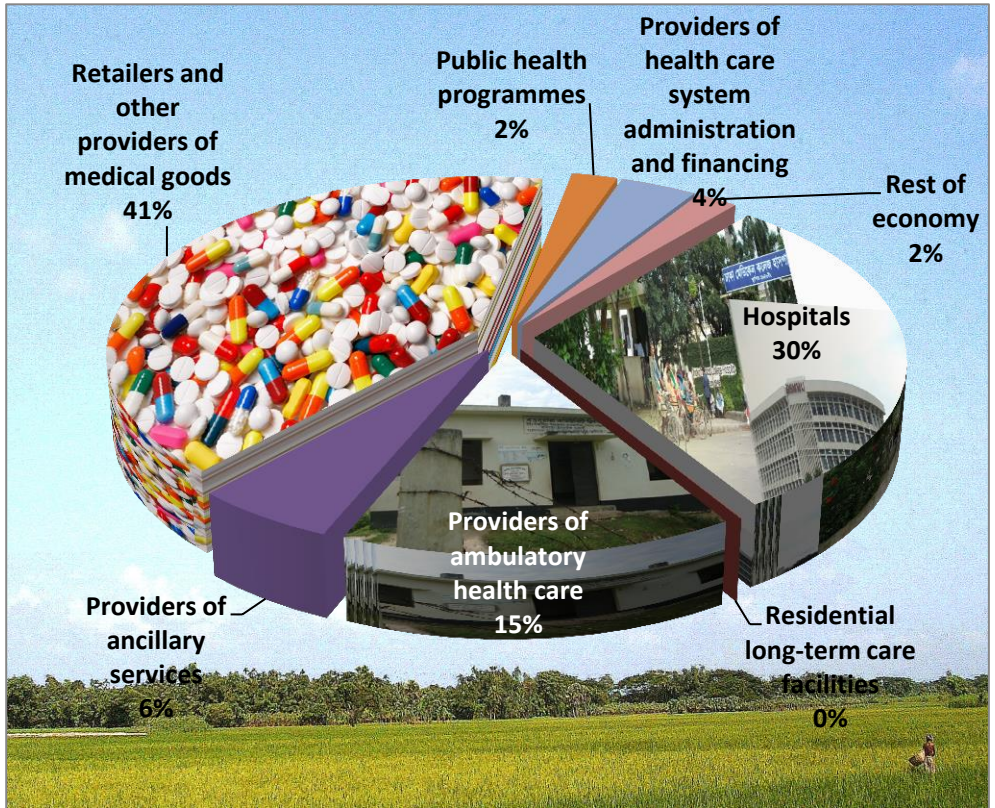




**Summary**  
**Bangladesh National Health Accounts 1997-2012**



**BNHA Cell**  
**Health Economics Unit**  
**Ministry of Health and Family Welfare**  
**Government of the People's Republic of Bangladesh**

## Summary

This report presents the results of the Bangladesh National Health Accounts (BNHA) 1997-2012. This round of BNHA has been developed and updated based on the System of Health Accounts (SHA) 2011 guidelines but also preserved the option of producing tables compatible to SHA 2001 manual for National Health Accounts. The BNHA framework used in the earlier rounds of NHA has been revised in this round (NHA-IV) through extensive consultations within BNHA cell, and the guidance of an international NHA expert. New estimation methods and data sources have been used to improve private expenditure estimates. Revisions to the framework and classifications of health accounts have also been made.

NHA-IV tracks the total health expenditure in Bangladesh between the fiscal years 1997 to 2012, cross-stratified and categorized by financing classifications, provider and function on annual basis. Its main goal is to inform national policymakers and other stakeholders of the magnitude and profile of health spending. It also serves in institutionalizing the monitoring of health outlays.

Adoption of SHA2011 provides two new financing classifications that provide more specific answers to the questions: *“where does the money come from?”* and *“what instruments are used for fund raising?”* This new classification provides better interpretation of public and private funding in the health care sector.

## Total Health Expenditure (THE)

Total health expenditure (THE) in Bangladesh is estimated at Taka 325.1 billion (\$4.1 billion) in 2012, Taka 153.9 billion (\$2.2 billion) in 2007, Taka 81.5 billion (\$1.4 billion) in 2002 and Taka 46.4 billion (\$1.1 billion) in 1997. In recent years THE grew at an annual average of around 14% in nominal terms. In real terms, the growth level has been approximately 8% annually.

**Table 1 Table: THE, GDP and Annual Growth Rates 1997 - 2012**

| Year | Total health expenditure |                     | GDP                   |                     | Per capita |       |        |      | Ratio of THE to GDP |
|------|--------------------------|---------------------|-----------------------|---------------------|------------|-------|--------|------|---------------------|
|      | Amount (Taka Million)    | Nominal Growth rate | Amount (Taka Million) | Nominal Growth rate | GDP        | THE   |        |      |                     |
|      |                          |                     |                       |                     | Taka       | US \$ | PPP \$ |      |                     |
| 1997 | 46,356                   |                     | 1,807,013             |                     | 14,767     | 379   | \$9    | \$19 | 2.6%                |
| 1998 | 51,101                   | 10.2%               | 2,001,766             | 10.8%               | 16,039     | 409   | \$9    | \$20 | 2.6%                |
| 1999 | 56,529                   | 10.6%               | 2,196,972             | 9.8%                | 17,270     | 444   | \$9    | \$21 | 2.6%                |
| 2000 | 62,474                   | 10.5%               | 2,370,856             | 7.9%                | 18,519     | 488   | \$10   | \$23 | 2.6%                |
| 2001 | 71,959                   | 15.2%               | 2,535,464             | 6.9%                | 19,452     | 552   | \$10   | \$26 | 2.8%                |
| 2002 | 81,488                   | 13.2%               | 2,732,010             | 7.8%                | 20,760     | 619   | \$11   | \$29 | 3.0%                |
| 2003 | 87,429                   | 7.3%                | 3,005,801             | 10.0%               | 22,532     | 655   | \$11   | \$30 | 2.9%                |
| 2004 | 100,251                  | 14.7%               | 3,329,731             | 10.8%               | 24,628     | 741   | \$13   | \$33 | 3.0%                |
| 2005 | 114,338                  | 14.1%               | 3,707,070             | 11.3%               | 27,059     | 835   | \$14   | \$36 | 3.1%                |
| 2006 | 134,873                  | 18.0%               | 4,157,279             | 12.1%               | 29,952     | 972   | \$14   | \$41 | 3.2%                |
| 2007 | 153,887                  | 14.1%               | 4,724,769             | 13.7%               | 33,604     | 1,095 | \$16   | \$44 | 3.3%                |
| 2008 | 178,943                  | 16.3%               | 5,458,224             | 15.5%               | 38,330     | 1,257 | \$18   | \$49 | 3.3%                |
| 2009 | 205,120                  | 14.6%               | 6,147,952             | 12.6%               | 42,635     | 1,422 | \$21   | \$52 | 3.3%                |
| 2010 | 244,331                  | 19.1%               | 6,943,243             | 12.9%               | 47,524     | 1,672 | \$24   | \$58 | 3.5%                |
| 2011 | 289,017                  | 18.3%               | 7,967,040             | 14.7%               | 53,220     | 1,931 | \$25   | \$64 | 3.6%                |
| 2012 | 325,094                  | 12.5%               | 9,181,414             | 15.2%               | 60,563     | 2,144 | \$27   | \$68 | 3.5%                |

THE as a percent share of Gross Domestic Product (GDP) has remained stable in recent years at around 3%. In 2012, per capita spending on health was Taka 2,167 (\$27) compared to Taka 1,558 (\$16) in 2007 and Taka 826 (\$9) in 1997. The Purchasing Power Parity (PPP) adjusted per capita expenditure on health in nominal terms was Taka 5,440 (\$68) in 2012; in real terms it was Taka 2,167 (\$27) for that year.

## Total Health Expenditure by Financing Classifications

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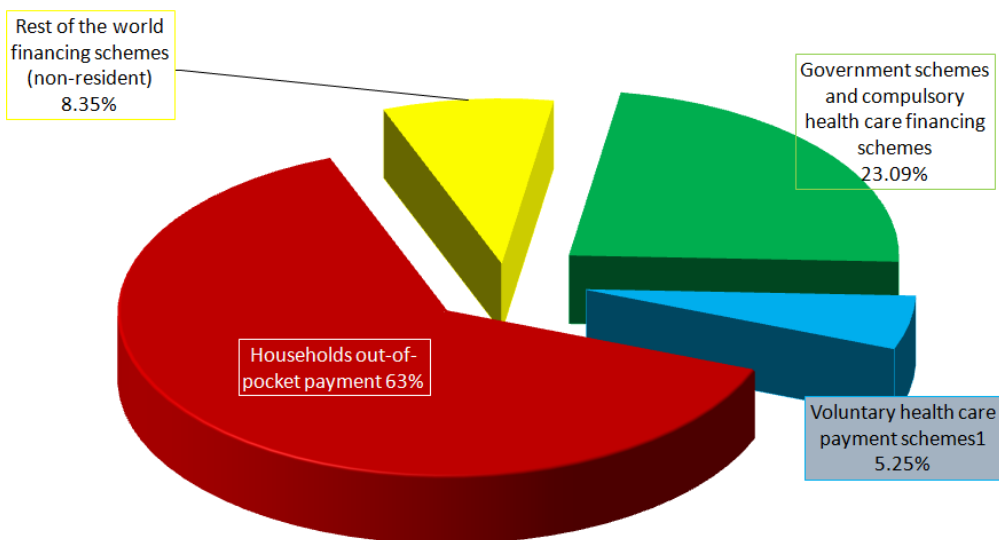
A significant introduction under NHA-IV is the disaggregation of all health spending according to:

- (i) Financing Schemes; and
- (ii) Revenue of Financing Schemes.

Health care financing schemes encompass major types of financing arrangements through which health services are paid for and obtained by households. These include direct payments by households as well as third-party financing arrangements, such as social health insurance, voluntary insurance.

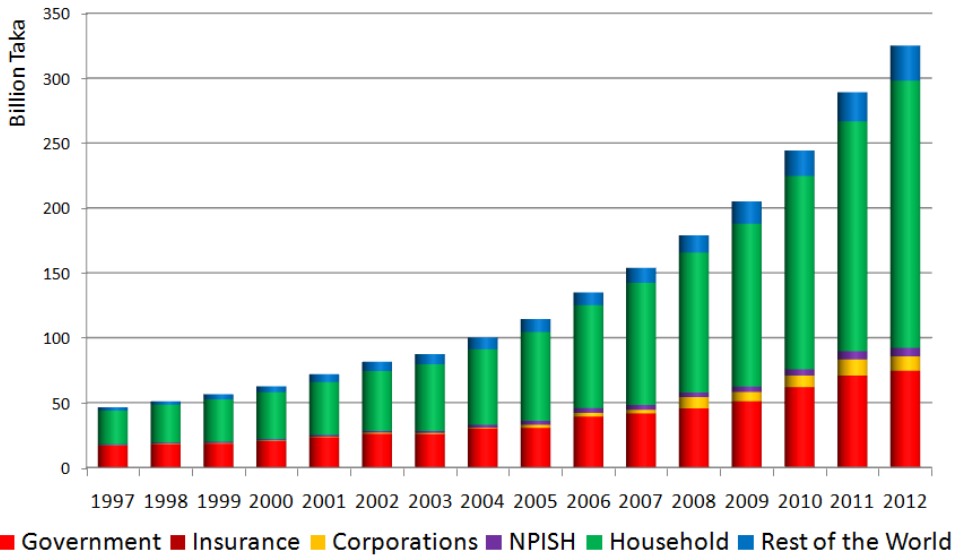
Revenues of Financing Schemes imply measurement of revenue sources of individual financing scheme. Such information can be of critical importance to policy makers, especially in assessing the mix of public and private expenditures.

**Figure: THE by Financing Schemes 2012**



Households serve as the biggest financing schemes for Bangladesh healthcare system. In 1997 the share of households in THE was 56% (Taka 26 billion), which has risen to 63% (Taka 206 billion) in 2012. Government financing in THE (primarily offered through the Ministry of Health and Family Welfare), has been increased significantly (more than 4 times) in absolute terms from 17,064 Million Taka to 75,071 Million Taka, but has declined relatively from 37% in 1997 to 23% in 2012.

**Figure: THE by Financing Agents 1997 – 2012**



<sup>1</sup> Includes

- NIPISH financing schemes excluding 2.2.2
- Employer-based insurance (other than enterprise schemes)
- Other complementary or supplementary insurance

Voluntary Health Insurance schemes are primarily in the form of spending to provide or reimburse medical care for employees of business entities. As a financing scheme, Voluntary Health Insurance Payment (NIPSH, Employers and Others) was 5.25% of THE.

A cross classification of BNHA estimates between Financing Schemes and Revenue of the Schemes for 2012 shows that NGOs own contribution (Non-profit Institutions Serving Households (NPISH) in health care services for 2012 accounts for Taka 6 billion (approximately 2% of THE), while Taka 27 billion direct assistance given to NGOs by the development partners is reflected in the Rest of World Financing Schemes (8.35% of THE).

## Total Health Expenditure by Functional Classifications

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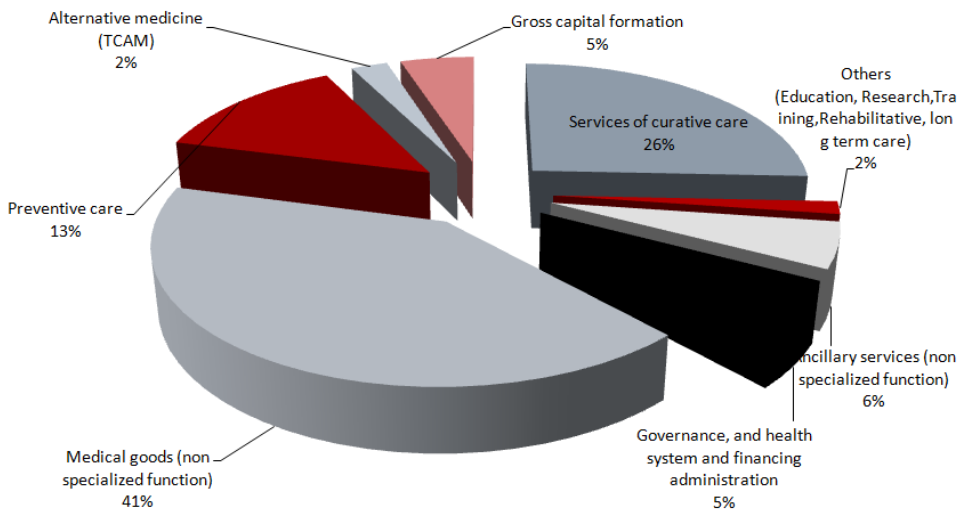
According to the System of Health Accounts 2011 (SHA 2011) guideline, health care functions imply the types of goods and services provided and activities performed within the health accounts boundary. Functional outlay refers to current spending on health care and, relates to health care consumption and it excludes investment outlays. Bangladesh national Health Accounts (BNHA) boundary of functions is slightly different from the SHA 2011 and it includes expenditure on medical research, education and training.

Apart from the inclusion of medical research, education and training, BNHA classification of functions remain consistent with SHA 2011 approach. All health expenditures are categorized by core health care functions and include such activities as: curative care, rehabilitative and long-term care, medical goods, preventive care and health system and financing administration.

Disaggregation of expenditures by functional category shows that retail drugs and medical goods and services of curative care account for major share of THE. The share of retail drugs and medical goods and services has varied amongst 38% to 43% during 1998 and 2012 period. Curative care services share of THE was 22% in 1997 and 26% in 2012. In 2012, Taka 134 billion (\$1.68 billion) was spent on retail drugs and medical goods and services; it was Taka 62 billion (\$0.9 billion) in 2007 and Taka 20 billion (\$0.5billion) in 1997.



**Figure: THE by BNHA Functional classifications 2012**



Expenditure for services of curative care was Taka 83.5 billion (\$1 billion) in 2012. Capital formation includes both capital formation and depreciation, i.e., capital consumption of domestic healthcare provider institutions (excluding: retail sale and other providers of medical goods). Its share was around 5% of THE in 2012. The share of health education, training and research has varied between 1% to 3% during the 1997-2012 period.

There has been a steady increase in inpatient curative care expenditure over the years, both in absolute terms as well as relative to outpatient curative care outlays. In 1997, inpatient curative care constituted 42% of total curative care compared to 49% in 2012. Outpatient curative care including dental services was 55% of total curative care in 1997, which declined to 47% in 2012. Outpatient curative care offered primarily by public sector community clinics in rural areas has shown an increase in recent years. In 2012 it was around Taka 3.1 billion (3.8% of curative care) while such service was almost non-existent

through 2009.

Regular ancillary services encompass such activities as laboratory and imaging. A total of Taka 17.8 billion was spent on ancillary services in 2012 compared to Taka 8 billion in 2007 and Taka 1.2 billion in 1997. The relative share of laboratory services has been declined from 60.1% in 1997 to 57.1% in 2012.

In 2012 Taka 43.6 billion was spent on preventive care. Expenditure relating to maternal and child health and family planning and counselling activities collectively constitute approximately 83% of preventive care. Public awareness creations on health and hygiene issues are conducted both by the government and the NGO sector. In 2012 Taka 5 billion was incurred for awareness creation, which is 13% of total preventive care outlay. HIV/AIDS/STD related expenditure in 2012 was Taka 1.1 billion, which is 2.5% of total preventive care expenditure.

## Total Health Expenditure by Provider Classifications

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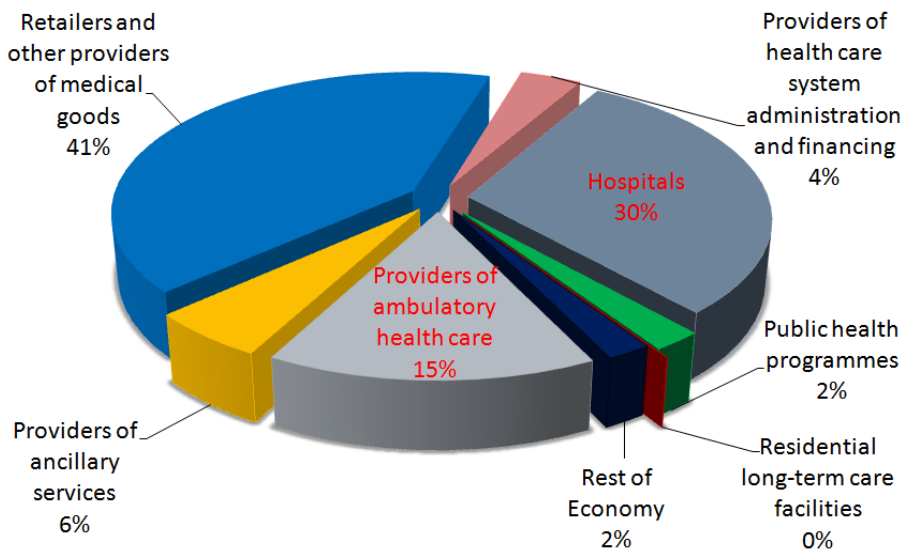
There are a wide range and types of healthcare providers in Bangladesh ranging from modern specialized tertiary level hospitals to unqualified practitioners. In this round of Bangladesh National Health Accounts (BNHA), classifications of Healthcare Providers (HP) have been reclassified using System of Health Accounts 2011 (SHA 2011) guideline. BNHA classifications of HP are now compatible to the SHA 2011 classifications of providers, and also capable of generating estimates by various categories of hospitals which are normally reported as general hospitals expenditure under SHA 2011.

Three types of provider account for most health expenditures:

- (i) Drug outlets and medical goods retailers Taka 134 billion (41%);
- (ii) hospitals Taka 98 billion (30%) and
- (iii) Ambulatory health services Taka 49 billion (15%) of THE in 2012.

The share of expenditures accounted for drugs and medical goods retailers remained steady between 38% and 42% during the period 1997-2012. Hospitals' share of expenditures has also remained steady at around 30% of THE over the past ten years.

**Figure: THE by Provider classification 2012**

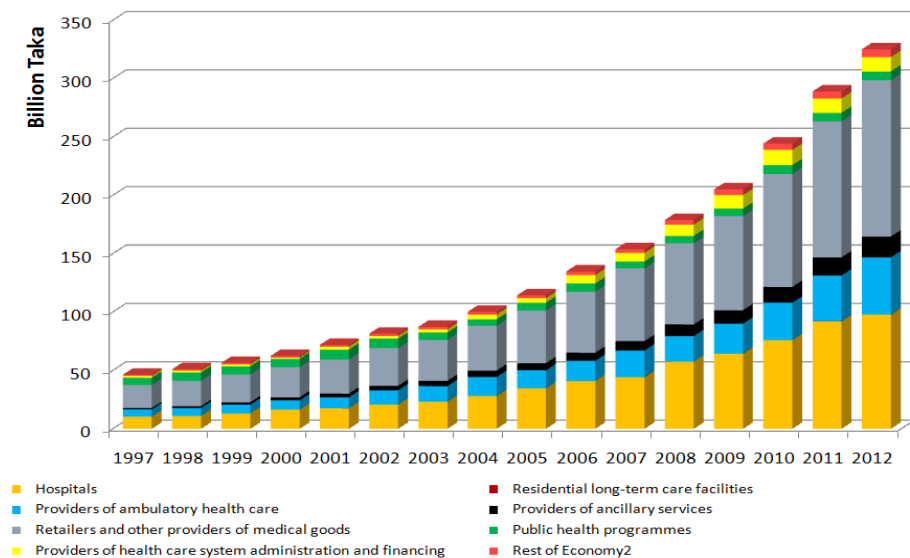


Ambulatory services primarily include outpatient services offered by physicians, and family planning centres. During the 1997–2012 period, ambulatory healthcare expenditure ranged between 13% and 16% of THE. Expenditures on public health programs, primarily administered by the MOHFW, witnessed ups and downs, a decline from 4,448 Million Taka in 1997 to 2,304 Million Taka in 2007 followed by a steady increase to 6,050 Million Taka in 2012 in nominal terms and as a share of THE. As a percent of THE, their share in 2012 was 2%, down from 10% in 2002 and 13% in 1997.

The increase in expenditures at hospitals as a share of all health spending has been considerable during the period 1997 – 2012. Overall hospital spending increased from Taka 11 billion (23% of THE) in 1997 to Taka 98 billion (30% of THE) in 2012. This increase was mostly due to increase in expenditures at private hospitals.

Hospital expenditures covering general as well as teaching hospitals, mental health substance abuse institutions, and specialized hospitals amounted to Taka 98 billion (\$1.1 billion) in 2012. Although upazila and public hospitals below upazila-level continue to be major providers of health services in terms of outlays made at these entities, their relative share of overall hospital expenditures has declined from 34.1% (Taka 2.9 billion) in 1997 to 27.4% (Taka 4 billion) in 2001 and 24.1% (Taka 10,377 million) in 2012.

**Figure: THE by Provider classification 1997 – 2012**



Total expenditures at medical college hospitals were Taka 907 million in 1997 and Taka 2,237 million in 2012. As a percent of total expenditure in hospitals, the share of medical college hospitals was 5.2% in 2012. The share of total

<sup>2</sup> Illustrative examples

- Taxis that provide patient transport under the supervision of health personnel
- Schools with employed health professionals for e.g. treatment of ill children or providing health education
- Prison health care services not provided in independent/separate health care

hospital expenditure at specialized hospitals was 3.4% and that of medical university and postgraduate institutes was 0.8% in 2012.

Private hospitals in particular have grown in number over the past decade, coupled with the entry of a handful of large-scale, tertiary level private healthcare facilities (e.g. Apollo, United, Square) in Dhaka city. Expenditure at private hospitals in 2012 was Taka 23.4 billion, which constitutes 54.5% of total outlays on hospital services. In 1997, total expenditure at private hospitals was Taka 2.2 billion.

Ambulatory healthcare providers are primarily involved in providing services directly to outpatients who do not require inpatient care. These services are provided by both the medical health services and public health services. The major providers in this group are general physicians and ambulatory health care centres. A total of Taka 49 billion was spent on such services in 2012. The relative share of general physicians have declined from 49% in 1997 to 37% in 2012 while that of ambulatory health care centres have increased from 36% in 1997 to 46% in 2012. There has been a structural shift in major metropolitan cities whereby more qualified and specialized physicians offer their services from outpatient health care centres than from retail drug outlets or their residence.

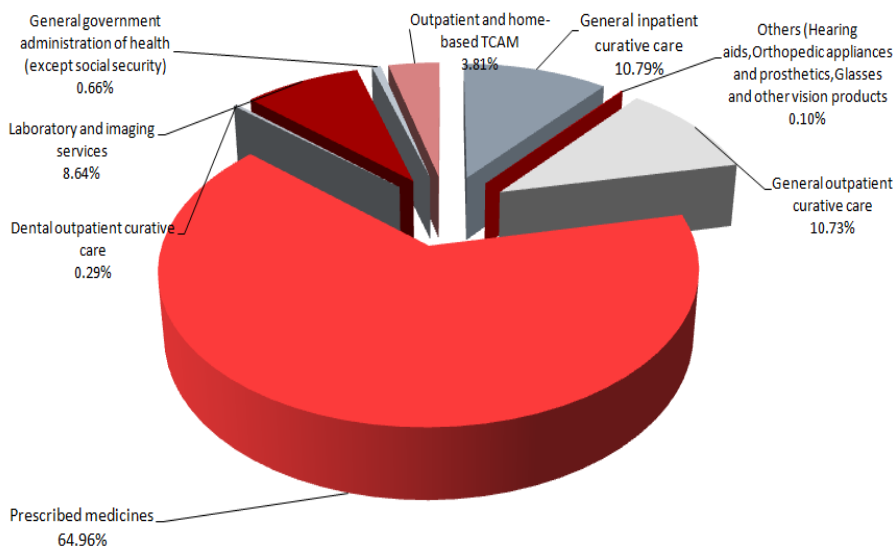
The Ministry of Health and Family Welfare (MOHFW) is the lead institution in conducting public health programs in Bangladesh. In 2012 Taka 6 billion was spent by the ministry under this activity, which constituted 82% of total public health program outlay. The role of NGOs too is significant, and their share was 17% (Taka 1.3 billion) in 2012. The involvement of government entities outside MOHFW is relatively nominal, incurring around Taka 61 million in 2012 for promotion of public health activities.

## Out-of-pocket Expenditure by Households

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Out of pocket health expenditure by households (OOP) constitutes the major component of total health spending in Bangladesh. Households spend over Taka 205 million annually on health related goods and services. OOP share in THE has increased from 55.9% in 1997 to 59.9% in 2005 to 63.3% in 2012. A functional breakdown of services suggests that outlay on medical goods comprises the biggest share of OOP. In 2012, households spent Taka 134 million on pharmaceutical drugs. Expenditure on drugs as a percentage of OOP however has declined over time. In 1997, drug outlay was 75.3% of OOP, 70.5% in 2001 and 65% in 2012. In 2012, Taka 44.8 million was spent on curative care, and Taka 17.8 million on ancillary services. Ancillary services are classified into such groups as laboratory services, imaging and so forth.

**Figure: Share of OOP by Services 2012**



The relative share of inpatient curative care expenditure steadily increased during 1997 to 2004 period, and stabilized at around 11% subsequently; in 2012 it is 14%. The increase in inpatient curative care spending is justified due to a combination of higher OOP in private hospitals and greater propensity to use private sector facilities.

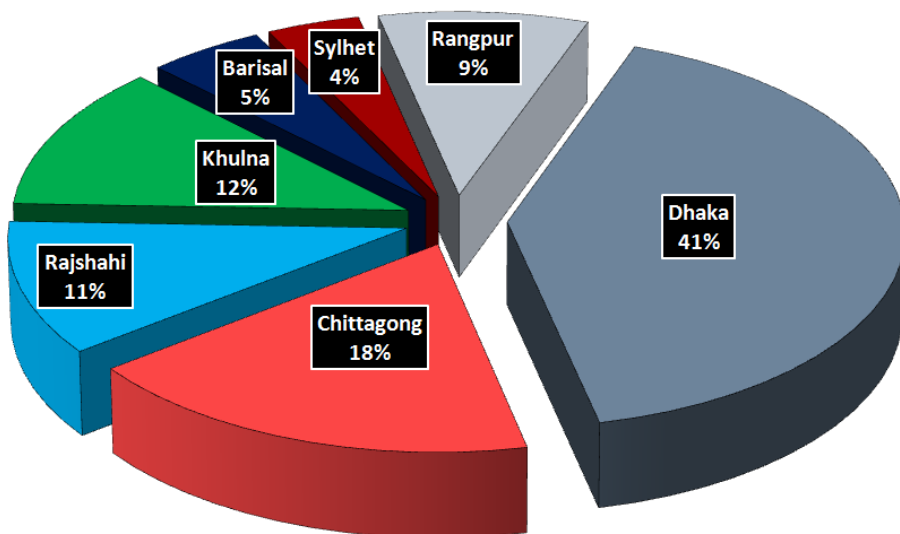


## Total Health Expenditure by Geographical Classifications

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The percentage distribution of healthcare spending by geographical region has not changed much between 1997 and 2012, except for Dhaka and Chittagong divisions.

**Figure: Share of THE by Divisions 2012**

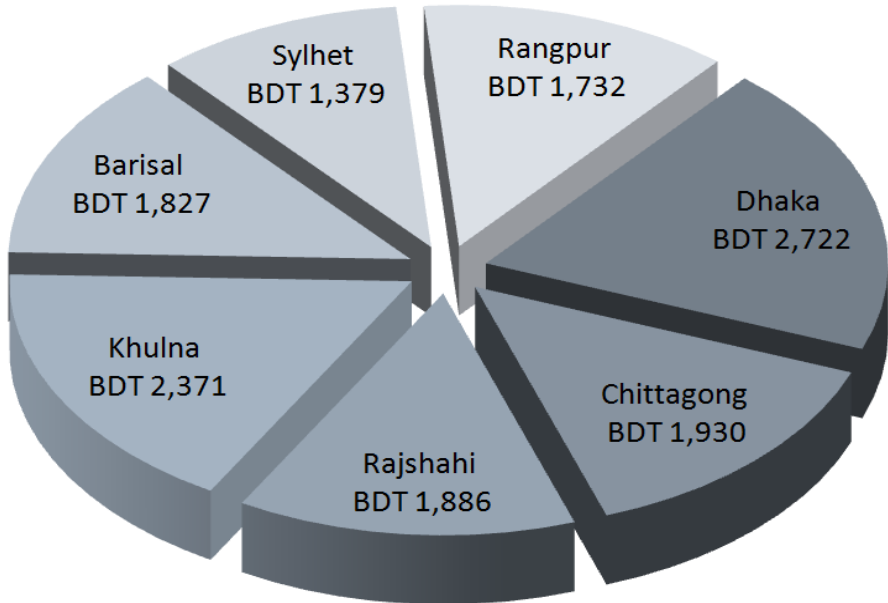


In 2012, health expenditure in Dhaka division was Taka 133 billion translating to 41% of total spending. In 1997, it was 28% of THE. In 1997, health expenditure in Chittagong division accounted for 27%, a share that has decreased to 18% in 2012. The main reason for this shift is due to faster increase in private sector health spending as well as investment in Dhaka division. The relative shares are much lower in Sylhet and Barisal, and have changed little.

In 2012, Dhaka division had the highest per capita spending of Taka 2,722 followed by Khulna (Taka 2,371) and Chittagong (Taka 1,930). The lowest per

capita spending was in Sylhet division (Taka 1,379). During the period 1997 – 2006 Chittagong division had the highest per capita spending. Barisal, Rangpur and Sylhet had relatively lower per capita expenditure than the other four divisions.

**Figure: Per capita THE by Divisions 2012**



As a percentage share of total government spending on health, in 2012, Dhaka (26%) and Chittagong (18%) are higher and lower in Barisal (8%) and Sylhet (7%). Per capita government outlay however is lowest in Dhaka division – Taka 396 while Chittagong division is the next lowest (Taka 464). Barisal division has the highest per capita public spending (Taka 668) followed by Khulna (Taka 631).

**Table: Per capita THE by Divisions 1997 - 2012**

| Year | Dhaka | Chittagong | Rajshahi | Khulna | Barisal | Sylhet | Rangpur |
|------|-------|------------|----------|--------|---------|--------|---------|
|      | Taka  | Taka       | Taka     | Taka   | Taka    | Taka   | Taka    |
| 1997 | 349   | 527        | 382      | 357    | 277     | 381    | 283     |
| 1998 | 384   | 566        | 409      | 382    | 301     | 410    | 302     |
| 1999 | 423   | 610        | 439      | 411    | 330     | 440    | 326     |
| 2000 | 479   | 606        | 459      | 434    | 461     | 559    | 375     |
| 2001 | 558   | 644        | 518      | 490    | 535     | 635    | 444     |
| 2002 | 632   | 705        | 580      | 554    | 604     | 692    | 470     |
| 2003 | 673   | 760        | 608      | 571    | 626     | 680    | 504     |
| 2004 | 759   | 850        | 686      | 676    | 722     | 760    | 550     |
| 2005 | 884   | 945        | 746      | 732    | 799     | 827    | 631     |
| 2006 | 1,019 | 1,064      | 850      | 868    | 936     | 954    | 838     |
| 2007 | 1,187 | 1,183      | 994      | 1,036  | 998     | 1,004  | 845     |
| 2008 | 1,484 | 1,294      | 1,059    | 1,207  | 1,024   | 1,085  | 939     |
| 2009 | 1,658 | 1,411      | 1,230    | 1,445  | 1,163   | 1,135  | 1,182   |
| 2010 | 2,002 | 1,622      | 1,466    | 1,721  | 1,378   | 1,164  | 1,373   |
| 2011 | 2,390 | 1,857      | 1,729    | 2,065  | 1,631   | 1,265  | 1,520   |
| 2012 | 2,722 | 1,930      | 1,886    | 2,371  | 1,827   | 1,379  | 1,732   |

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