Dear task team colleagues,

Sincerely yours

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KINGDOM OF CAMBODIA
NATION RELIGION KING

Ministry of Health

THE THIRD HEALTH STRATEGIC PLAN 2016-2020

"Equity in Access to Quality Health Services"

(DRAFT: NOT FOR CITE & QUOTE)

7 September 2015

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"Equity in Access to Quality Health Services"

Department of Planning & Health Information
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FOREWORD

ACKNOWLEDGEMENTS

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1. KEY FEATURES OF HEALTH STRATEGIC PLAN

1.1 INTRODUCTION

The Ministry of Health (MoH) produced and implemented the first "Master Plan for Health Development 1994-1996" right after the national General Election in 1993, followed by the introduction of "Policy Guidelines for Strengthening District Health System". The former provides strategic direction for rehabilitating and developing the health system in post-conflict setting. The latter laid out a policy framework for embarking the health sector reform in 1995.

The two documents were then used to guide the development of numerous specific health policies, strategic plans, and technical guidelines, notably Health Coverage Plan 1995 (HCP), Health Financing Charter 1996, Health Workforce Development Plan 1996-2006, and Guidelines for Strengthening Operational Districts 1998. The HCP is a framework for re-structuring the health system organization and supporting operations of newly revised roles and functions at each level of the health system, while the Charter paved the way for piloted experimentation of both supply-side and demand-side financing interventions over the last three decades.

The Health Strategic Plan 2016-2020 (HSP3) is the third medium term plan of the health sector. The second (2008-2015, HSP2) and the first plan (2003-2007) were launched at the Annual National Health Congress and Joint Annual Performance Review in 2003 and 2007, respectively. The plan was translated into action through the development and the implementation of Annual Operational plans (AoP) supported by annual budget plan across the health system. The MoH and Health Partners through Joint Annual Performance Review regularly monitored the progress of the plan implementation.

A Mid-Term Review of the HSP2 was conducted by independent consultant team in 2011 and informed by the results of Cambodia Demographic and Health Survey 2010 (CDHS). Results of CDHS 2014 provided hard evidences supporting the final evaluation of the outcome of the HSP2 interventions, especially to assess the progress toward achieving health-related CMDGs, which were adopted as the HSP2 goals. Furthermore the survey findings, to some extent, provided analytical tool for setting priority interventions and agenda for action over the next five years.

1.2 RATIONALE

The **successful implementation** of the HSP3 will be dependent not only on its **structure** and **content** but also a clearly outlined implementation **process.** In this regard, the HSP3 needs to be:

- First**, soundly formulated** with clearly defined goals, objectives, strategies, outcomes and time horizon, by engaging all concerned stakeholders across all levels in and outside the health system;

- Second**, strongly supported** by politics, mandates, legislations, and **adequately financed**, first and the foremost by the RGC with contribution of Development Partners;

- Third, **widely communicated and better understood** by all actors (including public and private sector, the Government's ministries and agencies, sub-national level administrations, citizen and community, professional associations, Non-Governmental Organizations, and media);

- Fourth**, fully implemented** with effective leadership, technical competence and managerial skills, as well as effective multi/cross-sectoral and multilevel collaboration and coordination; and

- Fifth**, regularly monitored** with a timely and high quality health information, and effective feedback, providing supportive analytical tool to policy makers, planners and implementers to make adaptation of operational plan and interventions to unexpected changes in situation.

1.3 ROLES OF HSP3

The HSP3 is the MoH's **"strategic management tool"** to guide the MoH and all health institutions as well as concerned stakeholders to effectively and efficiently use their available resources, to translate health strategies into action in pursuit of achieving the defined goals and objectives of the Plan. As such the HSP3 is characterized by the following:

- ***First***, it renews a **long-term vision** for improving health and wellbeing of the Cambodian people, and re-affirms the MoH's **commitment** to meeting the vision (health development goals), thereby contributing to achieving socio-economic development goals of RGC;

- ***Second***, it outlines a **strategic framework** for further strengthening the operation in the entire health sector (both public and private) to address **agreed sector priority** by refining **sector strategies** and **sets of its strategic interventions** in order to pursue **strategic outcome**;

- ***Third***, it layouts an **operational framework** to ensure that the sector strategies are consistently applied across programs' interventions, resulting in appropriate alignment of the program interventions with the sector strategy. In so doing, the programs' outcome can be consolidated toward achieving **strategic outcome and health development objectives**;

- ***Fourth***, it outlines a framework for **monitoring and evaluating** progress and results of the Plan implementation on an annual basis (Annual Performance Review), followed by Mid-Term Review and final evaluations; and

- ***Fifth***, it is a **potential tool** for mobilizing financial resources and informing fiscal allocation, as well as guiding development assistance in the health sector to support agreed sector priorities and interventions, in order to enhance harmonization and alignment.

1.4 CONTEXT OF PLAN DEVELOPMENT

The development of the HSP3 was strategically guided by two driven-contexts. Firstly, internal context that is **strengths and weaknesses** of the health system performance. Most importantly, the plan is fundamentally built upon the successes of the sector policies, strategies and plans interventions over the last decades by taking **health problems of the population and challenges to health system** into account. Secondly, external context that is **opportunities and implications** of politics, legislations, national policy, strategy and plan, and the on-going national reform programs that effect choices of health strategy and its successful implementation.

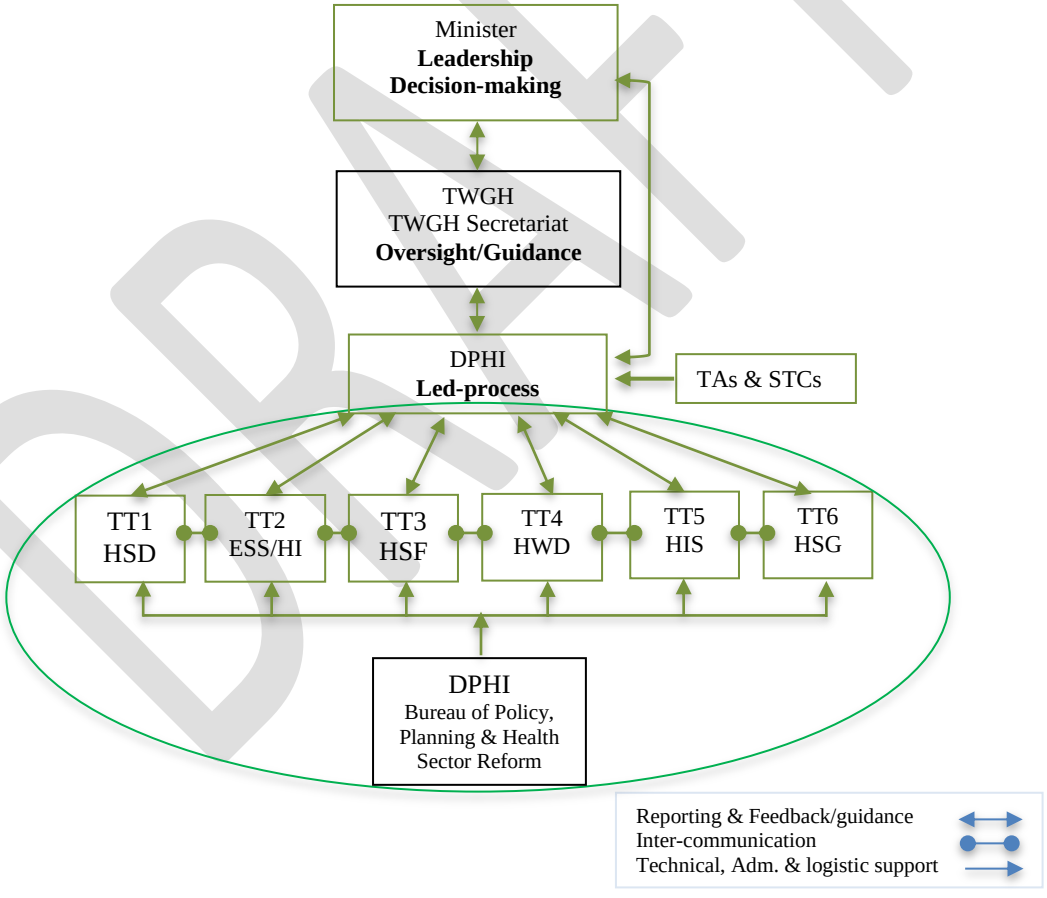
- The National Constitution (Article 72)
- Organic Laws
- Health Legislation
- Political platform and Rectangular Strategy Phase III of the RGC
- Policy on Public Service Delivery
- Decentralization and de-concentration policy including Social Accountability Framework for Subnational Democratic Development.
- National Strategy for Protection of the Poor and Vulnerable Peoples
- National Strategic Development Plan 2014-2018
- Public Administrative Reform
- Public Financial Management Reform
- Regional and global health development agenda (ASEAN Economic Community and Sustainable Development Goals).

1.5 APPROACH TO PLAN FORMULATION

Structure

The Figure 1.1 depicts the structures for developing the HSP3. The formulation process is under leadership of the Minister of Health, and guided (oversight) by the Technical Working Group for Health (TWGH) Secretariat, while the implementation of the process is led, managed, coordinated and facilitated by Director of Department of Planning & Health Information, with technical support of six Task Teams (TT), namely TT for (i) Health Service Delivery, (ii) Essential Support Services and Basic Infrastructure Development, (iii) Health System Financing, (iv) Health Workforce Development, (v) Health Information System, and (vi) Health System Governance. Each TT comprises of technical officers of both the MoH and Health Partners (including NGOs). DPHI Bureau of Policy, Planning & Health Sector Reform technically, administratively, logistically supports the whole process.

Figure 1.1 Structures for HSP3 Formulation



Process

Like the previous plan formulation, the MoH adopted participatory and consultative approach to HSP3 development. The process basically involved a number of main activities, including desk reviews, assessment of burden of diseases, sector analysis, data analysis of CDHS 2014, assessment of burden of diseases and costing exercise. Development and consultative workshops were organized in order to generate input from the MoH Task Forces for Monitoring & Evaluation of HSP, Sub-Committees of TWGHs, concerned Ministries/Agencies, Provincial Health Departments, Operational Districts and Health facilities, subnational level administrations including local councils, professional associations, academic institutions, private sector, and Health Partners including NGOs.

Outcome and Timeline

The whole process lasted for 16 months, starting from July 2014 to December 2015, resulting in the development of a comprehensive Plan (HSP3) supported by costing of priority program interventions. The HSP3 will be launched at the National Health Congress in 2016, followed by dissemination workshops for the implementation of the Plan.

2 COUNTRY OVERVIEW

2.1 INTRODUCTION

Cambodia is officially known as the Kingdom of Cambodia, and once known as the Khmer Empire.

RGC brought an end to two-decade civil conflicts plaguing the country and consolidated peace in 1998. Since then RGC Cambodia has made great strides to rehabilitate and develop the country. Political and security stability has laid out favorable environment for impressive economic growth and considerable poverty reduction as the government was able to implement its reforms and improve the socioeconomic infrastructure. These foundations enable further economic growth to achieve the government's medium term objective of maturing from least developed country to upper middle-income country by 2030.

Key features

- Constitutional monarchy
- Legislatives: Senate and National Assembly
- Government: elected with 5-year term
- Juridical system: Municipal and Provincial Court, Appellate Court, and Supreme Court
- Political system: pluralism and democracy
- Economy: free-market
- Total population (2015):15,405,157
- Total territory 181,035 sq. km
  - Land 97.5%
  - Water 2.5%
- Total land boundary 2,530 km
  - With Laos 555 km
  - Thailand 817 km
  - Vietnam 1,158 km

Cambodia is located in the southern portion of the Indochina Peninsula in Southeast Asia, bordering the Gulf of Thailand, between Thailand, Vietnam, and Laos, and in tropical zone, just 10-13 degrees north of the equator. Like most of countries in Southeast Asia, Cambodia is dominated by the annual monsoon cycle with its alternating wet/rainy and dry seasons, with little seasonal temperature variation; the wet season is 27-35 °C (June-October), and the dry season is 17-27 °C (cool: November-February) & 29-38 °C (hot: March-May).

2.2 ADMINISTRATIVE STRUCTURES

The country administrative structure is divided into four levels: the central (national), provincial including municipality), district (including cities and *Khans*) and commune

level (including *Sangkats*). According to Law on Administrative Management of the Capital, Provinces, Municipalities, Districts and Khans[1], the Capital (Phnom Penh) is divided into Khans. The Khan is divided into Sangkats. The province is divided into Cities and Districts; the city is divided into Sangkats and the district is divided into Communes and Sangkat. Village is the lowest level of the administrative management, and administrated by Commune/Sangkat Councils

<Table 2.1 Administrative management>

Elect-Government		Ministries, National Authorities & Councils
Municipality	1	Municipality/Provinces • Elect-Councils • Governing Boards (appointed)
Provinces	24	
Total	25	
Cities	26	Cities/Khans/Districts • Elect-Councils • Governing Boards (appointed)
Khans	12	
Districts	159	
Total	197	
Sangkats	227	Sangkats/Communes • Elect-Councils (Villages are under S/C Councils' administration)
Communes	1,406	
Villages	14,119	
Total	**1,633**	

Source of statistics: NSDP 2014-2018

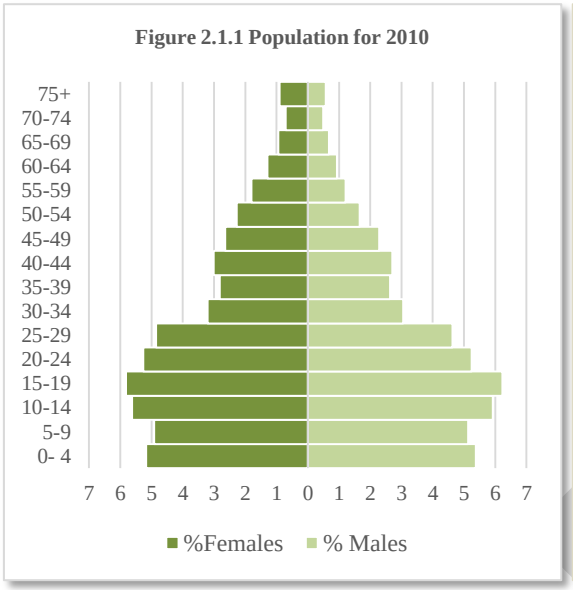
2.3 DEMOGRAPHIC AND HEALTH TRANSITION

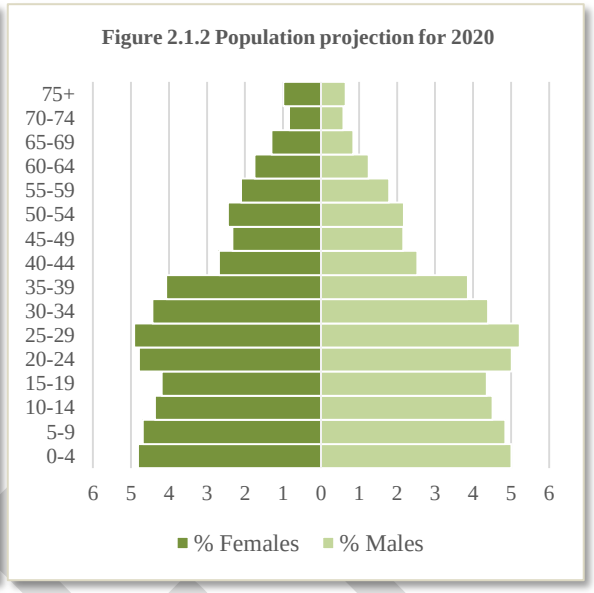
Cambodia is currently going through a phase of demographic transition. The population pyramids, illustrated in Figure 2.1, shows the age and sex structure. The expected changes in the demographic compositions will have an impact on the social (especially education) and economic sectors thereby creating the new to generate opportunities for a young population entering the labor workforce.

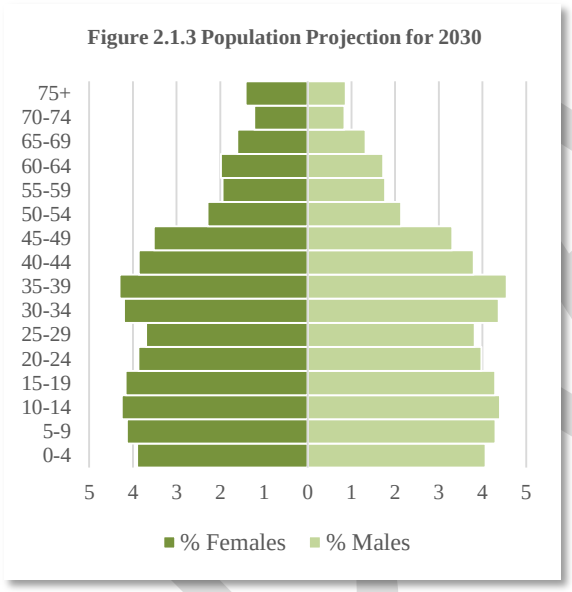
The demographic dynamic is also indicative of the potential changes in the health services needs of the population. It is estimated that by 2020, the total population will be 16.5 million, of which 9.83%, 6.5%, and 27% is children aged less than 5 years, people with age over 60 years, and women with reproductive age (WRA; 15-49), respectively. Demand for health care for these groups will be much higher than that of the other population age groups. For instance, a significant increase in young adults will increase the demand for adolescent and youth reproductive health services.

[1] Royal Kram No. NS/RKM/0508/017

<Figure 2.1 Population projection by sex and by age group>







Note: the population projection for 2020 and 2030 is estimated based on the Cambodian Inter-population Survey 2013.

Further, the Cambodian population is aging and is increasingly urban (an average annual increase of 5%). An increase in the elderly population will imply that the demand will be more for non-communicable and long-term care services.

Cambodia is also witnessing an epidemiological transition. The health system is facing the dual challenge of on-going burden of communicable diseases and a growing epidemic of non-communicable diseases (NCDs). NCDs are already the largest cause of mortality in Cambodia, increasing from 31.9% in 2000 to 51.8% in 2013.

To cope with the rising burden of NCDs, the existing structures of the health system will need to be strengthened, modified and expanded in different ways, while consolidating

the gains made in other areas such as maternal and child health, and communicable diseases control.

<Table 2.2 Key population indicators>

Indicators	Unit	2013	2014	2015
Population				
Total: Nov. 2013 CIPS	million	14.7		
- Population density	per sq. km	82	85	87
- Male/Female ratio	100 female	94.3	96	96.2
- Households				
Age distribution				
- < 1	% pop.	2.7	2.7	2.6
- < 5	% pop.	10.6	10.5	10.4
- 0-14	% pop.	29.4	29.6	29.2
- 15-64	% pop.	62.6	65.9	66.2
- 65 and above	% pop.	5.0	4.5	4.6
- 15-49 for WRA	% pop.	27.9	27.9	27.9
Rural vs. Urban pop.				
- Rural	% pop.	78.6	78.5	78.4
- Urban	% pop.	21.4	21.5	21.6
Annual growth	%	1.46	1.44	1.42
Total fertility rate (number of children)	per a WRA	2.8	2.7	2.6
Life expectancy at birth	year			
- Male		67.1	67.3	67.5
- Female		71.0	71.2	71.4

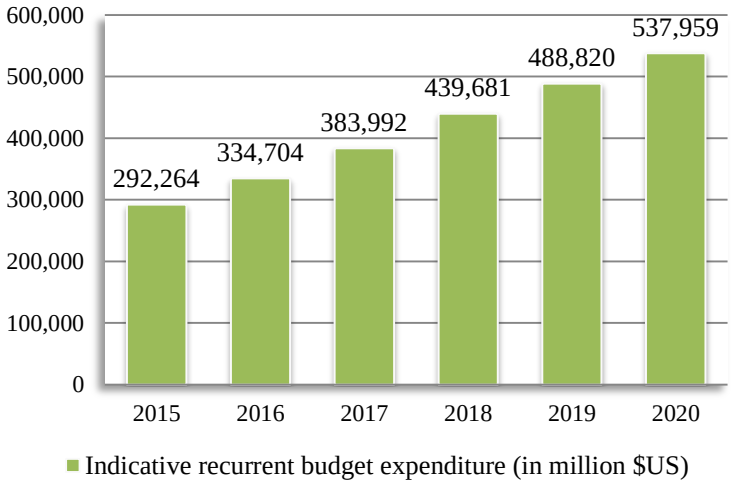
Sources: NSDP (2014-2018) for 2013-2018

2.4 SOCIO-ECONOMIC DEVELOPMENT

Prospective of economic growth

During 2009-2012, Cambodia achieved an average economic growth of 5.6% per year and is forecasted to continue to grow. Together with the economic growth, fiscal performance has improved, providing for additional revenue, and allowing for increased public spending. Figure 2.4 indicates indicative recurrent budget expenditure for public health over the next five years. Real Gross Domestic Product (GDP) growth (at constant price 2000) was 7.6% in 2013, and is expected to be 7% per annum during 2014-2018. There was a double-digit growth in GDP for 2004-2007. GDP per capita increased to USD 1,036 in 2013, and continues to increase to USD 1,579 in 2018. The level of Official Development Assistance (including grants and loans for both technical and capital assistance) is projected to decline over the coming years. Table 2.3 shows the performance of key economic indicators.

<Figure 2.4 Indicative recurrent budget expenditure for public health (in million $US)>



Source: NSDP 2014-2018 and DPHI estimation for 2019 and 2020

<Table 2.3 Key economic development indicators>

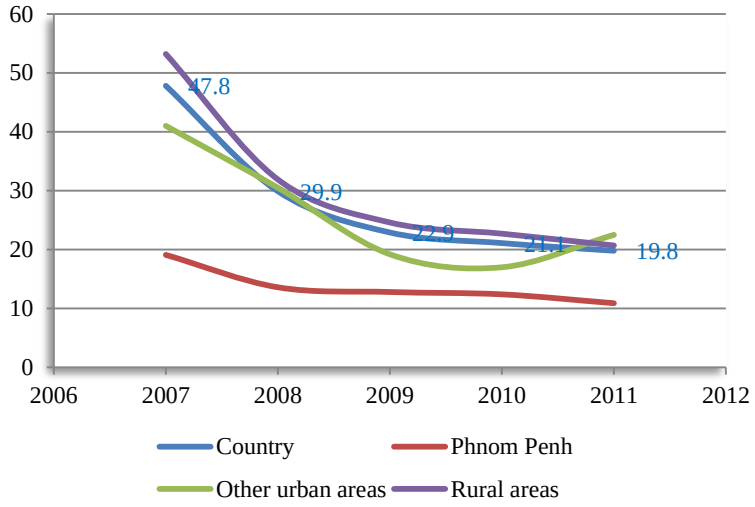
	Unit	2013	2014	2015	2016	2017	2018
Poverty Headcount							
Country	% pop.	17.9	16.9	15.9	14.9	13.9	12.9
- Phnom Penh	%	15.3	14.3	13.3	12.3	11.3	10.3
- Other urban areas	%	13.5	12.5	11.5	10.5	9.5	8.5
- Rural areas	%	19.0	18.0	17.0	16.0	15.0	14.0
National Poverty rate							
Country*		19.8					
- Phnom Penh*		10.9					
- Other urban areas*		22.5					
- Rural areas*		20.7					
Population below food poverty line	%	<5	<5	<5	<5	<5	<5
Macro-economic Indicators							
Real GDP growth rate (constant prices 2000)	%	7.6	7.0	7.0	7.0	7.0	7.0
- Agriculture	%	4.2	4.2	4.0	4.0	4.0	4.0
- Industry	%	9.8	9.9	9.3	9.1	8.8	8.8
- Services	%	8.8	6.8	7.1	7.1	7.2	7.2
GDP Per Capita	'000 Riel	4,248	4,670	5,072	5,523	5,949	6,472
GDP Per Capita	$UD	1,036	1,139	1,237	1,347	1,451	1,579
Inflation (Year average)	%	3.0	3.5	3.5	3.5	3.5	3.5
Exchange rate per US$ (Year average)	%	4,100	4,100	4100	4100	4100	4100
Fiscal space							
Total budget revenue	% GDP	14.3	15.1	15.6	16.1	16.5	16.9
Total budget expenditure	% GDP	19.5	19.9	19.8	19.9	19.9	19.9
Current surplus	% GDP	2.3	2.6	3.4	3.9	4.4	4.8
ODA (incl. NGOs)							
Total	$US m	1,566.4	1,242.2	1,008			
Technical Assistance		263.7	251.1	214.7			
Capital Assistance		1,238.3	897	696.8			
Other than TA		64.4	94.1	89.3			

Source: NSDP 2014-2018

Success of poverty reduction, even so challenges remain ahead….

The national poverty rate has declined from 47.8% in 2007 to 19.8%[2] in 2011. (Figure 2.2) This trend has been driven by a steady reduction in the rural poverty rates from about 53% in 2007 to about 21% in 2011 and has been the result of large and sustained investments in agriculture and rural infrastructure. This has helped Cambodia achieve the MDG target of halving the proportion of people below the national poverty line well ahead of time. Despite these gains, a sizeable proportion of the population continues to live below the the national poverty line (US$1.25 per day[3]). This creates the need for on-going efforts to bridge the poverty gap, and also prevent the vulnerable population from falling into the poverty trap.

Figure 2.2 Trends in poverty rates by broad strata, 2007-2009



Source: NSPD 2014-2018 (Calculated from CSES)

Social determinants of health

Improvements in education attainment (school enrolment), rural development, access to roads and public transport services and poverty reduction have had significant impact on improving the health outcome of the population. Table 2.4 shows the substantial achievements and progress made in addressing key social determinants for health.

[2] National poverty line is US$0.93 (2011). International poverty line is US$1,25 (2015)

[3] Calculation based on "Power Purchasing Product"

<Table 2.4 Key Social development indicators >

	Unit	2000	2005	2010	2014	2015
Health						
Maternal Mortality Ratio* (per 10,000)	live births					
Country		432	472	206	170	
- Urban areas						
- Rural area						
Neonatal Mortality Rate* (per 1,000)	live births					
Country						
- Urban areas						
- Rural areas						
Infant Mortality Rate* (per 1,000)						
Country						
- Urban areas						
- Rural areas						
Under 5 Mortality Rate* (per 1,000)						
Country						
- Urban areas						
- Rural areas						
Education						
Literacy Rate (age 15-24)						93.5
Literacy Rate (age 15-45)						88.45
Rural Development						
Access to Sanitation	%					
Country						
- Urban areas						
- Rural areas (% of rural population)						46
Access to improved drinking water						
Country						
- Urban						
- Rural areas (% of rural population)	%					50

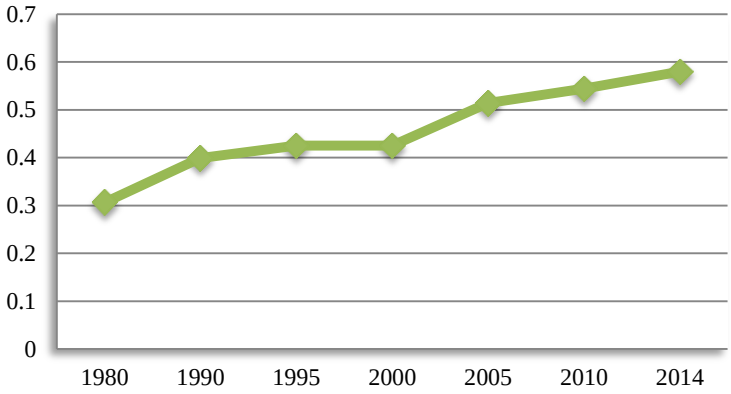
Sources: (*) CDHS 2000, 2005, 2010; and NSDP 2014-2018

Human Development Index

In the past two decades, the Human Development Index (HDI)[4] in Cambodia has shown the fastest improvements, amongst all Asian countries. (Figure 2.3) - In 2014, the HDI score for Cambodia was 0.58, a significant improvement compared to the score of 0.306 in 1980.

[4]HDI is measured based on income, life expectancy and year of schooling.

Figure 2.3 Cambodian positions on Human Development Index



Sources: Human Development Report, UNDP

2.5 CAMBODIAN MILLENNIUM DEVELOPMENT GOALS

The Royal Government of Cambodia's strong commitment towards the achievement of the Millennium Development Goals has helped the country achieve most of the targets (Table 2.5).

Table 2.5 Status of CMDGs

Cambodia Millennium Development Goals		Overall by 2015
Goal 1	Eradicating extreme poverty and hunger	●
Goal 2	Achieving universal literacy and basic education	
Goal 3	Promote gender equality and empower women	
Goal 4	Reducing child mortality	●
Goal 5	Improving maternal health	●
Goal 6	Combating HIV/AIDS, malaria and other diseases	●
Goal 7	Ensuring environmental sustainability	
Goal 8	Forging a global partnership for development	
Goal 9	De-mining, removing explosive remnants of war, and victim assistance	

3 HEALTH SYSTEM OVERVIEW

3.1 INTRODUCTION

The MOH is mandated by the RGC to ***lead and manage the entire health sector*** – public services as well as governance of private health sector. The health system is operating in a complex environment, given the diverse social determinants of health and interrelation between health and economic development.

The Cambodian health system comprises of both public and private sector (including both for-profit and non-for profit health organizations). The public sector is the prominent providers of preventive services and inpatient admissions, whereas the private sector tends to dominate as providers of curative services, and mainly of outpatient consultations.

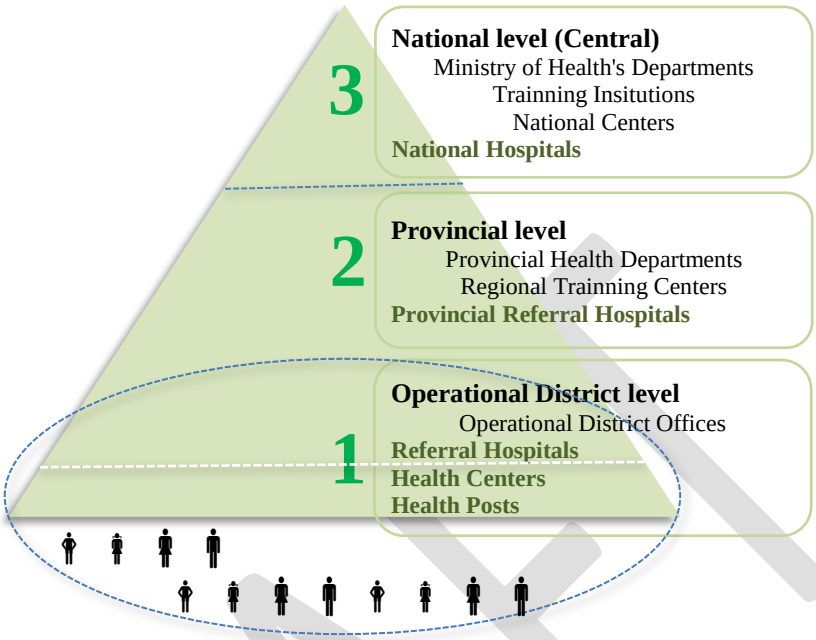
The MOH has implemented health sector reform since 1994. The main objective for the reform is "*to improve and extend primary health care through the implementation of a district-based health system approach*"[5]. The reform is put into place to meet the people's essential health needs by:

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

The health sector reform has brought in tough change "*from administrative-based to population and accessibility-based health system organization*." As consequences, the current Cambodian health system is organized into *three levels*: *Central, provincial and operational district level* (as depicted in Figure 3.1). Roles and functions of each level are clearly defined.

[5] MOH Health Development Master Plan, 1994-1996

<Figure 3.1 the Three Levels of the Public Health System>



3.2 REFORM OF THE HEALTH SYSTEM

Rationale and Background

Prior to 1995, general policy of the MOH aimed to have a clinic in each commune, a hospital in each district and a provincial hospital in each province. In practice, such system did not meet the population's essential health needs for because:

- Basic infrastructures including building and equipment were in poor conditions
- There were a shortage of skilled staff and lack of motivation
- Commune clinic and district hospital activities were not clearly differentiated
- Population size covered by clinic and hospital was either too large or too small
- Location of facilities was often inappropriate.

The health sector reform is part of the National Public Administrative Reform, which indicates the RGC's political commitment to rehabilitating and improving public sector effectiveness and efficiency. The health sector reform ***entails important transformation, both organizational and financial,*** including:

- Rational distribution of resources based on health coverage plan: financial, infrastructure, drugs, equipment and human resources;
- Reorganization of the MOH institutional structures at central, provincial and district levels;
- Budgetary reform;

- A new definition of the health system and the type of services expected at each of its levels;
- Redistribution and retraining of health staff; and
- Introduction of new ways to finance health services.

Health Coverage Plan

The Health Coverage Plan (HCP) is a framework for developing the health system infrastructure, based on population and geographical criteria (Table 3.1), taking quality of care and availability of resources into account[6]. It aims to:

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

<Table 3.1 Criteria for Establishment of Health Facilities>

Facility	Population	Accessibility
Health Center	Optimal size: 10,000 Range: 8,000-12,000	Within 10km or 2hrs walk maximum for the catchment area population.
Referral Hospital	Optimal size: 100,000 Range: 60,000 to 200,000	In populated area; within 2 hours drive or boat journey and in rural areas; not more than 3-hour drive or boat journey
Health Post	Range: 2,000-3,000	Distance from a commune or village to the nearest HC is more than 20km, with a geographical barrier (river, mountain, or poor roads)

Application of the criteria

- **In low density provinces** like Mondulkiri, Ratanakiri, Prahvihear, Koh Kong and few other provinces, some factors result in inadequate health service coverage:

  - ✓ Cultural and language differences exists,
  - ✓ Some communes and villages are scattered and isolated with small population,
  - ✓ Transport to district towns and between communes is difficult. Some communes get cut off from the districts during the rainy season,
  - ✓ Problems in posting and retaining skilled staff.

[6] MOH (December 1997). Guidelines for Developing Operational Districts

In this context, in remote commune **with at least 3,000 inhabitants**, HPs should be established and function as the lowest level within the district health system and thus the first point of contact in low density provinces.

- **In populated areas**, modification needs to be made in the criteria for the HCP for the Capital and municipalities, as well as urban town areas because of the following reasons:

  - ✓ Geographical access to health services is generally not a problem
  - ✓ Private health providers are crowded and become a larger part of service provision in those areas
  - ✓ Large hospital facilities of both public and private exist, especially in Phnom Penh.

  In this context, establishment of a RH for each City/Khan/District and a HC for each Sangkat is not justifiable in terms of economy of scale or return of investment. Therefore, the catchment population can range from 15,000 to 25,000 for a HC, and over 300,000 for a RH.

3.3 ROLES AND FUNCTIONS OF EACH LEVEL

Central Level

The key laws and regulations setting out the MOH's functions and other health functions are:

- A law, *Kram* NS/RKM/0196/06 (1996) on Establishment of the Ministry of Health, which establishes the Ministry's public service delivery role.

- A detail on the MOH's mission and functions are described in Sub-decree, *Anukret* 67 (1997, 18 years ago now). Its mission is "**to lead and manage the health sector of Cambodia**". Its functions are presented in Box 3.1.

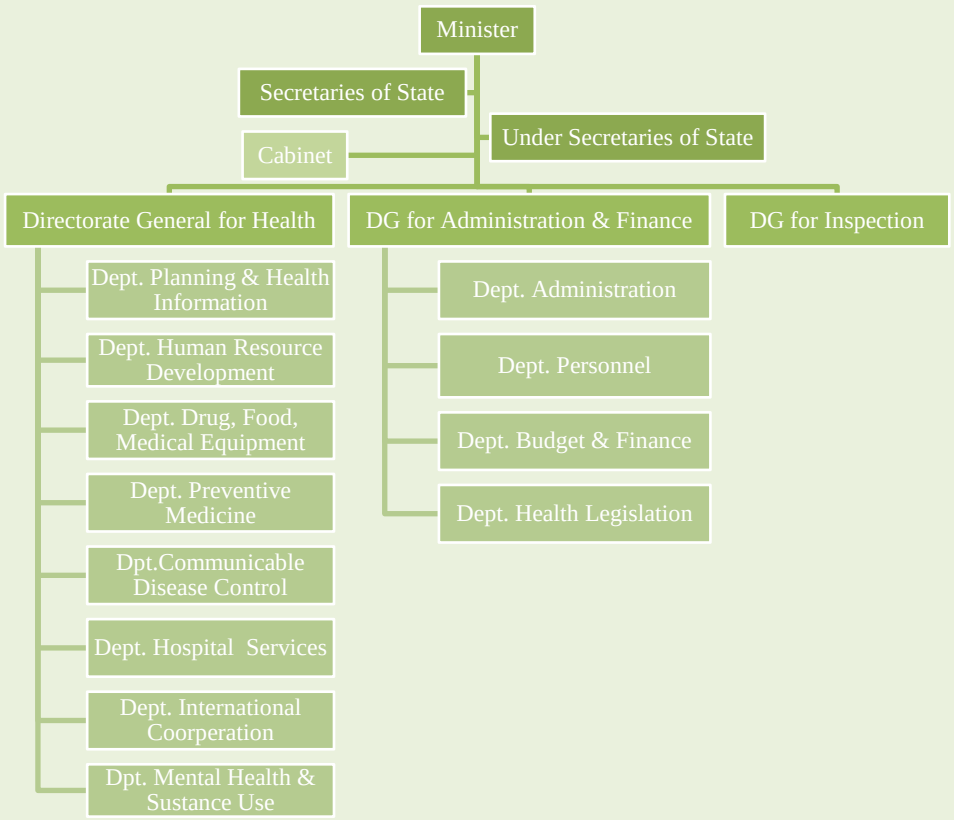
***Anukret* 67** also defines the organization chart (Figure 2.2) and terms of reference (ToRs) of the central level of the MOH and lists the national institutes and hospitals and Provincial Health Departments (PHDs) that are subordinate to the MOH (Annex 1). The organization chart and ToRs or the MoH's PHDs and ODs are set out in the MOH's administrative orders (*Prakas*).

The MOH responsibilities related to regulation of the private sector – the private health sector, health professionals, food and drugs, and abortion are governed by *Kram*, which give detailed indication of ***obligatory functions of the MOH*** for regulation of these aspects of the health sector.

Box 3.1. MOH Functions as defined by Anukret 67 (1997)

- Define health policy
- Develop planning and strategy for the health sector
- Develop regulations/guidelines to maximize the quality of health services in the public and private sectors
- Monitor, control and evaluation the administrative and technical work of the institutes subordinate to the MoH
- Research how to develop health sector
- Manage resources (human, material, financial, and information) at central, province, municipal, district, khan and C/S level
- Organize preventive programs and nursing care to decrease the causes of disease
- Coordinate other resources
- Oversee production, trade and distribution of drugs, medical equipment and paramedical equipment in all public and private health facilities
- Control food safety.
-

<Figure 3.2.Organization Chart of the MOH (HQs)—updated as of December 2014>



Provincial Level

As of 31 December 2015, there are 25 Municipal/Provincial Health Departments (M/PHD) and 25 Municipal /Provincial Referral Hospitals that are under direct administration of the M/PHDs. The provincial level is intermediate level or interface between the central and operational district level within the health system. The main role of the M/PHDs) is to link the MOH and ODs through:

- Interpretation, dissemination and implementing National Health Policy and Health Strategic Plan through operational strategy development and annual planning including budgeting.
- Supporting the development of ODs by regular supportive supervision and monitoring and evaluation.
- Ensuring equitable distribution and effective utilization of available financial and human resources.
- Mobilizing additional resources
- Providing continuing education in close collaboration with the regional training centers.
- Performing delegated regulatory functions of private health providers and pharmaceuticals.
- Promoting coordination and collaboration with relevant stakeholders including local administrations

Operational District Level

As of 31 December 2015, there are 92 OD offices out of the total 197 administrative D/K/Cs. OD is the most peripheral sub-unit within the health system closest to the population, and composed of HCs/HPs and RHs. Its main role is to implement the operational district health objectives through:

- Interpretation, disseminating and implementing national policies
- Maintain effective, efficient, and comprehensive services (promotive, preventive, curative, rehabilitative) according the national clinical practice guidelines/protocols
- Ensuring equitable distribution and effective utilization of available financial and human resources.
- Mobilizing additional resources for district health services
- Providing in-service training
- Providing support to HCs/HPs and RHs through supportive supervision and monitoring and evaluation.
- Promoting coordination and collaboration with relevant stakeholders including local administrations.

Health center

As of 31 December 2015, there are 1,141 HCs out of the total number of 1,631 C/Ss, leaving 490 C/Ss without having its own HC, for efficiency reason. HCs deliver basic

health care services as defined in the MOH's Guidelines for Minimum Package of Activities.

- 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 villagers, but large enough to justify the presence of HC with high quality staff
- Provide integrated high quality promotive, preventive and basic curative services
- Ensure accessibility: financial, geographical and cultural appropriate.
- Encourage community participation

Referral hospital (including Provincial hospitals)

As of 31 December 2015, there are xx district-based RHs out of the total number of 197 D/K/C, leaving xxx D/K/C without having its own RH, for efficiency reason. IN principles, RHs' health services are distinct and complementary to health center health services. The type of health services delivered by RHs is defined by the MOH's Guidelines for Development Complementary Package of Activities. Main roles of RH are:

- Providing health services that cannot be delivered by health centers: specialized services, diagnosis, follow-up and treatment for management of complex health problems.
- Supporting the health centers in the OD by clinical training
- Conducting supportive supervision/clinical monitoring to HC

3.4 HEALTH WORKFORCE

Increase in the size of the health workforce has been central to improvements in the coverage and access to health services. This has been outcome of concerted and coordinated efforts since the 1990s. In order to prioritize the rebuilding of the health workforce, the Ministry of Health invested in the Health Workforce Development Plan 1 (1997-2005), which focused on adequate production and equitable distribution of health workforce according to the then newly adopted Health Coverage Plan. Building on the achievements from the first plan, the second Health Workforce Development Plan (2006-2015) aimed to further address the issues of improving the competency and management of the health workforce. The specific focus granted to health workforce under these Plans resulted in impressive gains. For instance, between 2010 and 2015, the total size of the public sector workforce increased from 18,133 to 20,954. This has been accompanied by a rapidly growing though loosely regulated private sector with more than 5,500 licensed providers, which deliver a large proportion of health services (mainly curative care), and a larger number of unregistered informal providers, the exact number of which is not known.

Within the public sector, nurses and midwives together comprise 70% of the health workforce. Between 2010 and 2015, there was a 29% increase in the number of midwives and a more modest 6% increase in the number of nurses. The numbers of specialist and general medical practitioners, dentists and pharmacists have also increased marginally over the same period.

In the public sector, in 2015, 51% of the workforce is women, but gender distribution within categories is not equitable. The majority of female public sector health workers are concentrated in such cadres as nurses and midwives. However, only 33% of nurses are female, while 100% of midwives are women. Female are underrepresented in certain cadres as specialists, general doctors and dentists.

In 2015, the Ministry of Health central offices and national hospitals in Phnom Penh employed 18% of total public sector health workers; while the Ministry's provincial health service employed the remaining 82%. While the majority of general medical practitioners work at the provincial level (63%), most specialists work at the central level (79%). At the same time, most physician assistants (76%), dental assistants (82%), primary nurses (98%) and midwives (100%) work at the provincial level.

3.5 PRIVATE HEALTH SECTOR

Cambodia has a mixed health delivery system. The **private-for-profit** are an important provider of health services and has grown rapidly in the past years. While it is mainly concentrated in urban and economically advantaged areas, it is also becoming pervasive in rural areas. As of December 2014, there are over 8,000 formal private providers/facilities in the country; these facilities ranged from pharmacies and solo practice to specialized hospitals. The private health care is dominant for ambulatory treatment of illness, and accounts for the largest share of total health care spending. It is less dominant for inpatient treatments and limited for preventive and public health services. Available evidence also point towards the quality of services in the private health sector. Despite the existence of basic legislation, regulation of the private sector remains a challenge and mainly due to constraints in the institutional, informational, financial capacity.

Private non-for-profit sector also plays an important role in health service delivery in Cambodia. Most of the local and international organizations work at district and communities levels providing a range of services such as community-based health service network, health education and promotion activities etc.

As of December 2015, there were over 180 NGOs working in the health sector.

SECTION II
SECTOR ANALYSIS

- **Chapter 4**
  Conclusions and Recommendations
- **Chapter 5**
  Sector Priority
- **Chapter 6**
  Sector Performance Review

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

Based on the findings of the health sector review (Chapter 6) and certain key aspects highlighted in Chapter 1 and Chapter 2, this Chapter presents some conclusions. It focuses on two main outcomes of health system performance: **health outcome of the population and financial risk protection**. It describes the health system performance in terms of **access and coverage, quality, efficiency, equity and governance**.

With an insight understanding that the Cambodian health system has entered a period of further strengthening and consolidating the existing proven programs and interventions, rather than piloting and experimentation that was characteristic of earlier periods, the recommendations are built upon impetus gained in the health sector in the last decade, by taking the current and future challenges and foreseen opportunities into account. The recommendations concentrate on making health service delivery work better than before.

4.2 CONCLUSIONS

In the last decade, considerable improvement has been made in population health outcomes. This can be attributed to efforts to strengthen the health system, thereby resulting in improved health service delivery. This has been further facilitated by macro-level factors such as stable economic growth and rapid poverty reduction. Even so challenges remain ahead.

The efforts to strengthen the health system have been successful, which has helped achieve the health-related targets of the Cambodian Millennium Development Goal (CMDGs) several years ahead of the schedule. Recently, Cambodia was certified by World Health Organization as a measles-free country. However, addressing the other existing and emerging health issues remains a pressing issue.

- Life expectancy at birth increased from 65.6 years in 2000 to 71.4 in 2012
- The maternal mortality ratio decreased from 437 deaths per 100 000 live births in 2000 to 206 in 2010, with a further decline to 170 by 2014.

- The under-five mortality rate decreased from 110.5 to 35 deaths per 1,000 live births between 2000 and 2014
- Neo-natal mortality has declined more slowly and in 2010 represented 50% of all under 5 mortality
- HIV prevalence among the general population (adults 15-49 years) fell from 1.6% in 2000 to 0.6% in 2014 with 90% survival after 12 months of infection (achieved through widespread ARV coverage at 67% of people living with HIV in 2013)
- Malaria mortality fell rapidly from 135 deaths in 2010 to 10 in 2015 and the malaria mortality rate reported by public health facilities is approaching zero (at 0.06 per 100 000 population in 2015).
- The prevalence of tuberculosis per 100,000 populations more than halved between 2002 and 2014 from 1511 reported cases to 668.

(1) There has been an impressive gain in providing financial risk protection to the poor. Despite this gain, other vulnerable populations- people in high-risk, mobile and migrant populations, people with disabilities, ethnic minorities, elderly and the near-poor continue to bear financial hardship when accessing health care.

The expansion of Health Equity Fund schemes (HEFs) has proven a relatively effective investment for improving health outcomes of the poor. Even though, there is a critical need to expand social health protection mechanisms to other target populations, considering the increasing trend in individual households' out-of-pocket (OOP) spending in health. The overreliance on OOP correlates with high incidence of financial catastrophe and impoverishment; consequently, majority of the population is at risk of financial hardship when accessing health care. Thus the social health protection system, as an integral part of national social security systems, need to be established for both informal and formal sector populations, together with stronger regulation of healthcare market, among others.

- HEFs have entitled approximately 3,000,000 peoples living under the national poverty rate (19.7%) free access to public health services. HEFs have provided financial access for the poor, though utilization among HEF beneficiaries is still below expected levels.
- Lower levels of OOP health spending and catastrophic expenditure among HEF beneficiaries.
- High OOP for health (60% of total health expenditure in 2012) poses as a poverty trap for low-income households.
- There is a marked increase in capacity-to-pay coupled with a decline in catastrophic health expenditure across all income quintiles.
- The private health insurance industry is growing, but has very low coverage

(around 5% of the total population) and targeting only the rich.

- People with disabilities constitute approximately 15% of the total population and remain vulnerable to financial hardship when accessing health care.

(2) Promoting equity in population health outcomes deserves credits for the health service delivery. Further reducing the gap in the distribution of health services between provinces/districts, along with expansion of social health protection coverage can promote equity in health outcomes.

The health seeking behavior has improved with a larger proportion of individuals seeking treatment for illnesses, especially among the lowest income quintiles. In particular, the use of reproductive, maternal and child health services has increased. It is worthwhile to note that as compared to the general population, the utilization of public health services by HEF beneficiaries is much higher. However, in equities in the use of health services and health outcomes still persist across geographic areas and economic quintiles.

- The fertility rate for women in the poorest quintile is more than double that of the richest quintile.
- Children in the poorest quintile have a four-fold greater risk of death before their fifth birthday than those in the richest quintile.
- Stunting is more than twice as common among children in the poorest quintile than in the richest.

(3) There has been a significant gain in terms of access and utilization of health services by the population. Even so there is a gap in terms of availability and readiness of health service, and in particular healthcare quality that is an important determinant of service use.

Implementation of the HCP has succeeded in increasing access to public health services nationwide. The extensive expansion of road infrastructure has made public health facilities physically more accessible. However, overall, increase in the utilization of public health services has been slow, which could be either due to the non-availability or perceived (poor) quality of health services. There is a need for sustained and renewed focus on improving quality.

- Consumption of public health services by the general population remains low, with less than one outpatient consultation per inhabitant per year
- Patients tend to use the private providers more frequently for outpatient services. According to CDHS 2014, only 15% of individuals who sought treatment for an illness went to a public facility first, whereas 78% accessed private clinics as their initial provider.

(4) The overall quality of public health services has improved, mainly from improvements in structural quality as well as from improvements in the process of care. A focus on competency-based education and clinical performance of health and allied-professionals will further promote quality of health care.

Overall improvements in the quality of health services assisted the reductions in the maternal and childhood mortalities as well as reductions in the burden of communicable diseases. However, there are evidences that quality of health services still does not meet the need and expectation of service user. Resource constraints such as inadequate infrastructure, manpower, medicine and equipment, funds etc. have been an important impediment to the efforts to improve the quality of health services. This has resulted in a mismatch between the national clinical practice guidelines/protocols and available service quality.

- By 2011 Cambodia met the minimum global benchmark for provision of midwives of 6/1000 births per year; and by 2014, 81% of health facilities had at least one secondary midwife.
- Perceived quality of public health services by service users was high at 87% as reported by Client Satisfaction Index.
- Client satisfaction survey reported that service users were dissatisfied with the attentiveness of health-facility staff, availability of staff at night, cleanliness of facilities, and communication on illness diagnosis and prevention.

(5) Substantial increases in Government health spending overtime to continually strengthening both quantity and quality of the health spending with the intent to improve efficiency, both allocative and technical, to achieve "better-value for money".

Over the last decade, the consistent economic growth has enabled RGC to significantly increase the spending on health. In addition, the amount of external funding also increased, albeit to a lesser extent. This resulted in significant improvements in public health infrastructure for service delivery. Despite increases in the public funding, OOP health spending still remains the major financing source for health services and most of the expenditure occurs in private health providers and facilities, where better-value for money remains a major concern. An on-going challenge is curtail the health care costs and make most efficient use of the available financial resources.

- Total Health Expenditure as percentage of GDP was 6.3% in 2014, down from 7.2% in 2012
- Government health expenditure as percentage of GDP increased from 1.2%

in 2009 to 1.5% in 2013.

- More than US$ 1.03 billion, or 6.3% of GDP, was spent on health care in 2014, comprising US$69 per capita of which 60% was out-of-pocket.

(6) Progress has been made in health system governance in terms of regulation. Even so, enforcement of policy, legislation and regulation implementation remains weak. Additional legislations and regulations need to be developed.

Impressive strides have been made in the development of health policies, legislations and regulations. An example of which is the recent step undertaken to adopt a registration and licensing system for health practitioners. Efforts to improve the quality of training in health educational institutions have moved one step further with the implementation of the national entry and exit examination.

While the legal structure for governance of the health system has been developed and is in place, enforcement of remains weak due to inadequate resources, together with limited regulatory capacity.

- Pharmaceuticals law (1996); amended in 2007, Abortion law (1997), Law on management of private medical and paramedical services and medical aid (2000), HIV/AIDS Law (2002), Law on Tobacco products Control (2015), plus regulatory instruments i.e. Anoukret, Prakas, and Circulars etc.
- Regulatory mechanisms are put in places at national and subnational level for laws/regulations enforcement.

(7) Governance and D&D

The ongoing trend towards decentralization and deconcentration (D&D) has necessitated changes in the roles and functions of the central MoH departments, municipal and provincial departments and district health offices. It has also drawn attention to the implication of the D&D process on different administration levels in terms of investments, policies and practices with the objective to improve effectiveness and efficiency of health service delivery..

- Some regulatory functions (obligatory functions) of the MoH, have been delegated to the subnational levels i.e. both provincial and district administrations. It includes issuance of licenses, regulations and laws enforcement.

4.3 KEY RECOMMENDATIONS

The following recommendations are based on the premise that the MOH is well placed to **improve the quality of service delivery** by further strengthening the supply-side mechanisms; and it is also well placed to **improve equity in the distribution of health services** by further strengthening demand-side financing, most importantly HEFs.

- Achieve more equitable distribution in health outcome across the population and in health services that are in line with national quality standards and guidelines.

- Invest in stronger and more effective systems for pre- and in-service training for health professionals to enhance their clinical and managerial competencies for further improving the quality of service delivery.

- Enforce a stronger regulatory framework along with sound financial management, administrative and pay reform to enhance continuous quality improvement efforts.

- Build on the HEFs to provide access to services for other vulnerable population groups (e.g. people with disabilities, older people, people with chronic non-communicable diseases, and children under 5).

- Ensure uniform development of social health protection schemes in terms of provider payment, benefit package, claims processing, information systems, service purchasing systems.

- Consolidate the demand-side financing schemes in a national social health protection structure and system to advance the move towards universal health coverage, and to support increased demand for public health services, and to leverage healthcare quality.

- Explore opportunities for the use of performance-based financing in the purchasing function of social health protection institutions to improve performance and increase quality and efficiencies.

- Further strengthen the health promotion, primary and secondary prevention activities for NCDs in the health sector and with the community to stem the longer-term growth and reduce health care costs.

- Increase domestic financial resources for national programs to close financial gaps as result of the reduction in funding from the global partners and other development partners, and integrate these programs within the broader process of health service delivery system.

- Given evolving D&D process, redefine the roles and functions of the MoH and its institutions at all levels, and then adjust their organizational structures, accordingly, and consider moving from macro-level planning to micro-level to provide for the necessary staff placements; monitor results not only as outputs but as outcomes (results, quality).

- Invest in technology transfer and its use for health services delivery - to enhance knowledge and diagnostic capacity among health providers and connect them to their patients; for enhanced information products for decision making; and for the monitoring and evaluation of health system performance.

5 SECTOR PRIORITIES

5.1 INTRODUCTION

At a broader level, priority-setting is determined by the global commitment to the achievement of the Sustainable Development Goals (SDGs), taking into account the socio-economic conditions and impact of on-going Government reforms. The demographic and health transition also adds an additional layer of complexity to the health system.

Strategically, the priority setting is driven by rational approach to allocating available resources to ensure access, quality, efficiency and equity i.e. focusing on prioritizing health problems and interventions.

5.2 CHALLENGES

Challenges to epidemiology (diseases and health problems)

- Maternal, infant and under-5 mortality remain relatively high compared to other countries in the region.In addition, inequities in the health outcomes across socio-economic groups persist.

- Malnutrition (acute and chronic) among women and children remain stubbornly high; severely impacting their health and cognitive abilities later in life.

- An increased incidence of teenage pregnancy (aging 15-19) is likely to increase demand of adolescent reproductive health services. This challenge, together with relatively low institutional deliveries by women from lower economic groups, can slow down the reduction of maternal and neonatal mortality.

- HIV transmission remains significant amongst the marginalized populations including female entertainment workers, men having sex with men, transgender persons and people who inject drugs.

- Despite achievements, mortality rate and prevalence of tuberculosis (TB) still remains high.

- Artemisinin resistant malaria remains a public health concern of global significance.

- Increases in the prevalence of NCDs, together with the aging population and increasing urbanization pose as a challenge to the structure and delivery model of the existing health system.

- Burden of mental health disorders remains an unaddressed concern; especially since the health system is ill equipped to deal with the service needs.

- Growing threat of emerging and re-emerging infectious diseases exposes the vulnerability of the health system and also acts as a global health security threat.

- Potential risk to human health resulting from environmental health risks and climate changes remains an unaddressed but pressing concern.

Challenges to the health system performance

- Growing demand for better quality health services, as the current quality of health services provided in both public and private sector is generally considered inadequate.

- Effective delivery of quality health service is constrained by inadequate resources, mainly under-staffing, limited diagnostic capacity, and insufficient supply of medicines and health commodities.

- Inadequate capacity of public health services to deal with diseases/health problems related to CDs and as NCDs, and public health emergency including pandemic of emerging/re-emerging infectious diseases, disaster preparedness and response.

- Gaps in physical infrastructure limit the expansion/strengthening of existing health services or the establishment of new services.

- Low level of risk pooling; also strategic purchasing mechanisms are not yet in place. Apart from HEFs, there is no social health insurance system for either the formal and informal population.

- Equitable distribution of health workers is a challenge with implication on the efficient delivery of health services at various levels and in facilities within the health system.

- Competency and skills of health workers remain limited. Moreover, in the absence of complimentary skill mix with health care team the quality of health services remains compromised.

- Lack of investment in ICT, including a central repository of existing health databases, has resulted in the absence of a single, comprehensive information system for monitoring and evaluation in the health sector.

- Multiple M&E frameworks, indicators and reporting systems; project/program-related M&E (tools/teams); and donor-driven research and evaluation agenda based on their own interests and pilot initiatives.

- Limited capacity at central, subnational and health facility level to use, analyze and interpret data. Limited use of the HMIS by clinical and administrative staff to make managerial decisions.

- Rapid growth of the private health sector poses a challenge to the stewardship function of the MoH and its ability to regulate across all levels of the health system.

(1) On demand-side

- Rising demand for health care services has not been matched by increases in the utilization of public health services.

- A considerable proportion of the population suffers a variety of disabilities, including vision and hearing impairments, negatively impacting their socio-economic participation. There is an unmet demand for disability-specific services, including provision of supportive devices and social assistance.

- Inappropriate health-seeking behavior of the population, especially in rural/remote areas (e.g. delay seeking care, self-medication, seeking care from unqualified providers etc.,) and preference of using antibiotics and injections.

5.3 OPPORTUNITIES

The on-going, impressive economic growth along with progressive reform processes provided the MoH with an opportunity to make important improvements in the health sector, in particular health service delivery..

- The RGC's strong political commitment led to attainment of the MDGs. This is likely to be re-affirmed for the SDGs (particularly in advancing towards universal health coverage).

- The NSDP 2014-2018 provides the foundation for investing in health as a means to develop human capital, building a more productive workforce.

- Cambodia continues to experience a sustained and strong economic growth that increases fiscal space and capacity, allowing the Government to increase public spending in health.

- PFM reform have resulted in consistent increases in the budgetary investment in health and has led to improved credible budget and financial flow, transparent budget allocation and expenditure, robust auditing system and increased performance by public service providers through result based budgeting.

- Salary reforms that are consistent and conform to broader civil service policies can help improve the productivity and motivation of the health staff.

- D&D process hold great potential if properly structured and steered. It can potentially improve administrative and fiscal efficiencies, besides making the system more accountable and responsive to local community needs.

- "ASEAN Economic Community" - The ASEAN Member States (AMSs) have committed to the realization of an economic community by 2015, which includes the establishment of a single market and production base. This provides immense potential from trade and commerce arising from regional integration but also poses as a challenge and economic risks i.e. remain competitive in a unified market. While progress has already been made in liberalizing trade in goods between ASEAN member states, liberalization in the areas of trade in services and investment as well as the mobility of skilled labor has seen relatively slow. The Mutual Recognition Arrangements (MRA) has not been implemented completely. The implementation of the MRA and facilitation of the mobility of health workers (namely doctors, dentists, nurses) will involve further work in the adaptation of national laws and regulations. Furthermore, there is still limited understanding and awareness of the potential implication of these processes on the health labor market, both public and private sector.

Along with the above-mentioned opportunities, the following proven interventions in the health sector have created favorable environment for further strengthening the supply of quality health services in a responsive and publicly accountable manner.

- Growing support within the Government to build on HEFs as a mechanism to cover the population in the informal sector, especially rural and vulnerable groups.

- The Government funded Midwifery Incentives Scheme and the Government-DPs funded Service Delivery Grant, if institutionalized through expansion of SOAs.

- With significant achievements at national level (budget, personnel) the opportunity has arisen to strengthen service delivery at sub-national level (through expansion of SOAs or other supply-side interventions).

- Stronger demand for healthcare due to improved health literacy and establishment of social health protection mechanisms, such as HEFs.

5.4 HEALTH SECTOR PRIORITY

Ideally, priority-setting is driven by an important understanding of the main reasons behind the limited response in demand for public health services and ways whereby the supply side can ensure access and coverage, and quality of health service provision that meets the need and expectations of service users, and gain their trust on the public health system. Specifically, it is based on (i) the magnitude of the burden of diseases and other health problems—defining/re-defining priority health service packages and interventions, (ii) target population—hard-to-reach and vulnerable populations, (iii) resource availability (finance and human)—directing/re-directing resource investment.

Health Priorities

- Further reduce maternal, childhood and neo-natal mortality, especially across geographical area and socio-economic groups, and reduce prevalence of malnutrition among women and children.
- Further reduce the burden of communicable diseases, mainly HIV/AIDS, Tuberculosis, Malaria and Dengue, and others (Leprosy, Helminthiasis, emerging and re-merging diseases)
- Growing burden of NCDs necessitates its effectively management through the reorientation of the health system and more intensive engagement with the communities.

Health System Priorities

Investment in the health system to address the priority health problems of the population falls within three correlated broad areas: resource infrastructure, social health protection and institutional development and governance.

- Improve equitable distribution of health facilities across geographical location (rural vs. urban) with greater attention to a trade-off, to the maximum possible extent, between efficient and effective health service delivery and effective investment in basic infrastructure – promoted equitable access and economy of scale.

- Bridge the gap in health service delivery in terms of service availability and readiness, with emphasis on adequate supply of appropriate equipment, medicines, commodities and health personnel at health facilities – readily available health services to be used.

- Ensure health services provided are acceptable with adequate quality at affordable cost throughout the country in order to meet the need and expectation of the population – gained population trust on the public health services, hence increased utilization.

- Ensure equitable distribution of health workers with the required competencies and skills to provide patient-centered services that are responsive to population needs.

- Improve the governance and management of the health workforce to create a team of well-supported, adequately compensated and motivated health staff that are equipped to provide quality health services.

- Prepare a health workforce that is geared to address challenges resulting from the evolving demographic and epidemiological changes.

- Ensure the production of a competent health workforce by creating and enhancing mechanisms to buttress the quality of training in health educational institutions such as the establishment of an accreditation system.

- Reinforce regulatory mechanisms including registration and licensing of health practitioners, to create overarching safeguards to protect patient safety.

- Develop health legislation and regulations necessary to implement and enforce existing laws concerning the licensing and accreditation of both public and private health care facilities and ensure provision of adequate resources for enforcement.

- Expand target population (HEFs beneficiaries) and benefit packages of HEFs and ensure optimal access to and utilization of health services for them.

- Initiate pathway to establish social health insurance system in informal sector population within the RGC policies and strategic framework for developing the national social security system, when applicable.

- Enhance ICT and technology transfer—application of technology and practice for health care service delivery and health products, and health service management, disease surveillance and response, M&E system, along with capacity building for data processing, analysis, interpretation, dissemination and use.

- Use and expand appropriate technology, skills to use and interpret the collected data, comprehensiveness of the information and confidentiality. Develop and enforce legislation concerning data security and privacy.

- Efficiency in the use of financial resources by improving transparency and accountability, further realignment of resource allocation between central and peripheral health services, improving efficiency in medicines procurement and supply management, a reallocation of budget funds towards health care delivery and allocation of budgets based on population needs.

- Provide incentives for quality health care through various measures, including improvements in physical and human resources infrastructure, incentive programs, performance contracting, and strategic purchasing by social health protection institutions.

- Financial risk protection, to reduce the levels of OOP spending, catastrophic expenditure, impoverishment and health-related indebtedness.

- Equity in access to services, to target public resources on the provision of primary health care services in rural and remote areas and expansion of effective social health protection schemes.

- Equity in utilization, to address the geographical and socioeconomic differentials in service delivery and utilization.

- Strengthen the regulatory system for medicines and medical products as an essential component of the health system for achieving access to and rational use of quality, safe, efficacious and affordable medicines considering the growing emergence of antimicrobial resistance and economic and health consequences of poor quality medicines.

- Raise awareness and understanding on health issues amongst the general population.

6 SECTOR PERFORMANCE REVIEW

6.1 INTRODUCTION

A review of the health sector performance in the period 2008-2015 generated observations on the achievements and progress, and also identified challenges faced by the health sector. The review also explored the opportunities of the future prospect of the development of the health sector in the coming five years. It focused on the main issues of the five cross-cutting strategic areas of the HSP2 through an analysis of the available data/information related to key indicators of the health system performance, ranging from input, process/system to output and outcome indicators. The analysis shed the light on what did the health system actually work well and what did not so, and what need to be further improved, and in particular how to work better in the future.

6.2 BURDEN OF DISEASE

Finding 1 Burden of Diseases

The standard indicator for burden of disease is the Disability Adjusted Life Year (DALY). The DALYs for a specific disease are measured as the total of the Years of Life Lost (YLL) due to premature mortality within the study population from that disease, and the Years Lived with Disability (YLD) for people in the study population who are living with the disease.

The major findings of the assessment are:

- Key priorities for child health would be to reduce the burden of mortality from neonatal conditions, as well improve the nutritional status of children, from both macro- and micronutrient deficiencies, while addressing the morbidity and mortality from acute respiratory infections and diarrhoeal diseases.

- Tuberculosis ranks among the top three causes of both mortality and morbidity, and highlights the important challenges associated with case detection and successful treatment.

- Other infectious diseases of importance are Hepatitis B and dengue.

- Non-communicable diseases – mainly ischaemic heart disease, stroke and chronic obstructive lung disease are the emerging priorities. This is supplemented by an evolving threat from rising prevalence of principal NCD risk factors - hypertension, diabetes and overweight; as well as behavioural factors such as smoking and alcohol consumption.

- Mental health conditions comprise a major component of morbidity and the common conditions include post-traumatic stress disorder, depression, and anxiety disorders.

- Road traffic accidents are the 4th leading cause of DALYs among males, and 13th among females, with the majority of both mortality and morbidity occurring at ages 20-49 years.

MALES		FEMALES	
Causes	% of DALYs	Causes	% of DALYs
Neonatal conditions	10.9	Neonatal conditions	8.6
Tuberculosis	7.0	Tuberculosis	6.2
Lower respiratory infections	6.6	Lower respiratory infections	5.9
Road injury	4.2	Unipolar depressive disorder	4.1
Ischaemic heart disease	4.1	Ischaemic heart disease	4.0
Stroke	3.1	Iron-deficiency anaemia	3.9
Diarrhoeal disease	2.6	Stroke	3.4
HIV/AIDS	2.5	Sense organ disease	3.3
Drowning	2.5	HIV/AIDS	2.8
Iron-deficiency anaemia	2.4	Diarrhoeal disease	2.5
Sense organ disease	2.1	Chronic obstructive pulmonary disease	2.1
Unipolar depressive disorder	2.0	Maternal conditions	1.8
Chronic obstructive pulmonary disease	1.8	Road injury	1.8
Alcohol disorders	1.8	Back and neck pain	1.6
Self-harm	1.7	Asthma	1.6
Interpersonal violence	1.5	Diabetes mellitus	1.4
Drug use disorders	1.5	Congenital heart anomalies	1.3
Congenital heart anomalies	1.5	Anxiety disorders	1.3
Liver cancer	1.5	Migraine	1.1
Back and neck pain	1.4	Rheumatic heart disease	1.0
Asthma	1.2	Self-harm	1.0
Falls	1.2	Gynaecological disease	1.0
Meningitis	1.1	Drowning	1.0
Cirrhosis of the liver	1.0	Cervix uteri cancer	1.0
Kidney disease	0.9	Meningitis	1.0

6.3 HEALTH SERVICE DELIVERY

Finding 2 Capacity of Health Service Delivery

In the past decade, there have been considerable investments in health infrastructure. . Such investment includes, but is not limited to, construction, rehabilitation, renovation and expansion of HC/HP/RH, supply of medical equipment, medicines and health

commodities, ICT network, means of transportation, production of health professionals, competency and skill development, and other essential supporting services – such as laboratory and blood bank services. This investment has been made with the intention of improving both access and utilization of health services..

- 138 HCs were newly established, especially in remote areas, reaching the total number of 1,105 HC by 2015. If generally applied an optimal population size of 10,000 populations per HC, regardless urban vs. rural location, the catchment population currently covered by a HC is 12,500. Thus equitable distribution of HC across the population is fairly met. In this regard, the future investing in constructing new HC need to be carefully considered as long as effective and efficient services and economy of scale is concerned.
- The ratio of public hospital bed (excluding TB beds) to the total population is slightly increased to 1 bed per 1,446 population, but does not meet the ratio recommended by HCP i.e. 1 bed per 1,000 population.
- High investments in advanced medical equipment and technology in the national hospitals and national centers for medical laboratory is evident, along with the expansion of basic infrastructure at the University of Health Sciences and Regional Training Centers.
- Size of public health workforce has increased around 250 persons in annual average over the last eight years. The acute shortage of midwives in 2005 has been overcome; in 2009 all health centres had at least one primary midwife and over half had a secondary midwife. In 2014, 81% of the health centres had at least one secondary midwife.
- The Government health spending nearly doubled from US$104.1m in 2008 to US$199m in 2014. Health spending at provincial level has also gradually increased, despite reduction of the overall health spending in the period 2012-14. This decline was correspondent to the lower cost of medicine procurement despite maintaining the same quantity of purchased medicine. It is assumed that this was due to efficiency gains in procurement.
- More medicines and health commodities have been made available at most health facilities. As a result, essential drug stock-out at HCs decreased from 13.3% in 2008 to 1.6%% in 2015.
- Blood bank services are available in 21 provincial RHs and blood depots in 12 district RHs. Blood donation rate rose from 3 per 1000 population in 2008 to 4.5 per 1000 in 2014.
- Each referral hospital has at least 2 ambulances, and some HCs also have an ambulance.

Finding 3 Innovative Management of Health Service Delivery

Two models of health service delivery have been put in the implementation as per the Government Policy on Public Service Delivery (2005): i) Public Administrative Enterprises (PAEs) and ii) Special Operating Agencies (SOAs). Both are flexible managerial instruments to enhance performance and accountability in the provision of public services, with main emphasis on the improvement in quality and delivery of targeted public services. The former targets the central level institutions, including 4 national hospitals, 2 health educational institutions, and a national center. The latter concentrates on provincial level, including 10 provincial referral hospitals and 36 ODs.

- As a result of the relatively high-level autonomy awarded to health institutions with PAE status, they seemingly perform better with expanded basic infrastructure and motivated staff with supplementary salary income generated from Government subsidies and revenue from user fees. . However, there still remains the need to strengthen accountability over budget revenue. .

- Given institutionalized performance based practices accompanied by bonuses based on performance through "Service Delivery Grants" (SDGs) currently financed by the Government and DPs, well-managed SOAs have implemented job descriptions, performance requirements and stronger discipline for all staff; some SOAs are using these mechanisms as a basis for payment of not only the SDGs incentives, but also salary top-ups from user fees and HEF revenues.

- SOA-ODs receiving SDGs appear to have generally maintained the performance improvements achieved, and have made further improvement on some performance indicators. SOAs financial management has been generally successful, even though some design and implementation issues of the funding formula and performance-related component of the SDG are still being addressed.

Finding 4 Overall health access and choice for health service providers

During 2007-2014, medical care seeking at both public and private facilities/providers (consultation or treatment sought for the illness/injury) significantly increased for all population groups, including people <60 years and older, people with disability, and peoples with chronic diseases, across all socioeconomic strata. However, consumption of public health services remains low. The low utilization of public health facilities by poor and vulnerable populations (in some cases despite HEF coverage) is a concern.

- Significantly increased care seeking at both public and private providers for all groups of the population, rising from 84% in 2007 to 98% and 2013, respectively; people with disability from 63% to 95%; and peoples with

chronic diseases from 67% to 80%.

- Slow increase in utilization of public health services- per capita consultation per year increased from 0.45 in 2008 to 0.60 in 2014 while Bed Occupancy Rates increased around 15% annually.
- Care seeking at formal providers increased from 50% in 2004 to 82.4% in 2013, while home care decreased from 16% to 0.2% over the same period.
- People in rural areas significantly used private sector (drug store 38%, private clinics 35% and private hospitals 3%). They also used HCs, but less public hospitals. People in the capital used significantly more private hospitals and private clinics.
- Children and elderly sought more care than other groups of the population. Children under 5 were significantly less likely to receive care at home compared to other age groups.

Finding 5 Quality of Health Services

The pursuit of quality improvement has been moving at a slow but steady pace in Cambodia. This has been guided by the National Policy for Quality in Health, which outlines the roadmap towards the establishment of minimum standards and benchmarks in the public health system. In line with the policy vision, a multidisciplinary approach to building up the quality of health services has been undertaken in order that all Cambodians are able to achieve the highest level of health and well-being. In addition, with the proposed plans to develop and expand the social health protection programme, instituting systems to monitor the quality of services has become more crucial. For instance, social health protection scheme operators will have to actively participate in determining the minimum acceptable quality of health care to purchase for their clients, while policy makers seek the appropriate balance of incentives to the community and providers to harness pressure on the system to improve. The private sector will also have to be actively involved, as they are also subject to a common minimum quality of care, by participating in the development of guidelines to which they are ultimately accountable. Besides, to monitor the implementation of the Code of Conduct and professional ethics, coordination bodies such as professional councils will have to enact a critical role in ensuring patient safety in both public and private sectors.

- Systems and guidelines have been established for improving performance at public hospitals, but funding for implementation and monitoring are very limited.
- Hospital mortality rate decreased from 1.37% in 2010 to 0.97% in 2014.
- Results of the 2012 Client satisfaction Survey suggest that the National Satisfaction Index was 86, implying that the majority of clients were satisfied with the services received at the public health facility. However clients expressed dissatisfaction in several areas, including: inattentiveness of health

facility staff, unavailability of staff at night, unclean facilities, and poor communication on illness diagnosis and prevention.

- Quality assessment—Level 1 - Assessments of 50 out of 80 hospitals nationally, showing performance scores above 90% for equipment operation and maintenance, management and technical capacity.
- Quality assessment --- Level 2 – assessment of the process of care in health centers and hospitals showed that the median quality score is still low, with the aggregate scores for health centers being lower than for hospitals. Further, it also demonstrated the wide variations in the quality score depending on the type of health facility, its geographical location and type of services assessed.
- Prevalence of counterfeit and substandard medicines declined from 13% (in 2002) to 3% (in 2009) and 0.18% (2011) according to the second Pharmaceutical Sector Strategic Plan (2013-2018).

Finding 6 Reproductive, maternal, newborn and child health

In the last ten years, improvements in service delivery have focused on ante-, intra- & post-natal care; neonatal care; protection of mother-to-child transmission of HIV; immunization;, nutrition; management of Acute Respiratory Infections (ARIs), diarrhea, Vitamin A and folic acid supplementation, unmet need for contraception, teenage pregnancy, safe abortion, and family planning. Among the most significant improvements in service delivery, at referral hospitals and health centres, has been the increase in assisted and facility-based deliveries, uptake of antenatal and other maternal and child-health services. This progress has been possible due to the strong political commitment. In addition, the Midwifery Incentive Scheme, expansion of HEFs, and maternal health vouchers have all contributed to improvements in equitable access to these services.

- The contraceptive prevalence rate among married women has increased considerably (18% in 2000 to 39% in 2014), but unmet need for contraception remains high (13%).
- The dramatic increase in the use of skilled birth attendant –89% of all deliveries by 2014, 83% institutional deliveries– a result of long-term efforts beginning in 2000, when only 10% of births were institutional.
- Breastfeeding is nearly universal - 93% of children aged 0-5 months are breastfed. While exclusively breastfeeding is common, it is still not universal.
- C-section rate (as percentage of total deliveries) increased annually around 1% largely due to the increased number of facilities providing Comprehensive Emergency Obstetric and Newborn Care (EmONC), along with increased detection of pregnant women-at risk.

- Reductions in under-5 mortality is associated with improved coverage of effective interventions including routine immunization, and new vaccines, malaria prevention and treatment, vitamin A supplementation, and early and exclusive breastfeeding, and implementation of IMCI.
- "Zero-case" of measles was notified in November 2011. Cambodia was certified as 'measles free' by WHO in May 2015 - the only low-income country to have achieved this status in Asia and Pacific region.

Finding 7 Communicable diseases

In the past 5-10 years, Cambodia has made major advances in the control of communicable diseases – a testament of the strong disease control programs. As a result, the country was able to achieve many health related MDGs-6 targets several years in advance.

The three-disease programs, -HIV/AIDS, Tuberculosis and Malaria were generally well funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria and in some cases from other sources. However, the program review has drawn attention to the medium to long-term risks of relying on a single source of external funding. Attention has also been drawn to the need to strengthen the response to other communicable diseases in terms of improved notification, reporting and emergency responses.

More attention will be needed to build health system capacity in the area of pandemic response for emerging and re-emerging infectious diseases, such as avian influenza. While national structures for pandemic preparedness (as well as national pandemic influenza preparedness plans and Avian and Human Influenza) are in place, further development of surveillance and rapid containment of poultry related transmission is required. In particular, stronger linkages with other sectors are required as pandemic preparedness programs sit mostly with non-MOH agencies. An increasing level of investment in pandemic preparation has contributed to improvement in health system surveillance, laboratory capacity, monitoring and evaluation and public communications. While there is a commitment to meet the International Health Regulations requirements for disaster preparedness capacity by 2016, the health system has limited capacity despite recent improvements and the stockpiles of protective equipment, vaccines and supplies are insufficient.

- The quality of TB care has improved, evidenced by a lower MDR at 1.4% for new cases, and 10% for retreatment; the treatment outcome success rate has been >90% for ten years. DOTs have been implemented at all health facilities, together with Community-based DOTs.
- In the past decade, the adult HIV prevalence has declined by nearly 60%. The country has achieved the universal access target for treatment, with approximately 80% of adults and children estimated to be in need receiving antiretroviral treatment. The recently launched third strategic plan,

"Cambodia 3.0," builds on these successes and outlines an approach for eliminating new HIV infections and AIDS deaths by 2020. Malaria incidence is at its lowest point ever; dengue fever incidence is declining.

- Progress has been significant also for neglected tropical diseases (NTD), including schistosomiasis, lymphatic filariasis which are targeted for elimination. Cambodia was the first country to pass the 75% international target for coverage of drug distribution for the vitamin A and worms, achieving 90% among pre-school and school-aged children and women in the childbearing age group.

Finding 8 Non-communicable Diseases and Public Health Problems

The unfolding demographic and health transition in Cambodia has been evident in a sharp rise in the incidence of non-communicable diseases (NCDs), particularly diabetes and hypertension, as well as cancers. Premature mortality from NCDs is rising and the prevalence of risk factors is alarming. NCDs currently account for half of the disease burden. The principal risk factors for NCDs are preventable: unhealthy diet, physical inactivity, tobacco use, and harmful alcohol consumption. The Government has shown its commitment to addressing the rising NCD burden in its Action Plan for the Prevention and Control of NCDs (2014-2020).But NCD service delivery remains low in terms of availability and coverage.

- Cardio-vascular diseases, cancers, chronic respiratory disease and diabetes caused 52% of deaths in Cambodia in 2011, and the rate is rising.
- Health centres provide NCD routine services to a limited extent.
- There is currently no national screening programs for cervical or breast cancers and no cancer prevention programs. Health care services for cancer are limited.
- Although mental disorders are high in Cambodian society, the health system is still ill equipped to deal with the demand and community programs to manage the condition are limited.
- Cataract surgery increased from 16,150 cases to 27,354 and eye operation increased from 24,463 cases to 42,983 cases (Figure 5.16). Ophthalmological services are available in 21 RHs or 23% of the total RHs, while basic eye care services are available only at 331 HCs or 30% of the total 1,105 HCs.
- With 43% of adult males smoking cigarettes, there is an urgent need for effective preventive measures to be implemented.
- Accidents and injuries (almost 2% of the population being injured in 2010; two-thirds of accidental deaths are caused by road accidents)
- Over-nutrition (the proportions of people 25-64 overweight and obese were 15.4% and 1.9% in 2010; 76% of respondents were physically active for an

average of six hours per day)

- Alcohol consumption (a major concern in both urban and rural areas, affecting almost two-thirds of people in 2010)
- Tobacco abuse (4-in-10 men and 4-in-100 women (18 years and older) smoke according to a 2010 survey, with little change from 2005;

6.4 HEALTH SYSTEM FINANCING

Finding 9 Sources and level of fund, and risk pooling and financial management

Together with consistent economic growth the RGC increased substantially health spending. This positive trend together with increased households' capacity to pay is also reflected in the increase of total health expenditure in the country and in the private health provision sector. Despite increased public health spending, OOP health spending remains a major funding source for the health system.

Domestic and DPs funding provide the largest single pool of funds for the health system. In risk mitigation, the largest funding pool is the unified HEFs, which cover a population of about three million poor people and was expanded nationwide. Social health insurance coverage is limited to work injury benefits provided through the National Social Security Funds; the National Social Security Funds for Civil Servants is yet to provide health benefits. Voluntary health insurance coverage is available through a small number of schemes, principally serving rural communities, and some private insurance targeting the rich and urban workers.

There has been overdependence on various external financing sources (for instance CDs prevention and control program activities), posing a major challenge to financial sustainability of the program interventions. This has also underlined the need for harmonization and alignment.

- Total health expenditure (THE) has increased substantially and reached US$1,033 million in 2012, or more than 7% of GDP. OOP health spending was 60% of this total spending, with Government and DPs funding taking an equal share (20% each).
- The government's contribution amounted to US$199.1 million 2012, equalling 6.5% of total government expenditures (or 12% of total government recurrent expenditure).
- On average the amount of out-of-pocket health expenditure per capita and per year was found to be between US$13.9 and US$69 in 2007 and 2014 respectively. There were significant variations in the level of spending between age groups and by economic status.
- Households capacity-to-pay per year (nominal riel) increased from KHR21,345 in 2007 to KHR77,708 in 2013

- The incidence of impoverishment from health spending (households becoming poor as a result of health expenditure) reduced slightly between 2007 and 2013 from 2.5% to 1.7%.
- Household catastrophic expenditure due to health spending (% of all households) at 4.9% in 2014 remained similar to the 5.2% observed in 2009, and the incidence of household indebtedness due to health care expenditure also decreased from 2.9% to 0.9% in 2007 and 2014, respectively.
- The utilization rates (cases/person/year) of in-patient and out-patient at RHs by HEF Beneficiaries increased between 2007 and 2014 - 7.01 percent point increased of out-patient, and 5.19 percent points of in-patient. Deliveries (as % of expected deliveries) by HEF Beneficiaries at RHs and HCs increased 10.6% to 27.1% steadily, 3.1% to 23.4% from 2007 to 2014.
- Due to the rapid pace of expansion, HEFs reached 1,105 HCs (100%) and 95 RHs (97%), as targeted by 2015.
-

Health Facilities	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
OD	17	24	26	37	42	46	47	49	52	63	92
Hospital CPA 1	5	6	7	13	17	19	20	22	24	28	49
Hospital CPA 2	4	6	7	12	14	15	15	15	15	20	29
Hospital CPA 3	7	10	11	11	12	12	12	12	14	16	19
National Hospitals	0	0	0	0	1	1	1	1	1	8	9
HC with beds (former district hospitals)	2	2	2	6	14	18	23	25	38	43	N/A
Health Centers	6	14	15	74	154	230	259	280	455	554	1141
Health Posts	0	0	0	0	4	5	10	10	42	45	81

6.5 HEALTH WORKFORCE DEVELOPMENT

Finding 10 Human resource planning

Achievements are evident in a number of areas including policy formulation, legislation for health professional education, increased staff remuneration, improved HR reporting, staff planning and projections, staff deployment and performance and staff incentives. However, human resource planning is more challenging within a context that is rapidly changing; adaptation to change is therefore at the center of the planning tasks in areas including the epidemiological transition, new medical technologies and the growing demand for high quality and new health services. The best use of human resources can be achieved through developing the governance of a mixed health system and the MOH

has moved already to strengthen its human resource governance, planning and reporting functions.

- To fully implement the HCP there is a need to expand the total public health workforce to 36,000 by 2020, an increase 70% from 2014 level.
- The Health Workforce Development Plan provides guidance on staff levels and distribution, pre-service and in-service training, management and incentives and performance management.
- Legislation is being developed to further regulate the quality of medical education (public and private).

Finding 11 Human resources production

The MOH has achieved a staff of approximately 20,000 health workers nationally and has placed at least one midwife in every health centre. Even so, a further expansion of the total health-staff number will be needed to meet the growing health needs, with a more appropriate mix of staff with the necessary skills to meet existing and new health demands.

- Degree programs have been established for nurses and midwives.
- Under the proposed new Law on Regulation of Health Practitioners, a mandatory system of registration and licensing of all health professionals will be established.
- Despite a large number of graduating health professionals, the number recruited to civil service positions is still insufficient to meet the expanding needs. Further, the number of medical specialists is mostly sufficient to meet current needs according to CPA1, CPA2 and CPA3 hospital operations.
- There is an urgent need to institute a system for accreditation of health educational institutions, especially in the wake of the recent surge in the number of private training institutions in health. The MOH Human Resources Development Department manages the continuing education process; however there is an urgent need to regularly update the database to inform training needs of health staff.

Finding 12 Human resource management

Recent achievements in human resource management include annual salary increases, potentially resulting in better staff performance. Although staff allocation has improved, as a result of better management tools, better planning and better oversight with appropriate indicators, rural vacancies continue to pose as a serious challenge. Under the SOA arrangement, new organizational and management structures with performance measurement and incentives have assisted the improved performance. The introduction of

PAE status (for University of Health Sciences, National Hospitals) has increased management flexibility.

- Better management of human resources has been achieved but low levels of recruitment into civil service position results in staffing gaps.
- Despite increments in staff salary, low level of staff remuneration continues to impact staff motivation and productivity.
- Rural deployment and retention needs to be addressed by the introduction of a comprehensive package of financial and non-financial incentives.A consolidated HRH database has been established to assist in improved decision making.

6.6 HEALTH INFORMATION SYSTEM

Finding 13 Health Management Information System

Health facility data are a critical input into assessing national progress and performance on an annual basis and they provide the basis for subnational/district performance assessment. Despite limited investment in ICT, the use of information and communications technology has grown with all hospitals and ODs reporting monthly results to the web-based Health Information System (HIS) against a range of routine indicators. Nearly 40% of health centres are able to capture and submit date electronically as well. The system captures disease and surveillance records, provided preventative MCH services, national programs data, death and births records, population data from all public health facilities and 14% of all private health services providers.

The HIS is distinguished by being the only current source of up-to-date data in real time. Routine data quality assessments in 2011, 2012 and 2013 by using WHO data quality score cards indicate that there is a generally high consistency rate between source documents and monthly HMIS reported values. However, there is still scope for improvement.

- Selected data will be made available on MOH-DPHI website in due time to the public.
- At subnational level, HMIS information is used for quarterly and annual reviews, SOA performance reviews, Provincial Technical Working Group meetings, District and Provincial Health Financing Steering Committee meetings, and for annual planning and budgeting by facilities.
- The MOH has seen a development of databases systems like in-service training database, personnel management database, drug information database, social health protection database, HCP database, AOP database. It is the intention to further integrate these data bases.
- The data is available to a range of international institutes, universities and

researchers as well as investigators from development partners seeking information on health system performance.

- PMRS is the system of electronic patient records and data management used by public health facilities for patient data management. Using unique patient ID, the system can store detailed information on the patient (name, address, contact information, photos. etc.), including data on service fee for HEF repayments.

6.7 HEALTH SYSTEM GOVERNANCE

Finding 14 Institutional Development

The MoH is mandated by the RGC to lead and manage the entire health sector. It is the sole authority responsible for the organization and delivery of public health services. In Cambodia, most health service delivery functions of the public sector are described in policy documents, strategies and guidelines rather than formal legal documents. These documents do not generally define the distinction between obligatory and permissive service delivery functions, though they often set priorities and targets. The MoH exerts its leadership in health system planning and development via coherent and comprehensive policy and planning frameworks. A fundamental strength of the planning process is that it is fully owned, led and managed by the MoH, with strong support from Development Partners (DPs).

- A conceptual map of the major groups of functions of the MOH at each level of its administrative hierarchy was done in 2013, and is used for functional reviews to identify functions and sub-functions of obligatory and permissive functions to be transferred to sub-national administration from now on according the second national 3-year Implementation Plan for D&D.

- Functional mapping and functional review provide the MOH with analytical framework to redefine functions for each level of the health system, with explicitly spelled-out vision and clearly defined mission, accountability mechanisms and responsibility, including lines of command and communication, and to change institutional structures, accordingly in the D&D context.

Finding 15 Enforcement of health policies, legislations and regulations

Remarkable progress has been made in areas of health policy and regulations development, along with enforcement. There is considerable scope for reinforcing the regulatory mandate of the MOH retains the governance function for the whole health system. An increasing challenge for health sector governance is to incorporate the public

and private health sectors along with non-government agencies and development partners.

- Joint Prakas of the Ministry of interior and Ministry of Health on "Quality Control, Service and Measure for the Elimination of Illegal Health Product and Illegal Private Health Service for Health and Social Safety" was issued. The main objective of the Prakas is to control and take firm action on individuals who act as physician treating people, individuals who sell medicine to people at the base without recognition from Ministry of Health.

Finding 16 Coordination and collaboration

The MOH maintains the governance responsibility for the whole health sector. Significant progress made already in reducing the disease burden and in strengthening public health sector performance provides the opportunity in the coming period to extend the activities of the MOH in the coordination of health sector priorities.

- For public health care, sector-wide collaboration has been significantly improved under the Sector-Wide Management approach adopted by the MOH for the coordination and management of a proportion of the funding that supports government service delivery coming from development partners.
- Close collaboration with the Ministry of Planning is a key part of the HEF process, which benefits from the national identification of poor households through the ID-Poor survey process.
- The MOH works closely with the Council for Agriculture and Rural Development, which provides overall coordination of social protection interventions for the poor and informal sector population.
- Inter-Ministerial Committee on Combating Counterfeit and Substandard medicines has existed since 2005. The Committee guides the fight against counterfeit and substandard medicines and illegal health services.

6.8 OVERALL CONCLUSION

While improvements in health outcomes in the last ten years can be partly attributed to the consistent improvement in socio-economic conditions, a reduction in poverty levels and improved social conditions (including housing, clean water supply and sanitation), undeniably, a significant contributor has been the improved performance of a stronger health sector. The expansion of the physical and human resources, infrastructure and

social health protection schemes have all helped improve coverage and access to health services.

The successful expansion of the health infrastructure along with demand-side changes such as increases in the purchasing capacity, have significantly raised the demand for health care. Meeting this demand will be a key to the future development of the health system. This will mean maintaining a balance in the focus on both equity and quality in service delivery, and health outcomes.

SECTION III.
SECTOR DEVELOPMENT FRAMEWORK

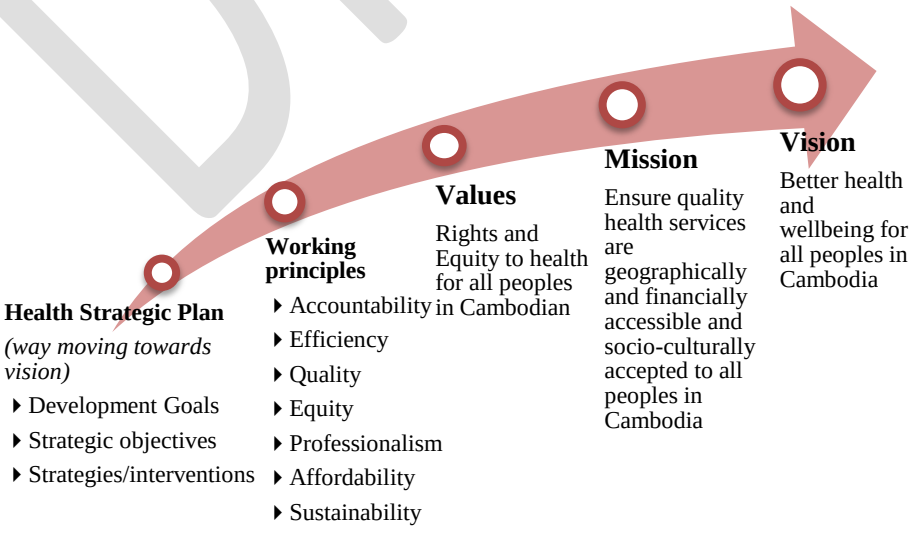
- **Chapter 7.**
  Strategic Direction
- **Chapter 8.**
  Health Development Goals
- **Chapter 9.**
  Strategic Objectives

7 STRATEGIC DIRECTION

7.1 INTRODUCTION

The strategic direction sets a long-term broad policy direction for the entire health sector (both public and private sector). It states the strategic intent and constitutes the MoH blueprint for the health sector development for years to come. The Strategic direction is a guiding light for decision-makers, managers and health personnel to lead, manage and operate the health system, so that everyone in all health institutions at national and sub-national level moves in the same direction, while carrying out their activities that are directly towards a common vision. It also provides a framework within which health development goals, and strategic objectives and health strategies are formulated. Strategic statements include vision, mission, values and working principles (Figure 7.1). Health strategic plan, with clearly defined goals and objectives, along with targets set and strategies, is developed as means moving towards achieving the strategic intent of the health sector development, so as to improve health outcome of the Cambodian population.

Figure 7.1 Strategic Directions



7.2 VISION

Vision is an overall inspirational purpose of the MoH envisioning a desired future of health prospect for all Cambodia as resulting from the entire health system development and operations. It motivates and enables individuals to see how their effort contributes to that end.

The RGC during the Fifth Legislature, 2014-2018 will continue to "sustainably develop and strengthen the health sector in order to improve health status and well-being of all Cambodians, especially women and children, the poor and vulnerable peoples, thereby contributing to socio-economic development and poverty reduction in Cambodia." In this regard, a long-term vision of the MoH is:

> **"All people in Cambodia have better health and wellbeing, thereby contributing to sustainable socio-economic development."**

7.3 MISSION

A mission statement spells out the role by which the Ministry of Health steers the development of the strategic intent to serve Cambodian people, with emphasis and concentration on sector priorities and influence on the sector's resources potential and core competencies to achieve defined health development goals. The MoH reaffirms it strong commitment to:

> **"Effectively managing and leading the entire health sector to ensure that quality health services are geographically and financially accessible and socio-culturally accepted to all people in Cambodia".**

7.4 VALUES AND WORKING PRINCIPLES

The MOH will achieve its stated vision and mission through application in motion ethical principles that are guiding the MOH's work. A value-based commitment of the MOH is:

> **"Rights to health for all people in Cambodia and equity"**

Right to health is recognized by the Constitution of the Kingdom of Cambodia. Equal access is not possible given geographical diversity, whereas equal utilization is not necessary without considering need. **Equal access to health services according to need** is therefore referred to as equity to health, meaning that health services are accessible and available to be used by all population when they need, regardless their socio-economic status and residency, so as improved equitable health outcome among the population.

Day-to-day management practices and activities of decision-makers, health managers and operational staff in all health institutions at all levels of the health system are guided by the following working principles that are the basis for health service management, including planning, implementing and monitoring all activities and expenditures, and decision-making to ensure that health institutions are operating in a way that is consistent with the MOH vision, mission and values, so as the better health and well-being for all people in Cambodia can be achieved.

Working Principles

Accountability

Improving responsiveness and good governance by application of laws and regulations, customs, ethical standards and norms, with emphasis on patient-centered health service delivery.

Efficiency

Targeting available resources to the areas of greatest need, especially rural areas and urban poor as well as priority health interventions, with better use of those resources to achieve desired results without having wasted them along the way.

Quality

Providing health services, including public health interventions, in accordance with nationally accepted quality standards and clinical practice guidelines, as well as sensitivity to gender, with respect to providers and clients 'rights-duties.

Equity

Removing socio-cultural, geographical, financial and bureaucratic barriers in access to and utilization of quality health services, especially by poor and vulnerable people, including persons with disability, and ethnic minorities.

Professionalism

Operational and productive health workforce, driven by competencies, ethical behaviour, teamwork, motivation, good working environment and learning processes.

Affordability

Ensuring that health services of accepted quality are provided at affordable cost and are financially sustainable.

Sustainability

Ensuring that substantial investment and progress made towards improving health are sustained and activities are progressively integrated into the health

system operations for the future.

7.5 POLICY GOAL

In pursuit of the stated vision, the policy goal is to **improve health outcome of the population and provide them with financial risk protection.** In order to achieve this ambitious goal, the health sector interventions focus on two fronts: **the entire health system (both public and private sector) and the entire population**. The former ensures access to and coverage of high quality health services throughout the country, while the latter ensures financial access to the quality health services by all, especially the target population. The policy agenda presented in the Box 7.1 will form a basis for defining strategic interventions on those two fronts over the course of HSP3 implementation.

Box 7.1 Health Policy Agenda

POLICY AGENDA

1. Increase population's access to and utilization of preventive, promotive, curative, and rehabilitative health services that are of an accepted level of quality and are safe.

2. Reduce the financial burden when accessing and utilizing health care services, especially for the poor and vulnerable groups.

3. Increase government health spending while ensuring improved efficiencies for use of available resources.

4. Provide adequate, competency-based, pre- and in-service training for the health workforce, along with strengthening of human resource governance.

5. Health facilities are adequately supplied with medicines and health commodities, medical equipment and technology and resource infrastructure, including buildings, amenities and ICT, to support delivery of essential health services.

6. Strengthen health management information system and disease surveillance system, along with promoting health research and utilization of information for improved health service management.

7. Strengthen institutional capacity with emphasis on regulatory capacity to enforce regulations, promote coordination and public-private partnerships and increase local accountability for health.

8 HEALTH DEVELOPMENT GOALS

8.1 INTRODUCTION

Achieving the stated policy goal "improved health outcome of the Cambodian population and provided them with financial risk protection" is directly supported by a set of four Health Development Goals (HDGs) that are significantly attributed to intended results of the strategic objectives, which include a wider range of strategic interventions across health programs and health system strengthening. Figure 8.1 shows hierarchy of policy goal and strategic interventions of the HSP3.

Figure 8.1 Hierarchies of Policy Goal and Strategic Interventions

8.2 HEALTH DEVELOPMENT GOALS

The HSP3 embraces four HDGs.

Goal 1	Reduce maternal, newborn and child mortality and malnutrition among women and children.
Goal 2	Reduce morbidity and mortality caused by communicable diseases
Goal 3	Reduce morbidity and mortality caused by non-communicable other public health problems.
Goal 4	Make the health system accessible, responsive, accountable and resilient.

Health Development Goals and Targets by 2020

Goal 1	**Reduce maternal, newborn and child mortality and malnutrition among women and children.**	
Target	1.1 Maternal Mortality Ratio (per 100,000 live births)	130
	1.2 Neonatal Mortality Rate (per 1,000 live births)	18
	1.3 Infant Mortality Rate (per 1,000 live births)	25
	1.4 Under 5 Mortality Rate (per 1,000 live births)	30

	1.5 Unmet need for family planning	7%
	1.6 Abortion rate	5%
	1.7 Stunted	NA

Goal 2	**Reduce morbidity and mortality due to main communicable diseases**	
Target	2.1 HIV prevalence rate among adult population aging 15-49	<0.1%
	2.2 Tuberculosis death rate per 100,000 population	40
	2.3 Malaria mortality rate reported from public health facilities per 100,000 population	0.01
	2.4 Dengue hemorrhagic fever case fatality rate reported from public health facilities per 100,000 population	<1

Goal 3	**Reduce morbidity and mortality due to non-communicable and other public health problems**	
Target	3.1 Prevalence of diabetes	2.9%
	3.2 Prevalence of hypertension	9.3%
	3.3 Incidence of cervical cancer	16.2%
	3.4 Prevalence of blindness	0.21%
	3.5 # (percentage) of adult mentally ill cases using public health services	70%
	3.6 Prevalence of Tobacco use among male & female	M/F: 36.4%/13.7%
	3.7 Prevalence of alcohol use among male & female adult	421.%/4.3%
	3.8 Road traffic injury mortality rate per 100,000 populations	10

Goal 4	**Make the health system accessible, responsive, accountable and resilient.**	
Target	4.1 Ratio household out-of-pocket expenses as percent of total expenditure on health	
	4.2 Ratio under five mortality rate upper and lower socioeconomic quintile	
	4.3 Institutional deliveries by socioeconomic quintile	
	4.4 Density of health workers (doctors, nurses, midwives) per 10,000 population	23
	4.5 Prevalence multidrug resistant TB	

8.3 STRATEGIC OBJECTIVES

The desired outcomes (impact level) of the HDGs are used to further define strategic objectives (of the HSP3) and the focus areas of work of the MoH and its subordinates across all levels of the health system. Specific and measurable targets are defined and used to assess progress overtime using measurable indicators. The HDGs are supported by a set of seven strategic objectives with clearly defined indicators (quantitative and qualitative indicators) and targets. Those indicators and targets are presented in Chapter 9 (Strategic Areas).

1. The population will have access to comprehensive, safe and effective quality health services at public and private health facilities.

    1.1 Increase coverage and access to quality sexual and reproductive health services, especially for young women, men and adolescents;

    1.2 Increase coverage and access to quality antenatal care, delivery, postnatal care, emergency obstetric and neonatal services, and prevention of mother to child HIV transmission from;

    1.3 Increase coverage and access to immunization and integrated management of childhood neonatal illnesses, including pneumonia and diarrheal diseases;

    1.4 Increase coverage and access to effective nutrition services, thereby reducing protein-energy malnutrition and micronutrient deficiencies among women and children under-5

    1.5 Eliminate new HIV infections and sustain the reduction in HIV/AIDS-related mortality;

    1.6 Improve Tuberculosis case finding and maintain high treatment success rates;

    1.7 Ensure zero deaths due to plasmodium falciparum malaria, and reduce dengue mortality;

    1.8 Reduce prevalence of parasite infections, including Helminthiasis and other infectious diseases; and

    1.9 Strengthen disease surveillance system to reduce morbidity and mortality due to emerging and re-emerging infectious and zoonotic diseases;

1.10 Reduce population exposure to risk factors of non-communicable and chronic diseases including cancer, diabetes, and cardio-vascular diseases and promote oral health, hygiene and sanitation, and food safety;

1.11 Promote early detection of non-communicable diseases, provide better management of acute events, ensure availability and access to long-term care as well as palliative care and rehabilitative services;

1.12 Promote awareness about mental health conditions, ensure availability of primary and complementary mental health services, including addictive substance treatment services;

1.13 Reduce blindness in specific geographical areas and provide services for hearing impairment;

1.14 Reduce harmful uses of illicit drug, alcohol and tobacco among general population;

1.15 Reduce the incidence of injuries and disability due to violence (including gender-based violence), accident and other causes; and

1.16 Strengthen disaster preparedness, management and response, and reduce health risks caused by polluted environment and climate change.

2. Stable and sustained financing of healthcare services with increased financial risk protection when accessing healthcare services;

3. The health system will have adequate number of well-trained, competent staff with appropriate skill mix who are well-motivated and display professional ethics.

4. Public health facilities are adequately supplied with medicines, health commodities, equipment and amenities, with effective essential supportive services;

5. Public health facilities have basic infrastructure, appropriate advanced medical equipment and technology and IT;

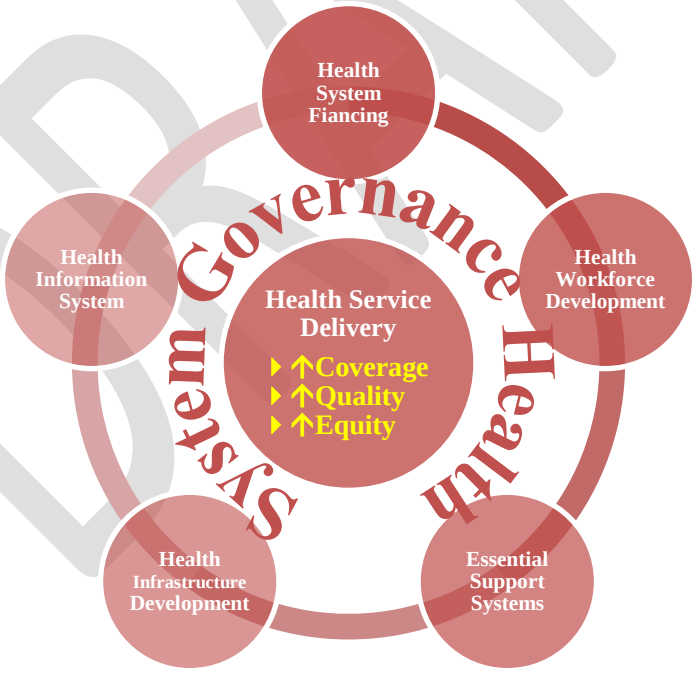
6. Health and health –related information are reliable, accurate, timely and of high quality and used together with medical and health system research; and

7. Strong health institutional capacity at al levels, including leadership and management competency, together with enforced regulation and local accountability in health.

8.4 STRATEGIC AREAS

Effectively addressing the identified sector priorities requires adequate resource infrastructure - building, amenities, medicines and health commodities, medical equipment and technology, competent and well-motivated health workforce, together with credible budget and sustained financing sources, robust health management information system, and good governance including effective regulation and coordination etc.- that are of essential input to support improved access to and utilization of quality health services by the population. In this regard, strategic interventions in pursuit of achieving strategic objectives are structured around seven cross-cutting strategic areas for health system interventions, namely health service delivery (HSD), health system financing (HSF), health workforce development (HWD), essential support systems (ESS), health infrastructure development (HID), health information system (HIS) and health system governance (HSG) (Figure 8.1). It is envisioned that the achievement of HDGs is directly impacted by outcome/results of HSD strategies that are attributable to consolidated results of strategic interventions falling within the other strategic areas. Each strategic area is described in turn in the next section 9.

Figure 8.1 Strategic Areas for Health System Interventions



8.5 STRATEGIC OBJECTIVES AND TARGETS

	OBJECTIVES AND TARGETS	2015	2016	2017	2018	2019	2020
1	**Improve access to and coverage of quality health services, thereby increasing health service utilization and client satisfaction.**						
1.1	**Increase access to and coverage of quality sexual and reproductive health services, especially for young women and men, and adolescents.**						
	Contraceptive prevalence (modern methods)	37% 39%	42%	44%	46%	48%	50%
	Number of health facilities providing Adolescents Youth Friendly Services	300	400	500	600	700	800
	Adolescent fertility	12.5%	11.6%	10.7%	9.8%	8.9%	8%
1.2	**Increase access to and coverage of quality antenatal care, delivery, postnatal care, baby care and emergency obstetric and neonatal services, and prevention of HIV transmission from mother to child.**						
	Percentage of pregnant women who received ANC4+ consultation by health personnel	64%	65%	68%	70%	72%	74%
	Percentage of newborn protection at birth				90%		95%
	Percentage of births delivered at health facilities	85%	87%	89%	91%	93%	95%
	Percentage of births delivered by trained health personnel	87%	89%	90%	92%	93%	95%
	Percentage of deliveries by C-section	4%	4.2%	4.4%	4.6%	4.8%	5%
	Percentage of post-partum women who received PNC2 consultation by health personnel			50%			60%
	Percentage of pregnant women who attend ANC receiving HIV testing and result	85%	87%	89%	91%	93%	95%
	Percentage of HIV+ pregnant women receiving ARV for PMTCT	82%	84%	86%	88%	90%	92%
	Number of referral hospitals and health centers functioning as BEmONC	132					
	Number of Referral hospitals functioning as CEmONC	43					
	Number of EmONC facilities implementing Early Essential Newborn care						
1.3	**Increase access to and coverage of immunization and integrated management of childhood illness, including pneumonia and diarrhea diseases.**						
	Number and Percentage of children under 1 year immunized with DPT3-HepB	95%	>97%	>97%	>97%	>97%	>97%
	Percentage of children under 1 year immunized against measles	95%	95%	95%	95%	95%	95%
	OPD consultations (new cases only) per person per year: children under 5 years	2	1.9	1.9	1.9	1.9	2

	OBJECTIVES AND TARGETS	2015	2016	2017	2018	2019	2020
	Percentage of new cases consulted using IMCI among children under 5 years	45%	50%	55%	60%	65%	70%
	Proportion of lower ARI cases among under five treated in public health facilities						
	Percentage of children under five with pneumonia receiving correct AB treatment at the public health facility	67%	68%	69%	70%	71%	72%
	Proportion of diarrhea cases among under five treated in public health facilities						
1.4	**Increase access to and coverage of effective nutrition services, thereby reducing insufficiency of protein-energy and micronutrient among women and young infant.**						
	Percentage of pregnant women received 90 tablets of iron/folic acid supplementation	80%	83%	86%	89%	95%	95%
	Percentage of mothers who start breast-feeding newborn child within 1 hour of birth (Joint monitoring indicators)	72	75 72	78 74	80 76	83 78	85 80
	Proportion of infants under 6 months exclusively breastfed	76% 66	77% 67	78% 68	79% 69	80% 70	81% >70%
	Percentage of postpartum mothers received 42 tablets of iron/folic acid supplementation	92%	93%	94%	95%	>95%	>95%
	Percentage of children 6-59 months received vitamin A during the last 12 months	98%	98%	99%	99%	100%	100% 98%
	Number and Proportion of children aged 6-23 months received multiple micronutrient powder	29	33	37	41	43	45
	Number and Percentage of children with severe acute malnutrition with complications receiving treatment	50% 3,000	65% 9,000	80% 15,000	90% 20,000	92%	94%
1.6	**Eliminate new HIV infections and sustain reduction of HIV/AIDS-related mortality.**						
	Percentage of adult peoples living with HIV above 14 year-olds who were on ART out of those eligible for ART	95% 79%	>95% 83%	95% 86%	97% 88%	91%	94%
	Percentage of children aging 0-14 who were on ART out of those eligible for ART	87%	90%	94%	>95%	>95%	>95%
	Percentage of PLHAs on ART surviving after 12 months of treatment	90%	90%	90%	90%	90%	90%
1.7	**Reduce prevalence and mortality of Tuberculosis and maintain high Tuberculosis treatment cure rate**						
	Number of TB cases all forms notified	40,096	39,896	39,696	39,498		

	OBJECTIVES AND TARGETS	2015	2016	2017	2018	2019	2020
		40,150	40,300	40,400	40,500	40,600	40,700
	TB cure rate (%)	91%	91%	91%	91%	93%	93%
1.8	**Ensure zero deaths from malaria and reduce dengue mortality**						
	Number of Malaria cases treated at public health facilities per 1,000 population	2.00	1.85	1.65	1.45	1.25	1
	Malaria mortality rate reported from public health facilities per 100,000 population	0.08	0.05	0.03	0.01	0.01	0.01
	Malaria case fatality rate (%)	0.5%	0.5%	0.5%	0.3%	0.25%	0.2%
	Dengue hemorrhagic case fatality rate reported at public health facilities (%)	0.5%	0.3%	0.3%	0.3%	0.2%	0.2%
1.9	**Reduce prevalence of parasite infections, including Helminthiasis and other infectious diseases; and**						
	Percentage of children 12-59 months received Mebendazole one doses during the last 6 months	90%					
1.10	**Strengthen disease surveillance system to reduce morbidity and mortality due to emerging and re-emerging infectious diseases and zoonotic diseases.**						
	Percentage of Timeliness of Reporting system	75%	80%	85%	90%	95%	95%
	Percentage of Completeness of Reporting System	90%	92%	95%	97%	97%	97%
	Percentage of Reported outbreak where local RRT respond within 24 hours	80%	95%	97%	99%	100%	100%
1.11	**Reduce population exposure to risk factors of non-communicable and chronic diseases including cancer, diabetes, and cardio-vascular diseases and promote oral health, hygiene and sanitation, and food safety.**						
	Mean population intake of salt (sodium chloride) in grams per day)	7.7%	6.8%	6.6%	6.4%	6.3%	6.1%
	Number and percentage of people with hypertension 25-64 years receiving treatment in public facilities	18.7%	20%	22%	24%	26%	28%
	Number and Percentage of people with diabetes 25-64 years receiving treatment in public facilities	15%	18%	21%	24%	27%	30%
	Number and Percentage of women aged 30-49 years screened for cervical cancer at least once	5.2%	6%	7%	8%	9%	10%
1.12	**Promote early detection, provide better primary prevention and manage acute events including palliative treatment and care and rehabilitation services.**						
1.13	**Expand coverage of primary and complementary mental health and mental-related illness services including addictive substance treatment services.**						
	Number of adult mental ill cases accessed public sector/10,000 pop.	35	40	45	50		

	OBJECTIVES AND TARGETS	2015	2016	2017	2018	2019	2020
	Depression, Schizophrenia						
	Number and Percentage of Drug Users (Mostly ATS) access to public health facilities (est. 13,000 PWID)	50%	60%	70%	80%	90%	100%
	Number and percentage of Opioid dependents treated at OST services (est. 1000 PWID)	60%	65%	70%	75%	80%	85%
	Number and percentage of PWID access to NSP services (est.1000 IDUs)	75%	85%	95%	95%	>95%	>95%
1.14	**Reduce blindness in specific geographical area and hearing impairment.**						
	Cataract surgical rate per 100,000 population	1,500	1,700	1,900	2,000	2,500	3,000
	Number and % child aging under 6 received of decayed missing filling teeth						
	Number and % of public hospital and HCs provide oral health prevention and promotion for pregnant women and mother of young children	RH:11 HC:20	RH:13 HC:25	RH:15 HC:30	RH:17 HC:35		
1.15	**Reduce harmful uses and impact of illicit drug, alcohol and tobacco among general population**						
1.16	**Reduce incident of injuries and disability due to violence, accident and other causes;**						
	Road traffic injury mortality rate per 100,000 population	<11.60	<11.60	<11.60	<11.60		
	Percentage of Injured population with head trauma due to road traffic accident received treatment (compare to total # of RTA injured)	<29.5%	<29.5%	<29.5%	<29.5%		
1.17	**Reduce health risks caused by polluted environment and climate change and disaster management and response**						
1.18	Improve coverage of quality health services in both public and private sector resulting in increasing service utilization and client satisfaction.						
	OPD consultations (new cases only) per person per year	0.70	0.75	0.80	0.85	0.90	0.95
	Hospital mortality rate						
	Bed occupancy rate (%)	95%	95%	95%	95%	95%	95%
	Average length of stay (no. of days)						
	Percentage of post-surgical infection						
	Number of health facilities that conduct client satisfaction survey at least once /year						
	Number and % of HC and RH that have QA score of 75%						
	Client satisfaction rate	87%	88%	88%	89%		
	Percentage of non-remunerated voluntary	60%	65%	70%	75%	80%	85%

	OBJECTIVES AND TARGETS	2015	2016	2017	2018	2019	2020
	blood donors						
2	**Increase financial risk protection together with increasing national health budget and improving efficiency of health spending.**						
	Percentage of population living under poverty line protected by HEFs	100%	100%	100%	100%	100%	100%
3	**Ensure adequate number of competent and skill mix, well-motivated is equitably distributed across levels of the health system, along with regulation enforcement of health professionals.**						
	Number (percentage) of HC with full staffing according to MPA guidelines						
	Number (percentage) of referral hospitals with full staffing according to CPA Guidelines						
	Number of rural health facilities with staffing gaps						
	Number of health educational institutions using competency-based curricula for all health disciplines						
	Percentage of students passing the national exit examination						
	Percentage of provincial health submitting an in-service training plan						
	Number of health practitioners registered and licensed by the health profession councils						
4	**Ensure health facilities are adequately supplied with medicines, health commodities, equipment and amenities, with effective essential supportive services.**						
	Percentage of HC with stock-out of essential drug (14 items)	<5%	<5%	<5%	<5%	<5%	<5%
	Percentage of non-remunerated voluntary blood donors	60%	65%	70%	75%	80%	85%
5	**Expand basic infrastructure for health facilities according to updated Health Coverage Plan and increase investment advanced medical equipment and technology.**						
	Number HC per 10,000 population						
	Ratio of hospital bed to 100,000 population				100/110.000		100/100.000
	Bed occupancy rate (%)	95%	95%	95%	95%	95%	95%
6	**Increase investment in ICT for strengthening HMIS with improved data quality, use, dissemination, and promote health researches.**						
	Percentage of HMIS reports submitted on time: HC1 and HO2 to ODO						
	Number and percentage of licensed private providers/ facilities reporting to HMIS	25%	30%	35%	40%	45%	50%
	Data quality index	93%	96%	98%	100%	100%	100%
7	**Strengthen institutional capacity and system development with emphasis on policies, regulations, management, coordination, public and private partnership and local engagement and accountability.**						

OBJECTIVES AND TARGETS	2015	2016	2017	2018	2019	2020
Percentage of pharmacy/depot-pharmacy (private) complied to the good pharmacy practices						
Percentage of medicines expired at HCs (this can be collected together with stock out data)		0%	0%	0%	0%	0%
Percentage of private health facility complied to the national quality standards						
Percentage of Health Center Supporting Committee functioning (3/4 meetings per year, 85% of total members attending each meeting, minutes are taken and follow-up activities)	>85%	>85%	>85%	>85%	>85%	>85%

9 STRATEGIC AREAS

9.1 INTRODUCTION

To effectively address the identified sector priorities, adequate resources will be required. This includes physical infrastructure, medicines and health commodities, medical equipment and technology, competent health workforce, adequate and sustained financial resources, robust health management information system, and effective governance. These are the essential inputs required to support improved access and utilization of quality health services by the population.

As described previously, the strategic interventions have been structured around seven cross-cutting strategic areas, namely health service delivery (HSD), health system financing (HSF), health workforce development (HWD), essential support systems (ESS), basic infrastructure development (BID), health information system (HIS) and health system governance (HSG) . It is envisioned that the achievement of HDGs is directed impacted by performance results of HSD strategies that are attributable to consolidated results of strategic interventions falling within the other strategic areas.

9.2 STRATEGIC AREA 1: HEALTH SERVICE DELIVERY

A key feature of a well-functioning health system is equitable access to quality health services that is responsive to population needs. For the health system to be effective, it is important that it offers a wider range of quality assured interventions related to health and associated domain. These services should be aimed at further reducing maternal and child mortality, reducing the burden of communicable and non-communicable diseases and addressing other major public health problems. Consequently, strengthening health service delivery is critical to ensure that all Cambodians have equity access to services of acceptable quality, irrespective of their demographic or socioeconomic characteristics.

9.3 STRATEGIC AREA 2: HEALTH SYSTEM FINANCING

Once health facilities are geographically accessible and health services are readily available to be used, removing barriers in financing access to affordable quality health

services by the majority of Cambodian population, especially the poor and vulnerable is potential to expanding financial risk protection, hence improved equity in access and in financing. Given, the current level of public health spending and household OOP health expenditure, as well as the coverage of the social health protection schemes, health financing strategy places on expansion of social health protection in terms of population and health service coverage,

9.4 STRATEGIC AREA 3: HEALTH WORKFORCE DEVELOPMENT

Health workforce development will play a pivotal role in achieving the strategic objectives of HSP3, whilst providing support to the overall health sector development in the medium to long term. There is an urgent need to effectively addressing the identified challenges relating to the structure, size and composition of the future workforce, recruitment, employment and deployment, productivity and staff remuneration. This requires a clearly defined policy agenda, focusing on strategic areas that must be strengthened to improve health service delivery at all levels – needs-based planning; competency-based deployment; enhanced skills; staff motivation; increased productivity; equitable distribution; and stronger regulation. All of these elements will have an important potential impact on the availability, affordability, equity and access to quality health service.

9.5 STRATEGIC AREA 4: ESSENTIAL SUPPORT SYSTEMS

Affordable access to quality-assured medicines and health technologies is critical for functioning health systems and fundamental for improving health outcomes. Health technologies equip health care providers with tools that are indispensable for effective and efficient prevention, diagnosis, treatment and rehabilitation and attainment of health-related development goals. Adequate human resources, sustainable financing, rational selection and use and reliable supply system are key components to ensure uninterrupted availability and accessibility of essential medicines and to avoid wastage of products and funds. Effective medicines and medical product regulation and registration is necessary to protect patients and systems from medical products with compromised quality, safety and efficacy which result in inadequate or no treatment and contributions to drug resistance and economic burden.

9.6 STRATEGIC AREA 5: BASIC INFRASTRUCTURE DEVELOPMENT

Basic health infrastructure referred to as “basic physical systems” within the overall health system resource infrastructure include, but are not limited to, buildings, medical equipment and technology, water and electric systems, **sewerage and waste disposal systems**, ICT network, communication and transportation etc. They are a major part of high-cost investments, but a key input to improve equitable distribution of health facilities, availability and readiness of health services and the overall quality. Along with competent health workforce and good governance, and financial protection, operable PHI will facilitate the production of sufficient quantity and good quality health services to the

population. Return of the investment in this area is strongly justified by the high level of utilization of health services by the population.

9.7 STRATEGIC AREA 6: HEALTH INFORMATION SYSTEM

Sound and reliable information is the foundation of decision-making across all health system building blocks. It is essential for health system policy development and implementation, governance and regulation, health research, human resources development, health education and training, service delivery and financing. Reliable health data are needed for both policy decision-making and coordination of partner activities across the country. Strong oversight and governance by the MOH is needed to manage donor activities, coordinate local and international partners, and measure progress toward national health goals. Having an effective national HMIS system supported by effective personnel will strengthen Cambodia ability to provide health data with which decision-makers can set a strategic health policy direction for the country.

9.8 STRATEGIC AREA 7: HEALTH SYSTEM GOVERNANCE

Governance refers to the multifaceted process of inter-sectoral collaboration and policy setting, implementation and accountability whereby multiple actors interact to foster equitable access to health services. It seeks to enhance local governance and community monitoring of health service efficiency. It aims to undertake joint actions of health and non-health sectors, of public and private sectors and of communities to improve health outcomes, in line with the decentralization reforms and other policies of the Cambodian government.

SECTION IV.
SECTOR STRATEGY

- **Chapter 10**
  Health Service Delivery
- **Chapter 11**
  Health System Financing
- **Chapter 12**
  Health Workforce Development
- **Chapter 13**
  Essential Support Systems
- **Chapter 14**
  Health Infrastructure Development
- **Chapter 15**
  Health Information System
- **Chapter 16**
  Health System Governance

10 HEALTH SERVICE DELIVERY STRATEGY

10.1 INTRODUCTION

Effective and efficient health service delivery is essential for the health system to improve lives and produce beneficial health outcomes. In fact, the performance of the health system is determined by its ability to provide services that are accessible (encourages utilization of the services by the beneficiaries); acceptable (of adequate quality to produce desired health benefits); affordable (promotes efficient use of available resources); and equitable (address barriers to service access). These are essential elements for all levels of service delivery not only to produce the potential benefits, but also to counter underperformance.

10.2 GUIDING PRINCIPLES

The development of health service delivery strategies and strategic interventions is guided by a set of the following principles.

- **Effective approach to health service delivery:** a comprehensive range of health services are appropriately provided to meet the health needs of the population, especially target population, including preventative, curative, palliative and rehabilitative services and health promotion activities, along with effective referral services.

- **Increase access to and coverage of MPA and CPA health services:** a wide range of health services as defined in MPA and CPA guidelines (including outreach and referral system) are made more available, so that all peoples in a defined catchment area of HC and RH are covered.

- **Continuous improvement in quality health services:** health services provided evidence-based interventions, effective and safe, and given in a timely manner at an affordable cost, so as to ensure "better-value for money" and improve health outcome of the population.

- **Promote providers' and clients' right:** making health services more patient-oriented; promoting awareness of patients' rights to health and appropriate health seeking behaviour; and promoting awareness of health providers' rights and responsibilities, and improving their ethical practice.

- **Strengthen accountability:** health service delivery is well managed, regulated and coordinated, so as health facilities can achieve health goals without having wastage of resources, and held accountable for results.

- **Well-coordinated health service delivery:** networks of health service delivery are effectively coordinated, across types of provider including other social services and partners (e.g. private, community-based organizations, NGOs).

10.3 STRATEGIC OBJECTIVE AND STRATEGIES

The population will have access to comprehensive, safe and effective quality health services at public and private health facilities.

1. Increase coverage of and accessibility to quality health services and information for the population, especially the hard-to-reach and vulnerable population.
2. Strengthen referral system to enable client access to comprehensive package of health and health-related services based on need.
3. Provide quality services in compliance with national protocols, clinical practice guidelines and quality standards.
4. Encourage behavior change of providers in interaction with consumers of health services and health care seeking of the population.
5. Strengthen and implement innovative approaches for effective and efficient health service delivery

10.4 STRATEGIC INTERVENTIONS BY STRATEGY

1 **Increase coverage of and accessibility to quality health services and information for the population, especially the hard-to-reach and vulnerable population.**

- Update the HCP in the context of D&D, by taking into account demographic and geographic factors, economy of scale, as well as availability of private providers.

- Review and update MPA and CPA Guidelines, with attention to, but not limited to, the following: services for NCDs including specialized services such as rehabilitative and palliative care, geriatric and adolescent reproductive health services.

- Define the "essential package of services" at HCs and RHs to inform review/re-define medical benefit packages for social health protection schemes.

- Develop and deliver an integrated approach to outreach services, in order to serve the hard-to-reach population in an efficient and well-coordinated manner, and in accordance with the MoH Outreach Guidelines.

2 Strengthen referral system to enable client access to comprehensive package of health and health-related services based on need.

- Ensure the availability of 24-hour referral services, including ambulance services equipped with medical and logistics support for prompt and effective referrals. In case provision of ambulance is not possible, undertake measures to identify a community-based system of organizing reliable and affordable transport.

  - Establish a centralized mechanism to coordinate referrals from health facilities and/or communities. The coordination mechanism should be able to communicate the arrangement for transportation, share information with the receiving facility on the patient condition and anticipated arrival, and maintain a database for monitoring the effectiveness of the referrals.

  - Develop/update referral protocols/guidelines that clearly define level and role of each facility (referring and receiving), protocols and procedures for referral, communication (referral forms and registers) and transport, performance expectations for health workers and clients to adhere to the referral discipline, and feedback to initiating facility on appropriateness of referral.
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  - Develop a system to monitor outward and back referrals in order to assess the number and appropriateness of referrals – compliance with protocols, the quality of documentation and consistency of follow-up.

- Assess periodically and monitor regularly referral system to ensure that the underlying processes are functioning properly, including provision of feedback, support and training for health staff.
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3 Provide quality services in compliance with the national protocols, clinical practice guidelines and quality standards

- Develop/regularly update quality standards, treatment protocol, and clinical practice guidelines, including interventions to combat anti-microbial resistance.
- Strengthen institutional structures and capacity for quality assurance across all levels of the health system, with emphasis on standard development, quality performance monitoring and assessment, quality control mechanisms and regulatory capacity.
- Establish/strengthen feedback mechanism to create demand for quality health services. The mechanism includes direct communications from individual clients or their representatives (e.g. Health Equity Fund Operators, local administrations, consumer groups, if any), patient exit survey, client satisfaction survey, and complaint-reporting via suggestion drop-boxes at health facilities.
- Develop and implement quality accreditation processes and systems for both public and private health facilities, with enhanced regulatory capacity of the MoH and it subordinates at all levels.
- Support health professional councils/associations to play an active role in health professional registration, clinical standards setting, continuing professional development program, and safeguarding professional ethic practices.

4 Encourage behavior change of providers in interaction with consumers of health services and health care seeking of the population.

- Resource public awareness raising campaigns and ensure that such campaigns are effective, informative, and relevant to the local context (social and cultural, geographical location and audience) with involvement of all concerned stakeholders.
- Establish and implement mechanism for monitoring of medicine use especially antibiotics and injections in order to promote rational use of medicines by the population and reduce microbial resistance.

- Increase public access to easy-to-understand and friendly-used Advocacy, Communication and Social Mobilization materials (ACSM) to support health education and promote behavior change in a well-coordinated manner.

- Support providers' behavioral change and effective application of providers' and clients' rights, and address discrimination and stigma related to specific diseases.

5 **Strengthen and implement innovative approaches to effective health service delivery to improve quality health services and accountability**.

- Expand PAEs and SOAs, with emphasis on improvement in accountability over budget revenue, performance indicators, financial and personnel management practices according to the national policies and regulations.

- Strengthen transparency and accountability in contract review, negotiations and monitoring performance.

- Introduce performance-based incentives to encourage health care providers to deliver high-quality, coordinated care at lower costs. This should include new ways of rewarding efficiency, investing in patient safety and care coordination, and improving the quality and lowering the cost of care.

  Transform the role of the health system from a passive payer of services into a strategic purchaser of high-quality, affordable care that takes into consideration the costs and benefits of alternative packages of health services; services availability and delivery; and the costs and incentives for efficiency and quality that exist in the alternative payment mechanisms potentially.

10.5 STRATEGIC OUTCOMES

1. Improved coverage and equitable access to quality health services.

2. Well-coordinated, integrated health service delivery across all levels of the health system.

3. Quality assured patient-centered services that comply with national protocols, clinical practice guidelines and standards.

4. Establishment of an effective and timely referral system that is responsive and accountable to the patient and system needs.

5. Increased health literacy and demand for quality assured health services by the communities.

6. Incentives to design and implement innovative approaches for effective and efficient health service delivery.

11 HEALTH SYSTEM FINANCING STRATEGY

11.1 INTRODUCTION

A long-term vision of health system financing is to enable active socio-economic participation of all residents of Cambodian through a health system that provides universal access to an essential package of quality health interventions in a regulated health market, thereby providing protection against impoverishment due to ill health. In addition to the existing health challenges, an ageing population together with rising prevalence of NCDs place increasing demands on the health systems. For households these changes in demographic and health patterns may eventually translate in excessive, necessitating a strengthened social health protection system.

11.2 GUIDING PRINCIPLES

The development of health financing strategies and strategic interventions is guided by a set of the following principles.

- **Equity in access and in financing:** ensure access to essential curative, preventive, promotive, and rehabilitative health services by the population, regardless their capacity-to-pay, cash at hand, and residency. Lack of cash money should not be a reason for not seeking care and for denying providing quality healthcare services.

- **Financial risk protection**: ensure that poor and vulnerable people are covered by social health protection mechanisms and together with the rest of the population do not

incur excessive costs when using health services. Financing the health system includes mechanisms to minimize catastrophic and impoverishing health spending and maximizes equity.

- **Quality healthcare services**: healthcare services shall be effective, provided in an efficient way and acceptable to the population.

- **Good governance**: health system financing follows rules and procedures, is responsive to present and future needs of the population and predictable in amount and timing, irrespectively of source of money.

- **Accountability and client oriented**: health providers are accountable for quality and safety of health services that must be adhered to nationally defined quality standards and delivered with respect to clients/patients' right.

11.3 STRATEGIC OBJECTIVE AND STRATEGIES

Stable and sustained financing of healthcare services with increased financial risk protection when accessing healthcare services.

6. Increase national budget for health
7. Target available resources according to population health needs
8. Increase efficiencies in the use of available financial resources with improved transparency and accountability by all actors of the health system
9. Increase financial protection for all to reduce out-of-pocket expenditure for health
10. Align external funding with MOH policy, strategies, plans and priorities and strengthen coordination of funding for health by Development Partners

11.4 STRATEGIC INTERVENTIONS BY STRATEGY

6 Increase national budget for health.

- Using valid and reliable evidence, advocate for increased and predictable government budget for health
- Ensure the collection and allocation of earmarked taxes for health

- Explore innovative domestic resource mobilization approaches such as public-private partnerships
- Build awareness of policymakers of the political and socioeconomic benefits of universal health coverage as a means to garner their support for increased government investment
- Rally support of policymakers to attain Sustainable Development Goal 3 indicator "Achieve Universal Health coverage, including financial risk protection, access to quality essential health-care services"
- Allow for gradual substitution by the government of funding from global health initiatives and bi/multilateral donors as Cambodia moves towards lower-middle income country status

7 Target available resources according to population health needs.

- Develop a formula to allocate resources within the health system according to population needs, taking into consideration epidemiological data, population size and structure and poverty incidence
- Implement Performance Based Budgeting nationwide and build capacity at all levels to master the entire budget-planning and implementation process
- Ensure timely availability of reliable information to enable resource allocation based on health needs and performance of the public health providers through a sound monitoring and evaluation system

8 Increase efficiencies in the use of available financial resources with improved transparency and accountability by all actors of the health system.

- Strengthen the public financial management system by building institutional capacity to manage, implement, and monitor and evaluate practices related to budgeting, accounting, reporting and auditing in accordance with the principles of the fiscal framework
- Establish an effective procurement system consistent with the principles of transparency, fairness, openness and value for money
- Implement system to strategically purchase health services with links between payment and predetermined criteria for quality

9 **Increase financial protection for all to reduce out-of-pocket expenditure for health.**

- Develop and enforce a regulatory framework for social health protection institutions with guidance of the Social Health Protection Committee
- Integrate management structures and activities of existing health financing initiatives and social health protection schemes for the informal sector population
- Increase coverage of the informal sector population by expanding the Health Equity Funds to include vulnerable population groups and by geographically enlarging the voluntary integrated insurance scheme
- Review and adjust the benefit package of the social health protection schemes to correspond to health needs of its beneficiaries and health service developments
- Implement complaint and feedback mechanisms concerning behaviours by health providers and scheme operators and design an ombudsman system

10 **Align external funding with MOH policy, strategies, plans and priorities and strengthen coordination of funding for health by Development Partners**

- Improve donor-ministry coordination through establishment of a sub-Technical Working Group on Health Financing at national level and inclusion of health financing issues at pro-Technical Working Group meetings.
- Harmonise activities and funding by Developing Partners related to health financing and universal health coverage through regular formal exchanges
- Gradually align financial commitments to the health sector of Development Partners with government plans, including efforts to increase fiscal space, and foster targeted health system strengthening

11.5 STRATEGIC OUTCOMES

- Availability of a predictable and sufficient amount of domestic financial resources for health

- Available budget allocated according to needs with minimal inequity
- Value for money for available financial resources for health
- Minimal financial hardship due to health care costs

12 HEALTH WORKFORCE DEVELOPMENT STRATEGY

12.1 INTRODUCTION

Health workforce development strategy plays an important role in achieving the HSP3 health development goals, and is linked to the medium to long term vision of desired outcomes for the health sector.. In essence, the strategy will add value to the MoH and it subordinates, across all levels, by identifying and effectively addressing challenges related to size and composition of the future workforce, recruitment, employment and deployment, productivity, staff remuneration, competency and skill-mix. All of these elements have potential impact on the effective delivery and uptake of quality health care service.

12.2 GUIDING PRINCIPLES

The health workforce development strategies and interventions are guided by the following guiding principles.

Health workforce development:

- is **responsive** - adapts to population and service needs, focusing on primary health care supported by appropriate levels of secondary and tertiary care;
- is **integrated** - aligned with Health Strategic Plan (HSP3) and National Strategic Development Plans (NSDP), supporting the achievement of national and international goals and objectives;
- is **effective** - contributes to the equitable delivery of affordable, accessible, safe and quality health services;
- is **acceptable** - based on agreed core competencies and professional standards;
- is **supportive** - encourages professional development and advances improvement in health workforce motivation and satisfaction;
- is **realistic** - cognizant of the local socio-political, cultural and economic circumstances.

12.3 STRATEGIC OBJECTIVES AND STRATEGIES

By 2020, the health system will have adequate number of competent, well-motivated and trained, equitably distributed, regulated health workforce with appropriate skill mix.

11 Adopt a unified approach to health workforce planning, to ensure health workforce development is responsive to population and service needs.

12 Enable effective delivery of health services by promoting equitable distribution, ensuring retention and skill mix of health workers.

13 Address workforce needs, including workplace environment, to ensure optimal staff productivity, motivation and participation.

14 Improve the quality of education and training to meet the skill and development needs of the workforce in a changing demographic and epidemiological environment.

15 Strengthen health workforce regulation and management to ensure quality of service delivery.

12.4 STRATEGIC INTERVENTIONS BY STRATEGY

11 Adopt a unified approach to health workforce planning, to ensure health workforce development is responsive to population and service needs.

- ✓ Strengthen HRH governance through the establishment of a high-level coordination mechanism encompassing all relevant stakeholders to provide stewardship to health workforce planning and management.
- ✓ Align human resources policies (including human resource production and management), systems and processes with the HSP3 and the RGC's policies, reforms (Public Administrative Reform, D & D) and strategies.
- ✓ Formulate strategies to support the development of a comprehensive national HRH data (including private sector) and planning system to encourage stakeholders to regularly monitor and analyze the health workforce needs.
- ✓ Strengthen research capacity, possibly as part of an existing entity, to support evidence-based human resources policies and planning. (Link to HIS strategy)

12 Enable effective delivery of health services by promoting equitable distribution, ensuring retention and skill mix of health workers.

- Strengthen decentralized HRH planning to address imbalances (distribution, number and types) in the health workforce in accordance to on-going reforms, mainly Public Administrative Reform and D&D.

- Develop and implement policy incentives to promote recruitment, deployment and retention health staff, especially in remote/rural health facilities. The policies should include appropriate financial and non-financial incentives such as selective recruitment of rural students, hometown postings, mandatory contracts, transparent transfer policies, career progression opportunities, recognition of services etc.

- Regularly monitor actual numbers and skill mix of staff at all administrative levels against recommended staffing standards as per national guidelines, and identify gaps to inform human resource planning and production.

13 Address workforce needs, including workplace environment, to ensure optimal staff productivity, motivation and participation.

- In line with pay reform of the RGC, advocate and promote adequate compensation of health staff.

- Improve management of facility-managed income supplementation from both supply-side and demand-side financing mechanisms, as a means to incentivize staff productivity and performance, thereby promoting quality and discouraging informal charges.

- Develop and introduce clear job descriptions for all staff positions, including mechanisms for supportive supervision and effective performance appraisal.

- Articulate career pathways for managers and clinical service providers to allow timely professional progression.

14 Improve the quality of education and training to meet the skill and development needs of the workforce in a changing demographic and epidemiological environment.

- Improve quality of training in all health educational institutions, both public and private, focusing introduction of competency-based curricula, enhancement of

comprehensive practical clinical knowledge, implementation of structured teaching techniques, including development of clinical placement sites.

- Establish mechanisms for the accreditation for public and private health education institutions to assess and uphold the quality of the institutions and their programmes.

- Enhance capacity of the Centre for Educational Development of Health Professionals to become a National Resource Center, to respond to the urgent need for transformation of medical education, including the management of the National Examinations for all health graduates.

- Regulate new intake into health training programs based on institutional production capacity and align it with the projected staff needs, to avoid over production of graduates beyond reasonable recruitment targets.

- Enhance better coordination and integration of in-service training by rolling-out MOH approved modular courses as per agreed annual training plans, based on an assessment of capacity needs in health facilities.

15	**Strengthen health workforce regulation and management to ensure quality of service delivery.**

- Assist full enforcement of the new Law on the regulation of health practitioners, to ensure that only qualified, competent and fit to practice health professionals are allowed to provide clinical services.

- Strengthen the Health Profession Councils with clearly determined institutional structures, responsibilities and established mechanism to implement registration and licensing system for health professionals.

- Support the Health Profession Councils in the implementation of a harmonized process for disciplinary action against health practitioners violating the new Law on the regulation of health practitioners.

- Support Health Professional Councils to take an active role in clinical standards setting, provision of continuing professional development programmes, and safeguarding professional ethics.

12.5 STRATEGIC OUTCOMES

- Adopt whole of sector approach for effective human resource planning.
- Strengthen HRH management at all administrative levels to create an equitably distributed health workforce with appropriate skill mix.
- Create a supportive environment to build a motivated, well-supported health workforce capable of providing quality healthcare services
- Strengthen quality of pre-service and in-service trainings to develop a competent, skilled heath workforce.
- Fully enforce the regulatory framework for health practitioners to ensure patient safety and delivery of quality of healthcare services.

13 ESSENTIAL SUPPORT SERVICE STRATEGY

13.1 INTRODUCTION

A well-functioning health system should ensure equitable access to essential support services such as medical products, vaccines and technologies. The availability of these services is critical for the health system to serve its objective of saving lives, reducing sufferings and improving population health outcomes. But for the health system to be able to have these support services, they must be available at an affordable cost, and be of assured quality and feasibility so that it can be properly used both by providers and patients. They should be available at all times to ensure continuity of services for population use. Thus, they should be selected based on the real needs, cost-effectiveness and suited to the available fiscal space. These services should be able to promote equity in access without comprising on the cost or quality.

13.2 GUIDING PRINCIPLES

A set of guiding principles is defined to inform the development of essential support service strategies and strategic interventions.

- Patient safety
- Quality assurance
- Timely distribution
- Rational use
- Regulation

13.3 STRATEGIC OBJECTIVE AND STRATEGIES

Public health facilities are adequately supplied with medicines and health commodities and backed by effective essential support services.
16 Provide public health facilities with sufficient quantity of quality assured,

efficacious, safe and affordable medicines and health commodities.

17 Improve rational use of medicines and health commodities.

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18 Enforce regulatory mechanism to safeguard quality of pharmaceutical products, including medicines, health commodities, medical devices and equipment.

19 Enhance capacity of medical laboratory, with associated improvement in test reliability, along with strengthening quality control mechanisms.

Provide safe, sufficient and sustainable blood and blood products, and strengthen patient blood management and use.

13.4 STRATEGIC INTERVENTIONS BY STRATEGY

16 Provide public health facilities with sufficient quantity of quality assured, efficacious, safe and affordable medicines and health commodities

- Develop/review policies on supply chain management, accompanied by upgrading supply management information system (IT, staff training etc.)
- Strengthen institutional capacity to forecast the needs for medicines and health commodities, especially at health facilities (e.g. HPs/HCs and RHs).
- Ensure timely delivery of affordable-cost, sufficient-quantity and good-quality medicines and health commodities to the right place.
- Strengthen pharmaceuticals, vaccines and health commodities inventory management and storage: Improving capacity of forecasting and quantifying medicines and health commodities required (for HCs, RHs, ODs/PHDs, programs/subprograms;

17 Improve rational use of medicines and health commodities

- Promote rational use at health facilities including proper medication/prescribing, proper dispensing and handling to clients.
- Promote access to information on medicines and pharmaceutical products by health personnel and the general population, with regard to any harmful medicines, medical devices, cosmetics.

18 Enforce regulatory mechanism to safeguard quality of pharmaceutical products, including medicines, health commodities, medical devices and equipment

- Enforce law, legislation and regulation including Intellectual Property Rights related to Pharmaceuticals for quality assurance leading to medical efficacy and patient safety. *(Link to HSG Strategy)*
- Strengthen quality control and quality assurance of supplied medicines and health commodities.
- Strengthening medicine regulatory mechanisms including licensing, registration, schedules of medicinal products, control of medicines circulation, restrictions on distribution and use, and eliminating substandard and counterfeit medicines. *(Link to HSG Strategy)*
- Develop procedures for registration of medical devices, traditional medicines, cosmetics and health supplements in order to ensure the safety and efficacy of these products. *(Link to HSG Strategy)*
- Strengthen post-marketing surveillance (inspection, pharmacovigilance, quality control of medicines, counterfeit and substandard medicines) to ensure the quality, efficacy and safety of pharmaceuticals.

19 Enhance capacity of medical laboratory, with associated improvement in test reliability, along with strengthening quality control mechanisms

- Develop/update and implement national policies, regulations, standards and operation procedures for clinical laboratory services.
- Conduct regularly clinical audit for reviewing laboratory operations and improving the quality that should be an integral part of programs for accreditation and quality improvement.
- Enhance knowledge and experience, and skills of laboratory technicians through provision of continuous education, so as to maintain good clinical performance in laboratory services and continuous quality improvement.
- Strengthen the national laboratory network throughout the country, and improve collaboration with oversea laboratories, regionally and globally, in particular in case of emerging and re-merging infectious disease.

- Regulate and monitor medical laboratory practice in private health sector based on policies and regulations to ensure that their operations and services are adhered to the national protocol/standards.

20	**Provide safe, sufficient and sustainable blood and blood products, and strengthen patient blood management and use**

- Develop/update and implement national policies and regulations, standards and operation procedures for blood transfusion services..

- Improve patient blood management practice, including appropriate clinical use of quality and safe blood and blood products, with associated measures taken to prevent transmission risks, particularly the risk of transfusion transmissible infectious blood and blood products.

- Ensure blood transfusion services are supported with appropriate resources - infrastructure, human resources, equipment and consumables, funding for cold chain maintenance, transportation, and donor refreshment.

- Engage sub-national level administrations and relevant organizations (e.g. Cambodian Red Cross, private-not-for profit) to support social mobilization of voluntary blood donation (non-remunerated blood donors) and enforce regulatory mechanisms of blood transfusion services.

13.5 STRATEGIC OUTCOME

- The institution of an effective supply chain management system that ensure uninterrupted availability of essential medicines and health commodities, with well-established mechanisms for quality assurance.
- Promote rational use of medicines and health commodities.

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- Establish regulatory mechanism to safeguard quality of pharmaceutical products, including medicines, health commodities, medical devices and equipment.

- The availability of effective and reliable laboratory diagnostic services to support the delivery of safe and efficacious public and clinical services.
- Ensure increased sufficiency and safety of blood and blood products.

14 BASIC INFRASTRUCTURE DEVELOPMENT STRATEGY

14.1 INTRODUCTION

The availability of basic health infrastructure is fundamental to the provision and execution of health system functions. A strong infrastructure not only facilitates and supports the delivery of essential services but also provides the capacity to prepare for and respond to both acute (emergency) and chronic health service needs. Infrastructure also forms the basis for planning and delivery of health services. It is fundamental to the provision of health care that is quality assured, effective, safe, timely, patient-centered, accessible, equitable and efficient.

14.2 GUIDING PRINCIPLES

A set of guiding principles is defined to inform the development of basic infrastructure development strategies and strategic interventions.

- **Accessibility and population base**:
- **Standard design and building brief**
- **Economy of scale**
- **Maintenance**
- **Standard medical equipment**

14.3 STRATEGIC OBJECTIVE AND STRATEGIES

Public health facilities will have appropriate basic infrastructure including advanced medical equipment and technology, and information technology

21. Build and upgrade infrastructure according to updated Health Coverage Plan and Health Infrastructure Building Briefs and support the linkage between these facilities by providing means of transportation, including ambulances.

22. Equip public health facilities with appropriate basic medical equipment and medical technology to improve diagnosis capacity and quality of healthcare

service.

23. Improve supportive environment for overall improvement in quality and safety for both patients and health providers.

24. Expand ICT infrastructure for the health facilities to promote the use of new technology in service delivery and monitoring.

25. Strengthen management of maintenance system for physical infrastructure, medical equipment, transportation and ICT.

14.4 STRATEGIC INTERVENTIONS BY STRATEGY

21 **Build, upgrade, renovate and maintain public health facilities according to updated Health Coverage Plan and Health Infrastructure Building Briefs.**

- Improve physical access to services by investing in infrastructure expansion while taking into consideration the economy of scale
- Upgrade existing health infrastructure to facilitate the provision of services outlined in the MPA and CPA guidelines
- Renovate existing health infrastructure to be able to maintain quality standards and safe and patient centered services.

22 **Equip public health facilities with appropriate basic medical equipment and medical technology to improve quality of health service delivery.**

- Develop/update list of standard basic medical equipment for HC/HP and RHs on regular basis, with up-to-date price information to support preparation of annual budget planned expenditure, and facility-managed procurement/purchasing.
- Provide appropriate basic medical equipment (including laboratory equipment) for HCs/HPs, RHs (CPA1, CPA2 and CPA3) and national hospitals according to standard basic medical equipment as defined in MPA and CPA Guidelines.
- Invest in high-tech medical equipment and medical technology at the selected health facilities based on geographical setting and accompanied by adequate training to enable health providers to perform advanced medical technology effectively.

- Replace damaged or inoperable medical equipment (including laboratory equipment) based on biannually updated medical equipment inventory list. Dispose of damaged equipment according to the national guidelines.

- Consider introduction of tele-medicine services, especially for specialized consultation and treatment in remote/hard to reach areas.

23 Improve supportive environment for overall quality improvement and safety for patients and health personnel to deliver quality health services and public health interventions.

- Ensure safe environment for patients and health personnel e.g., clean water and sanitation, adequate supply of equipment such as Personnel Protection Equipment

- Improve water sources, availability electricity, drainage system, catering facilities, and medical waste disposal facility in all health facilities.

- Improve practices of infection control at all health care facilities as defined by the Ministry of Health's Policy on Infection Control thereby contributing to improving overall quality of health service delivery, with emphasis on:

  - ✓ Establishing and functioning management and organizational structure for infection control across the health system and at all health care facilities;
  - ✓ Establishing effective and safe infection control practices for patients and health personnel at all levels of the health system and throughout the country; especially safe injection and infusion practices
  - ✓ Building infection control capacity to meet optimum standards set by Asia Pacific Strategy for Emerging Diseases (APSED).
  - ✓ Strengthening monitoring and control mechanism for infection control program/activity on regular basis.

- Improve medical waste management, including investment in new equipment and technology

24 Provide means of transportation including ambulance equipped with appropriate medical equipment for medical and public health emergency interventions.

- Ensure the availability of 24-hour referral services, including ambulance services equipped with medical and logistics support for prompt and effective referrals. In case provision of ambulance is not possible, undertake measures to identify a community-based system of organizing reliable and affordable transport.

- Establish a centralized mechanism to coordinate referrals from health facilities and/or communities. The coordination mechanism should be able to communicate the arrangement for transportation, share information with the receiving facility on the patient condition and anticipated arrival, and maintain a database for monitoring the effectiveness of the referrals.

25	**Improve system and capacity for maintenance of physical infrastructure, medical equipment, means of transport, and ICT hardware and software.**

- Improve physical asset management system; with emphasis on regularly updated asset inventory list by all health institutions, accompanied by improved internal control and internal audit system/mechanism. Streamline system to transfer duplicative equipment.

- Link inventory management system into web-based HMIS. In compliance with the Ministry of Health's Guidelines on Second-hand Medical Equipment, take into account receipt of donated second-hand medical equipment.

- Conduct Medical Technology Assessment periodically and routine supervision and follow up on medical equipment maintenance to ensure appropriate utilization and operational rate of medical equipment.

- Out-source maintenance services to specialized firms, especially for maintenance of sophisticated medical equipment and ICT hardware and software. The contractual arrangements can be centralized and/or decentralized, where and when appropriate.

14.5 STRATEGIC OUTCOME AREA

- **Constructed/expanded health facility**, mainly HC and RH within the existing norms (i.e. the HCP's criteria) by taking into account the policy framework (e.g. D&D).
- **Appropriate basic medical equipment** available and regular maintained in all health facilities to support service delivery.
- **Invested advanced medical equipment and technology** with an aim to improve efficiency, quality and cost-effectiveness of services.
- **Sustainable maintenance systems** established to ensure interrupted service provision.

- **Adequate means of referral transportation** provided to facilitate timely referral and maintain continuity of care.

15 HEALTH INFORMATION SYSTEM STRATEGY

15.1 INTRODUCTION

A long-term vision of the Health Management Information System development is "to ensure availability of relevant, timely, and high quality health and health related information for evidence-based policy formulation, decision-making, management and planning, and performance monitoring and evaluation, thereby contributing to improved health service delivery. It is widely recognized that the better information, the better decision, hence betterment of health. Increased and regular investment in the health information system, including communication and technology is therefore a critical need for the health system strengthening as a whole.

15.2 GUIDING PRINCIPLES

The development of a health management information system strategies and strategic interventions is guided by a set of guiding principles.

- Data management and use
- Technology
- Security and privacy
- Capacity development
- Governance

15.3 STRATEGIC OBJECTIVE AND STRATEGIES

Increase investment in ICT for strengthening HMIS with improved data quality, use, dissemination, and promote health researches.

26. Increase HMIS Information and Communication Technology (ICT) investments and provide an adequate number of HMIS qualified human resources

27 Improve data management, analysis, interpretation, reporting, dissemination and use, and increase reliable sources of health and health-related data, including private sector reporting system.

28 Promote data integration and inter-operability between different health information databases

29 Enhance and integrate disease surveillance and response systems or communicable diseases and non-communicable diseases

30 Strengthen M&E system and promote health research

15.4 STRATEGIC INTERVENTIONS BY STRATEGY

26 **Increase HMIS Information and Communication Technology (ICT) investments and provide an adequate number of HMIS qualified human resources**

- Increase ICT resources at national and subnational level
- Develop human resource plan on ICT including training needs analysis, training of different category of staff and post training evaluation
- Strengthen information systems on human resources/staffing, infrastructure, health services, population, laboratory (including biosafety/security/bio-risk management) and drug management support system

27 **Improve data management, analysis, interpretation, reporting, dissemination and use, and increase reliable sources of health and health-related data, including private sector reporting system.**

- Build up a central health repository by integrating existing databases at DPHI for the dissemination and analysis and use of health information for policy and advocacy, planning, priority setting resource allocation, and implementation monitoring
- Establish supportive supervision and performance monitoring for HMIS and review and standardize data quality assessment (DQA) guidelines and provide training.
- Increase access to information to clients/community about health data and services available to be used at HCs and RHs, in particular newly established health facilities.

- Strengthen international classification of disease (ICD) based morbidity and mortality diagnosis, causes of death and integrate ICD10/11 in HMIS and patient management registration system (PMRS) for public and private health facilities
- Improve birth and deaths records and causes of death at health facility and community level and enforce legislation on reporting by private sector

28 Promote data integration and inter-operability between different health information databases

- Develop an Integrated Strategic Master Plan covering common information standards, guidelines and compatible platform to enable information sharing, including security architecture and regulations for privacy protection.
- Conduct on a regular basis policy dialogue between relevant ministries and development partners through the HMIS technical working group
- Promote the integration of the surveillance systems, to reduce the workload at sub-national levels
- Develop National Patient Unique Identifier system

29 Enhance and integrate disease surveillance and response systems or communicable diseases and non-communicable diseases

- Improve quality of the surveillance systems through capacity development and provision of sufficient and adequate equipment and technology.
- Develop the reporting of non-communicable diseases in the overall surveillance and case reporting and response system, including accident and injuries, with compliance for both public and private health sectors
- Develop, review and update policies, strategic plans, and guidelines related to disease surveillance and enhance knowledge management by uploading policies, guidelines, and strategic plans, and activities on the website platforms

30 Strengthen M&E system and promote health researches.

- Promote development of an M&E system by establishing an M&E unit at DPHI together with increased capacity for data analysis, interpretation and reporting as well as conducting Mid-Term Review and Final evaluation of the Sector and Sub-sector Strategic Plans
- Promote the information sharing among the departments and national programs

- Enhance mutual accountability by the Ministry of Health and Development Partners to track progress of development assistance towards the development results.
- Conduct bi-annual and Joint Annual Performance Review of annual operational plans at the sectoral and sub-sectoral level, accompanied by quarterly monitoring, with engagement of concerned stakeholders
- Establish institutional structure with clearly defined roles and functions to oversee and coordinate all research activities in the health sector and promote health system/policy research based on needs

15.5 STRATEGIC OUTCOME AREA

- Expanded coverage of HMIS in public and private health facilities with improved data quality
- Employment of innovative ITC application: Expanded ICT/EMR and introduced NHID, Strengthened ICD based morbidity & mortality diagnosis
- Improved data management, use and dissemination
- Strengthened disease surveillance system
- Monitoring and evaluation and researches related to medical/clinical, epidemiological field and health system areas

16 HEALTH SYSTEM GOVERNANCE STRATEGY

16.1 INTRODUCTION

Health governance involves the provision of strategic policy frameworks that combined with effective oversight provides stewardship to the heath sector. It also includes wide range of functions carried out by the government such as of coalition building, appropriate regulations and incentives, with the intent to improve accountability and efficiency of the health system. Effective governance mechanisms are pivotal for the delivery of equitable, accessible, quality assured health services based on a patients' rights approach. Health governance also involves the definition of the roles and responsibilities of the public, private and voluntary sectors - including civil society - and their relationships and coordination in pursuit of national health goals.

16.2 GUIDING PRINCIPLES

A set of guiding principles is defined to inform the development of health system governance strategies and strategic interventions.

- Operational and productive
- Rule of law
- Social accountability
- Building partnership

16.3 STRATEGIC OBJECTIVE AND STRATEGIES

Strengthen institutional capacity including leadership, management and regulatory capacity and promote local accountability in health. .
31 Prepare institutional structures and functions at all levels of the health system to effectively response to changing environment and major national reform programs.
32 Develop health policies, legislations and regulations, and build regulatory capacity at all levels of the health system.
33 Increase national ownership and accountability to improve health outcomes, and enhance coordination and collaboration among relevant stakeholders

34 Use potential public and private partnerships in health service delivery, capacity development and implementation of the national health policies and regulations.

35 Encourage active participation of communities and subnational level administrations to strengthen local accountability in health.

16.4 STRATEGIC INTERVENTIONS BY STRATEGY

31 **Prepare institutional structures and functions at all levels of the health system to effectively response to changing environment and major national reform programs.**

- Develop/regularly update quality standards, treatment protocol, and clinical practice guidelines, as well as quality assessment and quality monitoring tools, for both public and private.
- Develop, implement and enforce legislations, regulations, policies, strategies and plan for public and private providers and facilities.
- Develop and implement a steady financing mechanisms for regulatory bodies to ensure effective enforcement
- Develop and update medium to long term plans on regular basis, including the health strategic plan, budget strategic plan, public investment program, and annual operational plan.

32 **Develop health policies, legislations and regulations, and build regulatory capacity at all levels of the health system.**

- Strengthen law and institutional regulatory mechanism for registration and licensing private sector, followed by the implementation of an accreditation system as a step up after compliance to licensing requirements.
- Enforce law, legislation and regulation including Intellectual Property Rights related to Pharmaceuticals for quality assurance leading to medical efficacy and patient safety.

- Strengthening medicine regulatory mechanisms including licensing, registration, schedules of medicinal products, control of medicines circulation, restrictions on distribution and use, and eliminating substandard and counterfeit medicines.

- Develop procedures for registration of medical devices, traditional medicines, cosmetics and health supplements in order to ensure the safety and efficacy of these products.

- Strengthen post-marketing surveillance (inspection, pharmacovigilance, quality control of medicines, counterfeit and substandard medicines) to ensure the quality, efficacy and safety of pharmaceuticals.

- Develop and enforce policies and regulations related to food safety and hygiene measure

33 **Increase national ownership and accountability to improve health outcomes, coordination and collaboration, and harmonization and alignment among relevant stakeholders**

- Strengthen institutional structures and capacity for quality assurance across all levels of the health system, with emphasis on standard development, quality performance monitoring and quality control, and regulatory capacity.

- Ensure phase-wise delegation of roles and responsibilities to sub-national administrations in line with the rollout of the D&D policy

- Review the Health Coverage Plan with a consideration of aligning the Operational Districts with the Administrative Districts with an aim to align and harmonize the delegation of the roles and responsibilities under the D&D policy

34 **Use potential public and private partnerships in health service delivery, capacity development and implementation of the national health policies and regulations.**

- Build, strengthen and scale-up public private partnership to foster harmonized and effective health service delivery models.

- Strengthen joint planning between public and private sectors and coordinate HIS and surveillance reporting and feedback through achieve engagement of Pro-TWGH, PHDO's and OD's with private sector.

- Strengthen the implementation of national policies, guidelines and protocols in the private health sector.

- Strengthen M&E system to promote quality and effectiveness of health services in the private health sector.

35	**Encourage active participation of communities and subnational level administrations to strengthen local accountability in health.**

- Strengthen "integrated approach to health services delivery" to build up a stronger link between communities, HCs and RHs, for improved service delivery and effective referral system. Focus on strengthening the function of HCMCs and VHSGs as focal points of communication between community and health service providers.

- Implement the MoH's Provider and Consumer Right Charter to strengthen community awareness of consumer and provider rights.

- Strengthen local accountability mechanism to improve responsiveness of the health services delivery and provide oversight of service quality and efficiency - through improved interaction between communities, consumers and suppliers at the operational level and through establishment of forum and other mechanisms from NGOs, Civil Society Organizations, to advocate for policy dialogue and policy reforms in the health sector

16.5 STRATEGIC OUTCOME AREA

- Improved efficiency and increased resource availability through strong advocacy with policy makers to dedicate more domestic resources for health.
- Promotion of evidence-informed action to guide decisions, to make more precise targeting of health priorities and objectives and upholding equity in access.
- Enhanced accountability of governments and its institutions on health investments.
- Increased community involvement and engagement in their own health decisions will encourage them to adopt healthier lifestyles.

SECTION V.

IMPLEMENTATION, MONITORING, EVALUATION

- **Chapter 17**
  Approach to Implementation
- **Chapter 18**
  Program Planning & Budgeting
- **Chapter 19**
  Monitoring & Evaluation

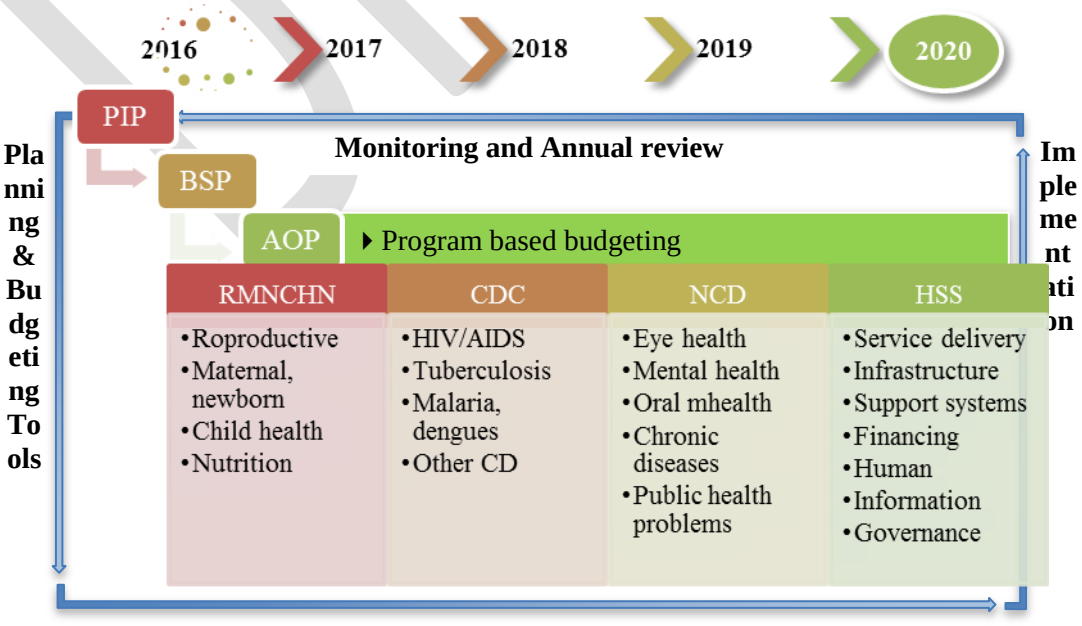
17 APPROACH TO IMPLEMENTATION

17.1 INTRODUCTION

Health planning has had a long history. AOP and its annual process were first introduced in 1999 and subsequently became routine activity for all health institutions. A fundamental strength of the process is that it is fully owned, led and managed by the MoH, with strong support from Development Partners (DPs). Alignment of DPs funds is a key aspect of the Cambodian approach to the health sector financing under "Sector-wide Management" (SWiM), aiming at putting development assistance behind the national health priorities and strategies.

HSP3 strategies will be translated into implementation via the national planning and budgeting process. Operational plans will be developed and updated on annual basis by using the national planning and budgeting instruments i.e. a 3-year-rolling Public Investment Program (PIP) and Budget Strategic Plan (BSP) and the health sector Annual Operational Plan (AOP) including annual budget. (Figure17.1).

Figure 17.1 Implementation Framework



17.2 PLANNING FOR HEALTH SECTOR FINANCING

Joint Annual Performance Review (JAPR) and Joint Annual Planning Appraisal (JAPA) are recognized as mechanisms for improving alignment of health partners' support with the national health priorities. In addition, the Technical Working Group for Health (TWGH) at the sectoral level and Provincial Technical Working Group for Health (Pro-TWGH) at the provincial level can be used as a mechanism for policy dialogue and promoting coordination. Box 17.1 presents key feature of TWGH.

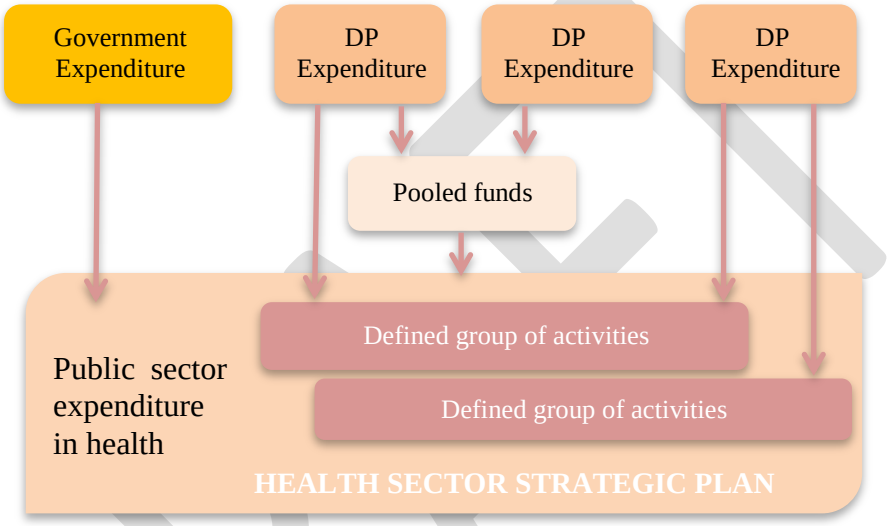
Box 17.1 Key Feature of TWGH

	Sectoral level (TWGH)	Provincial level (Pro-TWGH)
Objectives		
Chair/Cochair	Minister/Representation of DPs	Director, Provincial Health Department
Members	MoH officers and concered ministries, UN agencies, bilateral & multilateral partners and NGOs.	PHD officers, Health Partners working in the province
Mechanism	Monthly meeting	Monthly meeting
Main tasks	Ensure health partners' support (activities and resources) are included in Provincial AoP;	Ensure health partners' support (activities and resources) are included in Provincial AoP; Mobilize resources to support the implementation of Provincial AOPs including unplanned high priority (emergency, disease outbreak, disaster…) Ensure efficient use of available resources in implementing provincial AoP; Monitor progress and results Provincial AoP on quarterly and annual basis Promote transparency in sharing information on planning and budgeting, and financing.

A large proportion of DPs fund is dedicated to supporting the implementation of the HSP. Those funds flow partly into the health sector under "program-based approach" and partly directly into agreed priority interventions (defined group of activities) in HSP. The

MOH has adopted flexible funding modalities, which allow DPs to choose funding mechanism that best suits them. **Figure 17.2** depicts an overview of funding mechanisms from all available sources to support the implementation of the HSP (MoH's official letter dated 23rd March 2007 to DPs: *Decisions on Options for Moving to SWAPs in the Health Sector).* In practice, some DPs contribute to the pooled fund while others to non-pooled or discrete funding mechanisms. The second Health Sector Support Program (2009-2015), for example, involved both pooled and discrete funding arrangements. Use of the national systems for DP-supported program will be explored and implemented, when and where appropriate.

Figure 17.2 Planning of the Health Sector Financing



17.3 PRINCIPLES FOR PLANNING

An approach to health planning is a combination of top-down and bottom-up planning. The provincial level is the interface between top-down and bottom-up planning. It is via this mechanism that institutional knowledge, operational and site-specific expertise of managers is communicated to the central ministry and across the health sector. The annual health plan development is guided by **four guiding principles**:

- **Team approach.** Health managers work together as a team to organize their present and future resources to provide and improve health service delivery for the population. That is very important, because resources are often limited and therefore managers need to set priorities and make choices. Roles of the Planning Team are described in Box 16.1.

- **Participatory process.** All concerned stakeholders in and outside health institution should participate in a series of activities recommended in annual planning process. In doing so, each implementing unit/concerned stakeholder is provided an opportunity to influence broader resource allocation, and maintain its

own operational control over use of resources allocated, as well as accountability for the results.

- **Resources-based planning**. It is a process that puts human and financial resources at the forefront. A starting point is to identify available resources prior to the development of AoP, including planned budget. As such the process requires reliable and up-to-date resources information to guide rational decisions on the resource allocation and use.

- **Program-based budgeting.** This budgeting approach links the planned expenditures to clearly determined results. For management purpose, each program is broken down into several subprograms and activities. Programs' performance can be measured in terms of outcomes; outputs; and cost. In this regard, managers/planners need to identify group of main activities that support priority interventions.

Box 16.2. Roles of Planning Team

Team leader	Deputy Director (i.e. department, national center, PHD, OD, Hospital, HC Chief)
Members	Include, but are not limited to: Heads of bureau/units/wards (technical, budget and finance, personnel & administration, monitoring & evaluation etc….)
Roles	• Develop/update operational plans i.e. BSP and AOP, (and PIP for the relevant Central level institutions only) according to the recommended processes, structures and formats of the plans; • Conduct budget analysis of the previous year expenditure and the current planning year and prepare justification document for budget negotiation; • Conduct appraisal and provide feedback of drafted BSP and AOP • Submit draft BSP/AOP to Director for review and final approval via senior management meeting • Work closely with Monitoring & Evaluation Team to monitor progress of AOP implementation via monthly and quarterly review meeting (quarterly progress monitoring) and APR.

17.4 PLANNING AND BUDGETING INSTRUMENTS

There are a set of planning and budgeting tools that are currently used in the health sector and across the Government ministries/agencies. Those instruments are: Public Investment Program, Budget Strategic Plan and Annual Budget Plan (ABP). In the health sector ABP is an integral part of AOP. These documents are prepared in line with the Government's overarching macroeconomic policy, socioeconomic development agenda of the RGC's Rectangular Strategy, and the National Strategic Development Plan (NSDP), and used, by Ministry of Economy & Finance to guide annual budget allocation across the Government ministries and agencies.

Public Investment Programs

The RGC has introduced PIPs since 1995 and the Ministry of Planning is the lead-ministry, responsible for preparation of this annual, rolling and three-year program, focusing on capital and technical assistance required to implement development strategies of the RGC. A key feature of PIP process is "one-to-one consultation" with many ministries and agencies in order to ensure that the planned investment in a line sector is appropriately addressing the national priorities (NSDP). In addition, the process allows collecting inputs from DPs.

The preparation of the health sector PIPs is "a top-down planning". The Department of Planning & Health Information is responsible for annual update of PIPs based on input provided by the MOH relevant departments and national centers, and to some extent from health partners. The health sector PIPs directly addresses not only the national priorities, but also the health sector priorities as identified in the health strategic plan.

Budget Strategic Plan

The RGC has introduced BSP in 2011 with a medium term horizon that will incorporate the sector annual budget plan, and together with PIPs, constitutes the core strategy for medium to long term planning. BSP is seen as medium term planned expenditure framework. The health sector BSP is built upon the HPS3's medium term HDGs and strategic objectives, and also based on the sector's financing needs (bottom-up planning) and projections of available resource envelope from all sources (domestic and external – top down). The bottom-up costs and top-down resource envelope will be matched in the context of the annual planning and budget process to inform resource allocation decisions on priorities, both within and across sectors. The sector BSP is prepared by the MoH Budgeting Team, whose roles are presented in Box 16. 3.

Box 16.3. Roles of MOH Budgeting Team

- Prepare/update BSP for the central & provincial level
- Define program structures, identify targets and indicators, and forecast resources required
- Conduct budget analysis and prepare justification for budget negotiation
- Examine approaches to sector budget allocation

- Monitor and evaluate the implementation of PBB and prepare quarterly/yearly budget report

17.5 PLANNING AND BUDGETING PROCESSES

PIP/BSP process is "rolling-forward" over every year in order to incorporate changes (changing policy, needs and resources) and take into account progress made and new priorities as informed by APR/JAPR, but not for major deviations from the HSP3 strategy or momentums already set. If appropriately applied, the process will considerably improve allocation and predictability of funding for the health sector and link allocated resources with outcomes of health service delivery. Within PIP/BSP framework, AOP can then be developed with clearly defined operational objectives and detailed activities (including budget) and timetable. The following Section focuses mainly on BSP and AOP process.

Annual Planning/budgeting Cycle

The AOP process is an ambitious and labor-intensive one, incorporating top-down and bottom-up processes, in which individual ODs (with input from health centres and referral hospitals), PHDs, Central MoH departments, and national hospitals and national centers/institutions prepare its activity plan and its budget for the year. There are seven steps in the annual health planning cycle (Figure 17.2).

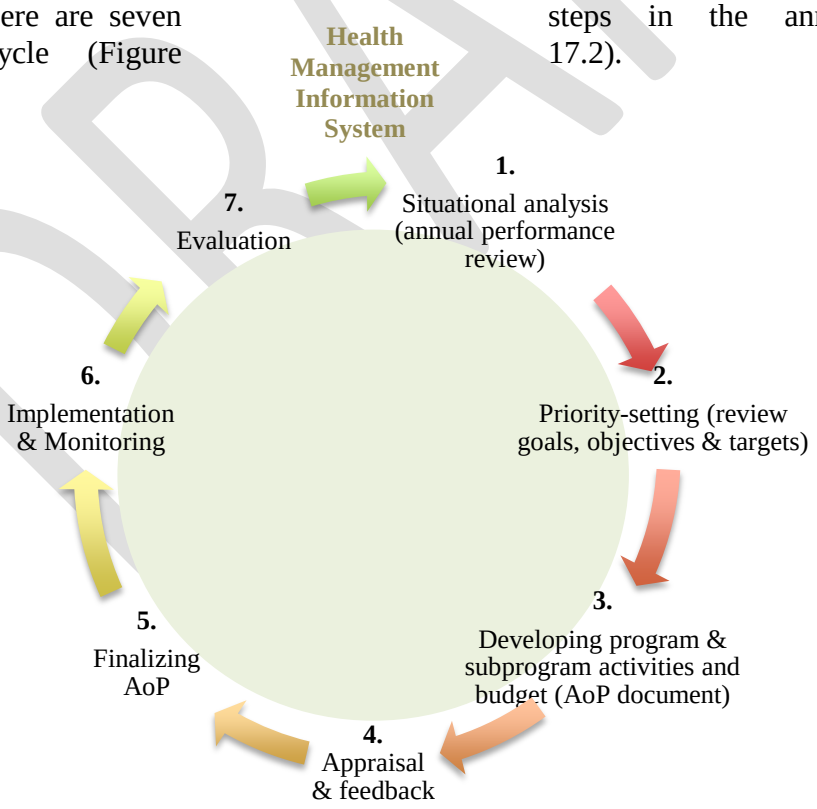


Figure 17.2 Annual Health Planning Cycle

Step1. Situational Analysis (where are we now?)

Annual review

Step2. Priority-setting (what do we want to achieve?)

This stage involves a hierarchy of HDGs, strategic objectives and targets as defined in the HSP3, and also programs' operational objectives. Priorities setting should also be based on factors such as feasibility in context of the socio-political climate, and within the available resources.

KEY FEATURES OF PRIORITY-SETTING

Step3. Programming & budgeting: (how do we achieve what we want?)
Identify planned activities over the year for program, each with a budget.

Step4. Appraisal and feedback

In the 3rd quarter of the year, a Joint Annual Plan Appraisal (JAPA) workshop is conducted with central institutions and provincial health departments joined by health development partners to appraise and finalize next year's AOP.

Step5. Implementation

Concerns transformation of program activities into specific timed and budgeted sets of tasks and activities with development of work plans (monthly and quarterly work plans).

Step6. Monitoring

Monitoring of the implementation of the program activities is conducted through monthly and quarterly progress review meetings at each level and mid-year progress review at sectoral level.

- **Quarterly Progress Review (QPR)**
- **Mid-Year Review (MYR):** The MoH also conducts a MYR in which the first semester's progress against targets down to OD level is analyzed and necessary changes made, along with resource re-allocation if required.

KEY FEATURES OF MID-YEAR REVIEW

- Timing: July
- Objectives: to (i) track progress over the first 6 months of the sector AoP implementation toward achieving targets set in the Sector AoP; (ii) identify constraints encountered during the plan implementation; and (iii); and produce recommendations for improvement of the plan implementation for the last 6 months.
- Expected results: review report
- Participation: Taskforces for Monitoring of HSP implementation: (i) Reproductive, Maternal, Newborn, Child Health and Nutrition; (ii) Communicable Diseases; (iii) Non-communicable Diseases and other public health problems; and (iv) Health System Strengthening), and Directors of central MoH Departments, National Centers, National Hospitals, Training institutions and Provincial Health Departments
- Organized and coordinated by: DPHI

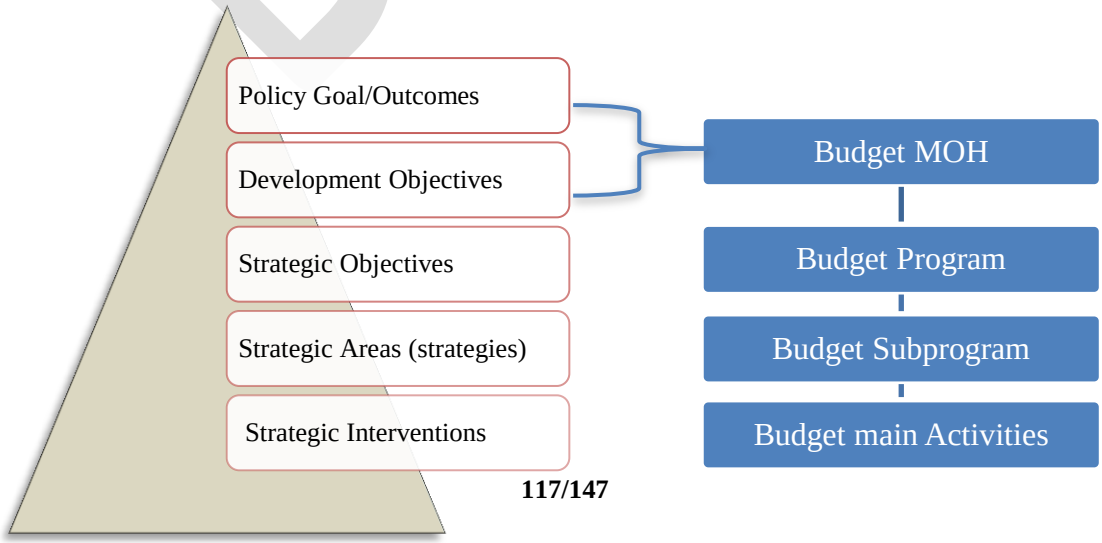
Step7. Evaluation

Evaluation is conducted through Annual Performance Review (APR) at district and provincial level and Joint Annual Performance Review at the sectoral level, followed by the National Health Congress (NHC). Implementing units at each level also conduct its own annual performance review.

NHC is formal event that includes a wide range of stakeholders including other Royal Government institutions, health development partners, health partners, civil society organizations, and provincial, district, and commune officials.

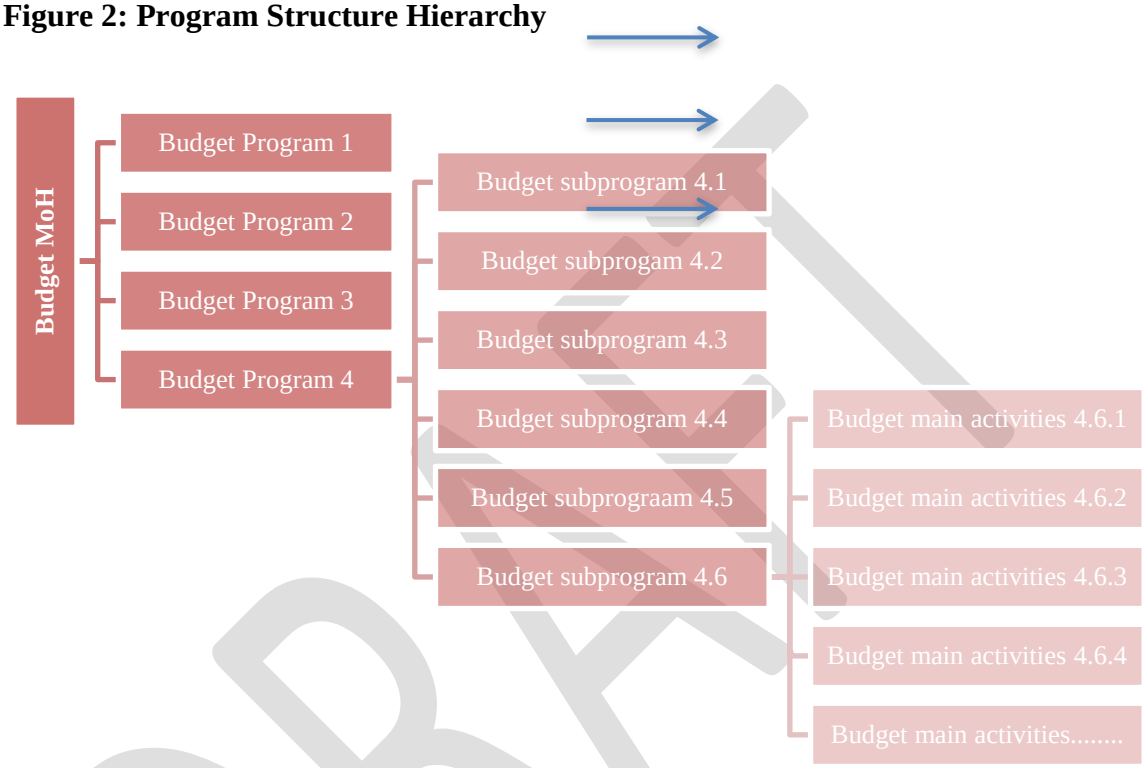
Program-Based Budget

Link budget to policy



The Program-Based Budget (PBB) is budgeting approach that shifts a focus on input and output to outcome and results (health service delivery). The PBB structure comprises of three levels as illustrated in Figure XX. Program structure hierarchy will be reviewed periodically, when and where appropriate.

Figure 2: Program Structure Hierarchy



- **A budget program**: is designated to a clearly defined set of services, whereby core permissive and obligatory functions (mainly service delivery function and management function) of MoH and its subordinates, are delivered. MoH has defined four budget programs as follows:

  ✓ Program 1: Reproductive , Maternal and newborn, child health and nutrition
  ✓ Program 2: Communicable disease control
  ✓ Program 3: Non-communicable disease control & public health problems
  ✓ Program 4: Health system strengthening

- **A budget sub-program** comprises a distinct grouping of services and activities within the scope of a budget program. For management purposes a budget subprogram is identified separately within the budget program.

  ✓ **Program 1: Reproductive, Maternal/newborn, child health & nutrition**
  Subprogram 1.1: Reproductive health

Subprogram 1.2: Maternal and newborn health
Subprogram 1.3: Child health
Subprogram 1.4: Nutrition
Subprogram 1.5: Support program 1

- ✓ **Program 2: Communicable disease control**
  Subprogram 2.1: HIV/AIDS prevention and treatment & care
  Subprogram 2.2: Tuberculosis prevention and treatment & care
  Subprogram 2.3: Malaria and dengue prevention and treatment & care
  Subprogram 2.4: Other communicable prevention and treatment & care
  Subprogram 2.5: Support program 2

- ✓ **Program 3: Non-communicable disease control & public health problems**
  Subprogram 3.1: Mental health & substance use
  Subprogram 3.2: Blindness prevention and control
  Subprogram 3.3: Oral health
  Subprogram 3.4: Cancer prevention and treatment and care
  Subprogram 3.5: Major public health interventions
  Subprogram 3.6: Support program 3

- ✓ **Program 4: Health system strengthening**
  Subprogram 4.1: Health service delivery
  Subprogram 4.2: Health system financing
  Subprogram 4.3: Health workforce development
  Subprogram 4.4: Health information system
  Subprogram 4.5: Health system governance
  Subprogram 4.6: Support program 4

- **A operation budget** is for **main activities** that are on-going and/or to be undertaken in delivering the budget program or budget sub-program. The main activities are developed based on strategic interventions as identified in the HSP.

Timetable for Annual Planning and Budgeting

The annual planning and budgeting process occurs across all levels of the health system. Plan and budget preparation and consolidation are very time-consuming and require specific knowledge and expertise of health managers/planners. Table 16.1 indicates time sequence that is relevant to main activities in the process.

Table 17.1 Timetable of Annual Health Planning & Budgeting

Main Activity	Level		J	F	M	A	M	J	J	A	S	O	N	D	J
	Sub	Sector													
APR	√														
JAPR		√													
NHC		√													
PIP update		√													
PIP submission		√													
BSP update	√	√													
Develop AoP (budget)	√	√													
BSP submission	√	√													
Appraisal AoP	√	√													
Submission	√	√													
Budget negotiation	√	√													
Annual budget submission	√	√													
Budget approval	√	√													
Implementation	√	√	●											●	
Monitoring	√	√				Q1			Q2			Q3			
Evaluation	√	√							MYR						APR JAPR

Note
**Referred to as
*Referred to as

18 PROGRAM PLANNING & BUDGETING

18.1 INTRODUCTION

The programming and budgeting framework describes **structure, process, and tools** to guide the development of annual operational plan including annual budget plan according to the annual operational plan structures that are properly aligned with the program-based budget. The framework consists of four program areas and its operational objectives, with clearly defined indicators and targets. The sector strategies are the basis for developing the program strategies/interventions and activities that are fully supported by estimated cost as guided by BSP and PBB guidelines.

The program planning and budgeting have to be directed towards the achievements of the stated operational objectives, and the broader strategic objectives set forth in the HSP3.

18.2 GUIDING PRINCIPLES

(The extent to which its sub-programs and activities have contributed to the advancement of the strategic objective) outcomes; outputs (the goods and services provided under the program which can be measured in terms of quantity, quality and timeliness); and cost.

Each programme therefore can be described in terms of the objective it seeks to achieve, the strategies it employs to impact on the objective, the outputs to be delivered in pursuing the strategies and the inputs used in the production of outputs.

(BSP principles/MoEF)

18.3 PROGRAM BUDGET INVESTMENT

Plan becomes realistic, when it is supported by realistic estimated budget. Intended objectives can be achieved; once the plan is truly put into the implementation and committed resources (budget and staff) are made available on timely manner and wisely used, without having wasted along the way, to carry out planned activities as scheduled.

The Table 10 below indicates estimated financial resources needed for the implementation of key interventions of the four policy priorities in the health sector over the period of five years (2014-2018).

- Action plan and Budget Plan (including TA requirement) by programs and subprogram including TAs (aligned to BSP/PBB format) presented in table format) (attached as an Annex of the HSP3).

- Funding gaps

Table x. Budget Estimated for 5 Years (2014-2018)			
Policy Priority	Total Cost for 5 Years (in USD)	Recurrent Cost	Capital Cost
1. Improving sexual, reproductive, maternal, newborn, infant, child health and nutrition	64,112,503	62,380,867	1,731,636
1.1 Sexual and reproductive health	14,384,762	13,413,126	971,636
1.2 Maternal and newborn health	7,359,298	7,359,298	0
1.3 Child health and immunization	25,893,442	25,133,442	760,000
1.4 Nutrition	16,475,000	16,475,000	0
2. Reducing morbidity and mortality of main communicable diseases-HIV/AIDS, tuberculosis, malaria, dengue, neglected tropical diseases, emerging and remerging infectious diseases	324,824,470	180,651,637	144,172,833
2.1 HIV/AIDS, STI (prevention, treatment including anti retroviral drug, and care)	47,370,000	46,900,000	470,000
2.2 Tuberculosis (prevention, detection, treatment, including first and second line Tuberculosis drug)	110,589,335	110,589,335	0
2.3 Malaria (prevention and treatment)	135,730,531	7,540,500	128,190,031
2.4 Other communicable diseases	31,134,604	15,621,802	15,512,802
3. Reducing morbidity and mortality of non-communicable/chronic diseases, and other public health problems related to substance use, alcohol and tobacco, traffic accident, injury, food safety, disaster, environmental health and climate change;	101,733,941	90,724,932	11,009,009
3.1 Prevention (risk behavior change)	19,370,107	16,220,107	3,150,000
3.2 Treatment and care, and rehabilitation	71,515,825	67,261,825	4,254,000
3.3 Public health interventions	10,848,009	7,243,000	3,605,009
4. Ensuring equitable access to quality health services by all Cambodians through health system strengthening	347,573,561	118,406,131	229,167,430
4.1 Physical infrastructure (construction, medical equipment and maintenance)	235,363,961	10,196,531	225,167,430
4.2 Health Equity Funds	100,283,256	100,283,256	0
4.3 Human capacity development	5,588,750	4,088,750	1,500,000
4.4 Health information system (Information Communication Technology software and hardware and capacity building)	4,000,000	1,500,000	2,500,000
4.5 Governance	2,337,594	2,337,594	0
4.6 Drug and medical consumables (general supply to all health centers and referral hospitals)	750,213,877	750,213,877	0
Grand Total	**1,588,458,352**	**1,202,377,444**	**386,080,908**

19 MONITORING AND EVALUATION

19.1 INTRODUCTION

The monitoring and evaluation framework outlines **structure** and **process** for **measurement and accountability for results** in the implementation of the HSP3. Progress and achievements of the HSP3 implementation will be reviewed and updated on regular basis throughout the lifespan of the plan by measuring input, output and outcome indicators of the health system performance against targets set in pursuit of strategic objectives, ultimately of achieving Health Development Goals.

The framework will further strengthen monitoring and evaluation system by linking inputs with implementation, then with outputs, and finally with outcomes and impacts. The monitoring and evaluation system focuses on the **seven domains** or strategic areas (health service delivery, physical infrastructure development, essential support systems, health system financing, health workforce development, and health information system and health system governance) and at **four levels** (input/process, output, outcome, and impact).

19.2 MONITORING AND EVALUATION FRAMEWORK

Guiding principles for M & E framework

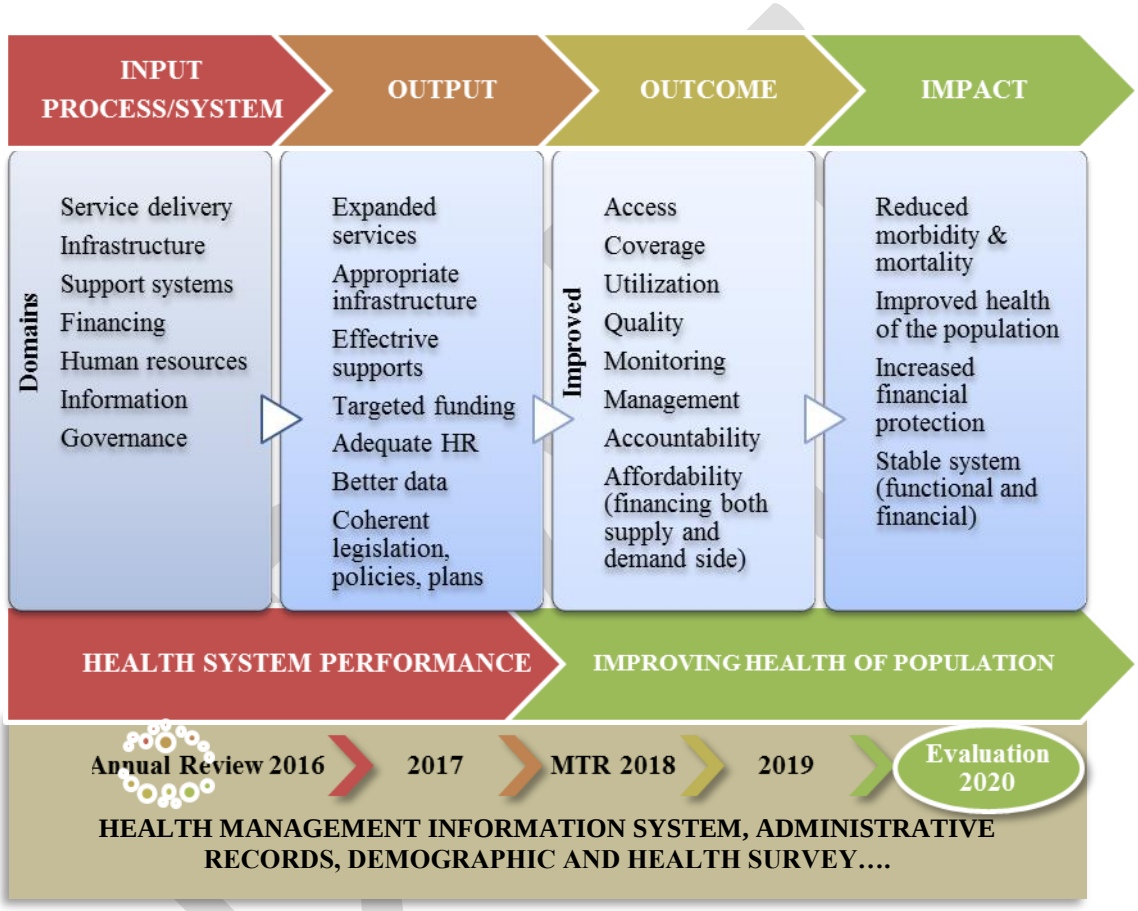
The monitoring and evaluation framework promotes use of both qualitative and quantitative information for evidence-based decision-making. It envisions that the MoH and DPs will use the framework to review the progress in the health sector on a regular basis to gain information for health service management, planning and decision-making.

- Clarity
- Reliability
- Sensitivity
- Accountability
- Sustainability

The purpose of the framework is threefold:

- To monitor and evaluate health sector performance in improving health status;
- To refine existing health policies considering the progress made; and
- To enable policy-makers to determine the effectiveness of different policy alternatives

Figure 19.1 Monitoring and Evaluation Framework



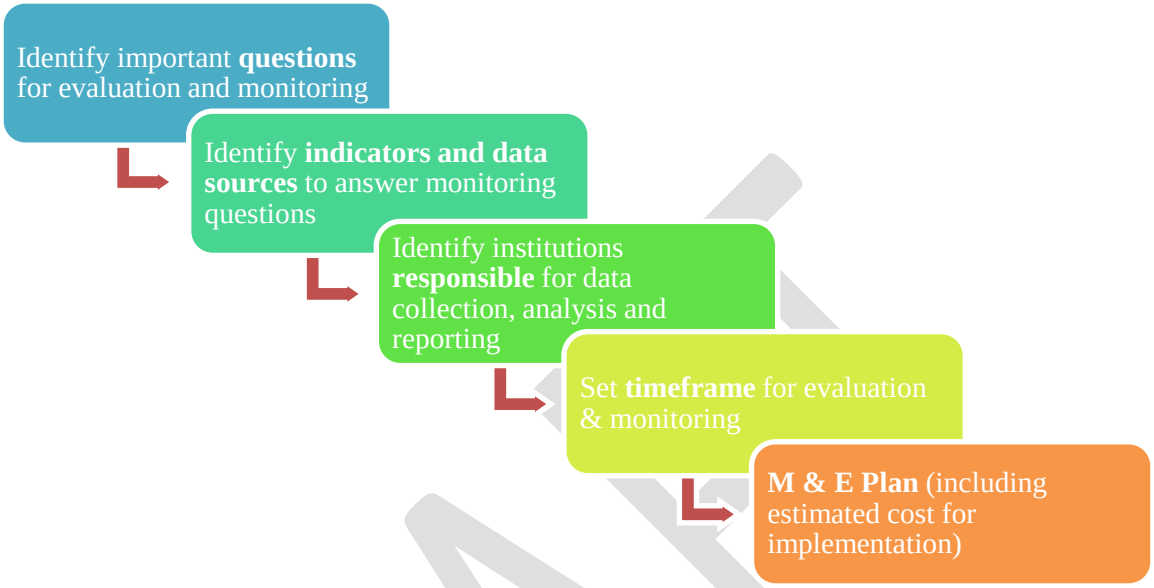
19.3 MONITORING & EVALUATION PROCESS

Monitoring occurs at all level of the health system and is an integral part of the annual health planning process as indicated in **Figure 17.3**. AoP including annual performance indicators and Quarterly Work Plan are basic tools to support monitoring exercises. **Figure 19.2** depicts steps for establishing M & E plan.

- Define questions for M & E
- Identify indicators and data sources to answer the defined questions
- Identify institutions/implementing units responsible for data collection, analysis and reporting
- Set timeframe for M & E

- Finally, establish M & E Plan, including estimated cost to implement the plan

< Figure 19.2 Overview of Monitoring & Evaluation Process>



National Indicators Framework

The national indicators framework presented in Table 18.1 is a tool for the national and subnational level MoH to monitor and evaluate the health sector performance. These indicators are developed based on the HSP3 priorities. The framework will be modified periodically to ensure that the information collected is useful for informing policy-makers and program managers. It also links key questions with the best available information to help policy-makers, health planners and managers make informed decisions about competing policy and strategy alternatives over the course of the HSP3 implementation.

Core monitoring indicators

A minimum set of core indicators for monitoring purpose

Table 19.1 National Indicators Framework for M & E

Performance Indicators	Core indicators	M & E Level; Areas
		Impact
1. Maternal mortality ratio (100,000 live births)		
2. Neonatal mortality rate (1,000 live births)		
3. Infant mortality rate (1,000 live births)		
4. Under 5 mortality rate (1,000 live births)		
5. Unmet need for family planning		
6. Abortion rate [OR repeat abortion rate]		

7.	Contraceptive prevalence rate (using any modern contraceptive method)		• Improving health of the population • Increased financial protection • Stable system
8.	HIV prevalent rate		
9.	% People Living with HIV/AIDS on anti-retroviral treatment survival after a 12-month treatment		
10.	Prevalence of all forms of Tuberculosis per 100,000 population		
11.	Tuberculosis death rate (100,000 population)		
12.	Tuberculosis Cure Rate		
13.	Malaria mortality rate reported by public health facility per 100,000 population		
14.	Prevalence of adult 25-64 years-old having Hypertension*		
15.	Prevalence of adult 25-64 years-old having Diabetes*		
16.	Prevalence of blindness		
17.	Prevalence of alcohol use among male & female adult		
18.	Prevalence of Tobacco use among male & female adults		
19.	Client satisfaction index		
20.	Catastrophic health expenditure incidence*		
21.	GHE as percentage of GDP		
			Outcomes
22.	% Of pregnant women attended antenatal care visit 2+ by health personnel		Access, coverage
23.	% Of pregnant women received iron- folic acid 90 tablets		Access, coverage
24.	% Of HIV+ pregnant women receiving antiretroviral for protection mother-to child-transmission		Access, coverage
25.	Proportion of births delivery in public health facility	√	Access, coverage
26.	Caesarian section rate		Access, coverage
27.	% Of mothers who start breast-feeding newborn child within 1 hour of birth (delivery in health facility)		Access, coverage
28.	% Of children under one year immunized against measles		Access, coverage
29.	% Of children under five with pneumonia received correct antibiotic treatment at the public health facility		Quality
30.	% Of children under five with diarrhea received ORS + Zinc at the public health facility		Quality
31.	% Of children with severe acute malnutrition with complications received treatment		Access, coverage
32.	Number of Malaria cases treated at public health facility per 1,000 population		Access, coverage
33.	Dengue hemorrhagic fever case fatality rate reported by public health facilities		Quality
34.	Number of cases of adults with mental health illness seen at public health facility per 10,000 population		Access, coverage
35.	Number and % of women aging 30-49 years-old received cervical cancer screening at least one		Access, coverage
36.	Number of newly diagnosed cervical cancer per 100,000 women aging over 25 years-old		Access, coverage
37.	Cataract surgical rate per 100,000 population		
38.	% Of opioid addictive person received treatment		Output
39.	Road traffic mortality (per 100,000 population)		
40.	% Of Health Center with stock-out of essential drug (14 items)		Efficiency
41.	% Of blood donations collected from volunteer non-remunerated blood donor		Output
42.	New case consultation per person per year		
43.	% Of poor population living under the national poverty		Coverage

	rate protected by Health Equity Funds	
44.	% Of Health Center having at least a secondary midwife	Output
45.	Data quality index	Quality
46.	% Of Functioning Health Center Management Committee	Output

National M & E Framework: Indicators and Targets for 2016-2020

		Baseline		Target			
	Indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
	1. Reproductive, Maternal, Newborn, Infant and Child Health and Nutrition						
47.	Maternal mortality ratio (100,000 live births)	206		140			130
48.	Neonatal mortality rate (1,000 live births)	27		22			20
49.	Infant mortality rate (1,000 live births)	45		35			32
50.	Under 5 mortality rate (1,000 live births)	54		45			42
51.	Unmet need for family planning	16.6%		10%			8%
52.	Abortion rate [OR repeat abortion rate]	5% [26%]		5% [22%]			5% [20%]
53.	Contraceptive prevalence rate (using any modern contraceptive method)	37%	39%	51%	52%	53%	54%
54.	% Of pregnant women attended antenatal care visit 2+ by health personnel	87%	88%	90%	91%	93%	95%
55.	% Of pregnant women received iron-folic acid 90 tablets	87%	88%	90%	91%	93%	95%
56.	% Of HIV+ pregnant women receiving antiretroviral for protection mother-to child-transmission	65%	68%	70%	73%	75%	78%
57.	Proportion of births delivery in public health facility	80%	84%	87%	88%	89%	90%
58.	Caesarian section rate	3.2%	3.5%	4%	4.2%	4.4%	4.6%
59.	% Of mothers who start breast-feeding newborn child within 1 hour of birth (delivery in health facility)	66%	69%	72%	75%	78%	80%
60.	% Of children under one year immunized against measles	95%	95%	95%	95%	95%	95%
61.	% Of children under five with pneumonia received correct antibiotic treatment at the public health facility	65%	66%	67%	68%	69%	70%
62.	% Of children under five with diarrhea received ORS + Zinc at the public health facility	95%	96%	97%	98%	99%	100%
63.	% Of children with severe acute malnutrition with complications received treatment	25%	35%	50%	65%	80%	90%
	2. Communicable Diseases						
64.	HIV prevalent rate	07%					<0.1%
65.	% People Living with HIV/AIDS on anti-retroviral treatment survival after a 12-month treatment	> 85%	>85%	>85%	>85%	>85%	>85%
66.	Prevalence of all forms of Tuberculosis per 100,000 population	735	694	653	612	571	530

67.	Tuberculosis death rate (100,000 population)	63	60	57	54	51	48
68.	Tuberculosis Cure Rate	>85%	>85%	>85%	>85%	>85%	>85%
69.	Malaria mortality rate reported by public health facility per 100,000 population	1.25	1	0.8	0.65	0.5	0.35
70.	Number of Malaria cases treated at public health facility per 1,000 population	4	2.9	2	1.85	1.65	1.45
71.	Dengue hemorrhagic fever case fatality rate reported by public health facilities	0.7%	0.7%	0.5%	0.5%	0.5%	0.3%
3. Non communicable diseases							
72.	Number of cases of adults with mental health illness seen at public health facility per 10,000 population	25	30	35	40	45	50
73.	Prevalence of adult 25-64 years-old having Hypertension*	11.2%	11.2%				
74.	Prevalence of adult 25-64 years-old having Diabetes*	2.9%	2.9%				
75.	Number and % of women aging 30-49 years-old received cervical cancer screening at least one		38,600	42,460	46,710	51,380	56,520
76.	Number of newly diagnosed cervical cancer per 100,000 women aging over 25 years-old		30.6	31.2	31.8	32.5	33.1
77.	Prevalence of blindness	0.38%	0.35%	0.32%	0.29%	0.27%	0.25%
78.	Cataract surgical rate per 100,000 population	1,200	1,300	1,500	1,700	1,900	2,000
4. Public health concerns							
79.	% Of opioid addictive person received treatment	50%	55%	60%	65%	70%	75%
80.	Prevalence of alcohol use among male & female adult	53%	52%	52%	51%	50%	49%
81.	Prevalence of Tobacco use among male (M) & female (F) adults	M: 42% F: 17%	M: 41% F: 16%	M: 40% F: 15%	M: 39% F: 14%	M: 38% F: 13%	M: 37% F: 12%
82.	Road traffic mortality (per 100,000 population)	<11.60	<11.60	<11.60	<11.60	<11.60	<11.60
5. Health System Strengthening							
83.	% Of Health Center with stock-out of essential drug (14 items)	<5%	<5%	<5%	<5%	<5%	<5%
84.	% Of blood donations collected from volunteer non-remunerated blood donor	50%	55%	60%	65%	70%	75%
85.	New case consultation per person per year	0.63	0.65	0.70	0.75	0.80	0.85
86.	Client satisfaction index	86%	87%	87%	88%	88%	89%
87.							
88.	% Of poor population living under the national poverty rate protected by Health Equity Funds	80%	90%	100%	100%	100%	100%
89.	Catastrophic health expenditure incidence*						
90.	% Of Health Center having at least a secondary midwife	66%	85%	100%	100%	100%	100%
91.	Data quality index	87%	90%	93%	96%	98%	100%
92.	% Of Functioning Health Center	8%%	>85%	>85%	>85%	>85%	>85%

19.4 DATA SOURCES

Monitoring and evaluation process requires a strong health management information system (HMIS) that provides real-time and high quality health data, and better institutional capacity at all levels to carry out effectively monitoring functions. The later includes data collection, compilation, analysis and reporting, as well as use monitoring results to support decision-making for improving health service management and planning.

As monitoring process is an integral part of the annual health planning processes, all MoH departments and program may collect additional information to manage and monitor their programs. Likewise the PHDs/ODs may also collect additional information on key indicators for operational and service planning. Data on indicators for provincial management and services are submitted annually to the MoH Department of Planning & Health Information. Some national level indicators are collected at provincial level and therefore serve two purposes: informing national policy and monitoring provincial planning.

Health and health-related data currently are collected through a number of reliable sources. These include, but are not limited to:

- Facility-based reporting (HMIS and PMRS), annual health financing report, National Health Account Report, annual report on human resource development,
- Population-based reporting (Census, CDHS and CSES)—periodically 3-5 years interval; providing, demographic information,
- Other sources: administrative and financial records, assessment/study/research findings .etc.

Health Management Information System

HMIS is web-based application and also health-facility based reporting system. The key features of HMIS are:

- Its integration; implying one system for routine health data, standardization in terms of the same set of forms applied across each level.

- Simplicity of design; retaining historical data, incorporating new information; reliability in terms of completeness and timeliness of data; and computerization to all referral hospitals and 25% of health centers, where internet access, electricity and computer facilities are available.

- Its components; including monthly routine reports from health centers (form HC1) and referral hospitals (HO2).

- Data are aggregated, covering (but not report on logistics, administration, finance or patient vital statistics):

  - ✓ Outpatient and in-patient services, other preventive services e.g. immunizations, birth spacing, deliveries, and laboratory examinations, referrals
  - ✓ Health problems such as illnesses and conditions. All patient data are reported in a disaggregated form containing patients geographical location, age and sex.

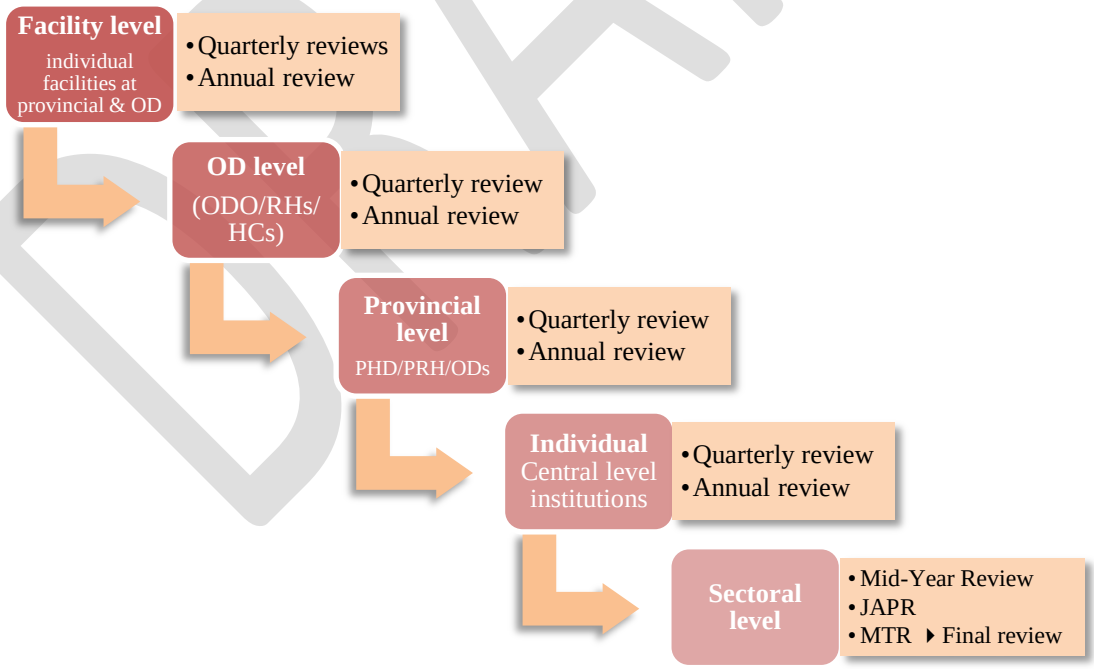
- Most of services output and outcome indicators (access and coverage) listed in the national indicators framework are available in HMIS.

Data Collection, Analysis and reporting

19.5 MONITORING ACTIVITY

- **Quarterly monitoring**
- **Mid-Year Review**
- **Annual Review/National Health Congress**

Figure 19.2 Monitoring & Evaluation Activity



Quarterly review

Mid-year review:

- Timing: a 2-day meeting

- Objectives:
  - To track progress over the first 6 months of the sector AoP implementation toward achieving targets set in the Sector AoP;
  - To identify constraints encountered during the plan implementation;
  - To produce recommendations for improvement of the plan implementation for the last 6 months.
- Expected results
  - Report which includes……..
- Participation
  - Taskforces for Monitoring of HSP implementation (led-technical) (1) Reproductive, Maternal, Newborn, Child Health and Nutrition Program; (2) Communicable Diseases; (3) Non-communicable Diseases and other public health problems; and (4) Health System Strengthening program.
  - Directors of central MoH Departments, National Centers, National Hospitals, Training institutions and Provincial Health Departments
- Organized and coordinated by: DPHI

Annual Review & JAPR

- Timing: a 2-day meeting
- Objectives:
  - Review the progress and achievements against annual targets set in the Sector AoP
  - Identify strengths (contributing factors to good performance) and weaknesses (constrains)
  - Identify sector priority and interventions to inform the next cycles of annual planning and budgeting process in the sector.
- Expected results
  - Report which includes……
- Participation
  - Taskforces for Monitoring of HSP implementation (led-technical) (1) Reproductive, Maternal, Newborn, Child Health and Nutrition Program; (2) Communicable Diseases; (3) Non-communicable Diseases and other public health problems; and (4) Health System Strengthening program.
  - Directors of central MoH Departments, National Centers, National Hospitals, Training institutions and Provincial Health Departments
- Organized and coordinated by: DPHI
- Tools Sector AoP

Timeframe for monitoring and Reporting

Table: Monitoring process in the health sector

	Objectives	Expected results	Participants	Output
Quarterly review	○ Monitor progress and achievements of Provincial AOP	Timely detection of deviations		Budget report and quarterly work plan
Mid-year review	○ To track progress over the first 6 months of the sector AoP implementation toward achieving targets set in the Sector AoP; ○ To identify constraints encountered during the plan implementation; ○ To produce recommendations for improvement of the plan implementation for the last 6 months		Taskforces for Monitoring of HSP implementation: (i) Reproductive, Maternal, Newborn, Child Health and Nutrition; (ii) Communicable Diseases; (iii) Non-communicable Diseases and other public health problems; and (iv) Health System Strengthening), and Directors of central MoH Departments, National Centers, National Hospitals, Training institutions and Provincial Health Departments	Review report
Annual review	○ Review the progress and achievements against annual targets set in the Sector AoP ○ Identify strengths (contributing factors to good performance) and weaknesses (constrains) ○ Identify sector priority and interventions to inform the next cycles of annual planning and budgeting process in the sector	Sector priorities defined, alignment of development partners' support for national health sector priorities		Annual Health Congress

Timetable for Monitoring and Reporting

ACTIVITY	Quarterly review and MYR (current year of AoP implementation)				APR	NHC
MONITORING	Q1	Q2	Q3	Q4	Q1 (next year)	
Subsector level (individual institutions or implementing units (central, provincial & district level)	W1-2 Apr	W1-2 Jul	W1-2 Oct	W1-2 Jan	W3-4, Jan	
Sector level (MoH)			W3-4 July		W4, Jan	W3 March
REPORTING (reports submission)	Q1	Q2	Q3	Q4		
Subsector						

HC & RH to OD	W1-2 Apr	W1-2 Jul	W1-2 Oct	
OD to PHD	W3-4, Apr	W3-4, Jul	W3-4, Oct	W1, Feb
PHD to MoH (DGH/DAF)				
Central level institutions to MoH (DGH/DAF)				
Sector level				
MoH to Council of Ministers				

M & E Plan

Monitoring						Evaluation		
Questions	Indicators	Data sources/method	Responsible	Timeframe	Estimated cost	Who involves?	Reporting (how)	When evaluation?