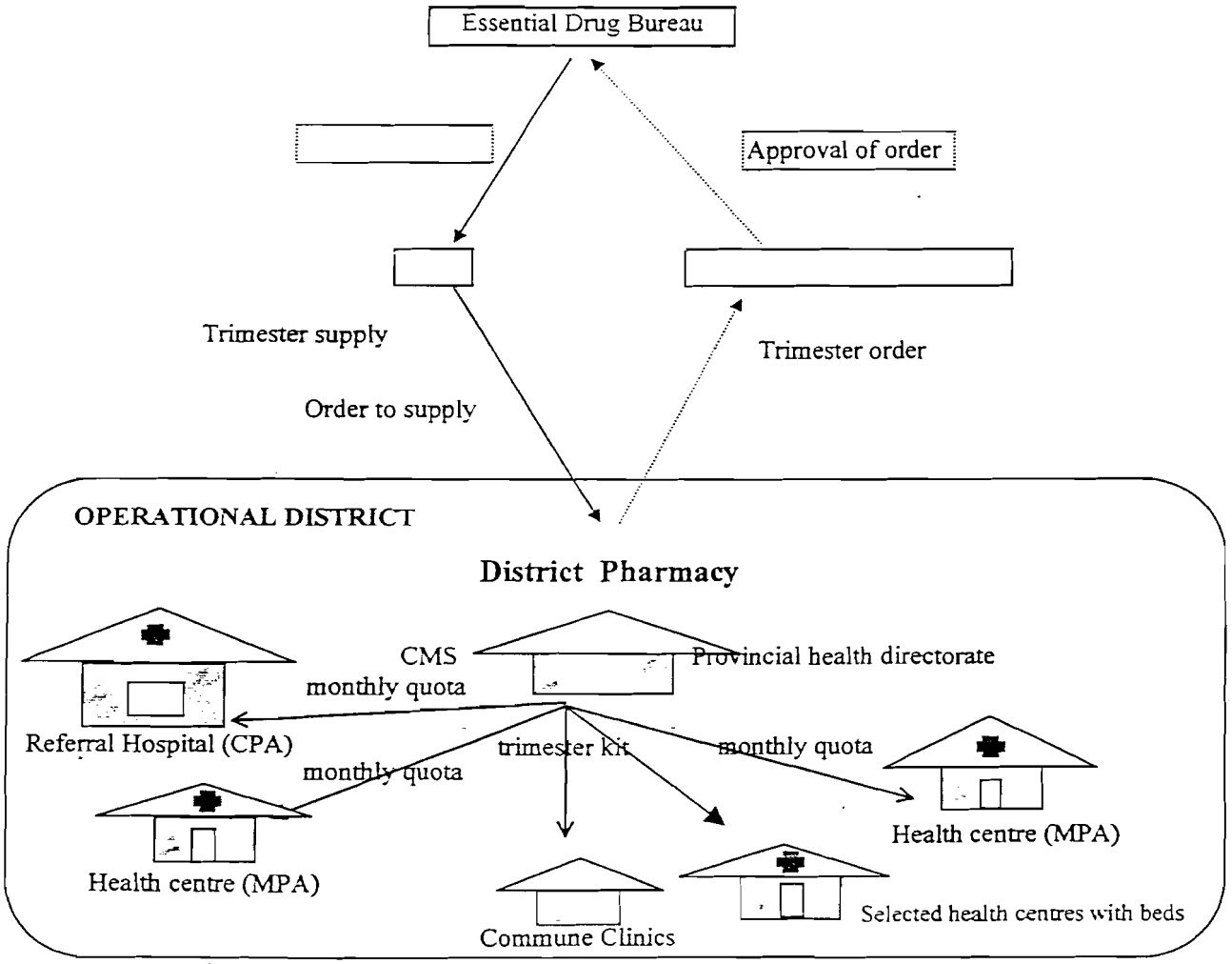
Chapter 12. Essential Drugs

12.1. Distribution scheme

The strategy for drug management is within the context of district health service reorganisation. The operational DHTATs will manage all medical supplies.

Currently, the Essential Drugs Bureau (EDB) calculates the quantities of medical supplies based on the provincial HIS reports. In the future (**Figure 14**) each operational district pharmacy will calculate the quantities required for the health centres and referral hospital. The quantities will be based on a ***quota system***. The provincial health department will collect the orders and submit them to the EDB for verification according to stock balances and activity levels. After approval, the EDB will submit the order to the Central Medical Stores (CMS) for delivery to the PHD and operational district pharmacies.

Figure 14: General distribution scheme.



Note: Health posts will receive drugs from their supporting health centers.[1]

[1] Chapter 2. 2.3.2.

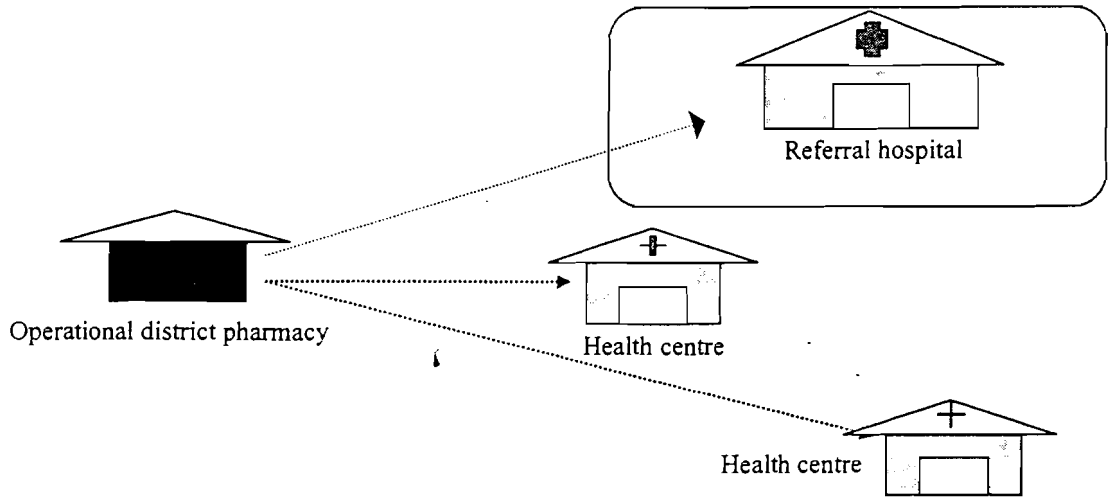
12.2. Organisation of the operational district pharmacy

The operational district pharmacy will be responsible for analysing the drugs needs and distributing the medical supplies to the referral hospital and health centres. The operational district pharmacist must have a diploma and training in district pharmacy management. He/she is also a member of the DHTAT.

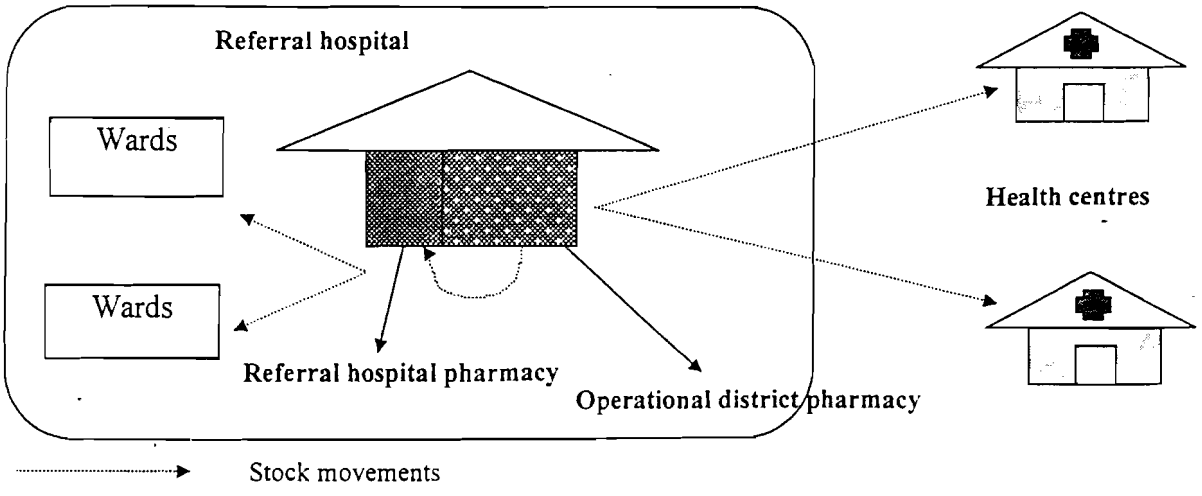
The operational district pharmacist supervises all drug management and use in the operational district, including the referral hospital. Ideally there should be operational district pharmacist and one referral hospital pharmacist.

There are three effective and safe options for organising the operational district pharmacy system.

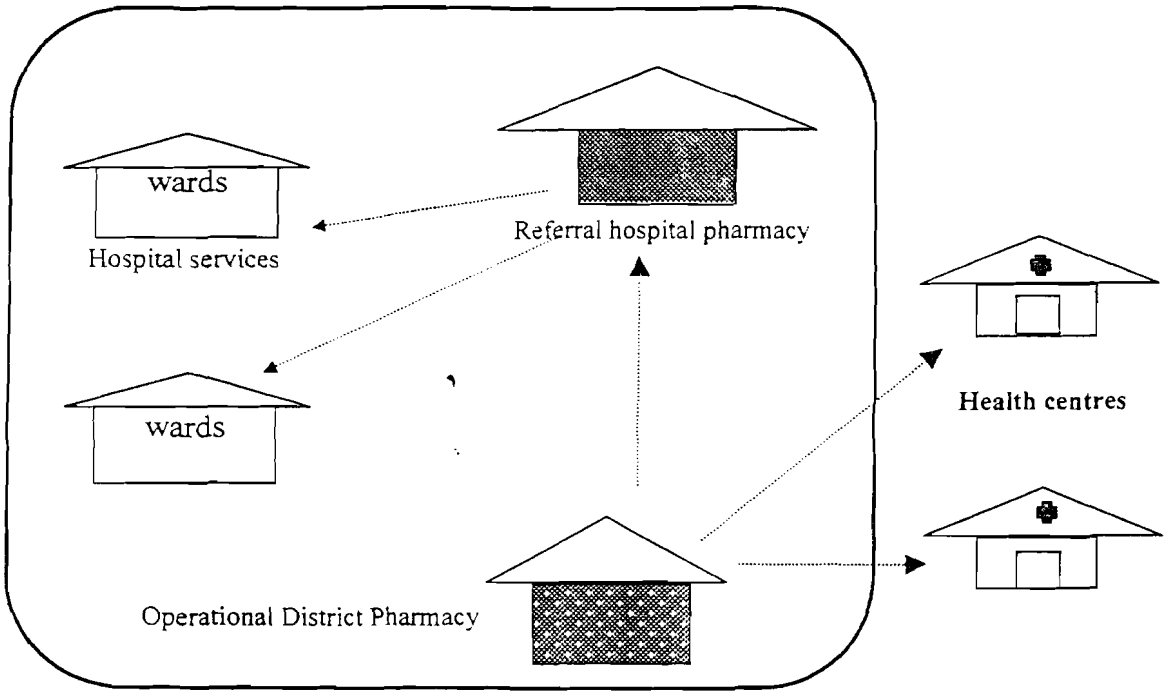
Option 1: The district pharmacy is outside the referral hospital



Option 2: The district pharmacy is within the referral hospital and next to the referral hospital pharmacy



Option 3 : The district pharmacy is within the referral hospital, but separate to the hospital pharmacy.



The Senior District Management should organise its operational district pharmacy according to one of these three options. Other options are possible depending on local circumstances e.g. presence of existing infrastructure, available resources, but there should still be clear stock separation.

12.3. Medical supplies to support MPA and CPA activities

The Department of Pharmacy reviewed the national list of essential drugs and medical materials, and defined a standard list for each level in the operational district:

1. **The MPA list** corresponds to the activities at the health centre level.
2. **The CPA list** corresponds to the activities at the referral hospital
3. **The CPA special list** is for referral hospitals that provide other special services e.g. surgery, ophthalmology, dermatology, psychiatry.
4. **The Commune kit** is for the commune clinics that continue to function during the transition period until health centres are built.

The distribution of medical supplies will be limited to these 4 types according to the activity level of each facility.

12.3.1. How to order for a new health centre

For an approved health centre, the health centre chief will submit an order for drugs and materials to the General Department of Health, MoH. After approval, the EDB will then decide the quantity (based on the MPA list). Currently there is a basic allocation estimated for 900 new cases every 3 months for all new health centres. The delivery of supplies will then coincide with the next trimester.

12.4. Procurement of medical supplies

The procurement unit of the MoH places its annual drug order in October each year. The order includes drugs, consumables, reagents and laboratory materials and equipment. This order specifies the annual specific requirements nation-wide, including national programme drugs.

The EDB submits the list of needs to the department of procurement for tender invitations, after the national budget has been approved by the MoEF. Orders submitted in October arrive approximately 8-9 months later. The three sources of budget for medical supplies are:

- National budget
- World Bank and Asian Development bank (Loans)
- Donors (National Governments e.g. Germany, Japan, UK; UNICEF and NGOs etc.)

12.5. Allocation of medical supplies and mode of supply

Three types of supplies are prepared and sent via the logistic support of CMS, following a three or six month cycle.

A. **Kits** are standard units with 16 items of medicines and materials for one commune clinic. The quantities are fixed and delivered every quarter to the district pharmacy for distribution to the commune clinics.
B. **Allocation** is the system adopted since 1996 and is used in all the hospitals in Cambodia. The EDB calculates each hospital's allocation centrally according to its outpatient/inpatient activity level. The amount allocated is revised every six months. For each supply, the quantities distributed correspond to a base allocation adjusted according to the stock balance at the end of each cycle. But it does not include reserve/security stocks.
C. **The quota system** was adapted from the allocation system and has been implemented in certain locations. The quota system differs from the allocation system in two main ways:
   1. Depending on the level, facilities calculate their own requirements and give the orders themselves to the district pharmacy or CMS.
   2. The quota ordered is based on the facility's activity level and includes reserve and security stocks. The calculated quota would thus be the maximum amount permitted for the facility.

The quota calculation uses the following data:

- Consumption (based on new cases OPD and IPD/month)
- Period of Supply
- Lead Time (time taken to receive the drugs from when the order was placed)
- Security stock

For example: Quota for Aspirin -referral hospital.

Period of Supply	=1 month	= 1.0 CMM
Lead time	= 10 days = reserve stock	= 0.3 CMM
Security stock	= 30%	= 0.3 CMM

Quota for the referral hospital is **1.6 CMM**

For aspirin 300mg, the standard consumption profile for a referral hospital per 100 new cases is 623 tablets. For a hospital with 200 new cases per month the required quantity is:

2 x 1.6 x 623 = 2000 tabs per month

After the operational district management system is implemented, the district pharmacy will replace the allocation system with the quota system. The quotas will initially be defined by the EDB and revised every six months in collaboration with the district health office and the PHD. The basic unit of the quota is the CMM (*Consommation Mensuelle Moyenne)* or average monthly consumption. The CMM has been calculated[2] for each drug and material e.g. sutures, dressings.

12.6. Storage and delivery of medicines

For the correct and secure storage of large amounts of drugs, a new operational district pharmacy store is required. Requirements for the store are:

- A standard design (available from the Department of Pharmacy)
- Advocating for a district pharmacy store to be built with every new operational district
- Prepare requests to donors for funding

CMS trucks deliver the order and an invoice, by truck to accessible provinces. Transport costs will be deducted from the district budget by MoH. Usually the CMS will unload its supply at the PHD. District pharmacies will receive and sign for their supplies from the PHD. The PHD should immediately check some boxes in the presence of the operational district pharmacist and the transporter. The district pharmacies should take a full inventory.

For districts on route, the CMS trucks can directly unload supplies to save transport expenses for those districts. Eventually CMS will deliver directly to all operational district pharmacies accessible by road. For remote provinces the transport budget line can be used to arrange private transportation of the supplies.

12.7. Management of medical supplies[3]

The main principle to be respected in all circumstances is that all stock, whatever its origin i.e. NGO, MoH, should be integrated. There should be only one stock card for each item, with a record of the origin of the item. There should only be one total amount on the card. This will then remove the link between origin of the stock and its utilisation by health care level.

12.7.1. How to manage the referral hospital pharmacy supplies

At present, most of the hospital inpatient services receive supplies daily from the hospital pharmacy, and the OPD pharmacy receives supplies weekly. There are three main types of activities:

- Inpatient based activities
- Referral consultations (OPD)
- Special technical services (X-ray, surgery, deliveries, wound dressing, psychiatry, laboratory etc.)

The organisation of supplies from the hospital pharmacy will depend on the service type.

A. **Inpatient services.** The supply of medical materials will be daily and based on the total prescriptions required for current inpatients. There will not be a reserve stock on the ward for this service.

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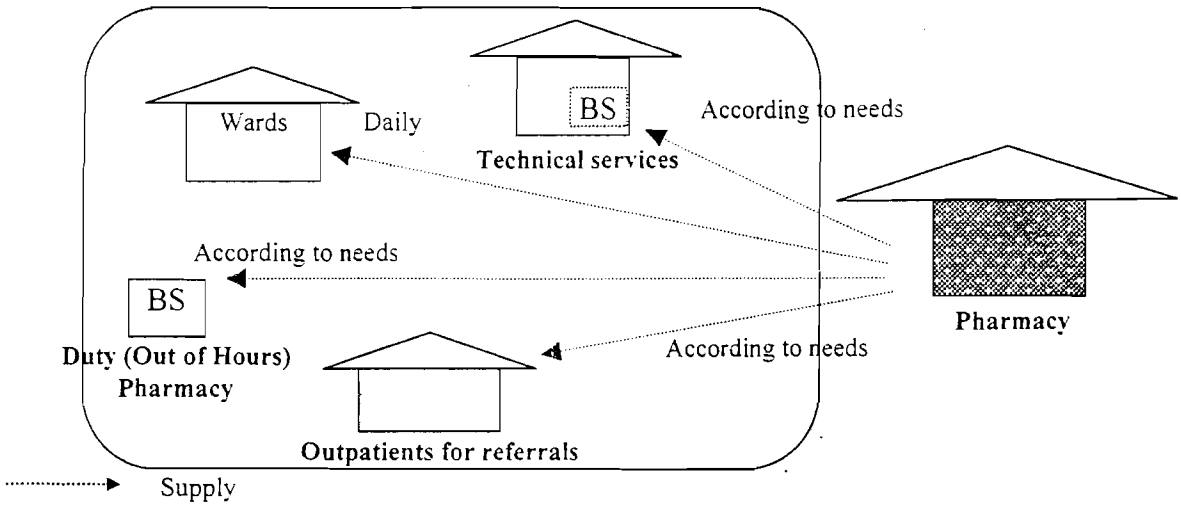
2 For more details refer to the Guidelines for the Management of Drug Supply at the Operational District level. MoH 1997

3 The stock management referred to here is from the manual Drug Management EDB/MoH (1995) Workshops on drug management were organized in all provinces based on the manual.

B. **Outpatient services.** Outpatients will have to take a prescription to the detail pharmacy to obtain their treatment.
C. **Technical services.** Each technical service will have its own pharmacy cupboard, which will have a basic stock determined by the needs of that specific service.
D. **Duty (Out of Hours) Pharmacy.** This will be open when the detail pharmacy is closed. It will be replenished every day according to the needs.

Transition period note: *Where OPD activities are integrated within the referral hospital. the supply will be weekly and from the hospital pharmacy.*

Figure 15: Supply of referral hospital services. Referral Hospital (BS- base stock)



12.8. Management tools

The management tools are related to the procedures for stock management, distribution and consumption. The treatment records (consultation book, prescriptions, inpatient records, and temperature chart) already exist and have been defined by the General Direction of Health and Planning Unit in the MoH.

12.8.1. Health centre pharmacy

There are 3 main tools:

1. The order and delivery forms from the operational district pharmacy
2. Daily consumption register
3. Information indicating the CMM and quota (prepared by the operational district pharmacy).

Using the patient consultation book, which should contain the patients' main information i.e. symptom, diagnosis and treatment prescribed, the supervisors should be able to monitor the drug consumption as well as the rational drug use.

12.8.2. Referral hospital pharmacy.

These management tools are:

1. The order/delivery forms from the operational district pharmacy.

2. The stock card.
3. The order form from the detail pharmacy and from the main stock pharmacy.
4. The order/delivery forms from the hospital wards.
5. The order for the Duty (Out of Hours) Pharmacy and technical services.
6. The daily consumption register and treatment records.
7. The information on CMM and quotas.
8. The consumption monitoring sheet.

12.8.3. Operational district pharmacy

The chief of the operational district pharmacy should be at least a diploma pharmacist. His/her main responsibilities are:

1. Management of the stock for the whole district.
2. Distribution to all district health facilities.
3. Compile orders and send to CMS.
4. Follow the consumption and analyse the needs of the district.
5. Be a member of the DHTAT.
6. Supervise drug use and management in district health facilities.
7. Monitoring of and training in rational drug use.

There are two types of management tools needed:

Stock management	Review of operational district needs
• Order form • Stock card • Information indicating CMM and the quotas for the referral hospital and health centre • The report on the replacement and destruction of expired medications	• Monthly summary of activities in the health facilities • Consumption profile of all health facilities • The record of quota calculation for the district

12.9. Drug Use

Misuse of drugs such as injectables and antibiotics continue to be the major problem with respect to irrational drug use. Patient and prescriber education is required:

- Information on drug use and provision of flow charts/protocols
- Direct discussion/explanation with the patient
- Use of media/theatre to educate the public

The PHTAT and DHTAT should conduct monitoring, regular workshops and on the job training to improve prescribing.

12.9.1. Drug prescribing

Drugs prescribing should be rational For this the following measures are required:

- Patient examination
- Strict implementation of treatment guidelines
- Prescription according to generic names
- Regular supervision to evaluate drug use according to the health centre indicators:
  - ✓ Average number of drugs prescribed per patient visit
  - ✓ % antibiotics given
  - ✓ % injections given

- ✓ % drugs prescribed by generic name
- ✓ % drugs prescribed on national list
- ✓ % correct treatment for malaria
- ✓ % children under five with diarrhoea receiving ORS
- ✓ % children under five with diarrhoea receiving antibiotics
- ✓ % children under five with ARI receiving antibiotics
- ✓ Are treatment guidelines available for CDD, ARI and malaria?

12.9.2. Drug dispensing

Drug dispensing requires:

- Drugs are given to the patient in a labelled plastic bag (drug name dose etc.).
- The patient is given the necessary information on use of the drug.
- The provincial/district pharmacist trains the drug dispenser.

12.10. Transition period

Commune clinics are not yet replaced by health centres.

- *Commune clinics will continue to receive their kits at the district level. until they are phased out.*

Former district hospitals which will become health centres:

- *FDHs will receive a supply that corresponds to both inpatient and outpatient activities (MPA and CPA), until they become health centres.*
- *For selected health centres (with some inpatient activity, permitted by MoH), these will also receive some other items in addition to the MPA, i.e. injectables which will be from an special established list.*

12.11. National programmes supplies

The drug orders for TB, malaria, birth spacing, and vaccines currently are made by national programmes based on the activity reports of the districts and checked by EDB. The orders are then passed onto CMS for distribution. In the future ordering and distribution of all the different drugs will be integrated, so that the operational district pharmacist will compile the order, along with the other general drug supplies. CMS will receive only one order for all items per trimester for each district.

Currently, national programme supervisors conduct supervision and monitoring of drugs such as TB drugs separately. A pharmacy supervision team from the EDB monitors general drug use. This double system wastes resources and restricts learning. In the future it is desirable that supervision is integrated and carried out by one team.

APPENDIX 1[1]

[1] After the health coverage plan review in 1997, Kampot added one health center, Ratanakiri added one health center, Banteay Meanchey added eight health centers, and Sampov Lun District, and Battambang added eight health centers. Some operational districts changed their names. The present list doesn't include the health coverage plan of the municipality of Phnom Penh. According to the plan developed in 1996, however, the municipality has four operational districts and 37 health centers.

Health Coverage Plan in Cambodia

List of Operationnal District and Health Centres

Svay Rieng	**37 HC**
1 Svay Rieng	20 HC
2 Romeas Hek	9 HC
3 Chiphu	8 HC
Prey Veng	**90 HC**
1 Prey Veng	17 HC
2 Nak Leoung	17 HC
3 Pearaing	15 HC
4 Kampong Trabek	11 HC
5 Preah Sdach	9 HC
6 Kamchay Mear	11 HC
7 Mesang	10 HC
Kandal	**88 HC**
1 Takhmau	14 HC
2 Saang	12 HC
3 Koh Thom	12 HC
4 Kien Svay	17 HC
5 Ksach Kandal	9 HC
6 Ang Snuol	8 HC
7 Ponhea Leu	10 HC
8 Muk Kampoul	6 HC
Kampong Cham	**128 HC**
1 Kampong Cham	22 HC
2 Prey Chhor	15 HC
3 Cheung Prey	13 HC
4 Chamcar Leu	13 HC
5 Kroch Chhmar	9 HC
6 Tbong Khmum	13 HC
7 Ponhea Krek	14 HC
8 O Raing Ov	8 HC
9 Memut	8 HC
10 Srei Santhor	13 HC
Kampong Chhnang	**34 HC**
1 Kampong Chhnang	23 HC
2 Kampong Tralach	11 HC
Kampong Speu	**50 HC**
1 Kampong Speu	22 HC
2 Oudong	9 HC
3 Kong Pisey	19 HC
Takeo	**70 HC**
1 Takeo	15 HC
2 Kirivong	20 HC
3 Prey Kabass	13 HC
4 Bati	13 HC
5 Ang Rokar	9 HC
Kampot	**47 HC**
1 Kampot (DC)	10 HC
2 Chhouk	15 HC
3 Kampong Trach	12 HC
4 Angkor Chey	10 HC
Sihanouk Ville	**11 HC**
1 Sihanouk Ville	11 HC
Koh Kong	**12 HC**
1 Koh Kong	6 HC
2 Sre Ambel	6 HC
Pursat	**30 HC**
1 Pursat	20 HC
2 Bakan	10 HC
Battambang	**67 HC**
1 Battambang	16 HC
2 Svay Por	34 HC
3 Mong Russey	11 HC
4 Sampov Luon	6 HC
Banteay Meanchey	**53 HC**
1 Mongkul Borei	28 HC
2 Preah Neat Preah	12 HC
3 Thmar Puork	13 HC
Siem Reap	**57 HC**
1 Siem Reap	29 HC
2 Sotr Nikum	17 HC
3 Kralanh	7 HC
4 Samrong	4 HC
Kampong Thom	**50 HC**
1 Kampong Thom	21 HC
2 Baray-Santuk	19 HC
3 Stong	10 HC
Preah Vihear	**12 HC**
1 Tbeng Meanchey	12 HC
Kratie	**22 HC**
1 Kratie	12 HC
2 Chhlong	10 HC
Stung Treng	**10 HC**
1 Stung Treng	10 HC
Mondul Kiri	**6 HC**
1 Sen Monorom	6 HC
Rattanak Kiri	**16 HC**
1 Ban Lung	16 HC
Kep Ville	**4 HC**
1 Kep Ville	4 HC

Health Coverage Plan in Cambodia

Number of Operational Districts, Health Centres and Population Coverage

Item	Province	Operational District	District Covered	Population Coverage	# of Health Centres
1	Svay Rieng	3		459,187	37
	1	Svay Rieng	Svay Rieng		20
			Svay Teap		
			Kampong Ro		
			Ramaouol		
	2	Romeas Hek	Romeas Hek		9
	3	Chi Phu	Chi Phu		8
2	Prey Veng	7		974,450	90
	1	Prey Veng	Prey Veng		17
			Ba Phnom		
			Kampong Leav		
			Kanh Chreach		
	2	Neak Loeung	Peam Ro		17
			Peam Chor		
			Preah Sdach		
			Ba Phnom		
	3	Peareang	Peareing		15
			Sithor Kandal		
	4	Kampong Trabek	Kampong Trabek		11
	5	Preah Sdach	PreahSdach		9
			Peam Chor		
	6	Kamchay Mear	KanhChreach		11
			KamChayMear		
	7	Mesang	Mesang		10
			Ba Phnom		
3	Kandal	8		935,830	88
	1	Takhmau	Takhmau		14
	2	Saang	Saang		12
	3	Koh Thom	Koh Thom		12
	4	Kean Svay	Leuk Dek		17
			Kean Svay		
			Lvea Em		
	5	Ksach Kandal	Ksach kandal		9
	6	*Ang Snuol*	*Ang Snuol*		*8*
	7	*Ponhea Leu*	*Ponhea Leu*		*10*
	8	*Muk Kam Poul*	*Muk Kam Poul*		*6*
4	Kampong Cham	10		1,450,557	128
	1	Kampong Cham	Koh Satin		22
			Stung Trang		
			Kampong Siem		
			Tbong Khmum		
			Kampong Cham		
	2	Prey Chhor	Prey Chhor		15
			Kang Meas		
	3	Choeung Prey	Cheung Prey		13
			Batheay		
	4	Chamkar Leu	Chamkar Leu		13
			Stung Trang		
	5	Krach Chhmar	Kroch Chmar		9
			Stung Trang		
	6	Tbong Khmum	Tbong Khmum		13
			Kroch Chhmar		
	7	Ponhea Krek	Ponhea Krek		14

Item	Province	Operational District	District Covered	Population Coverage	# of Health Centres
			Dam Be		
	8	O Reang Ov	O Reang Ov		8
			Koh Sotin		
	9	Memut	Memut		8
			Chamkakaosou		
	10	Srei Santhor	Srei Santhor		13
			Kang Meas		
5	Kampong Chhnanng	2		347,341	34
	1	Kampong Chhnang	RoleaPiear		23
			Boribo		
			ChulKiri		
			Tuk Phos		
			Kampong Leng		
	2	Kampong Tralach	Kampong Tralach		11
			Chul Kiri		
			Samaki Meanchey		
6	Kampong Speu	3		532,694	50
	1	Kampong Speu	Chbar Morn		22
			Samrong Tong		
			Phnom Sruoch		
			Oudong		
			Kong Pisey		
			Oral		
	2	Oudong	Oudong		9
			Thpong		
	3	Kong Pisey	Kong Pisey		19
			Bosedth		
7	Takeo	5		729,248	70
	1	Takeo	Samrong		15
			Takeo PT		
			Treang		
			Tram Kak		
	2	Kirivong	Kirivong		20
			Koh Andet		
			Borey Chulasar		
			Treang		
	3	Bati	Bati		13
			Samrong		
	4	Ang Rokar	Tram Kak		9
	5	Prey Kabass	Prey Kabass		13
8	Kampot	4		478,530	47
	1	Kampot	Kampot		10
			Kampong Bay		
	2	Chhouk	Chhouk		15
			Dang Tung		
			Chum Kiri		
	3	Kampong Trach	Kampong Trach		12
			Dang Tung		
			Banteay Meas		
	4	Angkor Chey	Angkor Chey		10
			Banteay Meas		
9	Sihanouk Ville	1		120,702	11
	1	Sihanouk Ville	Stung Hav		11
			Prey Nup		
			Mittapheap		

Item	Province	Operational District	District Covered	Population Coverage	# of Health Centres
10	Koh Kong	2		98,530	12
	1	Koh Kong	Smach Mean Chey		6
			Mondul Seima		
			Koh Kong		
			Kiri Sakor		
	2	Sre Ambel	Sre Ambel		6
			Botum Sakor		
			Thmar Baing		
11	Pursat	2		314,425	30
	1	Sampov Meas	Sampov Meas		20
			Kandeang		
			Krakor		
			Kravanh		
	2	Bakan	Bakan		10
12	Battambang	3		756,089	67
	1	Battambang	Svay Por		34
			Sangke		
			Ek Phnom		
			Banan		
			Rattanak Mondul		
	2	Battambang	Battambang		16
			Bavel		
	3	Mong Russey	Mong Russey		11
	4	Sampov Luon	Sampov Luon		6
			Phnom Preuk		
			Kom Reang		
13	Banteay Meanchey	3		539,070	53
	1	Mongkol Borei	Serey Sophorn		28
			O Chrov		
			Mongkol Borei		
	2	Thmar Puok	Thmar Puok		13
			Ampil		
			Svay Chek		
	3	Preah Net Preah	Preah Neat Preah		12
			Phnom Srok		
14	Siem Reap	4		658,865	57
	1	Siem Reap	Siem Reap		29
			Pourk		
			Angkor Thom		
			Banteay Srey		
			Prasat Bakong		
			Angkor Chum		
			Varin		
	2	Sotr Nikum	Soth Nikum		17
			Svay Leu		
			Chi Kreng		
	3	Kralanh	Kralanh		7
			Srey Snam		
			Puork		
	3	Samrong	Samrong		4
			Chong Kal		
15	Kampong Thom	3		569,263	50
	1	Kampong Thom	Stung Sen		21
			Santuk		
			Kampong Svay		
			Prasat Balaing		

Item	Province	Operational District	District Covered	Population Coverage	# of Health Centres
			Sandan		
			Prasat Sambo		
	2	Stong	Prasat Balaing		10
			Stong		
	3	Baray-Santuk	Santuk		19
			Baray		
16	Preah Vihear	1		109,030	12
	1	Preah Vihear	Tbeng Meanchey		12
			Chhep		
			Chey Sen		
			Ro Vieng		
			Sangkum Thmey		
			Kou Len		
			Chom Kscn		
17	Kratie	2		220,841	22
	1	Kratie	Kratie		12
			Prek Prasap		
			Sambo		
	2	Chhlong	Prek Prosop		10
			Chhlong		
			Snuol		
18	Stung Treng	1		82,177	10
	1	Stung Treng	Stung Treng		10
			Thala Bariwatt		
			Siem Pang		
			Sesan		
			Siem Bok		
19	Mondul Kiri	1		38,232	6
	1	Sen Monorom	Sen Monorom		6
			Koh Nhek		
			Pich Roda		
			O Reang		
			Keo Sema		
20	Rattanak Kiri	1		164,314	16
	1	Ban Lung	Ban Lung		16
			Ochum		
			Voen Sai		
			Ta Veng		
			Kaum Mum		
			Lumphat		
			BorKeo		
			Oyadav		
			Andong Meas		
			Ka Chonn		
			Seda		
			Sre Ngong Kroang		
			Pck Lan		
			Som Trork		
			Ek Ka Pheap		
			Ta Ang		
21	Kep Ville	1		25,827	4
	1	Kep Ville	KhanKep		4
			KhanDamnakChangAr		

APPENDIX 2

Ministry of Health

Evolution of number of health facilities in Cambodia following the implementation of the coverage plan

	Before the coverage plan	In the coverage plan		Situation in 1997	Target in 1998	Target in 1999	Target in 2000	Target in 2001	Target in 2002
National hospitals in Phnom Penh	8	8		8					8
Provincial Hospitals (26)	22								
Former District Hospitals	164								
Former Khum Clinics	1267								
Provincial Hospitals (22) *referral hospital (CPA)*		22		22					22
Former District Hospitals (164) *referral hospital (CPA)*		43		43					43
health centre (MPA)		121		74					101
(note 1) *selected health centre with beds (MPA)*				32					20
future health centre but not yet providing MPA				15					
Khum clinics (1267) *health centre (MPA)*		792		60					792
future health centre but not yet providing MPA				732					
Khum clinics still functioning but to be phased out				432					
phased out clinics		475		43					475
TOTAL HEALTH FACILITIES (Note 2)	1461	986		1418					986

Note 1 There are 32 former district hospitals that have more than 50 inpatients and 600 outpatients per month. Although initially not indicated in the health coverage plan, the Ministry of Health considers for this category to accepts inpatients bed for treatment of tuberculosis patients.

Note 2 Reduction from 1461 to 1418 in 1997 is due to formal closure of 43 non functioning commune clinics and transfer of work to a MPA health centre.

Ministry of Health

Evolution of number of health facilities following the implementation of the health coverage plan

Operational District		Before the coverage plan	In the coverage plan		Situation in 1997	Target in 1998	Target in 1999	Target in 2000	Target in 2001	Target in 2002
Provincial Hospitals										
Former District Hospitals										
Former Khum Clinics										
Prov. Hospital	*referral hospital (CPA)*									
Former District Hospitals	*referral hospital (CPA)*									
	health centre (MPA)									
	[note 1] *selected health centre with beds (MPA)*									
	future health centre but not yet providing MPA									
Khum clinics	*health centre (MPA)*									
	future health centre but not yet providing MPA									
	Khum clinics still functioning but to be phased out									
	phased out clinics									
TOTAL HEALTH FACILITIES										

NOTE: Target figures for 1998 to 2001 should relate to construction and upgrading projects (WB, ADB, Social fund) in the Province.

Note 1 Although initially not indicated in the health coverage plan, the Ministry of Health considers for former district hospitals with a moderate activity level, which is at least 50 inpatients and 600 OPD patients per month, to accept inpatients bed for treatment of tuberculosis patients.

Ministry of Health

Evolution of number of health facilities following the implementation of the health coverage plan

Province:	Before the coverage plan	In the coverage plan		Situation in 1997	Target in 1998	Target in 1999	Target in 2000	Target in 2001	Target in 2002
Provincial Hospitals									
Former District Hospitals									
Former Khum Clinics									
Prov. Hospital *referral hospital (CPA)*									
Former District Hospitals *referral hospital (CPA)*									
health centre (MPA)									
(note 1) *selected health centre with beds (MPA)*									
future health centre but not yet providing MPA									
Khum clinics *health centre (MPA)*									
future health centre but not yet providing MPA									
Khum clinics still functioning but to be phased out									
phased out clinics									
TOTAL HEALTH FACILITIES									

NOTE: Target figures for 1998 to 2001 should relate to construction and upgrading projects (WB, ADB, Social fund) in the Province.

Note 1 Although initially not indicated in the health coverage plan, the Ministry of Health considers for former district hospitals with a moderate activity level, which is at least 50 inpatients and 600 OPD patients per month, to accept inpatients bed for treatment of tuberculosis patients.

Ministry of Health

Evolution of number of health facilities following the implementation of the health coverage plan

Province: PURSAT	Before the coverage plan	In the coverage plan		Situation in 1997	Target in 1998	Target in 1999	Target in 2000	Target in 2001	Target in 2002
Provincial Hospitals	1								
Former District Hospitals	4								
Former Khum Clinics	39								
Prov. Hospital *referral hospital (CPA)*		1		1	1	1	1	1	1
Former District Hospitals *referral hospital (CPA)*		1		0	0	1	1	1	1
future referral hospital but not yet providing CPA				1	1	0	0	0	
health centre (MPA)		3		1	1	1	1	1	1
(note 1) *selected health centre with beds (MPA)*				2	2	2	2	2	2
future health centre but not yet providing MPA									
Khum clinics *health centre (MPA)*		27		12	19	23	27	27	27
future health centre but not yet providing MPA		0		15	8	4	0	0	0
Khum clinics still functioning but to be phased out		0		3	0	0	0	0	0
phased out clinics		7		4	7	7	7	7	7
TOTAL HEALTH FACILITIES	44	39	0	39	39	39	39	39	39

NOTE: Target figures for 1998 to 2001 should relate to construction and upgrading projects (WB, ADB, Social fund) in the Province.

Note 1 Although initially not indicated in the health coverage plan, the Ministry of Health considers for former district hospitals with a moderate activity level, which is at least 50 inpatients and 600 OPD patients per month, to accept inpatients bed for treatment of tuberculosis patients.

APPENDIX 3

Health coverage plan staffing requirements and Number of additional staff required by mid year 2000

Recommended standard

	Categories	RH	Selected HC*	HC
1	Medical Doctor	6	2	0
2	Medical Assistant	4	1	0
3	Dentist	1	0	0
4	Dentist Assistant	1	1	0
5	Dental Nurse	1	0	0
6	Pharmacist	1	0	0
7	Pharmacist Assistant	1	1	0
8	Secondary Nurse	12	4	1
9	Anaesthetic Nurse	0	0	0
10	Primary Nurse	8	2	3
11	Secondary Midwife	4	2	1
12	Primary Midwife	2	1	1
13	Nutritionist	1	0	0
14	Secondary Lab. Tech.	2	1	0
15	Primary Lab. Tech.	2	0	0
16	X-ray/Sono Tech.	2	0	0
17	Physiotherapist	1	0	0
18	Health Agent	0	0	0
19	Pharmacist prepa.	0	0	0
20	Secourist	0	0	0
21	Medical Traditional	0	0	0
	Sub-total health pers.	*49*	*15*	*6*
22	Cleaner	3	1	1
23	Laundry/Washing	2	0	0
24	Kitchen	2	0	0
25	Ambulance Driver	1	1	0
26	Administrator	1	1	0
27	Accountant	1	0	0
28	Secretary	2	0	0
29	Clerical Staff	4	1	0
30	Maintenance Technician	2	1	0
	Sub-total non-health	18	5	1
	Total	**67**	**20**	7

Notes :

1. RH = Referral hospital; HC = Health centre.
2. Assume average staff attrition rate = 3.5% annually.
3. Among the four medical assistants at least one should have received specialized training in anaesthetics.
4. The secondary nurses (RH) include nurses with qualifications in anaesthetics (2), operating theatre nursing (2-3) and other areas of specialization (eg. psychiatric nursing). The actual numbers of the nurses holding post-basic qualifications will depend on the output from post-basic training programs. The role of these nurses will not be confined to the area of there post-basic training but will include general nursing duties.

* With medical staff at 15% of selected health centres.

APPENDIX 4

INFORMATION TO BE INCLUDED IN A PROPOSAL OF OPENING OF & REQUESTING DRUGS FOR MPA-HEALTH CENTER
(Please fill and attach this form with your proposal)

Province:_____ Operational District:_____ Health Center:_____
N° communes covered by HC_____ N° villages covered by HC_____ Total population covered_____
Proposed date of opening the Health Center:_____
Proposed date of arrival of MPA drugs at the Health Center:_____

1. Buildings:

- Is the buildings adequate to deliver MPA ? Yes ❑ No ❑

	N° room	Date of starting and completion	Sources of funding
Renovation / Extension			
New construction			
Building design		MoH design plan, Yes ❑	No ❑ (specify)

2. Staff:

Name	Sex (M,F)	Position	Qualification
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
TOTAL:			

3. Training:

- Has any training been conducted (in-service training)? Yes ❑ No ❑

If Yes, complete the table below:

Name of trainees	Type of training*	When	Where	Funded by
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

*** Write only *MPA1* (MPA module1) , *MPA2* (MPA module 2), *OT* (Other training, and specify) .**

If No, Has the training been planned during the forth coming months ? Yes ❑ No ❑

If "Yes" (Your " *yes answer* " means that you are quite sure that the training will be conducted).

- Type of training: ❑MPA1, ❑MPA2, ❑ Other (specify)_____
- Length of training _____ week(s) From _____ To_____
- Number of staff to be trained _____ Funded by_____ (Please attach your training program if you have developed its)

4. Basic Equipment::

Items	Existing	Needed More*	From MoH / Ois & NGOs**
1. Otoscope set , cased			
2. Scale adult			
3. Sphygmomanometer			
4. Stethoscope binaural			
5. Tongue- depressor			
6. Thermometer clinic			
7. Table/bed, medical examination			
Minor surgery			
1. Basin kidney			
2. Box for syringes			
3. Forceps, dressing			
4. Forceps hemostatics			
5. Holder needle straight			
6. Surgical blade			
7. Scissors dissecting			
8. Scissors operating			
9. Table / bed, examination			
10. Sterliriser			
11. Tray, instrument			
Maternal and Child Care			
1. Basin Kidney			
2. Bed labor and delivery			
3. Forceps Sponge Holding			
4. Holder needle straight			
5. Scale, infant			
6. Scissors episiotomy			
7. Speculum vaginal			
8. Sphygmomanometer			
9. Stethoscope binaural			
10. Stethoscope fetal			
11. Tape-measure			
12. Weight-for-height chart			
Vaccination Set			
1. Ice pack for vaccine			
2. Steriliser			
3. Vaccine carrier, storage			
Laboratory Equipment			
1. Microscope binocular			
2. laboratory materials			
Others (specify)			

Note:

* List only materials or equipment that can be used

* * If any material was already or will be provided by NGOs, mark with AV after the name of Organisation

5. Type of drug received so far: ❑ Kit Khum ❑ Not at all

6. NGOs Assistance:

Name	Type of assistance	Period of Assistance (from-to)

7. Supervision Mechanism

Operational Health District Officehas asked Provincial Health Department to visit::

- **Buildings** Yes ☐ No ☐
- **Organisation of health center activities** Yes ☐ No ☐
- **Activities of health center services** Yes ☐ No ☐

8. HC Activities

If the health center are currently functioning, complete the following information

Services	Availability	Level of Activities of the last month
General consultation	☐Yes, ☐ No	New cases_____ Total cases _____
Dental	☐Yes, ☐ No	New cases_____ Total cases _____
Minor surgery	☐Yes, ☐ No	New cases_____ Total cases _____
ANC	☐Yes, ☐ No	First visit_____ Second _____ Third _____ Total _____
PNC	☐Yes, ☐ No	Firts visit_____ Second _____ Third _____ Total _____
Birth spacing	☐Yes, ☐ No	New acceptants _____ Total _____
Delivery	☐Yes, ☐ No	Total number _____ (assisted at HC _____ at home _____)
Vaccination	☐Yes, ☐ No	BCG | OPV0 | OPV1 | DPV2 | OPV3 | DPT1 | DPT2 | DPT3 | Rouvax
Tetanol vaccine	☐Yes, ☐ No	Pregnant Women | TT1 | TT2 | TT3+4+5 | 15-44 non-pregn | TT1 | TT2 | TT3+4+5
Referral cases	☐Yes, ☐ No	Number _____ specify problem of referral _____
Outreach	☐Yes, ☐ No	Number of visits_____ Activities done _____
Laboratory	☐Yes, ☐ No	Number of tests _____ (most case are: _____)
Health education	☐Yes, ☐ No	Number of session done _____

Note: Vaccination and Tetanol, count only the new cases

8. Other Information

- Has user fees been implemented at HC ? ☐ Yes ☐ No
- If No, Do you plan to introduce user fees ? ☐ Yes ☐ No
  If Yes, When _____

Date _____
Signature
Cheif of Health Center

Date _____
Signature
Chief of Operational Health District Office

APPENDIX 5

Health centre referral letter

No.....

Kingdom of Cambodia
Ministry of Health

Province: .....

District: .....

Health centre: .....

REFERRAL FORM

Name:.....Age:.....Sex:.....Patient N°.....

Village:..... Commune:.....

Date of presentation to the health centre on:..... Symptoms:.....

Main findings on physical examination:

Medication:

Transfer to the referral hospital for:

Hospitalisation

Consultation

Date:.....

Chief of Health centre

Hospital referral feedback letter

No.....

Kingdom Of Cambodia
Ministry of Health

Province: .....

District: .....

Health centre: .....

REFERRAL FORM

Name:.....Age:.....Sex:.....Patient N°.....

Village:..... Commune:.....

Date of hospitalisation from .....to:..... Speciality:.....

Diagnosis:

Request for health center to follow up on:

Continue treatment as follows:

Date:.....

Medical Doctor

APPENDIX 6

1998 Budget formula form for each operational district and for the province
Instruction on how to complete the forms

FORM 1 – FOR THE OPERATIONAL DISTRICT

INTRODUCTION

The Budget for each operational district is calculated as follows:

Allocation for fixed costs according to the type of health centres and hospital.		X
–	Allocation for variable costs according to the number of patients	X
+	Special allocation (for special needs agreed with Ministry of Health)	X
=	Total budget	XX

PART 1 – ALLOCATION FOR FIXED COSTS

This gives the minimum standard allocation for every hospital or health centre in Cambodia. Fixed costs include water, electricity, meeting, uniforms, cleaning, maintenance etc... which are the same even if the hospital is busy or not so busy. Each hospital or health centre will receive an extra allocation according to the level of activity in each place (see part 2).

1.	District Health Office	Every operational "operational district" will have one district office, therefore put in "1" for number and 12,000,000 for the amount.
2.	Referral hospital (in coverage plan) in province town or province hospital.	Every operational district will have one referral hospital. If the referral hospital is in the province town and is the province hospital then put "1" in the number column, and 108,000.000 in the amount column *for example Kampong Chhnang district*
3.	Referral hospital (in coverage plan) in district town	Every operational district will have one referral hospital. If the referral hospital is in the district town then put "1" in the number column, and 48,000,000 in the amount column *for example Bakan disrict in Pursat.*
4.	Well functioning former district hospitals	Some former district hospitals that were functioning well (health centres will beds) will receive a higher budget allocation than standard health centres. If your operational district has a former district hospital that were functioning well with more than 50 in-patients per month then it will be allocated 12,000,000 for each one.
5.	Health centre (in coverage plan) providing MPA and other former district hospitals.	In this section you should write in how many health centres you expect to be receiving the MPA drug allocation in 1998 + former district hospital not included in section 4) and multiply by 4,200,000 to calculate the budget allocation.
6.	Health centre (in coverage plan) not providing MPA and remaining Commune Clinics still receiving the drug kits (khum kit)	In this section you should put in all the other health centres listed in the coverage plan but not yet providing the MPA and the remaining commune clinics that are still receiving the drug kit khum. This means that every facility should receive at least 1,200,000 per year.

PART 2 – ALLOCATION FOR VARIABLE COSTS

The ministry of Health understands that the more out-patients and the mor in-patient that go to a hospital or a health centre the more money is needed for supplies eg. patient registration card, patient food etc... Therfore each operational district will receive an extra allocation according to the number of patients. This means that busy hospitals and health centre should receive more money each month than not-so-busy hospitals and health centres.

1. In-patients	In order to calculate the amount of budget for this line you have to multiply the number of patients by 10,000 Riel per patient. Remember 10,000 Riel is just to pay for the extra costs such as patient food. The operational district has to estimate how many in-patient cases it expects to have in 1998. To do this it will be necessary to look at the Health Information System reports for the last few months and see if the number of in-patients is increasing or decreasing or staying the same. The Ministry of Health will compare the number of patients you plan to the information from the Planning Unit.
2. Outpatient (new cases)	In order to calculate the amount of budget for this line you have to multiply the number of outpatients (new cases) by 500 Riel per patient. Remember 500 Riel is just to pay for the extra costs such as a registration card. The operational district has to estimate how many outpatient cases it expects to have in 1998. To do this it will be necessary to look at the Health Information System reports for the last few months and see if the number of outpatients is increasing or decreasing or staying the same. It will also be necessary to look at the plan of activities from your planning meeting to see if new health centres will be built for 1998. The Ministry of Health will compare the number of outpatients you plan to the information from the Planning Unit.

PART 3 – SPECIAL ALLOCATION

If the operational district has any special needs that require higher funding the amount should be put in Part 3 of the for and a letter of justification attached. Each request will be treated on a case-by-case basis.

FORM 2 - FOR THE PROVINCE HEALTH DEPARTMENT

The province health department must complete from 2.

PART1 - ALLOCATION FOR FIXED COSTS

1.	District health office	Total of all operational district 's form(from1)in the province
2.	Referral Hospital in province town or province Hospital	Total
3.	Referral Hospital in district town	Total of all operational district 's form(from1)in the province
4.	Selected health centres with beds	Total of all operational district 's form(from1)in the province
5.	Health Centre providing MPA	Total of all operational district 's form(from1)in the province
6.	Health Centre not providing MPA	Total of all operational district 's form(from1)in the province

PART2 - ALLOCATION FOR VARIABLE COSTS

1.	In-patients	Total of all operational district 's form(from1)in the province
2.	Outpatient (new cases)	Total of all operational district 's form(from1)in the province

PART3 – SPECIAL ALLOCATION

This should be the total of the request each operational district.

PART4 - PROVINCE HEALTH DEPARTMENT

4.1 when the province health department has put in the total for all operational district and calculated the total for part1 ,2&3 it is necessary to calculated the amount for the province health department . This is done using the following calculation :

Total for all operational districts x25%=budget for province health department

4.2 Section 4.2 is to provide extra budget for those provinces that cover remote areas, for example the extra cost of flights. The province of Koh Kong, Preah Vihear, Ratanakiri, Mondul Kiri should put the extra amount needed with a plan of how they will use the money.

4.3 Section 4.3 is for Battambang , Kompong Cham, Stung Treng, and Kampot who have regional training schools. In this section they should write in how much they need for operating costs for their regional training school and attach detail of the money is to be used.

TOTAL

The total is the total amount of budget needed in 1998 for operating cost to come from Chapter 11and Chapter 13. The Ministry of Health will cheek the plan for each district and province and the use this information to submit a proposal to the ministry of economy and finance when negating the budget allocation for 1998.

APPENDIX 7

CONTRACTING

CONTRACTING-OUT

The contractor is completely responsible for providing MPA and CPA.

* hire/fire staff
* assign staff
* incentives for improving output and minimizing cost through salary, cost recovery, or other system
* negotiate budget with MOH
* monitored by Provincial Health Director; MOH

CONTRACTING-IN

The contractor is administering and managing the Senior District Managers and staff to ensure the MPA and CPA provided. The contractor cooperates with the PHD who monitors activity.

* use existing MOH staff
* document problems with staff discipline or performance for Provincial Health Director action
* assign staff
* incentives for improving output and minimizing cost through cost recovery or other developed system
* Normal operating costs from MOH
* Budget supplement available if proposal approved
* monitored by Provincial Health Director; MOH

CONTROL

Senior District Management administers and manages staff providing MPA and CPA.

* use existing MOH staff
* hire/fire through normal MOH system
* assign staff through normal MOH system
* incentives for improving output and minimizing cost through cost recovery or other developed system
* Normal operating costs from MOH
* Budget supplement available if proposal approved
* monitored by Provincial Health Director; MOH

Glossary of terms

Accreditation	Official recognition of skills, knowledge and attitude gained from a training course
Activity	A group of tasks with a common purpose
Allocation	The assignment of a share of funds and other resources to a definite purpose, programme or activity.
Assessment	Identification and analysis of factors to assist decision making and planning.
Attrition	The act or process of gradual reduction (in staff) over time
Audit	A process used to investigate the treatment of a single case (e.g. maternal or perinatal death)or many cases (e.g. malaria patients seen over a period of time), presenting to hospital/health centre. The purpose of audit is to improve case mangement and to help set standards of clincal care.
Budget	A detailed estimate of the cost of a programme during a specific period. The amount of funds available to a programme
Capital expenditure	Funds spent on permanent goods e.g. buildings, equipment.
Checklist	A list of items to be checked one by one, to ensure that none are omitted
Communication	The transmission of information from one individual or group, by any means, to another individual or group.
Community	Individuals living and interacting within certain boundaries (e.g. physical, cultural)
Competence	The professional ability required to carry out a task. Competencies are clusters of knowledge, skills and attitudes necessary to the performance of a task or activity.
Contracting out	Private groups and NGOS manage and supervise government staff who continue to provide health services (MPA and CPA).
Contracting in	The MoH contracts with private groups and NGOs to directly deliver health services.
Coordination	The process of bringing the activities of different persons into relation with one another so as to achieve a common goal.
Cost	Resources expended in carrying out activities, including capital or(fixed) costs or recurrent (operating) costs.
Cost effectiveness	The gains (effectiveness) compared with the inputs (resources) of achieving certain specific objectives by one or other means
Cost recovery	Process by which part of the cost of running a health service are recovered e.g. through user fees.
Coverage	Proportion of a target population receiving a stated service
Criteria	Standard according to which something is judged or a decision made
Data	Elements of information, usually unprocessed
Effectiveness	A measure of the extent to which objectives are achieved
Efficiency	Resources are said to be used efficiently if a given output is produced at minimum cost or maximum output is produced at a given cost.
Equity	Equal access for equal need. Applies to the aim that everyone should have equal access to health care irrespective of geographical location, income level and sickness level.
Evaluation	A judgment of value, based on observation, measurement and examination -e.g. the extent to which a programme has been effective in carrying out its' initial stated objectives
Exemption scheme	Excluding individuals or a group from paying user fees, it is a way of ensuring access to health services for the poor.
Feedback	The flow of information back from one stage in a cycle or process or system to a preceding stage, as a basis for further development, improving motivation and learning
Franchising	A method whereby the state improves the quality of the private sector by creating and advertising a quality label, which these providers can display if they ful-

	fill certain criteria (e.g. gained through training); the labels are indicative of a basic minimum standard.
Function	A group of activities
Job description	A statement of activities and tasks assigned to a staff member
Management	"Getting things done". It includes planning, organizing, directing, monitoring, and control, supervision and evaluation.
Monitoring	Observing, measuring and recording the way activities are being implemented. Monitoring leads to better control of a programme/service
Motivation	A drive that impels an individual to make an effort and take action
Objective	The planned or intended result of a programme or activity
Operational district	Most peripheral sub-unit of the health system, it is based on population and geographical access criteria, rather than administrative criteria. And consists of health centres, referral hospitals and the operational district health office.
Organization	The pattern of responsibilities, accountability, authority and communication in a group of people pursuing a common goal.
Organogram	The drawing of a structure that describes the organization of a department/ministry etc. in terms of staff or units and shows their relationship to each other.
Output	The product of an activity or programme e.g. polio immunisation. to all children under 5.
Performance	The actual output and quality of work performed
Pilot	A small scale project that is implemented according to a set of regulations, monitored and evaluated over a period of time, to determine if it fulfills predetermined objectives or not , if it is then it may be expanded to the rest of the country e.g. health care financing pilots.
Priority	A preferential rating that indicates importance or urgency, according to certain criteria.
Private sector	Non-government owned services e.g. private pharmacies, clinics, hospitals.
Private for profit	This is when activity is carried out by private enterprise to make money
Private not for profit	This is when activity is carried out by the private sector but not with the intention to make money. NGOs fall into this category.
Progress	Actual implementation compared with scheduled implementation
Recurrent expenditure	Funds expended on running a service e.g. salaries, patient food, electricity etc.
Resources	This means people, money, materials needed to carryout an activity or run a service.
Role	The behaviour expected from someone or group with a particular job.
Standard	An accepted criterion for judging performance. Can be a national or international criteria.
Strategy	A broad approach to achieving goals, within which programmers may be formulated.
Supervision	A way of ensuring staff competence, effectiveness, and efficiency, through observation, discussion, support and guidance.
Target	A statement of measurable output related to a certain population and a certain time
Task	Work to be performed within a certain time.
User fees	A fee/price/charge to be paid for a health service.