# National Health Accounts FY 2016-17 & FY 2017-18



Policy and Planning Division Ministry of Health Royal Government of Bhutan

## 1. Acknowledgement

The Ministry of Health would like to extend its sincere gratitude to all organizations and individuals involved in finalizing and publishing the National Health Accounts for fiscal years 2016/17 and 2017/18.

The Ministry is grateful to the World Health Organization for providing financial and technical support to conduct the study. The Ministry would like to express special appreciation to all the allied health partners, Civil Society Organizations, Non-Governmental Organizations, corporations, development partners, Ministry of Finance and National Statistical Bureau for their valuable contribution.

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#### 2. Foreword

The Ministry of Health (MoH), with the support from the World Health Organization (WHO), initiated the conduct of the first ever National Health Accounts (NHA) study in 2011 for the fiscal year 2009-10. Since then, Ministry conducted NHA for four consecutive fiscal years (2011-12, 2012-13, 2014-15 and 2015-16).

NHA is a systematic description of the financial flows related to consumption of health care goods and services from expenditure perspective. The current study is the fourth round covering two fiscal years, 2016-17 and 2017-18. The estimates of the national health expenditures are described in thirteen dimensions covering consumer, provision and financing interfaces, supported by detailed methodological documentation. The findings of all rounds of the health accounts study will provide a reliable comparative source of health expenditure data. The study results indicate that for both fiscal years, the Royal Government of Bhutan has been the principal financier of the health system in Bhutan. The government share of current health expenditures in financial year 2016-17 and 2017-18 were 75% and 80% respectively. Current health expenditure as % of GDP is a little over 3% for both financial years. Donors contributed 11% and 6% in financial year 2016/17 and 2017/18 of Current Health Expenditure. Household's contribution (Out of pocket) to current health expenditures in both the financial years was slightly over 13%.

Bhutan is faced with various challenges that stand as barriers in our efforts to continue the provision of free basic health care services as mandated by the constitution. Some of the key challenges are double burden of communicable and non-communicable diseases owing to epidemiological transition, demographic shift and urbanization and withdrawal of key development partners. During such times, it is essential to comprehend the health financing scenario for evidence based health care planning and decision-making. Therefore, I am pleased to present the NHA report for financial year 2016-17 and 2017-18. I am confident that this report will be useful to all of our valued partners, both national and international, as we collectively strive to improve the country's health care system. I would like to thank the WHO for providing financial and technical support in conducting the study. I also take this opportunity to extend my sincere appreciation to all our colleagues for their support to the NHA study team. Lastly, I would like to thank the NHA team from the MoH for their efforts in successfully completing the study and bringing out this important report.

(Dr. Ugen Dophu)

**Secretary** 

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#### 6. Abbreviations

BHTF Bhutan Health Trust Fund

BHU Basic Health Unit

BMHC Bhutan Medical and Health Council

BNCA Bhutan Narcotic Control Authority

CF Capital Formation

CHE Current Health Expenditure

DIS Classification of disease/conditions

DRA Drug Regulatory Authority

FA Financing Agents

FP Factors of Health Care Provision

FS Revenues of Health Care Financing Schemes

FSRI Institutional Units Providing Revenues to Financial

Schemes

FY Fiscal Years

GDP Gross Domestic Product

HAPT Health Accounts Production Tool

HC Health Care Functions Classification

HC Health Care Function

HF Financing Schemes

HK Capital Account

HP Health Care Provider

JDWNRH Jigme Dorji Wangchuck National Referral Hospital

MoF Ministry of Finance

MoH Ministry of Health

NGO Non-Governmental Organization

NHA National Health Accounts

OOPS Household Out of Pocket Expenditures

PPD Policy and Planning Division

RGOB Royal Government of Bhutan

RICB Royal Insurance Corporation of Bhutan

SHA 2000 System of Health Accounts 2000

SHA 2011 System of Health Accounts 2011

SNL Sub National Level

TCAM Traditional Complementary and Alternative Medicine

WHO World Health Organization

## 7. Executive Summary

This report presents the National Health Accounts (NHA) of Bhutan for fiscal years 2016-17 and 2017-18. It describes the financial flows related to current and capital expenditures incurred by the government, households, donors, employers, and health insurers to meet the health care needs of residents in Bhutan during the two fiscal years.

NHA for FY 2016-17 and 2017-18 estimated the total national health expenditure by disaggregating it into thirteen dimensions covering consumer, provider, and financial interfaces. The study has been conducted using the System of Health Accounts (SHA) 2011 introduced by the World Health Organization (WHO). This is the fourth NHA study carried out in Bhutan.

The total Current Health Expenditures (CHE) incurred in Bhutan for FY 2016-17 and 2017-18 were estimated to be Nu.5.1 billion and Nu. 5.3 billion respectively. These include expenditures made by the government, corporations and private entities and the cost of consumption of capital assets in the government health system. The expenditure on capital formation (CF) in FY 2016-17 and 2017-18 accounted to Nu. 1.37 billion and Nu. 1.39 billion respectively.

The total sum of CHE and CF during the FY 2016-17 was estimated at Nu. 6.5 billion and Nu. 6.7 billion for FY 2017-18 which approximate to 4% of the GDP for both years. Whereas, the sum of CHE borne by the Royal Government of Bhutan (RGoB) was around 2.6 % of the GDP.

The major cost drivers include inpatient care constituting 38% and 39%, followed by outpatient care constituting 17.4% and 17.6% of the CHE in FY 2016-17 and 2017-18 respectively. The largest percentage of CHE was attributed to non-communicable diseases accounting for 34% and 38% of CHE in FY 2016-17 and 2017-18 respectively, followed by managing infectious diseases accounting to 17% and 24%.

The CHE analysis by subnational levels showed that the highest CHE was from Thimphu (32 % and 30% in FY 2016-17 and 2017-18 respectively); followed by Sarpang (7.8% and 9.1 % in FY 2016-17 and 2017-18); and Mongar and Chukha (around 7 and 8% approximately in FY 2016-17 and 2017-18) districts.

Hospitals were identified as the highest cost consuming health care providers in both fiscal years. Approximately 68% and 71% of CHE in FY 2016-17 and 2017-18 respectively were used by all types of hospitals. The largest percentage of CHE was used by the primary health care facilities which comprises of dzongkhag hospitals, BHU I & II, outreach centers and satellite clinics. They collectively consumed around 31 and 33% of CHE in FY 2016-17 and 2017-18 respectively. The national referral hospital JDWNRH used 22% and 23% of hospital costs in FY 2016-17 and 2017-18 respectively. Nearly 40% of CHE was spent on materials and services related to health care provision in both fiscal years followed by expenditures on employee compensations (32 to 35% in FY 2016-17 and 2017-18).

In both fiscal years, RGoB has been the principal financier of the health system in Bhutan. The government share of CHE was estimated at 75% and 80% in FY 2016-17 and 2017-18 respectively. Households' contribution to CHE was just above 13% in both fiscal years. Rest of the world contribution was around 11% and 6% of CHE in FY 2016-17 and 2017-18 respectively.

The central government schemes that covered the expenditures related to MoH, JDWNRH, regional referral hospitals and three hospitals under the administration of Central Ministry constituted 63% and 66% of CHE in FY 2016-17 and 2017-18. Local government schemes (Dzongkhag schemes) accounted around 17% and 18% in FY 2016-17 and 2017-18. Insurance schemes covered only a smaller share (0.1% and 0.2 %) of CHE in the two fiscal years.

#### 1 Background

NHA is an exercise carried out to determine the amount of expenditure made to meet the health care needs of residents in a country by all stakeholders and describe these expenditures in various financial, provider and consumer perspectives.

The Ministry of Health (MoH), Bhutan has been conducting NHA studies for consecutive fiscal years since 2009-10. This report presents the findings of the NHA studies conducted for the fiscal years: 2016-17 and 2017-2018.

NHAs 2016-17 and 2017-18 include the analyses of health expenditures of respective fiscal years over 13 different financing classifications under the consumer, financial and provider interfaces. In addition, this report aims to answer the following core questions:

- 1. How expenditures are distributed among various healthcare functions disaggregated by gender and age, and among people suffering from various illnesses and health conditions?
- 2. Which healthcare providers delivered health services and what proportion of healthcare expenditures are consumed by them?
- 3. How healthcare funding is raised, channeled and managed in producing or purchasing the health care services required by Bhutanese during the two fiscal years concerned?

The following sections present the findings of the NHA studies and the methodological approaches used.

## 2 Healthcare Financing System in Bhutan

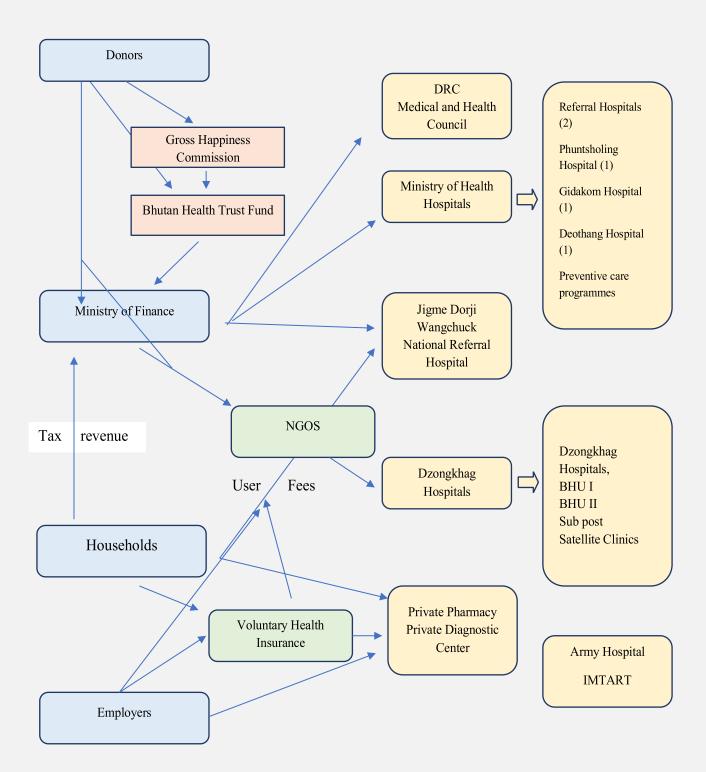
Healthcare in Bhutan is predominantly financed, organized and delivered by the public health institutions. Article 9, Section 21 of the Constitution of the Kingdom of Bhutan states "The state shall provide free access to basic public health services in both modern and traditional medicines". Comprehensive health care packages are delivered through a three-tiered network of health facilities as per the service standards and levels of care. Currently 52 sub posts, 186 Basic Health Units (BHU) II, 25 BHU I, and 29 hospitals constitutes the network of health facilities in the Bhutanese health system (MoH, 2018).

Around 95% of the Bhutanese population live within 3 hours distance to the nearest health facility (MoH, 2012). The public health service does not include services such as private cabin facility at the government hospitals, cosmetic (high-end) dental care, and cost for obtaining medical certificates and drugs outside the national essential drug list. Patients requiring specialized health services, which are not available in the country are referred to empaneled hospitals in India at the cost of the government. The traditional medicine services are provided through the national traditional medicine

hospital and traditional medicine units which are integrated in the health system. Currently, private provider participation is limited to a few pharmacies and selective diagnostic centers.

Figure 1 illustrates the flow of funds from Ministry of Finance (MoF), individuals, development partners, including Bhutan Health Trust Fund (BHTF) and employers to the service providers. Flow of funds from MoF to the public health facilities is channeled through the financial intermediaries: MoH, Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) and local government administration. Purchasing of public health services is carried out by the MoF through line item budgets, based on historical trends and needs. Voluntary private health insurance firms usually reimburse the patients. Households pay directly for availing services from the private pharmacies, private diagnostic centers and special consultation services; including expenditure incurred on traditional rimdros and pujas. Employers either purchase insurance premiums for their employees, reimburse the health expenditure of their employees or maintain their own health centers. Few NGOs also receive grants from the government or development partners for delivery of health-related activities. There are hospitals financed and managed by IMTART and DANTAK. However, their service provision is not restricted to their employees and even Bhutanese can avail services from these hospitals.

Figure 1 Bhutan Health Financing System



### 3 Overall Health Expenditure

SHA 2011 distinctly recognizes two main types of health expenditures: Current Health Expenditure (CHE) and Capital Formation (CF).

The CHE includes the cost of health services and goods provided by the government, the expenses made by private individuals as household out of pocket expenditures (OOPS), cost of health care of employees that are borne by employers, and costs borne by NGOs on health-related activities. In addition to the cost of intermediate consumption, the consumption of fixed capital is also added to the CHE. The consumption of fixed capital is defined as the decline, during the accounting period, in the current value of the stock of fixed assets owned by the government. The capital formation includes all investments made on capital asset creation during the fiscal years of concern.

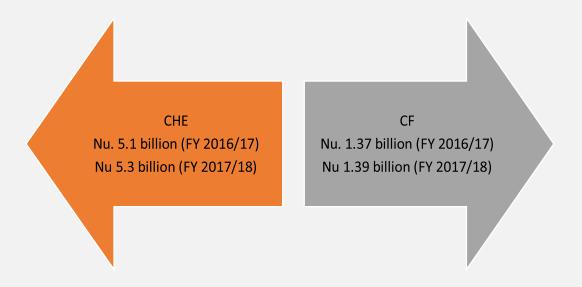
### 4 Current Health Expenditure

Total CHE for the FY 2016/17 was Nu. 5,090,949,255 while that for FY 2017/18 was Nu. 5,300,505,607. These amounts include expenditures made by both government and private sector participants and the cost of consumption of capital assets in the government health system within respective years. Under the Government expenditure, expenditure data that qualified within the NHA boundary by allied health agencies has been considered. However, in the future, it is noted that expenditures made by other government agencies which fulfills the criteria of NHA boundary needs to be included.

## 5 Capital Formation

The investments made for acquiring capital assets in FY 2016/17 amounted to Nu. 1,371,689,642, while in FY 2017/18 it was around Nu. 1,391,958,534.

Figure 2 Health Expenditures (CHE & CF) for FY 2016/17 and FY 2017/18



# 6 Health Expenditures as a percentage of GDP

Table 1 presents the health expenditures for FY 2016/17 and FY 2017/18 as a percentage of GDP. In both years, health expenditures (CHE+CF) were around 4% of GDP.

Table 1 GDP, Health expenditure types, and their relative sizes in relation to GDP in FY 2016/17 and FY 2017/18

Item	FY 2016/17	FY 2017/18
GDP (Nu)*	148,678,930,000	164,627,920,000
CHE (Nu)	5,090,949,255	5,300,505,607
CHE RGoB (Nu)	3,797,719,640	4,219,324,654
CF (Nu)	1,371,689,643	1,391,958,534
Total (CHE +CF)	6,462,638,898	6,692,464,141
CHE as % of GDP	3.4%	3.2%
CHE RGoB as % of GDP	2.6%	2.6%
Total (CHE +CF) as a % of GDP	4.3%	4.1%

\*Source: National Accounts 2017 & 2018 National Statistical Bureau, Bhutan

# 7 Per Capita Health Expenditures in FY 2016/17 and FY 2017/18

Table 2 presents the per capita expenditures in FY 2016/17 and FY 2017/18.

Table 2 Per capita health expenditure during FY 2016/17 and FY 2017/18

Item	FY 2016-17	FY 2017-18
Per capita CHE (Nu)	6,366.34	6,707.68
Per capita CHE RGoB (Nu)	4,749.13	5,339.46
Per capita CF (Nu)	1,715.33	1,761.49
Per capita Total (CHE +CF)	8,081.67	8,469.17

# 8 CHE by Consumer Interface

This section presents the disaggregation of CHE in two fiscal years by consumer characteristics: health care functions, age, gender, disease and geographical distribution.

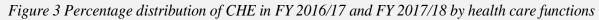
#### 8.1 CHE by Health Care Functions

Health care functions classification analyses CHE by the type of health care needs for which the current health expenditure was made. It identifies the CHE components for curative care provisions made at various health institutions, ancillary services that includes privately purchased services such as laboratory investigations, patient transportation, etc... and medical goods that are non-specified by function. Medical goods non-specified by function includes privately purchased pharmaceuticals and other medical goods that are not included in the curative care packages provided by public health facilities.

It is important to note that the costs of laboratory investigation, ambulance, and pharmaceutical costs associated with institutionalized care are factored into respective curative care component costs and thus do not get reflected under ancillary care and medical goods categories.

In addition, health care function classification disaggregates the CHE into costs of preventive care, governance, health system and financing administration, and other non-specified expenditures.

Figure 3 and Table 3 shows the CHE of FY 2016-17 and 2017-18 according to health care functions.



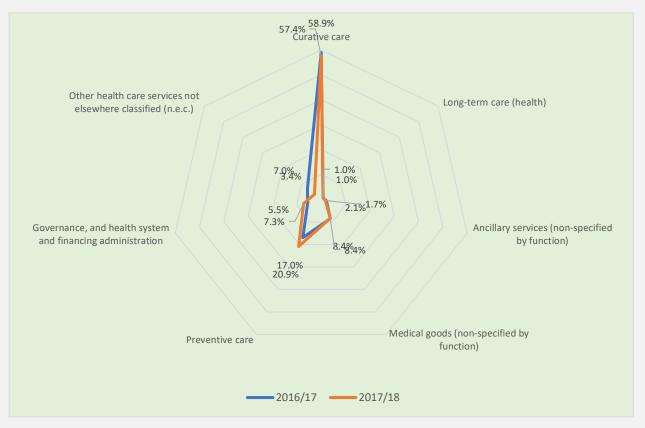


Table 3 CHE in FY 2016-17 and 2017-18 by healthcare functions

			Health care functions	2016/17		2017/18	
				#	%	#	%
HC.1			Curative care	3,000,458,127	58.9%	3,043,749,694	57.4%
	HC.1.1		Inpatient curative care	2,023,290,255	39.7%	2,020,502,740	38.1%
		HC.1.1.1	General inpatient curative care	854,237,209	16.8%	879,245,476	16.6%
		HC.1.1.2	Specialized inpatient curative care	1,156,746,526	22.7%	1,128,581,547	21.3%
		HC.1.1.nec	Unspecified inpatient curative care (n.e.c.)	12,306,521	0.2%	12,675,717	0.2%
	HC.1.3		Outpatient curative care	884,228,860	17.4%	932,150,312	17.6%
		HC.1.3.1	General outpatient curative care	865,108,351	17.0%	910,885,709	17.2%
		HC.1.3.2	Dental outpatient curative care	16,634,685	0.3%	20,494,788	0.4%
		HC.1.3.nec	Unspecified outpatient curative care (n.e.c.)	2,485,824	0.0%	769,814	0.0%
	HC.1.nec		Unspecified curative care (n.e.c.)	92,939,012	1.8%	91,096,643	1.7%
HC.3			Long-term care (health)	49,629,101	1.0%	51,117,974	1.0%
	HC.3.nec		Unspecified long-term care (n.e.c.)	49,629,101	1.0%	51,117,974	1.0%
HC.4			Ancillary services (non-specified by function)	109,060,506	2.1%	89,935,382	1.7%
	HC.4.1		Laboratory services	9,292,005	0.2%	6,960,210	0.1%

	HC.4.3	Patient transportation	88,168,988	1.7%	71,027,673	1.3%
	HC.4.nec	Unspecified ancillary services (n.e.c.)	11,599,513	0.2%	11,947,499	0.2%
HC.5		Medical goods (non-specified by function)	429,858,818	8.4%	442,754,583	8.4%
	HC.5.nec	Unspecified medical goods (n.e.c.)	429,858,818	8.4%	442,754,583	8.4%
HC.6		Preventive care	863,465,021	17.0%	1,106,829,998	20.9%
HC.7		Governance, and health system and financing administration	280,692,189	5.5%	385,970,823	7.3%
HC.9		Other health care services not elsewhere classified (n.e.c.)	357,785,494	7.0%	180,147,152	3.4%
All HC			5,090,949,255	100.0%	5,300,505,607	100.0%

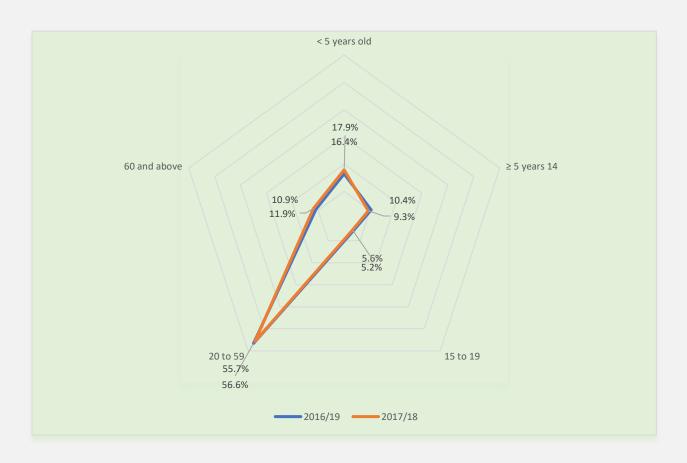
The largest share of CHE was spent on curative care services, which accounted for 59% and 57% of the total CHE in 2016-17 and 2017-18 respectively.

Nearly 2% of CHE was used for ancillary services non specified by functions (i.e. for laboratory services and patient transport in acute emergencies). In both the fiscal years, around 8.4% of CHE was spent on medicines and other medical goods that people bought from pharmacies.

Preventive care expenditures as a proportion of CHE were found to be 20% in FY 2016/17 and 21% in FY 2017/18. Central administration costs were estimated at 5.5% and 7.3% in the two fiscal years. The administration cost of hospitals is not included under curative care in line with the SHA framework.

#### 8.2 CHE by Age

The disaggregation of CHE by age is based on the relative proportion of the estimated health care costs incurred by people in different age categories. These calculations were based on the distribution of patients by relative age, sex and disease. The details of calculation are provided in the section of methodology. Figure 4 and Table 4 presents pattern of CHE in different age groups.



*Table 4 CHE in FY 2016-17 and 2017-18 by age* 

Age		2016/17		2017/18	
		#	%	#	%
AGE.1	< 5 years old	836,501,394	16.4%	948,739,518	17.9%
AGE.2	≥ 5 years 14	529,628,246	10.4%	492,173,999	9.3%
AGE.3	15 to 19	286,643,602	5.6%	274,994,139	5.2%
AGE.4	20 to 59	2,883,385,403	56.6%	2,954,331,380	55.7%
AGE.5	60 and above	554,790,611	10.9%	630,266,573	11.9%
All AGE	•	5,090,949,255	100.0%	5,300,505,607	100.0%

The largest share of CHE, nearly 57%, was spent on the 20-59 year age group. This reflects the relatively larger representation of this age group in the Bhutanese population structure; further, expenditure related to reproductive health care services are also predominant in this age group. Over 26% of CHE was spent on the health care provision for children. However, the table below shows the per capita health care cost under each age group (this table is included to avoid confusion/misunderstanding that our health expenditure is dominated by the age bracket 20-59 as the age bracket reflected here does not have equal intervals):

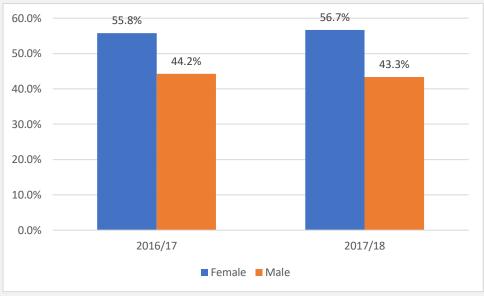
Table 5 Per Capita Health Expenditure by Age Group

Age		Population	20	16/17	2017	7/18
		(A)	Exp (B)	Per Capita (B/A)	Exp (C)	Per Capita (C/A)
AGE.1	< 5 years old	57,474	836,501,394	14,554.43	948,739,518	16,507.28
AGE.2	≥ 5 years 14	131,943	529,628,246	4014.07	492,173,999	3730.20
AGE.3	15 to 19	68,286	286,643,602	4197.69	274,994,139	4027.09
AGE.4	20 to 59	405,667	2,883,385,403	7107.76	2,954,331,380	7282.65
AGE.5	60 and above	63,775	554,790,611	8699.19	630,266,573	9882.66
All AGE		727,145	5,090,949,255	38,573.14	5,300,505,607	41,429.84

## 8.3 CHE by Gender

CHE by gender is estimated based on the gender-based patterns of seeking healthcare. Figure 5 and Table 6 show the gender-based disaggregation of CHE in fiscal years FY 2016-17 and 2017-18.

Figure 5 Percentage distribution of CHE in FY 2016/17 and FY 2017/18 by gender



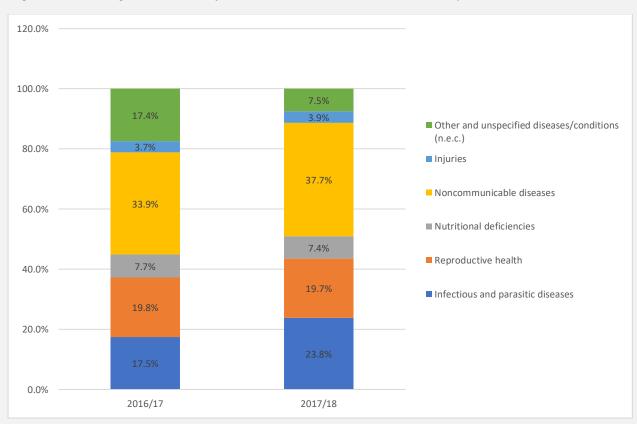
In both years, relatively larger share of CHE was assigned for females.

Gender		2016/17		2017/18		
		#	%	#	%	
GEN.1	Female	2,839,686,877.41	55.8%	3,004,769,220.42	56.7%	
GEN.2	Male	2,251,262,377.99	44.2%	2,295,736,386.51	43.3%	
All GEN		5,090,949,255.40	100.0%	5,300,505,606.93	100.0%	

### 8.4 CHE by Diseases

Figure 6 and table 7 presents the share of CHE by broader disease groups as per Global Disease Burden classification indicated in SHA 2011.

Figure 6 Percentage distribution of CHE in FY 2016/17 and FY 2017/18 by disease



The largest share of CHE in both fiscal years were dominated by non-communicable diseases (33.9% and 37.7% respectively) followed by reproductive health in 2016/17 (19.8%) and treatment of infectious diseases (23.8%).

	Classif	ication of d	iseases / conditions	2016/17		2017/18		
	Olassii	ication of a	iscuses / containons	#	%	#	%	
DIS.1			Infectious and parasitic diseases	889,939,840	17.5%	1,262,188,080	23.8%	
	DIS.1.1		HIV/AIDS and Other Sexually Transmitted Diseases (STDs)	49,542,930	1.0%	32,444,870	0.6%	
	DIS.1.2		Tuberculosis (TB)	54,868,710	1.1%	44,165,260	0.8%	
	DIS.1.3		Malaria	29,323,850	0.6%	38,137,540	0.7%	
	DIS.1.4		Respiratory infections	337,942,750	6.6%	377,824,660	7.1%	
	DIS.1.5		Diarrheal diseases	23,778,420	0.5%	11,953,330	0.2%	
	DIS.1.6		Neglected tropical diseases	4,450,250	0.1%	9,967,340	0.2%	
	DIS.1.7		Vaccine preventable diseases	81,102,030	1.6%	413,082,800	7.8%	
	DIS.1.ne		Other and unspecified infectious and parasitic diseases (n.e.c.)	308,930,900	6.1%	334,612,280	6.3%	
DIS.2			Reproductive health	1,008,966,860	19.8%	1,045,544,760	19.7%	
	DIS.2.1		Maternal conditions	316,095,220	6.2%	319,927,580	6.0%	
	DIS.2.2		Perinatal conditions	137,467,200	2.7%	128,875,070	2.4%	
	DIS.2.3		Contraceptive management (family planning)	424,773,600	8.3%	434,958,700	8.2%	
	DIS.2.ne c		Unspecified reproductive health conditions (n.e.c.)	130,630,840	2.6%	161,783,410	3.1%	
DIS.3			Nutritional deficiencies	389,634,240	7.7%	394,552,240	7.4%	
DIS.4			Non communicable diseases	1,725,302,510	33.9%	1,995,939,570	37.7%	
	DIS.4.1		Neoplasms	46,625,920	0.9%	52,598,270	1.0%	
	DIS.4.2		Endocrine and metabolic disorders	34,681,180	0.7%	42,534,430	0.8%	
		DIS.4.2.1	Diabetes	34,681,180	0.7%	42,534,430	0.8%	
	DIS.4.3		Cardiovascular diseases	173,528,510	3.4%	214,563,560	4.0%	
		DIS.4.3.1	Hypertensive diseases	76,186,100	1.5%	97,729,060	1.8%	
		DIS.4.3.ne c	Other and unspecified cardiovascular diseases (n.e.c.)	97,342,410	1.9%	116,834,500	2.2%	
	DIS.4.4		Mental & behavioral disorders, and Neurological conditions	165,827,920	3.3%	185,163,140	3.5%	

	DIS.4.5	Respiratory diseases	183,458,760	3.6%	208,238,420	3.9%
	DIS.4.6	Diseases of the digestive	357,855,930	7.0%	398,033,930	7.5%
	DIS.4.7	Diseases of the genito- urinary system	184,111,290	3.6%	196,888,050	3.7%
	DIS.4.8	Sense organ disorders	260,353,750	5.1%	317,540,800	6.0%
	DIS.4.9	Oral diseases	167,115,050	3.3%	207,765,880	3.9%
	DIS.4.ne c	Other and unspecified non communicable diseases (n.e.c.)	151,744,200	3.0%	172,613,090	3.3%
DIS.5		Injuries	189,999,410	3.7%	204,841,490	3.9%
DIS .nec		Other and unspecified diseases/conditions (n.e.c.)	887,106,450	17.4%	397,439,450	7.5%
All DIS			5,090,949,310	100.0%	5,300,505,590	100.0%

# 8.5 CHE by Dzongkhag

CHE by dzongkhags is computed by allocating expenses to the dzongkhags where services were availed. Expenditure for preventive interventions were determined after considering the geographical areas in which preventive interventions were targeted as per age and sex.

Table 8 CHE in FY 2016-17 and 2017-18 by regions and dzongkhags

	Sub Nat	ional Level	2016/17		2017/18		
	Sub-Nat	ionai Levei	#	%	#	%	
SNL.1		Central region	1,015,135,981.97	19.9%	1,098,733,146.14	20.7%	
	SNL.1.1	Bumthang	117,925,978.78	2.3%	114,170,416.79	2.2%	
	SNL.1.2	Dagana	123,922,525.56	2.4%	123,513,654.73	2.3%	
	SNL.1.3	Sarpang	399,084,995.51	7.8%	480,317,843.72	9.1%	
	SNL.1.4	Trongsa	103,072,379.07	2.0%	101,985,776.33	1.9%	
	SNL.1.5	Tsirang	129,640,920.67	2.5%	131,423,654.99	2.5%	
	SNL.1.6	Zhemgang	141,489,182.38	2.8%	147,321,799.58	2.8%	
SNL.2		Eastern Region	1,208,596,345.56	23.7%	1,283,988,206.70	24.2%	
	SNL.2.1	Lhuntse	98,513,836.34	1.9%	97,502,493.59	1.8%	
	SNL.2.2	Mongar	370,431,060.67	7.3%	420,479,601.00	7.9%	
	SNL.2.3	Pema Gatshel	134,246,008.52	2.6%	133,348,467.00	2.5%	
	SNL.2.4	Samdrup Jongkhar	206,185,066.99	4.1%	219,835,448.94	4.1%	
	SNL.2.5	Tashigang	285,555,958.15	5.6%	298,476,527.13	5.6%	
	SNL.2.6	Tashi Yangtse	113,664,414.89	2.2%	114,345,669.05	2.2%	
SNL.3		Western Region	2,867,216,927.88	56.3%	2,917,784,254.09	55.0%	
	SNL.3.1	Chukha	382,492,700.32	7.5%	385,805,562.02	7.3%	
	SNL.3.2	Gasa	31,249,609.67	0.6%	30,505,800.47	0.6%	
	SNL.3.3	Наа	69,437,555.82	1.4%	66,137,812.14	1.2%	

	SNL.3.4	Paro	206,325,228.48	4.1%	246,103,259.87	4.6%
	SNL.3.5	Punakha	147,835,693.76	2.9%	142,191,388.12	2.7%
	SNL.3.6	Samtse	194,060,455.03	3.8%	276,950,156.88	5.2%
	SNL.3.7	Thimphu	1,650,449,149.28	32.4%	1,584,477,875.46	29.9%
	SNL.3.8	Wangdue	185,366,535.51	3.6%	185,612,399.11	3.5%
All SNL			5,090,949,255.40	100.0%	5,300,505,606.93	100.0%

The CHE analysis by subnational levels showed that the highest CHE was reported from Thimphu dzongkhag followed by Sarpang, Mongar and Chukha. This could be attributed to the location of major hospitals (providers) in these dzongkhags which are the 350 bedded national referral hospital in Thimphu, 150 bedded regional referral hospitals in Mongar and Sarpang, and the 60 bedded general hospital in Chukha. Moreover, these dzongkhags have relatively higher proportion of health facilities as compared to other dzongkhags.

## 9 . CHE by Provider Interface

This section presents the analysis of CHE by provider institutions and by factors of provision.

#### 9.1 CHE by Providers

SHA 2011 classify health care providers as hospitals (general and specialized), providers of ambulatory health services, retailers, providers of medical goods, providers of preventive care, providers of health system administration and financing and rest of the economy.

Figure 7 and Table 9 presents the CHE in FY 2016-17 and 2017-18 by various health care providers in Bhutan.

Hospitals were found to be the most cost consuming health care providers in both years. It reflects relatively higher needs for curative care corresponding to higher expenses on curative care. Approximately, 68% and 70% of CHE in FY 2016-17 and 2017-18 is attributed to all types of hospitals in Bhutan. Dzongkhag level hospitals and BHUs account for the largest share of CHE (32%) whereas JDWNRH accounts for 21.5% and 23% in two fiscal years respectively.

Figure 7 Percentage distribution of CHE in FY 2016/17 and FY 2017/18 by health care providers

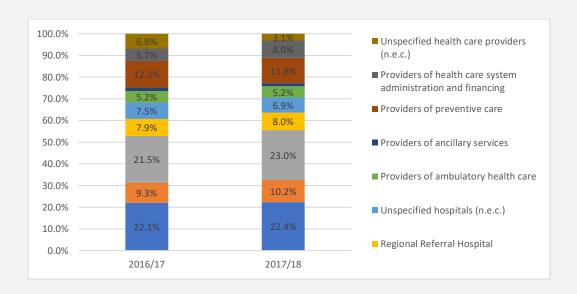


Table 9 CHE in FY 2016-17 and 2017-18 by health care providers

		Health	n care providers	2016/17	7	2017/18		
				#	%	#	%	
HP.1			Hospitals	3,477,739,173	68.3%	3,739,331,601	70.5%	
	HP.1.1		General hospitals	1,597,885,826	31.4%	1,726,802,445	32.6%	
		HP.1.1.1	Dzongkhag Hospitals	1,124,698,046	22.1%	1,185,572,307	22.4%	
		HP.1.1.2	BHu I, II & others	472,782,462	9.3%	541,230,138	10.2%	
		HP.1.1.nec	Other General hospitals	405,318	0.0%			
	HP.1.3		Specialised hospitals (Other than mental health hospitals)	1,496,205,920	29.4%	1,645,593,692	31.0%	
		HP.1.3.1	JDWNRH	1,096,145,023	21.5%	1,219,149,038	23.0%	
		HP.1.3.2	Regional Referral Hospital	400,060,897	7.9%	426,444,655	8.0%	
	HP.1.n ec		Unspecified hospitals (n.e.c.)	383,647,427	7.5%	366,935,464	6.9%	
HP.3			Providers of ambulatory health care	264,165,628	5.2%	273,636,238	5.2%	
	HP.3.1		Medical practices	263,435,628	5.2%	271,338,697	5.1%	
		HP.3.1.nec	Unspecified medical practices (n.e.c.)	263,435,628	5.2%	271,338,697	5.1%	
	HP.3.2		Dental practice	730,000	0.0%	2,297,541	0.0%	
HP.4			Providers of ancillary services	88,168,988	1.7%	71,027,673	1.3%	
	HP.4.1		Providers of patient transportation and emergency rescue	88,168,988	1.7%	71,027,673	1.3%	
HP.6			Providers of preventive care	624,799,766	12.3%	627,298,158	11.8%	
HP.7			Providers of health care system administration and financing	290,554,536	5.7%	423,885,848	8.0%	
HP.n ec			Unspecified health care providers (n.e.c.)	345,521,165	6.8%	165,326,089	3.1%	
All HP				5,090,949,255	100.0%	5,300,505,607	100.0%	

#### 9.2 CHE by Factors of Provision

Disaggregation of CHE by factors of provision allows to understand the distribution of current health expenses on various constituents of production. It includes expenditure incurred for paying compensation to employees in the health system, cost of drugs and other medical goods, cost of non-health care services and cost of consumption of fixed capital in the government health system.

Figure 8 and Table 10 presents the disaggregation details of CHE in fiscal years 2016-17 and 2017-18 by factors of provision.

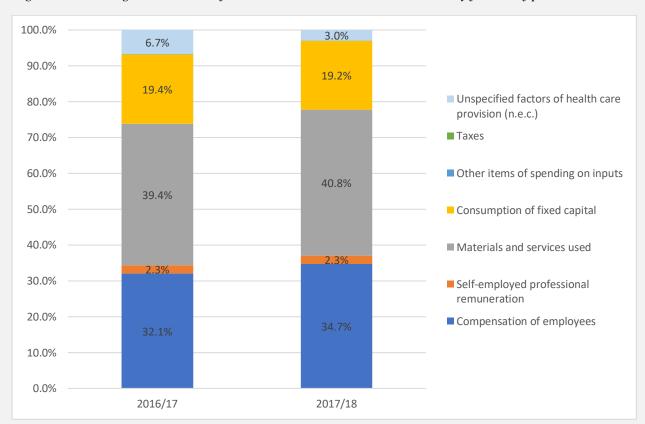


Figure 8 Percentage distribution of CHE in FY 2016/17 and FY 2017/18 by factors of provision

The largest share of CHE (nearly 40%) in both FY 2016-17 and 2017-18 were spent on purchasing materials and services related to health care. The second largest share (32% to 34%) was attributed for compensation of employees in both years, which include remuneration.

Table 10 CHE in FY 2016-17 and 2017-18 by factors of provision

		Eagta	rs of health care	provision	2016/17	'	2017/18		
		Facto	rs of nealth care	provision	#	%	#	%	
FP.1				Compensation of employees	1,632,989,933	32.1%	1,840,393,709	34.7%	
	FP.1.1			Wages and salaries	1,311,425,933	25.8%	1,436,098,566	27.1%	
	FP.1.2			Social contributions	134,541,249	2.6%	135,922,844	2.6%	
	FP.1.3			All Other costs related to employees	187,022,751	3.7%	268,372,299	5.1%	
FP.2				Self-employed professional remuneration	117,379,109	2.3%	120,900,482	2.3%	
FP.3				Materials and services used	2,006,848,479	39.4%	2,160,323,493	40.8%	
	FP.3.1			Health care services	387,404,191	7.6%	405,313,684	7.6%	
		FP.3.1.1		Laboratory & Imaging services	11,599,513	0.2%	11,947,499	0.2%	
		FP.3.1.nec		Other health care services (n.e.c.)	375,804,678	7.4%	393,366,185	7.4%	
	FP.3.2			Health care goods	997,724,851	19.6%	1,097,543,614	20.7%	
		FP.3.2.1		Pharmaceuticals	963,678,275	18.9%	1,097,170,962	20.7%	
			FP.3.2.1.1	ARV	12,878,534	0.3%	NS	0.0%	
			FP.3.2.1.2	TB drugs	4,658,809	0.1%	4,399,226	0.1%	
			FP.3.2.1.3	Antimalarial medicines	5,995,560	0.1%	4,759,863	0.1%	
			FP.3.2.1.4	Vaccines	8,089,952	0.2%	336,211,053	6.3%	
			FP.3.2.1.5	Contraceptives	314,400,000	6.2%	323,832,000	6.1%	
			FP.3.2.1.nec	Other pharmaceuticals (n.e.c.)	617,655,420	12.1%	427,968,821	8.1%	
		FP.3.2.2		Other health care goods	34,046,576	0.7%	372,652	0.0%	
			FP.3.2.2.nec	Other and unspecified health care goods (n.e.c.)	34,046,576	0.7%	372,652	0.0%	
	FP.3.3			Non-health care services	565,762,420	11.1%	591,747,024	11.2%	
		FP.3.3.1		Training	251,164,787	4.9%	228,212,832	4.3%	
		FP.3.3.2		Technical Assistance	3,168,801	0.1%	829,496	0.0%	
		FP.3.3.3		Operational research	1,838,843	0.0%		0.0%	
		FP.3.3.nec		Other non-health care services (n.e.c.)	309,589,988	6.1%	362,704,696	6.8%	
	FP.3.4			Non-health care goods	55,757,018	1.1%	65,719,171	1.2%	
	FP.3.nec			Other materials and services used (n.e.c.)	200,000	0.0%	NS	0.0%	
FP.4				Consumption of fixed capital	989,864,043	19.4%	1,019,559,964	19.2%	
FP.5				Other items of spending on inputs	932,741	0.0%	411,693	0.0%	
	FP.5.1			Taxes	932,741	0.0%	411,693	0.0%	
FP.nec				Unspecified factors of health care provision (n.e.c.)	342,934,950	6.7%	158,916,265	3.0%	
All FP					5,090,949,255	100.0%	5,300,505,607	100.0%	

(NS= Not specified in the year)

### 10 CHE by Financial Interface

The analysis of CHE by health financing dimensions describe how the funds related to health care flow from various fund providers (Institutional units providing revenues to financing schemes - FSRI), using various revenue mechanisms (Revenues of Financing Schemes -FS), financing arrangements (Health Financing Schemes -HF), and financing agents (Financing Agents -FA), until they are finally utilized to purchase or produce the healthcare services offered by all types of providers.

Figure 9 shows the financial flows related to CHE in Bhutan. The government (79%-80%) and household (13%) are the principal financiers of the health system. The contributions made by corporations, NGOs and Rest of the World (development partners) are found to be relatively small.

Government funds reach health services as internal transfers to various government institutions. In Bhutan, all donor funds to NGOs are also channeled through the government's revenue mechanisms. Households' funds are used for direct payments for private healthcare and purchasing primary insurance schemes. Funds of corporations are channeled through two revenue mechanisms: a. Voluntary insurance prepayment from employers and b. Other revenues from corporations n.e.c. that covers the reimbursement of healthcare bills of employees and cost of maintaining workplace-based healthcare services.

The rest of the world financing sources rely on the government to distribute the major share of their contribution to the country through the revenue mechanism called 'Transfers Distributed by Government from Foreign Origin'. The remaining portion of the rest of the world funds are added as 'Direct Foreign Transfers'.

The government uses several financing schemes (Ministry of Health Scheme, JDWNRH Scheme and Dzongkhag scheme) to manage its funds. Revenue mechanisms of these financing schemes is indicated in figure 9. The financing schemes related to private health expenditures have direct correspondence with the respective revenue mechanisms. A clear one to one correspondence is observed between the health financing schemes and financing agents.

Figure 9 Financial flows related to CHE in Bhutan

Institutional units providing revenues to financing schemes (FS.RI)	Revenues of Financing Schemes (FS)	Health Financing Schemes (HF)	Financing Agents (FA)
Government	Internal Transfers from The Government Domestic Revenue  Transfers Distributed by Government from Foreign	Ministry of Health Scheme  JDWNRH scheme	Ministry of Health  JDWNRH
	Origin	Dzongkhag Scheme	Dzongkhag administration
NPHISH	Other revenues from NPISH n.e.c.	NPISH Scheme	Non-Profit Institutions Serving Households (NPISH)
Corporations	Other revenues from corporations n.e.c.  Voluntary prepayment from employers	Enterprise Scheme	Employers
Households	Voluntary prepayment from individuals/households	Private Insurance Scheme	Commercial Insurance
	Other revenues from households n.e.c.	Household Out of Pocket Schemes	Households
Rest of the world	Direct Foreign Transfers	Rest of the World Financing Schemes	Rest of the World

# 10.1 CHE by Institutional Units Providing Revenues to Financing Schemes

'Institutional units providing revenues to financing schemes' implies to the various sources of funding healthcare. In Bhutan, the principal share (75% to 80%) of CHE is provided by the government. Households contributed 13% of total CHE in both fiscal years. Development partner's contribution to CHE was relatively small; furthermore, it declined from 11% in 2016-17 to 6% 2017-18.

Table 11 CHE in FY 2016-17 and 2017-18 by Institutional Units Providing Revenues to Financing Schemes

				2016/17		2017/18		
	Institutional ur	nits providing reven	ues to financing schemes	#	%	#	%	
FS.RI.1.1			Government	3,797,719,640	74.6%	4,219,324,654	79.6%	
FS.RI.1.2			Corporations	13,795,365	0.3%	16,343,061	0.3%	
FS.RI.1.3			Households	683,567,347	13.4%	703,609,049	13.3%	
FS.RI.1.4			NPISH	624,894	0.0%	1,935,306	0.0%	
FS.RI.1.5			Rest of the world	564,540,893	11.1%	320,994,366	6.1%	
	FS.RI.1.5.1		Bilateral donors	15,027,241	0.3%	18,093,275	0.3%	
		FS.RI.1.5.1.4	Canada	NS	0.0%	1,064,153	0.0%	
		FS.RI.1.5.1.23	Switzerland	NS	0.0%	482,777	0.0%	
		FS.RI.1.5.1.25	United States (USAID)	8,153,965	0.2%	9,495,295	0.2%	
		FS.RI.1.5.1.26	India	6,873,276	0.1%	5,097,950	0.1%	
		FS.RI.1.5.1.nec	Other and Unspecified bilateral donors (n.e.c.)	NS	0.0%	1,953,100	0.0%	
	FS.RI.1.5.2		Multilateral donors	528,393,199	10.4%	273,495,639	5.2%	
		FS.RI.1.5.2.8	Global Fund	104,349,290	2.0%	73,533,752	1.4%	
		FS.RI.1.5.2.15	UNFPA	6,445,906	0.1%	2,523,043	0.0%	
		FS.RI.1.5.2.16	UNICEF	69,800,982	1.4%	33,282,314	0.6%	
		FS.RI.1.5.2.20	WHO	346,508,054	6.8%	163,335,956	3.1%	
		FS.RI.1.5.2.nec	Other and Unspecified multilateral donors (n.e.c.)	1,288,968	0.0%	820,574	0.0%	
	FS.RI.1.5.3		Private donors	NS	0.0%	7,971,213	0.2%	
		FS.RI.1.5.3.nec	Other and Unspecified private donors (n.e.c.)	NS	0.0%	7,971,213	0.2%	
	FS.RI.1.5.nec		Unspecified rest of the world (n.e.c.)	21,120,453	0.4%	21,434,239	0.4%	
FS.RI.1.nec			Unspecified institutional units providing revenues to financing schemes (n.e.c.)	30,701,116	0.6%	38,299,170	0.7%	
All FS.RI				5,090,949,255	100.0%	5,300,505,607	100.0%	

(NS= Not specified in the year)

#### 10.2 CHE by Revenues of Health Care Financing Schemes

Reflecting the higher percentage of government contribution to CHE, the main revenue mechanism of CHE in both fiscal years have been transfers from government domestic revenue representing 75% to 80% respectively. Other domestic revenue includes revenues from households, corporations and a few non specified sources as indicated in Table 12.

Table 12 CHE in FY 2016-17 and 2017-18 by revenues of healthcare financing Schemes

	Reven	ues of healt	th care financing schemes	2016/17	,	2017/18		
				#	%	#	%	
FS.1			Transfers from government domestic revenue (allocated to health purposes)	3,793,695,421	74.5%	4,216,526,031	79.5%	
	FS.1.1		Internal transfers and grants	3,639,685,189	71.5%	4,094,308,977	77.2%	
	FS.1.4		Other transfers from government domestic revenue (BHTF)	154,010,232	3.0%	122,217,054	2.3%	
FS.2			Transfers distributed by government from foreign origin	242,105,628	4.8%	226,610,381	4.3%	
FS.5			Voluntary prepayment	8,299,865	0.2%	7,920,052	0.1%	
	FS.5.1		Voluntary prepayment from individuals/households	6,141,900	0.1%	5,860,838	0.1%	
	FS.5.2		Voluntary prepayment from employers	2,157,965	0.0%	2,059,214	0.0%	
FS.6			Other domestic revenues n.e.c.	720,388,857	14.2%	755,283,787	14.2%	
	FS.6.1		Other revenues from households n.e.c.	677,425,447	13.3%	697,748,211	13.2%	
	FS.6.2		Other revenues from corporations n.e.c.	11,637,400	0.2%	14,283,847	0.3%	
	FS.6.3		Other revenues from NPISH n.e.c.	31,326,010	0.6%	43,251,729	0.8%	
FS.7			Direct foreign transfers	326,459,484	6.4%	94,165,355	1.8%	
	FS.7.1		Direct foreign financial transfers	326,459,484	6.4%	94,165,355	1.8%	
		FS.7.1.2	Direct multilateral financial transfers	326,459,484	6.4%	94,165,355	1.8%	
All FS		•		5,090,949,255	100.0%	5,300,505,607	100.0%	

The household expenditures (OOPS) excludes non-emergency transport costs and expenditures made on rimdo and puja. Cost borne for emergency transport activities were factored in the OOPS. Rimdo and puja expenditures were excluded as this practice does not fall within the health care boundary definition according to SHA 2011.

#### 10.3 CHE by Financing Schemes

The financing of the government health sector is mobilized through several financing schemes. These schemes include MoH Scheme and JDWNRH Scheme that are classified as the Central Government Schemes, and the Dzongkhag Health Scheme as a sub-national scheme.

Government schemes apportioned approximately 79% and 84% of CHE in FY 2016-17 and 2017-18 respectively. The central government scheme that covered the expenditures related to MoH, JDWNRH, regional referral hospitals and three hospitals under MoH's administration was estimated over 60% of CHE in both fiscal years, while Dzongkhag health scheme accounted for 17% to 18%. The households' out of pocket payments scheme accounted for a little over 13% of CHE. The voluntary health care payment schemes that included health care insurance expenditures incurred by employers and private individuals, covered only a small share of CHE.

Table 13 CHE in FY 2016-17 and 2017-18 by financing schemes

			F'		2016/17		2017/18	
			Financing	schemes	#	%	#	%
HF.1			Government schemes and compulsory contributory health care financing schemes	4,035,801,049	79.3%	4,443,136,412	83.8%	
	HF.1.1			Government schemes	4,035,801,049	79.3%	4,443,136,412	83.8%
		HF.1.1.1		Central government schemes	3,188,614,069	62.6%	3,486,215,871	65.8%
			HF.1.1.1.1	Ministry of Health Scheme	2,190,088,898	43.0%	2,358,210,777	44.5%
			HF.1.1.1.2	JDWNRH Scheme	947,947,054	18.6%	1,066,505,130	20.1%
			HF.1.1.1.nec	Other Central government schemes	50,578,117	1.0%	61,499,963	1.2%
		HF.1.1.2		State/regional/local government schemes	847,186,980	16.6%	956,920,542	18.1%
			HF.1.1.2.1	Dzongkhag Health Sector Scheme	847,186,980	16.6%	956,920,542	18.1%
HF.2				Voluntary health care payment schemes	51,263,275	1.0%	65,455,628	1.2%
	HF.2.1			Voluntary health insurance schemes	8,299,865	0.2%	7,920,052	0.1%
		HF.2.1.1		Primary/substitutory health insurance schemes	8,299,865	0.2%	7,920,052	0.1%
			HF.2.1.1.1	Employer-based insurance (Other than enterprises schemes)	2,157,965	0.0%	2,059,214	0.0%
			HF.2.1.1.3	Other primary coverage schemes	6,141,900	0.1%	5,860,838	0.1%
	HF.2.2			NPISH financing schemes (including development agencies)	31,326,010	0.6%	43,251,729	0.8%
		HF.2.2.1		NPISH financing schemes (excluding HF.2.2.2)	31,326,010	0.6%	43,251,729	0.8%
	HF.2.3			Enterprise financing schemes	11,637,400	0.2%	14,283,847	0.3%
		HF.2.3.1		Enterprises (except health care providers) financing schemes	11,637,400	0.2%	14,283,847	0.3%
HF.3				Household out-of-pocket payment	677,425,447	13.3%	697,748,211	13.2%
	HF.3.1			Out-of-pocket excluding cost-sharing	677,425,447	13.3%	697,748,211	13.2%
HF.4				Rest of the world financing schemes (non-resident)	326,459,484	6.4%	94,165,355	1.8%
	HF.4.2			Voluntary schemes (non-resident)	326,459,484	6.4%	94,165,355	1.8%
		HF.4.2.2		Other schemes (non-resident)	326,459,484	6.4%	94,165,355	1.8%

		HF.4.2.2.1	Philanthropy/international NGOs schemes	34,572,809	0.7%	424,718	0.0%
		HF.4.2.2.2	Foreign development agencies schemes	291,886,675	5.7%	93,740,637	1.8%
All HF				5,090,949,255	100.0%	5,300,505,607	100.0%

#### 10.4 CHE by Financing Agents

Government is the principal financing agent and handling 79 % and 84 % of CHE in FY 2016-17 and 2017-18 respectively. Table 14 presents the distribution of CHE by financing agents.

Table 14 CHE in FY 2016-17 and 2017-18 by financing agents

		Fina	ncing agents	2016/17	7	2017/18		
				#	%	#	%	
FA.1			General government	4,026,049,199	79.1%	4,432,395,093	83.6%	
	FA.1.1		Central government	3,178,862,219	62.4%	3,475,474,551	65.6%	
		FA.1.1.1	Ministry of Health	2,190,088,898	43.0%	2,358,210,777	44.5%	
		FA.1.1.2	Other ministries and public units (belonging to central government)	988,773,321	19.4%	1,117,263,774	21.1%	
	FA.1.2		State/Regional/Local government	847,186,980	16.6%	956,920,542	18.1%	
		FA.1.2.1	Dzongkhag Administration	847,186,980	16.6%	956,920,542	18.1%	
FA.2			Insurance corporations	8,299,865	0.2%	7,920,052	0.1%	
	FA.2.1		Commercial insurance companies	8,299,865	0.2%	7,920,052	0.1%	
FA.3			Corporations (Other than insurance corporations) (part of HF.RI.1.2)	11,637,400	0.2%	14,283,847	0.3%	
	FA.3.2		Corporations (Other than providers of health services)	11,637,400	0.2%	14,283,847	0.3%	
FA.4			Non-profit institutions serving households (NPISH)	41,077,860	0.8%	53,993,048	1.0%	
FA.5			Households	677,425,447	13.3%	697,748,211	13.2%	
FA.6			Rest of the world	326,459,484	6.4%	94,165,355	1.8%	
	FA.6.1		International organizations	326,459,484	6.4%	94,165,355	1.8%	
All FA			'	5,090,949,255	100.0%	5,300,505,607	100.0%	

# 11 Methodology

The NHA study was conducted using the System of Health Accounts (SHA) 2011 guidelines. The Health Account Production Tool (HAPT) (V4.0.0.6) was used to process data and produce reports.

#### 11.1SHA 2011 and HAPT Tool

The SHA 2011, is a collection of standards, definitions and guidelines for producing NHA. SHA 2011 facilitates the production of comparable health accounts across countries and between different time periods in the same country. SHA 2011 principles envision a health financing system through three primary dimensions. They include: 1) Consumer Interface 2) Provider Interface and 3) Financing Interface.

Health Accounts Production Tool, (HAPT) is a public domain windows-based software program that can be used to digitize health account details in a systematic manner and produce various health accounts reports. HAPT is designed to be used with SHA 2011 guidelines and has in built classifications that can be customized to represent specific country contexts. Users of HAPT should define classifications to be used in the country and identify data sources. Data from various sources should be gathered, processed and entered to the HAPT enabling a process called "mapping" to collate these data by different SHA classification characteristics. Successful completion of mapping allows the creation of tables and graphs related to health accounts.

#### 11.2 Customization of NHA accounts

Two NHA studies were created in the HAPT for FY 2016/17 and 2017/18 simultaneously. Accounting periods were set to be between 01/07/16 to 30/06/17 and 01/07/17 to 30/06/18 to commensurate with the accounting practices of the RGoB. The accounts were customized to have 13 CHE classifications including age, gender and disease accounts. The standard classifications were changed to reflect the Bhutanese Health system context. The SNL classification was created based on distribution of dzongkhag under three regions.

#### 11.3 Data Sources

A comprehensive data records on health expenditures were availed from the routine financial data systems of MoH. MoH's expenditure records included both recurrent and capital expenditures categorized according to standard accounting classifications. Background data associated with government expenditure records were sufficient to recognize classification codes related to FSRI, FS, HF, FA, HP, SNL and FP classifications.

The expenditure data obtained through Ministry of Finance (MoF) by the MoH had 3 different

origins. MoH's expenditure covered the expenditures of central administration including preventive care programmes, Bhutan Health Trust Fund (BHTF), Bhutan Medical and Health Council (BMHC), 2 Regional Referral Hospitals, Phuntsholing, Gidakom and Deothang hospitals. Expenditure report of Drug Regulatory Authority (DRA), Bhutan Narcotic Control Authority (BNCA) and JDWNRH were obtained separately from MoF. Dzongkhag and Geog level institutions has separate expenditure reports on the expenditures made by dzongkhag level administration, hospitals, BHUs, sub posts and outreach clinics were obtained from Dzongkhag and Geog level institutions.

Age, sex and disease specific morbidity data on outpatient, inpatient and preventive care records were available for all institutions except for disaggregated outpatient data of JDWNRH. This data was used to derive mapping keys based on HC, AGE, Gender and Disease classifications.

Since all 'rest of the world' funding were channeled through the MoH, data related to donor expenditures were also included in the MoH expenditure reports. Data on remaining direct expenditures made by donors directly (mostly procurement related expenses) were obtained separately.

Detailed health expenditure data recorded by the MoF in the Annual Financial Report were used to verify the consistency of MoH expenditure data.

At present Bhutan has around 10 NGOs dealing with health related activities. Data from 7 NGOs were received and the expenditures of remaining NGOs were imputed based on group average of reported NGOs.

Data on employer related health expenses were collected from all major corporations in the country. Three types of health expenditures were reported by employers. They included expenditures made on claim reimbursements, purchasing of insurance premium and providing institutional based health care.

The expenditure records of the Royal Insurance Corporation of Bhutan (RICBL) were used as the source of insurance-based health expenditures.

OOPS were estimated using the Bhutan Living Standard Survey 2017 (BLSS 2017). Health expenditure component of the BLSS 2017 survey data related to health expenditures on outpatient and inpatient were used as a basis to estimate OOPS. Household costs related to transport for non emergency (routine) hospital visits, rimdo and puja were not considered for estimating the health accounts. Transport cost for emergency medical care was included in estimating OOPS. Expenditure incurred on rimdo and puja were excluded as this practice does not conform to the health care boundary definition according to SHA 2011. BLSS survey included sufficient information to create distribution keys for mapping on health care provider, area, age and gender.

#### 11.4Data Processing and import

MoH, JDWNRH and Dzongkhag data records were customized in excel sheets, so that they can be directly imported to HAPT using auto-binding technique. Original data files were sorted and processed to ensure only the expenditure lines remain after processing. Qualitative information was used to classify each expenditure line into respective classification categories and codes related to FSRI, FS, HF, FA, SNL, FP and HP. In addition, special coding columns were maintained to facilitate the repeat mapping procedures, where relevant. Once processed, double checking for coding consistencies was carried out. The data files were then imported under relevant data source categories.

#### 11.5 Data Mapping and estimation

The data from Donors, Government, Employers, NGO, Insurance companies and part of TCAM institutes were available from actual expenditure reports. Household costs were estimated.

The nature of data record arrangement in the government health system enabled the identification and direct coding of FSRI, FS, HF, FA, SNL, FP and HP classifications in most expenditure files. As described earlier, direct coding procedure was accomplished automatically through auto binding. Mapping in relation to HC, Age, Gender and disease classifications were carried out using respective disease keys.

Morbidity data were available for each district separately and they were disaggregated by type of institution, type of care within institution and by age, sex and disease. These morbidity data files were selectively consolidated to compile three national master files; one each for outpatient care, inpatient care and preventive care. Each master file presented data on number of patients under each disease condition further sub categorized under 10 age-sex categories (5 age and 2 sex categories). In addition, the information was retained so that these data files could be filtered by districts and type of institution.

Adjustments were made to standardize the number of patients in outpatient and preventive master files so that they are comparable with inpatient data files. A cost study carried out in Bhutan (MoH, 2011) indicated cost ratios between different types of health care functions (inpatient and outpatient costs per patient) across different types of health institutions. These cost ratios were used to convert number of outpatient and preventive care patient visits into inpatient equivalents. This was achieved by multiplying respective data lines in master files by disease, hospital type-based cost ratios related to them.

These standardized values were used to calculate mapping keys related to Disease, HC, Age, and

Gender classifications. Excel pivot tables were used to create relevant proportions.

Separate age-based mapping keys were created for out-patient and in-patient care in different health care providers. These keys were based on the standardized total patient days under each age class in a particular type of care and provider. The age categories of preventive care components were directly allocable.

Separate gender classifications were created for each age category under different types of providers. These were also based on the total standard patient days assigned for male and female patients under each provider, function and age category. Whenever age related data were not available for a particular expenditure, the respective population-based age distribution was used to create distribution keys. Disease classifications were also created based on the total standardized patient days assigned for each disease. Separate disease keys were created based on type of provider.

Cost of consumption of fixed capital in government institutes were estimated in the following manner:

Consumption of fixed capital (CFC) for buildings, vehicles and equipment (Medical and other) and furniture that belongs to MoH were calculated for each year.

The number and types of capital items prevailed during the 2 fiscal years were listed by reviewing annual health bulletins and other relevant reports.

Then for each year, annualized capital cost (CFC) for corresponding items were calculated. Annualized capital cost was based on the following formula:

#### CFCit = (RC it / Annualization factor it)

Where,

 $CFC_{it}$  = Consumption of Fixed Capital of infrastructure item i in year t  $RC_{it}$  = Replacement cost of infrastructure item i at the end of year t = (Present cost \* (1+ real r) Real r = real interest rate = {[(1+nominal interest rate)/ (1+annual inflation)]-1}

Annualization factor =  $(1/r) x [1 - (1/(1+r)^n)]$ where, r = real interest rate, and n = life span of the infrastructure Real interest rate was calculated using the nominal interest rates and inflation rates in Bhutan pertaining to each year. Lifespan of a building was set at 60 years while those for vehicles and equipment assumed to be 10 and 5 years respectively.

Household expenditure data for FY 2016/17 and FY 2017/18 were estimated by forecasting these amounts based on the BLSS 2012 survey data. Initially, outpatient, delivery and inpatient per capita health expenditures incurred by Bhutanese people in 2012 was estimated. This was accomplished by running the original database using STATA software.

BLSS survey data included data on background variables such as age, sex, etc.. so that adequate filtration of estimates could be done when finding out the relevant costs percentages required for creating age and gender related distribution keys. BLSS data also provided information on provider, and health care function (only for OPD) so that distribution keys for HP, HC, DIS classifications could be derived. BLSS 2017 data were used for estimating OOPs in FY 2016/17 and figures were inflated to estimate OOPS for 2017/18.

Donor data were mainly retrieved from the government data sources, supplemented by the reports directly obtained from Donors. These records contained adequate information to identify FSRI, FS, HF, FA, FP and HC classifications. In some cases, donor expenditures related to preventive care, region, age and gender coding were not available. Hence, it was assumed that these funds for which data were not available were mostly incurred on overall preventive works. Hence, they were mapped using distribution keys created based on national population characteristics.

Coding for FSRI, FS, HF, FA for employer data were implied from the nature of information. No details on coding related to FP, HC and HP classifications were available. Therefore, they were coded into respective unidentified categories. The overall distribution keys derived from the SNL, Age, Gender and disease cost distributions pertaining to government data were used for coding employer data on SNL, Age (productive age only), gender and disease classifications. It was assumed that SNL, Age, Gender and disease patterns among employees who fall ill are similar to that of the normal population.

Insurance data allowed the direct identification of FSRI, FS, HF, FA classifications based on context. FP, HP and HC classification were classified as non-specific due to lack of identification data. RICB data had adequate information to develop SNL based distribution keys.

No specific data available for mapping NGO expenditures in to HC, HP, FP classifications and hence they were assigned to .nec (un specified) categories. SNL, age, gender classifications were assumed to be equal to national population distributions related to these criteria.

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# 12 Appendix- NHA detailed Tables

# 12.1 Financing Schemes and Revenues of Financing Schemes (HF x FS) – 2016/17

Ngultrum (BTN), Million						Revenues o	of health ca	re financing	schemes						
Financing schemes	Transfer s from govern ment domesti c revenue (allocate d to health purpose s)	Inter nal tran sfer s and gran ts	Other transfe rs from govern ment domes tic revenu e (BHTF)	Trans fers distri buted by gover nmen t from foreig n origin	Volu ntar y prep aym ent	Volunt ary prepay ment from individ uals/h ouseh olds	Volu ntar y prep aym ent from emp loye rs	Othe r dom estic reve nue s n.e.c	Other reven ues from hous ehold s n.e.c.	Othe r reve nue s from corp orati ons n.e.c .	Oth er rev enu es fro m NPI SH n.e. c.	Dir ect for eig n tra nsf ers	Dir ect for eig n fin an cial tra nsf ers	Direct multil ateral finan cial transf ers	All FS
Government schemes and compulsory contributory health care financing schemes	3,794	3,640	154	242											4,036
Government schemes	3,794	3,640	154	242											4,036
Central government schemes	2,954	2,800	154	235											3,189
Ministry of Health Scheme	1,971	1,824	148	219											2,190
JDWNRH Scheme	944	944		4											948
Other Central government schemes	39	32	6	12											51
State/regional/local government schemes	840	840	0	7											847
Dzongkhag Health Sector Scheme	840	840	0	7											847
Voluntary health care payment schemes					8	6	2	43		12	31				51

Voluntary health insurance					8	6	2								8
schemes															
Primary/substitutory health insurance schemes					8	6	2								8
Employer-based insurance					2		2								2
(Other than enterprises							2								۷
schemes)															
Other primary coverage					6	6									6
schemes					0	0									U
NPISH financing schemes								31			31				31
(including development								01			01				01
agencies)															
NPISH financing schemes								31			31				31
(excluding HF.2.2.2)											• •				
Enterprise financing								12		12					12
schemes															
Enterprises (except health								12		12					12
care providers) financing															
schemes															
Household out-of-pocket								677	677						677
payment															
Out-of-pocket excluding								677	677						677
cost-sharing															
Rest of the world financing												326	326	326	326
schemes (non-resident)															
Voluntary schemes (non-												326	326	326	326
resident)															
Other schemes (non-												326	326	326	326
resident)															
Philanthropy/international												35	35	35	35
NGOs schemes												222	222	222	222
Foreign development												292	292	292	292
agencies schemes	0.704	0.040	454	040	^	^	0	700	077	40	24	200	200	202	5.004
All HF	3,794	3,640	154	242	8	6	2	720	677	12	31	326	326	326	5,091

# 12.2 Financing Schemes and Revenues of Financing Schemes (HF x FS)-2017/18

Ngultrum (BTN), Million					Re	evenues of hea	alth care fin	ancing sche	emes						
Financing schemes	Transfers from governmen t domestic revenue (allocated to health purposes)	Internal transfer s and grants	Other transfers from governme nt domestic revenue	Transfer s distribut ed by governm ent from foreign origin	Volunta ry prepay ment	Voluntary prepayme nt from individual s/househ olds	Volunta ry prepay ment from employ ers	Other domesti c revenue s n.e.c.	Other revenue s from househ olds n.e.c.	Other revenu es from corpora tions n.e.c.	Other reven ues from NPISH n.e.c.	Direct foreig n transf ers	Direct foreig n financ ial transf ers	Direct multilate ral financial transfers	All FS
Government schemes and compulsory contributory health care financing schemes	4,217	4,094	122	227											4,443
Government schemes	4,217	4,094	122	227											4,443
Central government schemes	3,261	3,138	122	226											3,486
Ministry of Health Scheme	2,144	2,030	114	214											2,358
JDWNRH Scheme	1,067	1,067													1,067
Other Central government schemes	50	42	8	12											62
State/regional/local government schemes	956	956		1											957
Dzongkhag Health Sector Scheme	956	956		1											957
Voluntary health care payment schemes					8	6	2	58		14	43				65
Voluntary health insurance schemes					8	6	2								8

Primary/substitutory health insurance schemes					8	6	2								8
Employer-based insurance (Other than enterprises schemes)					2		2								2
Other primary coverage schemes					6	6									6
NPISH financing schemes (including development agencies)								43			43				43
NPISH financing schemes (excluding HF.2.2.2)								43			43				43
Enterprise financing schemes								14		14					14
Enterprises (except health care providers) financing schemes								14		14					14
Household out-of-pocket payment								698	698						698
Out-of-pocket excluding cost-sharing								698	698						698
Rest of the world financing schemes (non-resident)												94	94	94	94
Voluntary schemes (non-resident)												94	94	94	94
Other schemes (non-resident)												94	94	94	94
Philanthropy/international NGOs schemes												0	0	0	0
Foreign development agencies schemes												94	94	94	94
All HF	4,217	4,094	122	227	8	6	2	755	698	14	43	94	94	94	5,301

# 12.3 Health Care Providers and Financing Schemes (HP x HF) – 2016/17

Ngultrum (BTN), Million					Fi	nancing	schemes					
Health care providers	Govern ment scheme s and compul sory contrib utory health care financin g scheme s	Ministry of Health Scheme	JDW NRH Sche me	Other Centr al gover nmen t sche mes	Dzon gkha g Healt h Secto r Sche me	Volu ntary healt h care paym ent sche mes	Volu ntary healt h insur ance sche mes	NPIS H finan cing sche mes (inclu ding devel opme nt agen cies)	Enter prise finan cing sche mes	Hous ehold out- of- pocke t paym ent	Rest of the world finan cing sche mes (non- resid ent)	All HF
Hospitals	3,099	1,327	948		825					345	33	3,478
General hospitals	1,598	774			824							1,598
Dzongkhag Hospitals	1,125	667			458							1,125
BHu I, II & others	473	106			367							473
Other General hospitals	0	0										0
Specialized hospitals (Other than mental health hospitals)	1,496	548	948									1,496
JDWNRH	1,096	148	948									1,096
Regional Referral Hospital	400	400										400
Unspecified hospitals (n.e.c.)	5	5			0					345	33	384
Providers of ambulatory health care	1	1								263		264
Medical practices										263		263
Unspecified medical practices (n.e.c.)										263		263
Dental practice	1	1										1
Providers of ancillary services	20	20								69		89
Providers of patient transportation and emergency rescue	19	19								69		88

Providers of preventive care	624	582		19	23						1	625
Providers of health care system administration and financing	291	259		31								291
Government health administration agencies	288	256		31								288
Other administration agencies	3	3										3
Unspecified health care providers (n.e.c.)	2	2				51	8	31	12		292	345
All HP	4,036	2,190	948	51	847	51	8	31	12	677	326	5,091

# 12.4 Health Care Providers and Financing Schemes (HP x HF)- 2017/18

Ngultrum (BTN), Million					Fi	inancing s	chemes						
Health care providers	Governm ent schemes and compuls ory contribut ory health care financing schemes	Governm ent schemes	Ministry of Health Scheme	JDWNRH Scheme	Othe r Cent ral gove rnme nt sche mes	Dzong khag Health Sector Sche me	Volu ntary healt h care pay ment sche mes	Volu ntary healt h insur ance sche mes	NPIS H finan cing sche mes (incl udin g deve lopm ent agen cies)	Ente rpris e finan cing sche mes	House hold out-of- pocke t payme nt	Rest of the worl d finan cing sche mes (non-resid ent)	All HF
Hospitals	3,384	3,384	1,392	1,067		925			,		355	0	3,739
General hospitals	1,727	1,727	802			925							1,727
Dzongkhag Hospitals	1,186	1,186	693			493							1,186
BHu I, II & others	541	541	109			432							541
JDWNRH	1,219	1,219	153	1,067									1,219
Regional Referral Hospital	426	426	426										426
Unspecified hospitals (n.e.c.)	11	11	11								355	0	367
Providers of ambulatory health care	2	2	2								271		274
Medical practices											271		271
Unspecified medical practices (n.e.c.)											271		271
Dental practice	2	2	2										2
Providers of ancillary services											71		71
Providers of patient transportation and emergency rescue											71		71

Providers of preventive care	627	627	570		25	32						0	627
Providers of health care system administration and	424	424	387		37								424
financing													
Government health administration agencies	424	424	387		37								424
Unspecified health care providers (n.e.c.)	6	6	6				65	8	43	14		94	165
All HP	4,443	4,443	2,358	1,067	61	957	65	8	43	14	698	94	5,301

# 12.5 Health Care Functions and Financing Schemes (HC x HF)- 2016/17

Ngultrum (BTN), Million							Financin	g schen	nes						
Health care functions	Gover nment sche mes and comp ulsory contri butor y health care financ ing sche mes	Gover nment sche mes	Centr al gover nment sche mes	Minist ry of Health Sche me	JDW NRH Sch eme	Oth er Cen tral gov ern men t sch eme s	Stat e/re gion al/lo cal gov ern men t sche mes	Dzo ngk hag Heal th Sect or Sch eme	Volunta ry heal th care pay men t sch eme s	Vol unta ry heal th insu ranc e sch eme s	NPI SH fina ncin g sch eme s (incl udin g dev elop men t age ncie s)	Ent erpr ise fina ncin g sch eme s	Hou seh old out- of- poc ket pay men t	Rest of the worl d fina ncin g sche mes (non - resi dent )	AII HF
Curative care	2,863	2,863	2,132	1,404	728		731	731	20	8		12	117		3,000
Inpatient curative care	2,011	2,011	1,619	906	713		392	392					12		2,023
Outpatient curative care	838	838	506	490	15		332	332					46		884
Unspecified curative care (n.e.c.)	14	14	7	7			7	7	20	8		12	59		93
Long-term care (health)													50		50
Ancillary services (non-specified by function)	29	29	29	29									81		109
Medical goods (non-specified by function)													430		430
Preventive care	863	863	748	509	220	19	116	116							863

Governance, and health system and financing administration	281	281	281	249		31									281
Other health care services not elsewhere classified (n.e.c.)									31		31			326	358
All HC	4,036	4,036	3,189	2,190	948	51	847	847	51	8	31	12	677	326	5,091

# 12.6 Health Care Functions and Financing Schemes (HC x HF)- 2017/18

Ngultrum (BTN), Million					Fir	nancing so	hemes						
Health care functions	Governm ent schemes and compuls ory contribut ory health care financing schemes	Governm ent schemes	Ministry of Health Scheme	JDWNRH Scheme	Othe r Cent ral gove rnme nt sche mes	Dzong khag Health Sector Sche me	Volu ntary healt h care pay ment sche mes	Volu ntary healt h insur ance sche mes	NPIS H finan cing sche mes (incl udin g deve lopm ent agen cies)	Ente rpris e finan cing sche mes	House hold out-of- pocke t payme nt	Rest of the worl d finan cing sche mes (non-resid ent)	AII HF
Curative care	2,901	2,901	1,239	863		798	22	8		14	121		3,044
Inpatient curative care	2,008	2,008	828	748		432					13		2,021
Outpatient curative care	884	884	403	115		367					48		932
Unspecified curative care (n.e.c.)	8	8	8				22	8		14	60		91
Long-term care (health)											51		51
Unspecified long-term care (n.e.c.)											51		51
Ancillary services (non-specified by function)	7	7	7								83		90
Laboratory services	7	7	7										7
Patient transportation											71		71
Unspecified ancillary services (n.e.c.)											12		12
Medical goods (non-specified by function)											443		443
Unspecified medical goods (n.e.c.)											443		443
Preventive care	1,107	1,107	731	203	14	159							1,107

Governance, and health system and financing	386	386	338		48								386
administration													
Other health care services not elsewhere classified	43	43	43				43		43			94	180
(n.e.c.)													
All HC	4,443	4,443	2,358	1,067	61	957	65	8	43	14	698	94	5,301

#### 12.7 Health Care Functions and Health Care Providers Schemes (HC x HP) – 2016/17

Ngultrum (BTN), Million							Health care	provider	S						
Health care functions	Hospital s	General hospitals	Dzongkh ag Hospital s	BHu I, II & others	Othe r Gen eral hosp itals	Specialis ed hospitals (Other than mental health hospitals )	JDWNRH	Regio nal Referr al Hospit al	Unspe cified hospit als (n.e.c.	Provid ers of ambul atory health care	Prov iders of ancil lary servi ces	Provid ers of preve ntive care	Provid ers of health care syste m admin istrati on and financ ing	Unspe cified health care provid ers (n.e.c.	All HP
Curative care	2,632	1,414	1,002	411	0	1,196	864	332	22	101		236	9	22	3,000
Inpatient curative care	1,892	812	583	229	0	1,068	798	270	12			126	6		2,023
Outpatient curative care	727	599	419	180	0	129	66	62		47		107	3		884
Unspecified curative care (n.e.c.)	13	4	1	3					9	54		4		22	93
Long-term care (health)	2								2	48					50
Ancillary services (non- specified by function)	2								2	10	89	9			109

Medical goods (non- specified by function)	325								325	105					430
Preventive care	484	184	122	61	0	300	232	68				379	1		863
Governance, and health system and financing administration													281		281
Governance and Health system administration													281		281
Other health care services not elsewhere classified (n.e.c.)	33								33			1		323	358
All HC	3,478	1,598	1,125	473	0	1,496	1,096	400	384	264	89	625	291	345	5,091

### 12.8 Health Care Functions and Health Care Providers Schemes (HC x HP)- 2017/18

Ngultrum (BTN), Million						Health	care prov	/iders						
Health care functions	Hospital s	General hospitals	Dzongkh ag Hospital s	BHUI, II & others	Specializ ed hospitals (Other than mental health hospitals	JDWNRH	Regio nal Referr al Hospit	Unspe cified hospit als (n.e.c.	Provid ers of ambul atory health care	Prov iders of ancil lary servi ces	Provid ers of preve ntive care	Provid ers of health care syste m admin istrati on and financ ing	Unspe cified health care provid ers (n.e.c.	All HP
Curative care	2,899	1,526	1,056	470	1,356	1,003	353	17	106		1	9	28	3,044
Inpatient curative care	2,015	878	615	263	1,125	835	289	13				6		2,021
Outpatient curative care	880	648	441	208	232	167	64		48		1	3		932
Unspecified curative care (n.e.c.)	4							4	58				28	91
Long-term care (health)	2							2	49					51
Ancillary services (non-specified by function)	2							2	10	71		7		90
Medical goods (non-specified by function)	335							335	108					443
Preventive care	490	201	130	71	289	216	73				616	1		1,107
Governance, and health system and financing administration											11	375		386
Other health care services not elsewhere classified (n.e.c.)	12							12			0	32	137	180
All HC	3,739	1,727	1,186	541	1,646	1,219	426	367	274	71	627	424	165	5,301

### 12.9 Health Care Providers and Factors of Provision Schemes (HP x FP) - 2016/17

Ngultrum (BTN), Million		Factors of health care provision												
Health care providers	Compen sation of employe es	Self- emplo yed profes sional remun eratio n	Materials and services used	Health care servic es	Health care goods	Non- health care servic es	Non- health care good s	Consumption of fixed capital	Unspe cified factor s of health care provis ion (n.e.c.)	All FP				
Hospitals	1,390	17	1,091	276	611	158	45	980		3,478				
General hospitals	785		151	68	3	57	23	662		1,598				
Dzongkhag Hospitals	485		84	28	2	36	17	556		1,125				
BHU I, II & others	300		67	40	0	21	5	106		473				
Other General hospitals			0		0					0				
JDWNRH	416		532	201	250	67	14	148		1,096				
Regional Referral Hospital	189		41	4	0	29	8	170		400				
Unspecified hospitals (n.e.c.)		17	367	4	358	5				384				
Providers of ambulatory health care		101	163	59	105					264				
Providers of ancillary services	12		77			76	0			89				
Providers of preventive care	105		519	20	282	209	8		0	625				
Providers of health care system administration and financing	126		155	33		120	3	10		291				
Government health administration agencies	125		153	33		118	3	10		288				
Unspecified health care providers (n.e.c.)	0		2			2			343	345				
All HP	1,633	117	2,007	387	998	566	56	990	343	5,091				

### 12.10 Health Care Providers and Factors of Provision Schemes (HP x FP)- 2017/18

Ngultrum (BTN), Million		Factors of health care provision												
Health care providers	Compen sation of employe es	Self- emplo yed profes sional remun eratio n	Materials and services used	Health care servic es	Health care goods	Non- health care servic es	Non- healt h care good s	Consum ption of fixed capital	Othe r item s of spen ding on input s	Unspe cified factor s of health care provis ion (n.e.c.	All FP			
Hospitals	1,539	17	1,174	320	635	162	56	1,009	0		3,739			
General hospitals	866		179	84	3	64	28	682	0		1,727			
Dzongkhag Hospitals	523		90	29	3	39	20	572	0		1,186			
BHU I, II & others	343		89	55	0	26	8	109	0		541			
JDWNRH	458		608	234	297	61	16	153	0		1,219			
Regional Referral Hospital	215		37		0	25	11	175			426			
Unspecified hospitals (n.e.c.)	0	17	349	3	335	11	0				367			
Providers of ambulatory health care		104	170	60	108	2					274			
Providers of ancillary services			71			71					71			
Providers of preventive care	73		554	25	354	170	5		0		627			
Providers of health care system administration and financing	227		186			182	5	10			424			
Unspecified health care providers (n.e.c.)	1		6			5	0			159	165			
All HP	1,840	121	2,160	405	1,098	592	66	1,020	0	159	5,301			