National Health Accounts, Bhutan, 2011-12 and 2012-13

(Using SHA 2011 Framework)

Executive Summary

As evidence-based policy-making captures the imagination of policy-makers, planners, program-managers, civil society groups, academia and development partners, health financing evidence plays a critical role in shaping health systems and influencing health outcomes. Utilising the latest SHA framework (System of Health Accounts, 2011), this report provides fresh evidence of health expenditure trends and pattern in Bhutan for the year 2011-12 and 2012-13.

During 2012-13, an estimated Nu. 3965 million was spent in Bhutanese health system as against Nu. 3587 million in 2011-12, by all the sources put together. This includes both current and capital spending. As a percentage of GDP, the overall health expenditure stood at 3.6 and 3.8% respectively during the same time period. Current expenditure alone accounted for three-fourths of spending in Bhutan, while in government expenditure; the share of current expenditure is to the tune of two-thirds. Development partners and the government put together spent an estimated Nu. 868 million and 1026 million during 2011-12 and 2012-13, as capital expenditure. During both the years under consideration, it was estimated that seven and half percent of all government expenditure was spent on the health sector in Bhutan.

Further, it is equally interesting to observe that the annual per capita health expenditure as a whole is estimated at Nu. 5409 during 2012-13 as against Nu. 4977 during 2011-12). This works out close to US $ 100 per person in Bhutan per annum. As a result, nearly three-fourth of health expenditure comes from government, and this works out to about Nu. 3994 (US 73) per capita per annum during 2012-13. Households' expenditure per capita is about Nu. 1375 (USD 25). Development partners' on the other hand appears to be spending about USD 14 during the year under consideration.

As far as the central government is concerned, the spending pattern points to the fact that over two-thirds of spending is on curative care, including hospital, outpatient and spending on medicines & supplies, while on the other hand, the entire district health spending is composed primarily of inpatient and outpatient expenditure, with outpatient accounting for two-thirds of its health care spending. On the other hand, households' expenses are essentially allocated to its own transport expenses (for patients and their accompanying members of households) while they

are also reported spending on pharmaceutical and other supplies, that are not available in public health facilities.

Key Indicators of Bhutan NHA, 2011-12 and 2012-13

Key Indicators	2011-12	2012-13
Health Expenditure as % of GDP	3.61	3.80
General Govt. Health Expenditure as % of General Govt. Expenditure	7.55	7.44
General Govt. Health Expenditure as % of Health Expenditure	73.38	73.84
General Govt. Health Expenditure (without Dev. Partners) as % of Health Expenditure	61.77	60.15
Private Exp as % to Health Expenditure	26.62	26.16
Households' OOP as % to Health Expenditure	25.85	25.41
Households' OOP without Transportation	12.30	12.09
Dev. Partners Exp. as % to Health Expenditure	11.61	13.69

In terms of sources of revenue, the central government schemes are primarily funded from governments' own revenue from domestic sources plus transfers distributed by the foreign origin (development partner's funds) through the government. As far as district government schemes are concerned, the primary source of revenue is from the central government distributed from governments' own revenues from tax and non-tax revenues. The respective sources of revenue for voluntary health insurance schemes and enterprise financing schemes are from premiums collected from employer and employees in the organized sector and from revenues from big corporations.

One of the critical components of government expenditure is procurement of medicines and supplies. During 2012-13, it is observed that the amount of funds spent on procuring drugs by the government was over Nu. 150 million as against Nu. 105 million during 2008-09. Procurement of expendables and equipment accounted for Nu. 145 million and 87 million respectively for the same period. It is apparent that in the last two years, procurement of drugs and supplies have shot up substantially to cater to the growing demand of treatment cost in public health facilities.

District-level assessment of fund flows reveal that nearly one-third of all current expenditure of the government during 2012-13 were allocated to districts for primary health care services (BHUs) and hospital services. About 45% of all allocation to districts were meant for primary health care services and the rest 55% allocation went into hospital services. Wide variation is observed in allocation of government resources among districts in Bhutan. Although in overall allocation, district Gasa received the least allocation of funds at 7.78 Nu. million during 2012-13, but in terms of per capita allocation, it received the maximum with Nu. 2208. On the other hand, Trashigang which received the maximum funds of 63.61 Nu. Million, but in terms of per capita spending district Chukka received the least with Nu. 530 during the same period.

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Section 1

Introduction

Health financing is a core component of a health system, in which it facilitates the system to undertake activities for achieving various goals including improving health status, expanding access to health care services and providing financial risk protection. As rapid and substantial epidemiological transition takes place, developing countries are grappling with double or triple burden of diseases, where not only communicable diseases are high but people are being exposed to chronic disease conditions. Further, rapid medical technological changes are occurring, displacing the old technique but are proving to be expensive. All this requires substantial resources, to be mobilized, managed and services purchased from various health care providers.

Traditionally, Bhutan has been following the tax-based financing mechanisms for allocating government funds. As there is hardly a purchase-provider split in the Bhutan context, both the financing and provision functions are integrated into the system. Such a system is expected to be both efficient and equitous, as it has the potential to involve prepayment and risk-pooling mechanism in a robust way. However, households are also reported to be paying for their services, although not substantial but a significant share of their spending is expected to be on transportation of patients, in view of difficult terrain to reach health care facilities.

Assessing resource availability in the health system, identifying resource gaps to meet the growing demand for health care needs, and to finally project financial requirement is an important task of governments. This includes an understanding of not only financial flows in the public sector but also in the other sectors as well. NHA is the first and foremost tool to understand the complex nature and magnitude of financial flows in the health system. NHA provides the basic framework from which several other financial indicators and assessment of the health system can be made, such as, health equity analysis, benefit-incidence analysis, progressivity analysis, etc.

Section 2

The Methodology

Countries are moving towards adopting SHA 2011 (System of Health Accounts) framework and this report moves away from SHA 1.0 which was part of the 2009-10 NHA report while we utilize the latest framework. SHA 2011 clearly reinforces the role and importance of three dimensions, namely, financing, consumption and health care provision dimensions. The financing dimension has three sets of classifications, such as, health financing schemes, health financing intermediaries and revenues of financing schemes. The consumption dimension deals with functional categories of health care expenditure while the dimension on provision encompasses classifications relating to health care providers.

The financing dimension clearly outlines the role and relevance of health financing functions, such as, resource mobilization, risk pooling and purchasing. As countries innovate with health financing strategies, using both demand and supply-side financing interventions, the need to analyse these features assumes critical importance. Harnessing the above framework, this report attempts to track resource flows into all three dimensions. Several two-by-two matrices is worked out and reported in this report. This includes the following:

1. Health Financing Schemes to health financing intermediaries;
2. Health Financing Schemes to revenues of health financing schemes;
3. Health Financing intermediaries to revenues of health financing schemes;
4. Health Financing schemes to health care functions;
5. Health Financing schemes to health care providers;
6. Health Financing functions to health care providers.

Besides the matrices, this report also provides estimates by individual classifications, such as, health financing schemes, revenues of the schemes, health financing intermediaries, health care functions and health care providers.

One of the major departures of SHA 2011 from SHA 1.0 is the distinction made between current expenditure from capital spending. While this distinction existed under SHA 1.0, but reporting under the latest framework clearly outlines the need to separately report capital and current spending. In view of the changes in reporting format, health expenditure estimates are likely to be revised and may not be comparable with NHA estimates from SHA 1.0. This is more so in respect to public expenditure. In order to make it consistent with earlier NHA estimates, we provide two sets of estimates – with and without capital spending. The former can be mapped with SHA 1.0 NHA estimates.

Key Data Sources

Several data sources were identified and efforts made to collect, tabulate, classify and analyse the same. The methodological issues underlying the transformation of raw data into meaningful estimates are described below. This report provides NHA estimates for two years, namely, 2011-12 and 2012-13:

1. Government Sources:

Two important sources of data from government are the i) Annual Financial Statement (AFS), Department of Public Accounts, Ministry of Finance, Govt. of Bhutan 2011-12 and 2012-13 and ii) Provincial Expenditure Detail Report. The Annual Financial Statement provides information for over 4000 line items including program-wise and functional categories (wage, salaries, travels, etc.). Similarly, provincial data source also provides such information but on a limited level of categories. These data sets are collapsed into a reasonable level of aggregation that fits into SHA 2011 classifications.

Under the functional classifications of SHA 2011, hospitalization, outpatient, day care and long term care expenditures were considered key classifications. However, such disaggregations were not available as the current system in Bhutan does not distinguish expenditure incurred for inpatient and outpatient expenditure. In order to provide estimates for functional classifications, the following methods were used, especially for inpatient and outpatient expenditure:

The AFS outlines actual expenditure by program-wise as well as by health facility-wise categories. While all lower-level health facilities and facilities that do not provide hospitalization overnight are considered to be part of expenditure estimates for outpatient, while the rest are considered to be part of the inpatient expenditure. The disaggregation of expenditure by outpatient and inpatient at the higher level of health care facilities are made using a recently conducted unit cost study of health care facilities[1]. The study provides estimates of unit cost by different facilities and the cost composition. The inpatient and outpatient expenditure are arrived at by multiplying unit cost with number of visits. From this estimate, we derived ratios of cost estimates by inpatient and outpatient.

2. Household Expenditure Data:

Households' OOP expenditure is another key basis of funding in Bhutan, although its magnitude is still very low. National level surveys on morbidity and associated expenditures would be an important source of information for estimating households' OOP. However, in the absence of such a survey in Bhutan, we utilized the latest Bhutan Living Standard Survey (BLSS), 2012. Interestingly, the latest BLSS used an abridged version of morbidity module in conducting the survey. Besides collecting data about the current status of households in relation to employment, income & expenditure, education and health, it also obtained information about households' spending on health care by outpatient and inpatient.BLSS 2012 gathered data from a sample of 8,968 households involving 39,825 individuals. In addition to health module, the BLSS 2012 administered a separate module on fertility-related questions for women in their reproductive years. As far health module is concerned, data was obtained for those who were sick or injured during the four weeks before the interview to capture outpatient visits, while on the other hand, expenditure incurred by households' on overnight stay in a medical facility were captured.

The questions relating to expenditure on treatment and services includes the composition of households' spending such as, hospital charges, consultation fees, medicines & medical care

[1] Royal Government of Bhutan (2011), The Cost of Your Healthcare – A Costing of Healthcare Services in Bhutan, 2009-2010, Policy and Planning Division, Ministry of Health, Bhutan.

goods, transportation expenses for domestic and international travel were included, rimdo puja, traditional practitioners, etc. The survey gathered information about these expenses incurred by the households in different health care facilities, including government hospitals/facilities, private for-profit and not-for-profit facilities. The BLSS, 2012 also collected information about the reasons for accessing inpatient and outpatient involving 22 common set of health conditions.

It was observed that the sample-weighted population figures were underestimate from the BLSS. In order to correct the underlying underestimation of population, we adjusted the ratios obtained from BLSS and applied appropriate ratios to census population figures, to arrive the number of people ill, and those accessing services at the outpatient, inpatient settings and by health care provider categories. Further, we calculated the households' expenditure on outpatient, hospitalization and deliveries for those who accessed and paid for services. Such an estimate was required because a large section of those who access health care services, the facilities in public institutions are free. Subsequently, we obtained total outpatient and inpatient expenditure by working out average expenditure per person per year and then multiplied that figure with total episodes of illness (those who reported ill, who accessed and paid for services). Finally, the overall households expenditure on OOP was worked out by combining expenditure incurred by them on inpatient, outpatient and deliveries. It may be noted here that the NHA estimates for the year 2011-12 involving households are direct estimates as outlined here, while for the year 2012-13, we adjusted annual inflation to arrive at households' expenditure.

One of the important components which were part of the survey tool under health module was expenditure incurred by households on rimdo/puja. While expenditure on traditional healers and providers are generally taken into account in NHA calculations, we excluded this item as it was considered not directly responsible for improvement of households' health, in lieu of health boundary principle. One of the important observations from the estimation of households' survey which is very unique to the Bhutanese context is the large share of patient transportation (domestic as well as outside the country).

3. Health Insurance Data:

Although at a nascent stage, we still captured the role and magnitude of voluntary private health insurance. The premium for the health insurance coverage was paid currently by households and employers engaged in formal sector employment. We obtained data and information for several variables from the health insurance company (Royal Insurance Corporation of Bhutan). This included information such as, the number of people enrolled in insurance scheme, average and total premium collected, and claims paid by the companies. In addition, such information included the source of premium collected and the break-down of claims paid to such entities as hospitals inside and outside the country. Data from insurance agencies were collected for the year 2011-12 while the same was adjusted for inflation for the year 2012-13.

4. Enterprise sources:

In Bhutan, recent experiences suggest that few big state-owned corporations and autonomous agencies were making payments on behalf of its employees through different means. While some companies paid directly to its employees as reimbursements, other paid their employees through insurance coverage and the rest had its own health facilities that treated their employees and its dependents. Some of the big private corporations that responded to our short questions include Druk PNB Bank, Druk Green Power Corporation Ltd., Bhutan Power Corporation Ltd., etc. Data from these agencies were collected for the year 2011-12 while the same was adjusted for inflation for the year 2012-13.

Section 3

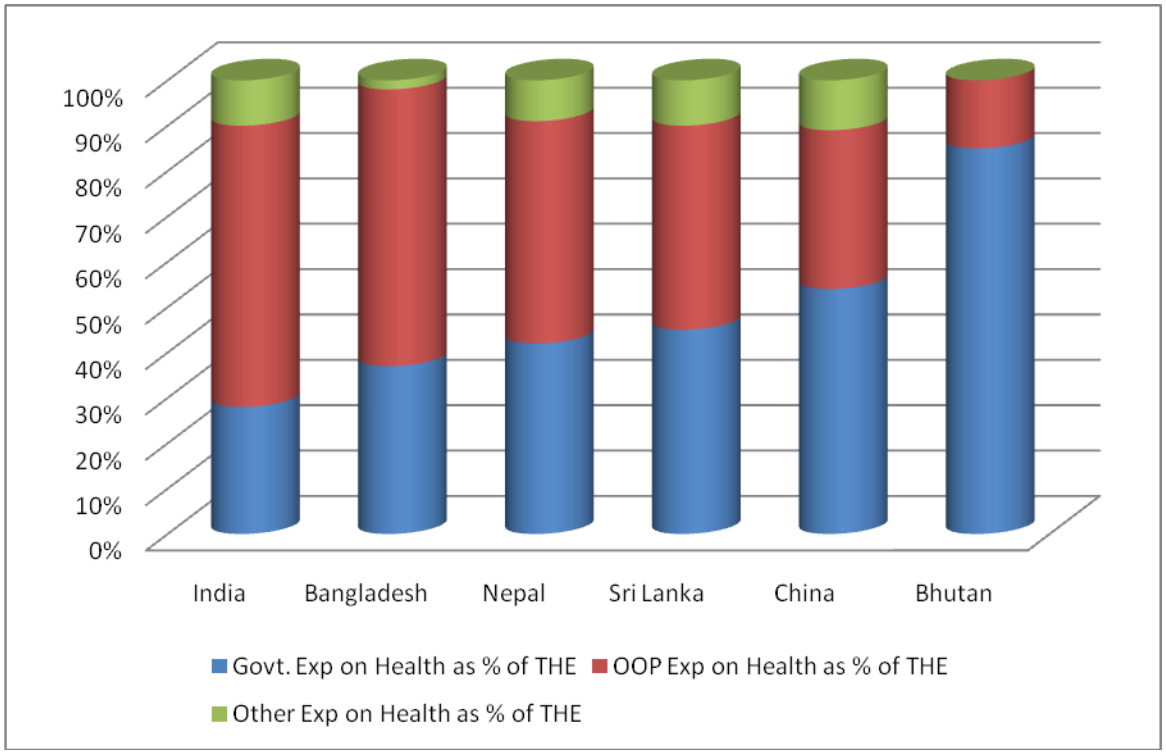
Current Trends and Pattern of Health Care Financing in Bhutan, 2012-13

Unlike other Low – and Middle-income Countries (LMICs), Bhutan health financing and delivery system is currently very well integrated, as funding for the public health system is drawn substantially from the budgetary sources with partial support from the development partners. In sharp contrast to South Asian neighbors and China, Bhutan's public spending is notably the highest and therefore the households' burden on OOP is by far the least. Its apparent

from Chart 1 that India and Bhutan stands in opposite direction, where Bhutan's government spends over 85 percent of its overall health expenditure and the rest sourced from households. Even Sri Lanka whose system performs relatively better than other neighbors, government's spending is comparatively lower than that of Bhutan.

Chart 1

Comparative Health Expenditure Pattern in South-Asian Countries and China, 2010



Source: Global Health Expenditure Database, WHO

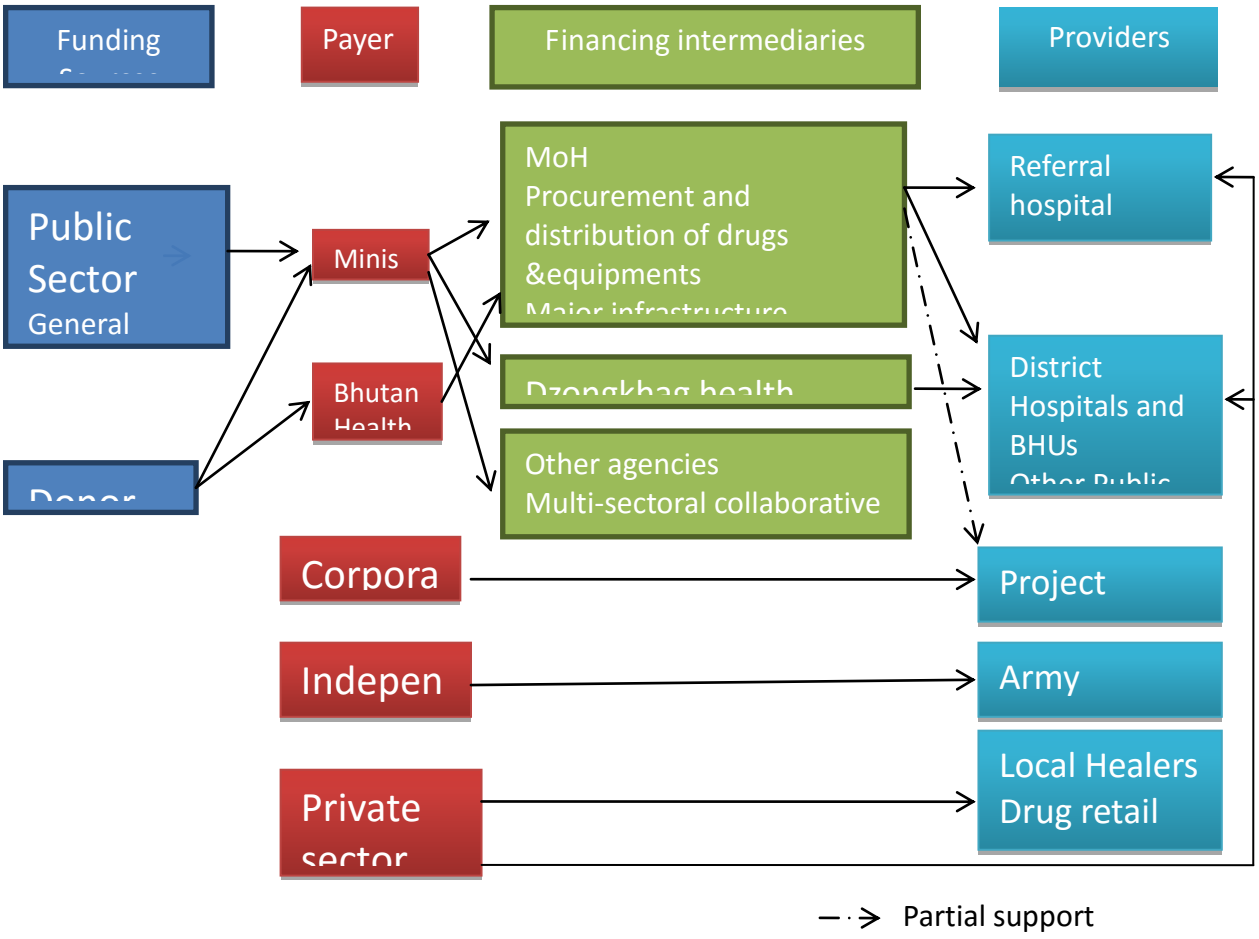
Besides higher allocation to health sector by the government, purchasing and provider functions are integrated into the government health system, not giving adequate scope for the purchaser-provider split. Also, due to one unique system, pooling becomes much more efficient for sharing risks and revenue. The accompanying chart (Chart 2) captures various entities involved in financing and the fund flow mechanism in Bhutan. The key players are government, partially supported by the development partners, whose funds flow through the budgetary route. The central government funds are managed and utilized directly by the Ministry of Health, whose

chief functions relate to funding i) major health infrastructure development, ii) public health programs including disease control programs, such as, immunizations, T.B., malaria, leprosy, reproductive & child health, iii) capacity building activities to strengthen existing health care providers and recruit new staffs, iv) administer and manage referral hospitals including traditional medicine services, v) procure and distribute medicines and equipments and finally, vi) support to district level facilities. The district (Dzongkhag) health administration is directly responsible for administering district hospitals and BHUs (Basic Health Units), other public health services and traditional medical services. Interestingly, the Dzongkhag health administration receives funding for managing these activities directly from the Ministry of Finance.

Two other important actors in financing health sector include the private sector and households. Private corporations provide revenue to its own employees as standard reimbursement for ailments, and moreover few big corporations have set up their own health facilities, that cater to its own employees and its dependents. In places where district hospital services are hard to reach, or in places where private sector facilities are concentrated, households end up utilizing drug retail outlets and private diagnostic facilities. Although the magnitude of households' spending is relatively low in Bhutan, their overall expenditure is still high as they are forced to pay up a substantial amount of income as travel expenses to health facilities.

Chart 2

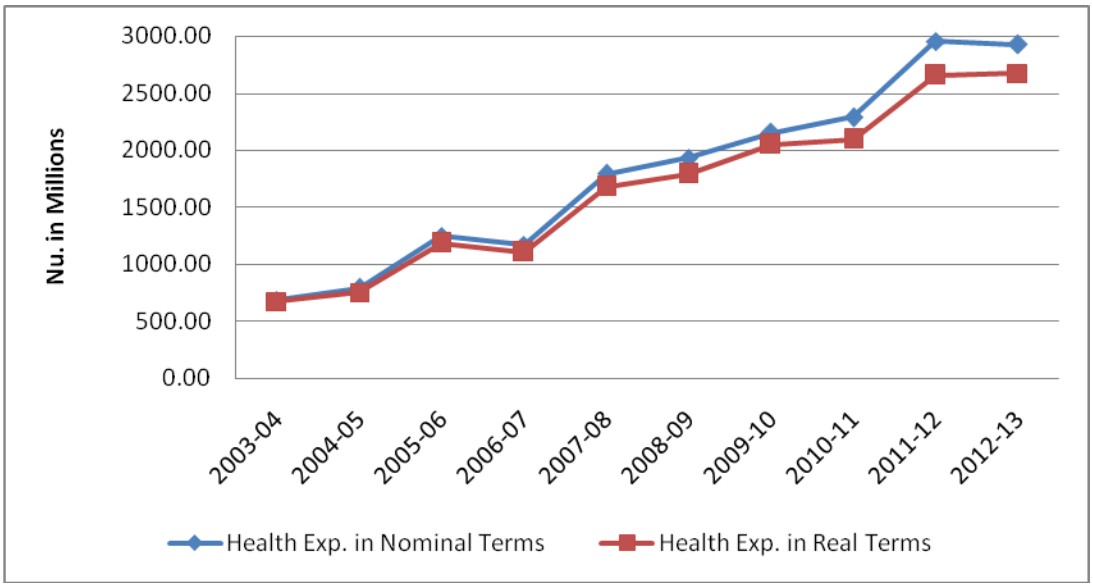
Key Health Financing Entities and Flows in Bhutan



Realizing its importance as a key actors in providing health care services, the Government of Bhutan has been spending substantial amount of resources to not only provide & improve day-to-day services but also been investing in strengthening health care infrastructure. This is clearly reflected in the number of facilities, which stands at 222 currently and little over 3 health facilities, on an average, is available per 10,000 population. In a country with difficult geographical terrain, making available facilities accessible to population is extremely critical.

Chart 3

Trends in Government Expenditure on Health, Bhutan, 2001-02 to 2011-12



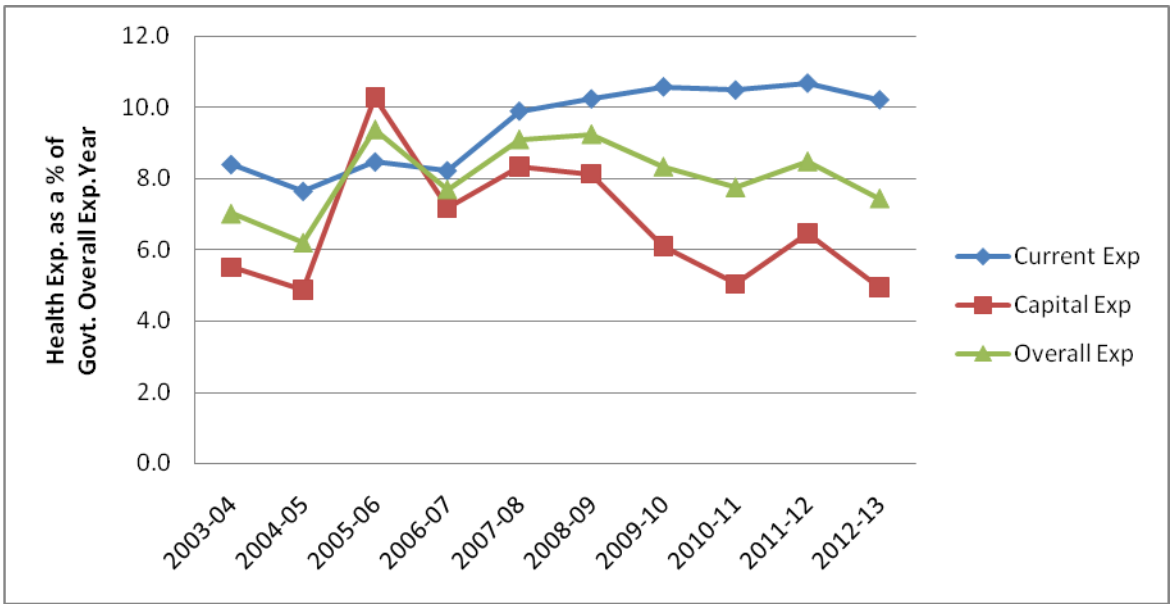
Source: Annual Financial Statement (AFS), Department of Public Accounts, Ministry of Finance, Govt. of Bhutan, respective years

During 2012-13, Nu. 2928 million was set aside for the health sector, which is roughly 7.4 percent of the overall government expenditure. While real health expenditure (adjusted for inflation) has tended to widen in recent years compared to the nominal health expenditure, the gap is not substantial (Chart 3). Recent widening of gap is more to do with increasing prices. It is interesting to observe that during the early 2000, the share of health expenditure in overall spending of the government was around 5.5 percent. Over the last one decade, the proportion of public expenditure on health has shot up dramatically and even breached two digit mark in 2006-07 (Chart 4). Several aspects of government expenditure, its trends and patterns are outlined later in this section.

Chart 4

Trends in Health Expenditure as a percentage of

Overall Government Expenditure, 2003-04 to 2012-13



Source: Annual Statistics Yearbook, Bhutan, respective years

Section 4

Under the SHA 2011 framework, three dimensions of health care, namely, health financing, health service provision and health care consumption are underlined. Each of the three dimensions are critical because understanding and describing financing magnitude per se may not be adequate but needs to assessed in relation to other important entities and their activities. Therefore, financial flows to providers and consumers are equally critical in policy-making, planning and executing. We first describe the financing dimension followed by other dimensions.

4.1 The Financing Dimension:

The SHA 2011 framework under financing dimension outlines three sets of classifications, namely, health financing schemes, revenues of the schemes and financing intermediaries. As far health financing schemes are concerned, we observe that during 2012-13, approximately Nu. 3964 million (Table 1) was spent by all the entities put togetheras against Nu. 3586 million in 2011-12. This included both capital and current expenditure, which accounted for roughly one-fourth and three-fourth respectively. It is interesting to observe that all capital spending came

from the government. Little over three-fourths of all health care financing schemes in Bhutan is contributed by the government, spent by both central and district governments. The rest is shared by private entities including households, private enterprises and voluntary health insurance schemes. While insurance and private enterprises accounted for roughly 0.7% of the overall health expenditures, the households' share is the largest component of private spending in Bhutan.

Table 1
Expenditure by Health Financing Schemes, Bhutan, 2012-13

Financing Schemes Classifications	Current	Capital	Total
Central Govt.	1294.62 (44.05)	504.82 (49.20)	1799.44 (45.38)
State/Local/Regional Govt.	606.97 (20.65)	521.18 (50.80)	1128.15 (28.45)
Voluntary Health Insurance Schemes	12.44 (0.42)	0.00 (0.00)	12.44 (0.31)
Enterprise Financing Scheme	17.38 (0.59)	0.00 (0.00)	17.38 (0.44)
Households Out-Of-Pocket Payments	1007.50 (34.28)	0.00 (0.00)	1007.50 (25.41)
Total	2938.92 (100.00)	1025.99 (100.00)	3964.91 (100.00)

In a well integrated tax-based financing system where the government plays an active role in financing and provision of health care services, the role for other entities especially the financial intermediaries are limited. Although in its nascent stage, the number of people enrolled under voluntary private health insurance in the year 2012 in Bhutan was 8447, covering about one percent of the population. These are essentially provided by formal sector employers to its employees while some of the super rich are also able to obtain coverage from private health insurance. Tables 2 outlines a synoptic view the current health insurance program in Bhutan. While premium contributed by the government towards health insurance coverage for its employees accounted for roughly one-tenth of the insurance coverage, over 86 percent of the coverage is provided by the employers of private companies to its employees. The share of individuals in health insurance coverage is about three and half percent. In terms of claims paid by the health insurance companies, the largest share went to persons covered by the health

insurance for treatment in Indian hospitals. It accounted for almost 88 percent while the rest accounted for treatment outside India for Bhutanese people.

Table 2
Health Insurance Expenditures in Bhutan, 2012

Total Premium Collected (Nu.)	**Number Enrolled**	**Avg. Premium Collected**	**Claims Amount**	**Number of claims**
10,545,805	8447	1,248	2,742,957	87
Premium From (In Nu.):	**Government**	**Private Companies**	**Individuals**	**PHPA**
	1,162,252	9,875,646	407,908	Not Enrolled
Claims Paid to (In Nu.):	**Outside India**	**India**	**Bhutan**	**Pharmacy Shop**
	87,769	665,368	1.97	None

Since the government assumes a major role in financing health sector in Bhutan, the role of financial intermediaries are limited. Thus to the question of who are major entities providing finance to health sector, it is clear from Table 3 that over 60 percent of the revenues are generated from the government, while close to 14 percent of revenues for the health care sector are provided by the development partners routed through the government. The other major entity is households which contributed to roughly one-fourth of all revenues.

Table 3
Revenues of Health Financing Schemes in Bhutan, 2012-13

Revenue Classifications	**Current**	**Capital**	**Total**
Transfers from Government Domestic Revenue	1,792.60 (61.00)	592.19 (57.72)	2,384.79 (60.15)
Transfers Distributed by Government From Foreign Origin	108.96 (3.71)	433.80 (42.28)	542.76 (13.69)
Voluntary Prepayment	12.44 (0.42)	0.00 (0.00)	12.44 (0.31)
Revenues from Households	1007.50 (34.28)	0.00 (0.00)	1007.50 (25.41)
Revenues from Corporations	17.38 (0.59)	0.00 (0.00)	17.38 (0.44)
Total	2938.88 (100.00)	1025.99 (100.00)	3964.87 (100.00)

4.2 The Provision Dimension:

Health care providers play an important role in provision of quality services. From the point of view of NHA framework, the magnitude of financing flows to different health care providers are critical in understanding the nature of services provided. It can be noted from Table 4 that a significant share of national resources goes towards treatment care, at both inpatient and outpatient levels of care. Health care providers for treatment of diseases conditions accounted for over 80 percent of all national expenditure. Out of which, a larger share of two-thirds is accounted for by providers of ambulatory care, while the rest by hospitals. Health systems administration alone accounted for over one-tenth of all the resources committed to health care providers.

Table 4
Health Care Expenditure by Providers in Bhutan, 2012-13

Health Care Provider Classifications	Current	Capital	Total
Hospitals (Inpatient Care)	655.02 (22.29)	5.48 (0.53)	660.50 (16.66)
Providers of Ambulatory Health Care (Outpatient Care)	1284.61 (43.71)	34.44 (3.36)	1319.05 (33.27)
Providers of Ancillary Services	533.287 (18.15)	2.214 (0.22)	535.50 (13.51)
Retailers & Other Providers of Medical Goods	174.86 (5.95)	101.957 (9.94)	276.817 (6.98)
Providers of Preventive Care	66.91 (2.28)	17.30 (1.69)	84.20 (2.12)
Providers of Health System Administration & Financing	140.089 (4.77)	360.351 (35.12)	500.44 (12.62)
Rest of Economy (incl. households care)	84.103 (2.86)	504.245 (49.15)	588.35 (14.84)
Total	2938.88 (100.00)	1025.99 (100.00)	3964.86 (100.00)

If we were to assess only financing flows to government health care providers, we get a different scenario. As Table 5 demonstrates, less than one-third and over one-third of financing were allocated for hospitals and outpatient services in the government set-up respectively. While health administration accounted for roughly 14 percent, an equal share of government

expenditure went as capital investment into strengthening hospital infrastructure. Providers of preventive care accounted for close to 6 percent of all government spending.

Table 5
Government Expenditure on Health Care Providers, Bhutan, 2011-12

Health Care Provider Classifications	Central Govt.	Provincial Govt.	Total
Hospitals	657.03 (39.18)	184.13 (19.27)	841.16 (31.95)
Providers of Ambulatory Health Care	509.01 (30.35)	399.78 (41.83)	908.79 (34.52)
Providers of Ancillary Services	15.17 (0.90)	0 (0.00)	15.17 (0.58)
Providers of Preventive Care	130.06 (7.76)	18.67 (1.95)	148.73 (5.65)
Providers of Health System Administration & Financing	365.78 (21.81)	0.95 (0.10)	366.73 (13.93)
Other Hospital/Health Infrastructure	0 (0.00)	352.13 (36.85)	352.13 (13.38)
All Health Care Providers	1677.05 (100.00)	955.66 (100.00)	2632.72 (100.00)

While the foregoing clearly explains the dominant role of not only curative aspect of health care, ambulatory health care provider proved to be a significant player in addition to hospitals, when government is the major source of revenue. However, the same is not true when households spend funds on health care. It can be seen from Table 6 that the central hospital alone accounted for over one-fourth of all funds when households ended up paying from their pocket. It is equally interesting to note that close to 30 percent of all households health expenditure is spent at the level of government district hospitals, for both in ambulatory and hospital setting. Even the basic health units played a significant role as providers of services to households spending from their own pocket. Another significant point that emerges from Table 6 demonstrates the importance of accessing treatment from neighbouring countries, including India and Thailand, with the former alone accounting for over six percent of all households' spending.

Table 6
Households' OOP Expenditure on Inpatient, Outpatient and Deliveries, by Health Care Providers, 2011-12 (In Thousand Nu.)

Providers	Inpatient Expenditure	Outpatient Expenditure	Expenditure on Deliveries	Overall OOP Expenditure
Central Govt. Hospital	23054.96	209,593.21	14796.29	247,444.47
Govt. Regional Referral	17154.74	125,933.94	0	143,088.68
Govt. District Hospital	29169.45	240,881.25	0	270,050.70
Govt. BHU/ORC	11221.90	147,276.08	0	158,497.98
IndigenousCentres	88.84	4,481.53	0	4,570.38
Retail Chemist/pharmacy/Pvt. Hospitals	67.76	81.84	0	3,911.68
Traditional Practitioners Lama/pandit	0	204.31	0	204.31
Treatment in Indian hospital*	12752.02	46330.50	0	59182.52
Treatment in Thai hospital	10438.92	15432.50	0	25871.42
Self/Home-based Delivery without Medical Assistance	0	9.14	3735.12	3,744.26
Others	5726.12	4,866.52	87.86	10,680.50
Total	109774.70	798,920.55	18619.27	927,314.52

- ***Treatment in Indian hospitals. It is to be noted that the actual expenditure as per the government budget data shows that the amount of funds spent by the govt. in treatment in Indian hospital for the year 2011-12 stands at Nu. 141,180,000 as against 12,752,020. The households expenditure is estimated from households survey, which is underestimates the actual expenditure.***

4.3 The Functional Dimension:

The functional dimension is another set of classifications that is useful in addressing the question of 'what services are consumed'? This denotes to the groups of goods and services consumed by the end users in a health care system. The primary aim of this set of classification would help us facilitate in understanding and delineating between individual and collective health care goods; between promotive, preventive and curative aspects of health care; and between modes of provision, such as hospitalization and outpatient care. Estimates for 2012-13 in Bhutan suggest that half of all health care expenditure is accounted by curative care including inpatient and outpatient care. Expenditure on hospitalization episodes alone took a share of close to 17% while outpatient curative care had one-third share of the overall expenditure. Preventive care

expenditure, on the other hand, accounted for little over two percent of the overall health care expenditure in Bhutan. It may be observed that actual expenditure on preventive care could be substantially higher, but the budget classifications are hard to tease out preventive from other curative care. It is equally interesting to observe that 7% of Bhutan's health care expenditure is spent on medicines & other medical goods. However, it must be noted that the expenditure on medicines & other medical goods reported here is a gross underestimate, as it was difficult to delineate expenditure on outpatient care in public health setting. The budgetary classifications do not clearly specify how much of funds were allocated to procuring medicines, vaccines, etc. It was equally significant to note that 13% of all health spending in Bhutan was due to patient transportation. This is primarily spent by households while accessing public health care facilities. Perhaps Bhutan is one of the countries that report highest patient care transportation expenses due to its difficult geographical terrain.

Table 7
Overall Expenditure on Health Care Functions, 2012-13 Bhutan

Functional Classification	Current	Capital	Total
Inpatient Curative Care	655.02 (22.29)	5.48 (0.53)	660.50 (16.66)
Outpatient Curative Care	1284.61 (43.71)	34.44 (3.36)	1319.05 (33.27)
Laboratory & Imaging Services	5.187 (0.18)	2.214 (0.22)	7.40 (0.19)
Patient Transportation	528.1 (17.97)	0 (0.00)	528.10 (13.32)
Medicines & Other Medical Goods	174.86 (5.95)	101.96 (9.94)	276.82 (6.98)
Preventive Care	66.91 (2.28)	17.30 (1.69)	84.20 (2.12)
Governance, Financing Administration	140.089 (4.77)	360.35 (35.12)	500.44 (12.62)
Other Health Care Services	84.103 (2.86)	504.24 (49.15)	588.35 (14.84)
Total	2938.87 (100.00)	1025.99 (100.00)	3964.86 (100.00)

By functional classification, however, the pattern of health expenditure provides an entirely different scenario if we were to include only government spending. Table 8 spells out the spending pattern by central and district government in 2011-12. While curative care including hospital and outpatient care accounts for close to half of all government expenditure, the share of

such expenditure in overall central government spending is about 70%. Medicines and other medical goods accounted for 20% and 15% respectively for central and district government spending pattern. Health infrastructure development services accounted for the largest component of district government spending, accounting for 40% in the district's overall health spending. Administrative expenses accounted for a larger share (27%) in district government expenses while it was 7.5% in the case of central govt.

Table 8
Government Expenditure by Health Care Functions, 2011-12

Functional Classifications	Central Govt.	District Govt.	Overall
Inpatient Curative Care	554.44 (96.95) [31.44]	17.44 (3.05) [2.01]	571.88 (100) [21.73]
Outpatient Curative Care	680.80 (95.31) [38.60]	33.47 (4.69) [3.86]	714.27 (100) [27.14]
Laboratory & Imaging Services	2.59 (17.07) [0.15]	12.58 (82.93) [1.45]	15.17 (100) [0.58]
Medicines & Other Medical Goods	334.99 (72.34) [18.99]	128.11 (27.66) [14.75]	463.10 (100) [17.59]
Preventive Care	52.81 (43.86) [2.99]	67.60 (56.14) [7.79]	120.41 (100) [4.57]
Governance, Financing Administration	132.34 (36.09) [7.50]	234.39 (63.91) [26.99]	366.73 (100) [13.93]
Health Infrastructure Development Services	0.05 (0.01) [0.32]	352.08 (99.99) [40.55]	352.13 (100) [13.38]
Other Health Care Services	5.67 (20.02) [0.32]	22.65 (79.98) [2.61]	28.32 (100) [1.08]
Total	1763.69 (67.01) [100]	868.33 (32.99) [100]	2632.02 (100) [100]

Note: Figures in Million; figures in brackets row percentages while square brackets indicate column percentages.

Unlike other low- and middle income countries where households' OOP dominate, in Bhutan, such expenditure is not very significant. Given that substantial share of overall health care

expenditure is borne by the government, households' OOP payments reflect activities that are more curative in nature. For instance, households' payments is dominated by outpatient expenditure followed by inpatient expenditure. These two categories alone accounted for 98% of all households spending, with the former accounting for 86% (Table 9). It can also be observed that over half of all households' spending in on account of patient transportation including inland and foreign transport. Well-off households, as well as the ones with acute health conditions requiring treatment abroad, also spend a significant share, close to 9 percent of the overall households' expenditure. Medicines spending by households accounted for roughly 17%, traditional practitioners also took a sizeable share of nearly 15% in households' expenditure.

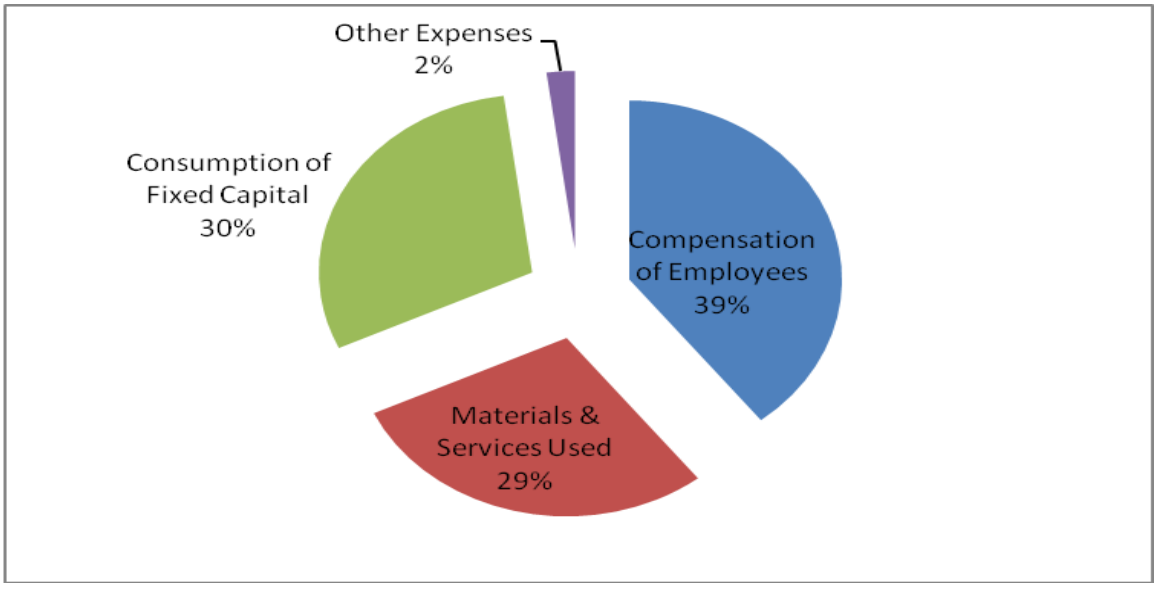
Table 9
Households' OOP Expenditure by Functional Categories, 2012
(In Nu. '000)

Functional Categories	Consul-tation Fees	Medicines	Transport – Inland & Foreign	Traditional Practitioners	Other Expenditure	Overall Expenditures
Outpatient Expenditure	54,823 (6.86)	139,298 (17.44)	425,386 (53.25)	122,689 (15.36)	56,725 (7.10)	798,921 (100)
Inpatient Expenditure	17,534 (15.97)	20,325 (18.51)	49,441 (45.04)	12,786 (11.65)	9,690 (8.83)	109,776 (100)
Expenditure on Deliveries	209 (1.12)	1,320 (7.09)	11,242 (60.38)	169 (0.91)	5,679 (30.50)	18,619 (100)
Overall Household Expenditure	72,566 (7.83)	160,943 (17.36)	486,069 (52.42)	135,644 (14.63)	72,095 (7.77)	927,316 (100)

Besides examining functional categories, it is also worth looking at the pattern of expenditure on several items of expenditure – called factors of provision in the SHA (System of Health Accounts) framework. The SHA typically classifies factors of provision into five categories, such as, compensation of employees, materials & services used, consumption of fixed capital, professional self-employed professional expenditure and other items. Utilising this framework, we applied the same to understand the pattern of government expenditure by factors of provision for the period 2012-13. Classification of expenditure items in Bhutan were brought under these five categories by reclassifying the budgetary items. For instance, compensation of employees

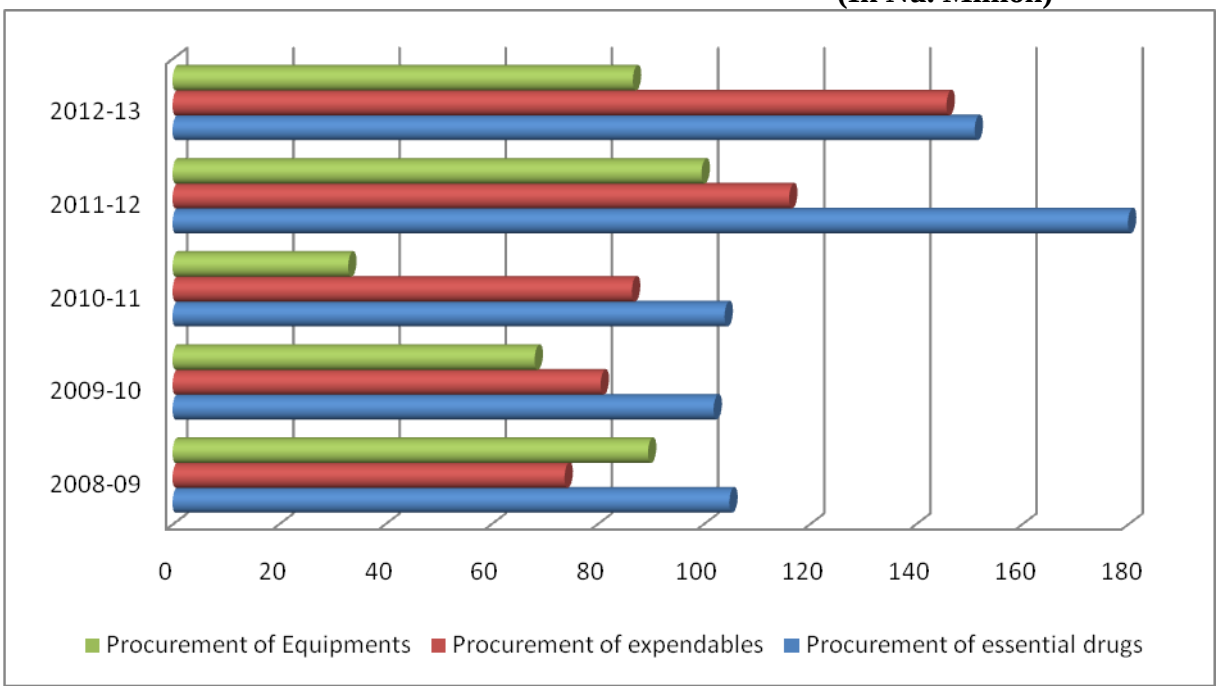
included pay & allowances, contributions towards provident funds, and retirement benefits. Some of the items under materials & services included travel (In Country and Outside Bhutan travel), expenses paid for utilities, rental of properties, expenses incurred on supplies and materials, training of personnel, office equipments, etc. Finally, consumption of fixed capital included acquisition of immovable properties, expenditure on structure including buildings, water supply, sanitation, etc. and plant & equipment. Chart 5 reveals that a major chunk of about 39% of all government expenditure during 2012-13 went into compensation of employees. This is followed by consumption of fixed capital and closely followed by materials and services used.

Chart 5
Pattern of Government Expenditure on Factors of Provision, Bhutan, 2012-13



Source: Annual Budget, Ministry of Health, 2012-13

Chart 6
Govt. Procurement of Drugs, Equipments and Expendables, 2008-09 to 2012-13
(In Nu. Million)



Source: Procurement Division, Ministry of Health, Bhutan

One of the critical components of government expenditure is procurement of medicines and supplies. Chart 6 provides estimates of procurement trends in drugs, equipment and expendables. During 2012-13, we observe that the amount of funds spent on procuring drugs by the government was over Nu. 150 million as against Nu. 105 million during 2008-09. Procurement of expendables and equipment accounted for Nu. 145 million and 87 million respectively for the same period. It is apparent that in the last two years, procurement of drugs and supplies have shot up substantially to cater to the growing demand of treatment cost in public health facilities.Besides functional categories, it is equally vital to understand the distribution of resources among districts. It is important to observe that nearly one-third of all current expenditure of the government during 2012-13 were allocated to districts for primary health care services (BHUs) and hospital services. About 45% of all allocation to districts was meant for primary health care services and the rest 55% allocation went into hospital services. However, it must be noted that the assessment here involves only expenditure allocated and incurred by central government directly to districts. This doesn't include overall expenses incurred for several key items of expenditure. If we were to apportion certain fixed ratio of central services,

the actual amount of funds allocated to districts is expected to much higher. We observe from Table 10 that there are wide variation in allocation of government resources among districts in Bhutan. Although in overall allocation, district Gasa received the least allocation of funds at 7.78 Nu. million during 2012-13, but in terms of per capita allocation, it received the maximum with Nu. 2208. On the other hand, Trashigang which received the maximum funds of 63.61 Nu. Million, but in terms of per capita spending district Chukka received the least with Nu. 530 during the same period.

Table 10

District-wise Allocation of Current Government Funds during 2012-13

Districts	Overall Allocation (Nu. In Million)			Per Capita Allocation (Nu.)		
	Primary Health Services (BHUs)	Hospital Services	Total	Primary Health Services (BHUs)	Hospital Services	Total
Bumthang	6.13	14.70	20.83	338.41	810.77	1149.18
Chhukha	19.68	24.98	44.65	233.67	296.65	530.30
Dagana	7.51	21.07	28.58	288.07	808.48	1096.55
Gasa	7.78	0.00	7.78	2208.97	0.00	2208.97
Haa	12.78	0.00	12.78	986.19	0.00	986.19
Lhuentse	10.62	13.75	24.37	625.38	809.78	1435.16
Monggar	27.69	0.00	27.69	657.45	0.00	657.45
Paro	7.18	26.73	33.91	174.28	649.17	823.46
Pema Gatshel	18.82	16.73	35.55	772.56	686.64	1459.20
Punakha	13.03	16.41	29.44	490.90	618.25	1109.19
SamdrupJongkhar	18.60	18.14	36.74	480.55	468.71	949.26
Samtse	21.41	34.41	55.82	316.99	509.60	826.61
Sarpang	13.88	10.36	24.23	322.38	240.60	562.98
Thimphu	9.82	17.45	27.27	90.17	160.21	250.37
Trashigang	26.67	36.94	63.61	493.52	683.67	1177.20
TrashiYangtse	9.05	11.13	20.18	453.66	557.82	1011.43
Trongsa	8.40	14.24	22.64	550.85	934.45	1485.37
Tsirang	8.64	16.00	24.64	414.56	767.75	1182.31
WangduePhodrang	10.15	19.01	29.16	284.94	533.57	818.54
Zhemgang	16.11	20.89	37.00	779.46	1010.35	1789.86
Total	273.94	332.93	606.88	380.14	462.01	842.15

Section 5

NHA Estimates for Bhutan, 2011-12 and 2012-13

In this section, we present the key findings of National Health Accounts for Bhutan for two years, 2011-12 and 2012-13. These new set of estimates are important as it comes after a gap of 2 years of last NHA estimate. The last NHA estimate relates to the year 2008-09. During 2012-13, an estimated Nu. 3965million was spent in Bhutan health system as against Nu. 3587 million in 2011-12, by all the sources put together. This includes both current and capital spending. As a percentage of GDP, the overall health expenditure stood at 3.6 and 3.8% respectively during the same time period. Current expenditure alone accounted for three-fourths of spending in Bhutan, while in government expenditure; the share of current expenditure is to the tune of two-thirds. Development partners and the government put together spent an estimated Nu. 868 million and 1026 million during 2011-12 and 2012-13, as capital expenditure (See Table 11). Another key indicator relates to overall government spending and the share of health care spending by the government. During both the years under consideration, it was estimated that seven and half percent of all government expenditure was spent on the health sector in Bhutan. In the countries' health spending of Bhutan, the share of public spending was close to about three-fourths of overall spending, while with development partners' assistance, the share was about 61-62%. Charts 7.1 provides evidence about the source of current health care expenditure (with and without transportation expenditure of households' OOP), while Charts 7.2 captures various sources of overall health care expenditure including current and capital (with and without transportation expenditure of households' OOP). Private expenditure, on the other hand, accounted for over one-fourth of all health care expenditure in Bhutan during the period under consideration (26%). This primarily consisted of households' OOP payments, insurance premiums paid by employers and employees, plus contribution made by private companies for its employees' health benefits in its own health facilities. In fact, households OOP alone accounted for one-fourth of all health care expenditure in Bhutan. However, if patient transportation expenses were to be excluded, the share of OOP spending drops down to 12 percent. Thus, transportation expenses alone accounted for 12-13 percent of all health expenditure in Bhutan during the years under consideration. It can also be observed that nearly 12-13 percent of Bhutan's health spending comes from development partners.

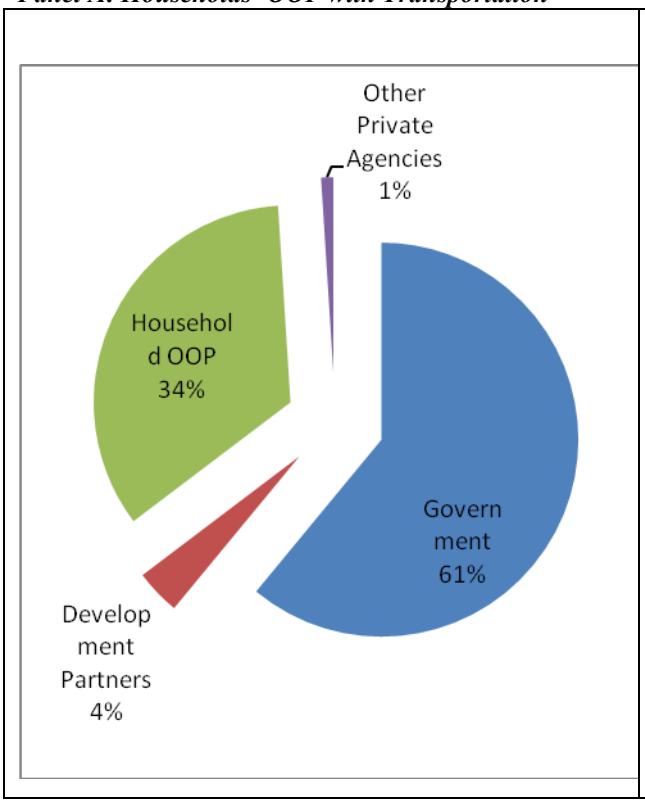
Table 11
Key NHA Indicators, Bhutan, 2011-12 and 2012-13

Expenditure Descriptions	*2011-12 (Nu. In Million)*			*2012-13 (Nu. In Million)*		
	Current	*Capital*	*Overall*	*Current*	*Capital*	*Overall*
Overall Health Expenditure	2718.45	868.38	3586.83	2938.92	1025.99	3964.91
Overall Govt. Health Expenditure	1763.69	868.38	2632.07	1901.60	1025.99	2927.59
Govt. Health Exp. without Dev. Partners	1665.25	550.24	2215.49	1792.60	592.19	2384.79
Private Expenditure	954.76	0	954.76	1037.32	0	1037.32
Households Out-Of-Pocket Expenditure	927.31	0.00	927.31	1007.50	0.00	1007.50
Households OOP without Transportation	441.24	0.00	441.24	479.40	0.00	479.40
Dev. Partners ' Expenditure	98.44	318.14	416.58	108.96	433.8	542.76
(In Percent)						
HE as % of GDP	2.73	0.87	3.61	2.81	0.98	3.80
GHE as % of GGE	10.56	4.79	7.55	10.21	4.95	7.44
GHE as % of HE	64.88	100.00	73.38	64.70	100.00	73.84
GHE (without Dev. Partners) as % of HE	61.26	63.36	61.77	61.00	57.72	60.15
Private Exp as % to HE	35.12	0.00	26.62	35.30	0.00	26.16
HH OOP as % to HE	34.11	0.00	25.85	34.28	0.00	25.41
HH OOP without Transportation	16.23	0.00	12.30	16.31	0.00	12.09
Dev. Partners Exp. as % to HE	3.62	36.64	11.61	3.71	42.28	13.69

Note: i) Pvt. Exp. denotes to Private Expenditure; OOP – indicates Households Out-Of-Pocket Expenditure; HE – Health Expenditure; GHE – Government Health Expenditure; GGE – Government General Expenditure.
ii) Gross Domestic Product in nominal prices for the year 2011-12 is Nu. 99,455million and Nu. 104,473 (obtained from Natinal Statistics Yearbook, respective year).

Chart 7.1:Source of Current Health Expenditure in Bhutan, 2012-13

Panel A: Households' OOP with Transportation



Panel B: Households' OOP without Transportation

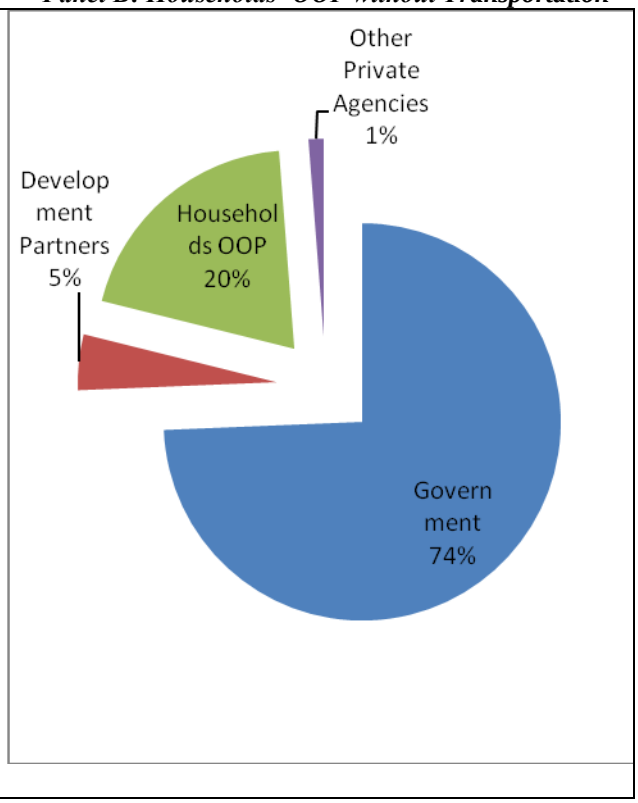
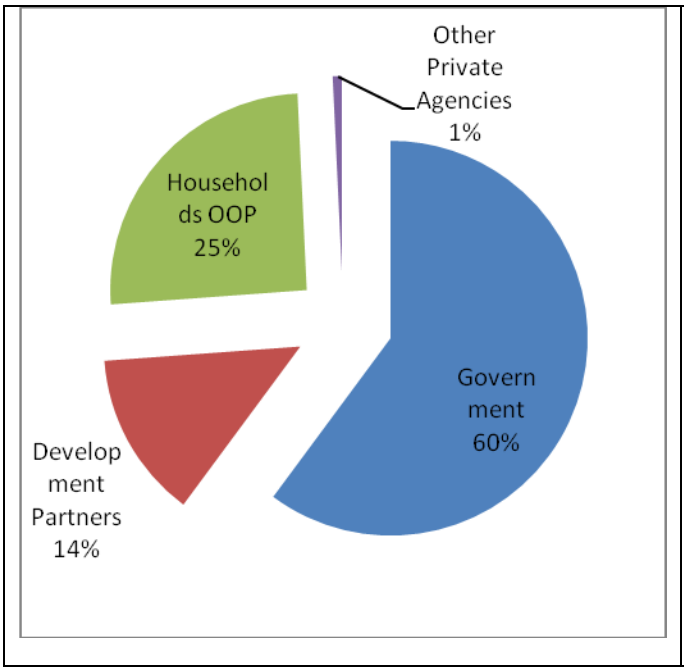
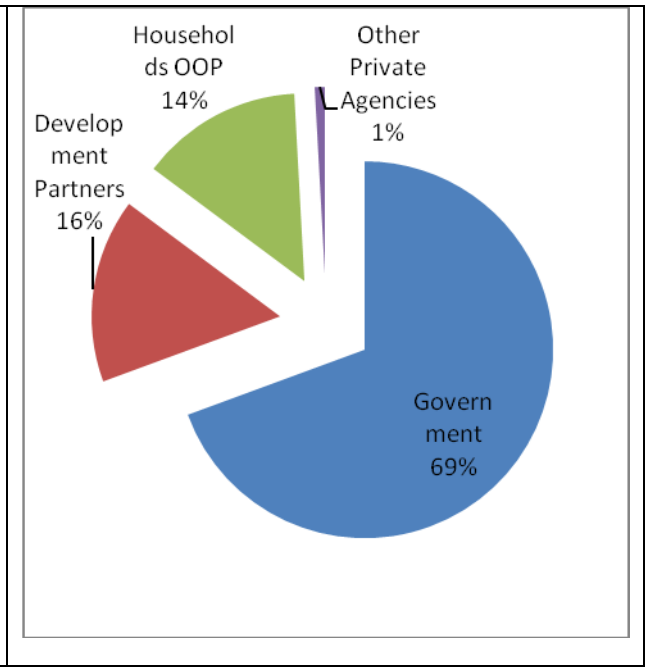


Chart 7.2:Source of Overall (Current and Capital) Health Expenditure in Bhutan, 2012-13



Panel A: Households' OOP with Transportation



Panel B: Households' OOP without Transportation

Table 12

Key Indicators of Per Capital Health Expenditure in Bhutan, 2011-12 and 2012-13

Expenditure Descriptions	2011-12		2012-13	
	Per Capita (Nu)	Per Capita (US$)	Per Capita (Nu)	Per Capita (US$)
Overall Health Expenditure	4977.37	99.01	5409.12	99.41
Overall Govt. Expenditure	3652.47	72.66	3993.96	73.40
Govt. Expenditure without Development Partners	3074.39	61.16	3253.45	59.80
Private Expenditure	1324.90	26.36	1415.16	26.01
Households OOP	1286.82	25.60	1374.48	25.26
Households OOP without Transportation	612.31	12.18	654.02	12.02
Expenditure by Development Partners	578.08	11.50	740.46	13.61

Note: Average Exchange Rate USD to Nu. for 2011-12: 50.27 and for 2012-13: 54.41

Further, it is equally interesting to observe that the annual per capita health expenditure as a whole is estimated at Nu. 5409 during 2012-13 as against Nu. 4977 during 2011-12 (Table 12). This works out close to US $ 100 per person in Bhutan per annum. As observed earlier, nearly three-fourth of health expenditure comes from government, and this works out to about Nu. 3994 (US 73) per capita per annum during 2012-13. Households' expenditure per capita is about Nu. 1375 (USD 25). Development partners' on the other hand appears to be spending about USD 14 during the year under consideration.

Table 13
Distribution of Health Financing Schemes by Revenues of the Schemes, 2012-13

Financing Scheme Classifications	Transfers from Govt. Domestic Revenue	Transfers Distributed by Govt. from Foreign Origin	Voluntary Prepayments	Revenues from Households	Revenues from Corporations	Overall Expenditure
Central Govt.	1197.85 (66.82)	108.96 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	1306.81 (44.47)
Regional Govt.	594.75 (33.18)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	594.75 (20.24)
Voluntary Health Insurance Schemes	0 (0.00)	0 (0.00)	12.43 (100.00)	0 (0.00)	0 (0.00)	12.43 (0.42)
Enterprise Financing Scheme	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	17.38	17.38 (0.59)
Households OOP Payments	0 (0.00)	0 (0.00)	0 (0.00)	1007.50 (100.00)	0 (0.00)	1007.50 (34.28)
Overall Expenditure	1792.60 (100.00)	108.96 (100.00)	12.43 (100.00)	1007.50 (100.00)	17.38 (100.00)	2938.87 (100.00)

The NHA matrices in this section allow us to understand the underlying nature and magnitude of fund flows from two sets of dimensions. According to SHA 2011 guidelines, we have only reported current expenditure in matrices. The accompanying table 13indicates the levels and distribution of funds from health financing schemes by revenues of the schemes. The sources of revenue for each financing schemes can be identified and tracked using this framework. As can be seen from Table 13, the central government schemes are primarily funded from governments' own revenue from domestic sources plus transfers distributed by the foreign origin (donor funds) through the government. As far as district government schemes are concerned, the primary source of revenue is from the central government distributed from governments' own revenues from tax and non-tax revenues. The respective sources of revenue for voluntary health insurance schemes and enterprise financing schemes are from premiums collected from employer and employees in the organized sector and from revenues from big corporations. It can be noted that less than two-thirds of current health care expenditure is derived from domestic

revenue, while donor funds accounted for less than four percent. Revenues from households alone accounted for over one-third of all current health spending in Bhutan during 2012-13.
It can further be observed that in Table 14 and in Table 6 (as in appendix), we depict the fund flows from health financing schemes to health care functions. As far as the central government is concerned, the spending clearly points to the fact that over two-thirds of spending is on curative care, including hospital, outpatient and spending on medicines & supplies, while on the other hand, the entire district health spending is composed primarily of inpatient and outpatient expenditure, with outpatient accounting for two-thirds of its health care spending. On the other hand, households' expenses are essentially allocated to its own transport expenses (for patients and their accompanying members of households) while they are also reported spending on pharmaceutical and other supplies, that are not available in public health facilities.

Table 14

Flow of Funds from Health Financing Schemes to Health Functions, 2012-13

Financing Schemes/ Functions	Inpatient Care	Outpatient Care	Lab. & Imaging Services	Patient Transportation	Medicines & Other Goods	Preventive Care	Governance, Financing Administration	Other Services	Overall Expenditure
Central /Regional Govt.	625.2 (95.4)	717.3 (76.0)	5.2 (100.0)	0 (0.0)	341.11 (66.1)	66.9 (100.0)	140.1 (100.0)	0 (0.0)	1895.8 (64.5)
Voluntary Health Insurance Schemes	12.43 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	12.4 (0.4)
Enterprise Financing Scheme	17.38 (2.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	17.4 (0.6)
Households OOP Payments	0 (0.0)	226.2 (23.9)	0 (0.0)	528.1 (100.0)	174.86 (33.9)	0 (0.0)	0 (0.0)	84.1 (100.0)	1013.3 (34.5)
Overall Expenditure	655.01 (100.0)	943.5 (100.0)	5.2 (100.0)	528.1 (100.0)	515.97 (0.0)	66.9 (100.0)	140.1 (100.0)	84.1 (100.0)	2938.9 (100.0)

Understanding fund flows across health care providers is important in several ways. This would help us assess the broad payment mechanism and the incentive structure involved. While an independent study might be required to undertake this behavior, given the integrated nature of purchasing-provision function in Bhutan, global budgets play an important role, which is considered to be an efficient way of resource allocation. Also, due to the absence of private sector players, especially general practitioners and private hospitals, where they are expected to operate under fee-for-service payment mechanism, this is not a significant challenge to Bhutan's health system currently.

As far the financing scheme is concerned, a substantial share of the central government's funds are routed through public hospitals and outpatient care units followed by the expenses incurred on administration while about 3 percent of the central government funds went into providers of preventive care unit (Table 15 and Table 7 in Appendix). Interestingly, the funds that are collected and managed by voluntary health insurers, a tiny fraction are provided as reimbursements for hospitals while a significant share of the premiums collected is retained by the insurers, as administrative expenses and the rest as profit. In respect to household's expenditure, over half of the expenses went into patient transport providers, while outpatient care providers including traditional providers accounted for a larger share of over one-fourth of the households' funds. Hospitals accounted for only about 8% of households' expenses. This is largely due to comprehensive inpatient coverage and availability of public hospitals (availability of health facilities is 3.1 per 10,000 population) reachable within a respectable distance. One of the striking phenomenon of the funding flows among health care providers is the dominant role of central government, which accounted for 88% of all funds that went into hospitals, while about 10% of hospitals received funds directly from the households. On the other hand, in respect to outpatient care providers, households' share is about 23% while central government expenses contributed the rest 77%. The other important point to note is that the entire funding for providers of preventive care is drawn from the government.

Table 15
Flow of Funds from Health Financing Schemes to Health Care Providers, 2012-13

Financing Schemes/ Functions	Hospitals	Providers of Ambulatory Care	Providers of Ancillary Services	Providers of Medicines & Other Goods	Providers of Preventive Care	Governance, Financing Admn.	Rest of Economy	Overall Expenditure
Central Govt.	625.2 (95.4)	1058.4 (82.3)	5.2 (0.9)	0 (0.0)	66.9 (100)	140.1 (100)	0 (0.0)	1895.8 (64.5)
Voluntary Health Insurance Schemes	12.4 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	12.4 (0.42)
Enterprise Financing Scheme	17.4 (2.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	17.4 (0.59)
Households OOP Payments	0 (0.0)	226.21 (17.6)	528.1 (99.0)	174.9 (100)	0 (0.0)	0 (0.0)	84.1 (100)	1013.3 (34.5)
Overall Expenditure	655.0 (100)	1284.61 (100)	533.3 (100)	174.9 (100)	66.9 (100)	140.1 (100)	84.1 (100)	2938.9 (100)

It would also useful to assess the magnitude and mechanism of fund flow between health care providers and financing functions. Table 16 below provides NHA estimates for the year 2012-13 and Table 8 in Appendix presents NHA estimates for the year 2011-12. It depicts the matrix with estimates finding its place in diagonal way. As an illustration, it is amply clear from the table that all inpatient care expenditure from various sources are provided by hospitals (public and private), while expenditure on outpatient care visits are provided by the ambulatory care providers (public, private, including traditional practitioners).

Table 16
Flow of Funds from Health Functions to Health Care Providers, 2012-13

Financing Functions/ Providers	Hospitals	Providers of Ambulatory Care	Providers of Ancillary Services	Providers of Medicines & Goods	Providers of Preventive Care	Providers of Governance & Fin. Admn.	Rest of Economy/ World	Overall Expenditure
Inpatient Care	655.0 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	655.0 (22.3)
Outpatient Care	0 (0.0)	1284.6 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1284.6 (43.7)
Lab. & Imaging Services	0 (0.0)	0 (0.0)	5.18 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5.18 (0.2)
Patient Transportation	0 (0.0)	0 (0.0)	528.1 (99.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	528.1 (18.0)
Medicines & Other Goods	0 (0.0)	0 (0.0)	0 (0.0)	174.9 (100)	0 (0.0)	0 (0.0)	0 (0.0)	174.9 (5.9)
Preventive Care	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	66.9 (100)	0 (0.0)	0 (0.0)	66.9 (2.3)
Governance, Financing & Administration	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	140.1 (100)	0 (0.0)	140.1 (4.8)
Other Services	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	84.1 (100)	84.1 (2.9)
Overall Expenditure	655.02 (100)	1284.6 (100)	533.3 (100)	174.9 (100)	66.9 (100)	140.1 (100)	84.1 (100)	2938.9 (100)

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Appendix 1

Table 1
Number of Outpatient/Inpatient Visits and Those who paid for Services, in Bhutan Districts , 2012

Districts	Outpatient Visits			Inpatient Visits		
Dzongkhag	Male	Female	Total	Male	Female	Total
Bumthang	2775	7331	10678	101	157	267
Chhukha	36584	38133	76307	1392	1716	3209
Dagana	7545	11179	18806	472	555	1029
Gasa	941	2762	3826	106	139	248
Haa	2692	2609	5306	62	126	189
Lhuentse	3258	6823	10198	326	288	613
Monggar	10802	17328	28245	841	1278	2128
Paro	25987	31999	58687	661	1522	2259
Pema Gatshel	3079	7247	10547	229	356	592
Punakha	10223	21927	32775	693	986	1695
SamdrupJongkhar	15751	16045	31850	902	959	1866
Samtse	11186	10072	21253	723	957	1683
Sarpang	12321	11088	23398	479	518	999
Thimphu	31280	35579	67907	773	1422	2285
Trashigang	22298	30116	52730	958	1474	2452
TrashiYangtse	12868	15657	28435	493	521	1014
Trongsa	3918	7106	10968	259	357	615
Tsirang	9928	14217	24206	718	576	1288
WangduePhodrang	13327	23193	36838	615	796	1418
Zhemgang	3204	3670	6875	236	339	575
Total	237516	313956	557054	11221	15027	26523

Table 2
Number of Outpatient/Inpatient Visits and Those who paid for Services, by Health Care Providers, 2012

	Inpatient Visits			Outpatient Loads		
Health Care Providers	Male	Female	Total	Male	Female	Total
Jdwnrh	2,315	3,548	5,945	42,147	56,528	99,713
govt. regional referr	2,382	2,958	5,385	34,415	43,986	79,122
govt. district hospit	3,982	5,501	9,591	83,242	117,031	202,640
govt. bhu/orc	2,012	2,287	4,324	69,171	83,430	153,757
indigeniouscentres	0	11	12	1,220	2,008	3,280
chemist/pharmacy	0	0	0	0	273	289
other private hospitals	25	0	24	596	683	1,288
retail shop	0	0	0	0	304	322
lama/pandit/preist(ri	0	12	12	451	0	427
traditional practione	0	0	0	140	132	272
indian hospital paid	22	86	112	140	374	528
indian hospital paid	110	186	301	1,559	1,999	3,591
thai hospital paid by	0	21	22	301	267	567
thai hospital paid by	0	0	0	0	553	586
Self	0	0	0	0	385	408
Other	373	418	795	4,134	6,003	10,265
Total	11221	15027	26523	237516	313956	557054

Table 3
Households' OOP Expenditure in Districts by Functional Categories

Districts	Inpatient Expenditure	Outpatient Expenditure	Expenditure on Deliveries	Overall OOP Expenditure
Bumthang	785053	7,937,721	116901	8,839,675
Chhukha	8618916	111,164,996	2774881	122,558,792
Dagana	5259338	24,281,489	0	29,540,827
Gasa	1039009	8,912,431	104224	10,055,664
Haa	2440615	10,529,124	0	12,969,739
Lhuentse	3239479	26,817,040	578123	30,634,642
Monggar	6340517	48,797,419	1517152	56,655,088
Paro	2372749	47,785,952	211275	50,369,976
Pema Gatshel	2049529	30,148,254	66781	32,264,563
Punakha	3915727	57,504,866	294125	61,714,718
SamdrupJongkhar	3359840	47,794,423	1845858	53,000,120
Samtse	9361875	22,745,423	1469683	33,576,981
Sarpang	1997452	28,708,219	993,176	31,698,848
Thimphu	21590247	72,331,622	1,533,509	95,455,378
Trashigang	11162006	74,343,333	6,062,927	91,568,266
TrashiYangtse	9738437	53,838,581	1,287,577	64,864,594
Trongsa	3007514	10,101,519	0	13,109,033
Tsirang	4495403	32,697,874	70,810	37,264,087
WangduePhodrang	4169222	70,855,606	141,413	75,166,240
Zhemgang	2670953	10,272,934	3,281,285	16,225,173
Total	109,774,702		18,619,267	927,314,516

		798,920,547		

Table 4
Distribution of Health Financing Schemes by Revenues of the Schemes, 2011-12

Financing Scheme Classifications	Transfers from Govt. Domestic Revenue	Transfers Distributed by Govt. from Foreign Origin	Voluntary Prepayments	Revenues from Households	Revenues from Corporations	Overall Expenditure
Central Govt.	1098.55	98.43	0	0	0	1196.98
Regional Govt.	566.71	0	0	0	0	566.71
Voluntary Health Insurance Schemes	**0**	0	11.45	0	0	11.45
Enterprise Financing Scheme	**0**	0	0	0	16.00	16.00
Households OOP Payments	**0**	0	0	927.31	0	927.31
Overall Expenditure	1665.25	98.43	11.45	927.31	16.00	2718.45

Table 5
Health Financing Agents to Revenues of the Schemes, 2011-12

Financing Agents/ Revenues of Schemes	Transfers from Govt. Domestic Revenue	Transfers Distributed by Govt. from Foreign Origin	Voluntary Prepayments	Revenues from Households	Revenues from Corporations	Overall Expenditure
Central Govt.	1098.55	98.43	0	0	0	1196.98
District Govt.	566.71	0	0	0	0	566.71
Health Insurance Companies	0	0	11.45	0	0	11.45
Private Corporations	0	0	0	0	16.00	16.00
Households	0	0	0	927.31	0	927.31
Overall	1665.26	98.43	11.45	927.31	16.00	2718.14

Expenditure						

Table 6

Flow of Funds from Health Financing Schemes to Health Functions, 2011-12

Financing Schemes/ Functions	**Inpatient Care**	**Outpatient Care**	**Lab. & Imaging Services**	**Patient Transportation**	**Medicines & Other Goods**	**Preventive Care**	**Governance, Financing Administration**	**Other Services**	**Overall Expenditure**
Central Govt.	347.40	291.85	2.59	0	334.99	52.81	137.06	277.24	1443.94
Regional Govt.	179.65	388.95	0	0	0	0	0.95	3.06	572.61
Voluntary Health Insurance Schemes	11.45	0	0	0	0	0	0	0	11.45
Enterprise Financing Scheme	16.00	0	0	0	0	0	0	0	16.00
Households OOP Payments	27.44	0	0	486.07	160.94	0	0	0	674.46
Overall Expenditure	581.94	680.80	2.59	486.07	495.93	52.81	138.01	280.30	2718.45

Table 7
Flow of Funds from Health Financing Schemes to Health Care Providers, 2011-12

Financing Schemes/ Functions	Hospitals	Providers of Ambulatory Care	Providers of Ancillary Services	Providers of Medicines & Other Goods	Providers of Preventive Care	Governance, Financing Admn.	Rest of Economy	Rest of World	Overall Expenditure
Central Govt.	758.12	822.04	2.59	0	58.48	132.14	0	0	1773.37
Regional Govt.	0	0	0	0	0	0	0	0	0
Voluntary Health Insurance Schemes	1.57	0	0	0	0	13.197	0	0	14.77
Enterprise Financing Scheme	16.00	0	0	0	0	0		0	16.00
Households OOP Payments	80.78	245.32	486.07	0.69	0	0	3.74	10.68	914.29
Overall Expenditure	856.47	1067.56	488.66	0.69	58.48	145.34	3.74	10.68	2718.45

Table 8
Flow of Funds from Health Functions to Health Care Providers, 2011-12

Financing Functions/ Providers	Hospitals	Providers of Ambulatory Care	Providers of Ancillary Services	Providers of Medicines & Goods	Providers of Preventive Care	Providers of Governance & Fin. Admn.	Rest of Economy/ World	Overall Expenditure
Inpatient Care	581.93	0	0	0	0	0	0	581.93
Outpatient Care	0	680.80	0	0	0	0	0	680.80
Lab. & Imaging Services	0	0	2.59	0	0	0		2.69
Patient Transportation	0	0	486.07	0	0	0	0	486.07
Medicines & Other Goods	0	0	0	495.93	0	0	0	495.93
Preventive Care	0	0	0	0	52.81	0	0	52.81
Governance, Financing & Administration	0	0	0	0	0	138.01	0	138.01
Other Services	0	0	0	0	0	0	280.31	280.31
Overall Expenditure	581.93	680.80	488.66	495.93	52.81	138.01	280.31	2718.45