



BANGLADESH NATIONAL HEALTH ACCOUNTS 1996/97

Nominal million Taka	Sources and Financing Intermediaries			
	Public Sector Financing			
	MOHFW		Other Ministries & Divisions	Local Governments
Providers	Revenue Budget	Development Budget		
Government Providers				
MOHFW Secretariat	840.2	1364.9		
Medical College Hospitals	923.3	1011.7		
District Hospitals	646.5	1118.6		
Thana Level Facilities	2388.8	2599.1		
Lower Level Facilities	758.8	806.1		
Specialised Hospitals	1041.3	1621.4		
Other MOHFW Facilities	92.4	37.9		
Other GOB Facilities			604.0	
Local Government Facilities				180.5
Corporations & Autonomous Bodies				
Research & Training Institutions				
Government	375.8	1544.3	14.0	
Non-Government			575.7	
Non-Profit Institutions & NGO Facilities				
NGO Affairs Bureau Registered			16.0	
Social Welfare Department Registered			45.9	
Private Modern Qualified Providers				
Private Clinics/Hospitals				
Private Practitioners, Others				
Private Modern Unqualified Providers				
Private Traditional Providers				
Private Homeopathic Providers				
Other Unqualified Providers				
Diagnostic/Imaging Service Providers				
Drug Retail Outlets				
Private Health Insurance Administration				
Foreign Providers				
TOTAL	7067.1	10104.0	1255.6	180.5

Final Report

November, 1998

Prepared for:

Health Economics Unit
Ministry of Health and Family Welfare
Dhaka, Bangladesh

Prepared by:

Data International Ltd. Bangladesh
in association with
Maxwell Stamp PLC, UK

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Asian Development Bank

CONTENTS

EXECUTIVE SUMMARY	iv
OVERVIEW OF EXPENDITURES	1
<i>National health expenditures 1996/97</i>	1
<i>Sources and uses of expenditures 1996/97</i>	2
Public sector financing	2
Private sector financing	5
Foreign donors	5
Flow of funds	5
<i>Expenditures by type of provider</i>	7
EXPENDITURES BY PUBLIC SECTOR	11
<i>National government</i>	11
Ministry of Health and Family Welfare (MOHFW)	11
Expenditures by other GOB ministries	14
<i>Local government</i>	15
<i>Corporations and autonomous bodies</i>	16
<i>Expenditures by research and training institutions</i>	16
EXPENDITURES BY DEVELOPMENT PARTNERS	18
EXPENDITURES BY PRIVATE SECTOR	20
<i>Expenditures by NGOs</i>	20
Functional classification of expenditures	23
<i>Household expenditures</i>	23
<i>Insurance expenditures</i>	25
Health insurance	25
<i>Firm expenditures</i>	25
EXPENDITURES BY BENEFICIARY	27
ANNEX I:	
APPROACH AND METHODOLOGY	36
<i>Conceptual framework</i>	36
Introduction	36
Derivation of framework	36
<i>Bangladesh NHA framework</i>	36
Health expenditure definition	36
National health expenditures (NHE)	37
Base year for NHA	37
Accounting basis	37
Classifications	37
Financing sources	37
Financial intermediaries	38
Providers	38
Beneficiaries	39
ANNEX II:	
METHODS AND DATA SOURCES USED IN ESTIMATES	41
<i>Public sector expenditure</i>	41
Ministry of health and family welfare	41
Other GOB ministries	41
Local government	41
Corporations and autonomous bodies	41

Facility survey	42
Survey of research and training institutes	42
<i>Survey of development partners</i>	42
<i>Private sector expenditure</i>	42
NGO survey	42
Household expenditures	43
Household survey data	44
Supply side data	45
ANNEX: III	
ADDITIONAL TABELS	47
ANNEX: IV:	
Survey sources	49
BBS household expenditure survey 1995/96	49
Private clinic survey 1997	49
NGO survey 1998	50
Facility efficiency survey 1998	50
Survey of research and training institutes	50
IMS	51
BIBLIOGRAPHY	52

DATA COLLECTION MANUAL

CONTENTS

Background	1
Manual for NGO Health Expenditure Survey, 1998	1
Manual for Health Insurance Expenditure Survey, 1998	4
Manual for Facility Efficiency Survey, 1997-98	6
Manual for Health Education, Research and Training Institutions Survey, 1997-98	10
Manual for Other Ministries' Health Expenditure Survey, 1998	12

List of Tables

Table 1: Comparative national health expenditures and share from public sources for selected countries	1
Table 2: Bangladesh national health account, 1996/97	3
Table 3: Bangladesh national health account, 1996/97 (Percentage composition of expenditure)	4
Table 4: Uses of household (HH) health expenditures by providers 1996/97	9
Table 5: MOHFW expenditures	11
Table 6: MOHFW expenditures per capita	12
Table 7: MOHFW expenditures (net of user fees) by type of facility 1991/92 – 1996/97	13
Table 8: Percentage distribution of MOHFW expenditure (net of user fees) by provider 1991/92 – 1996/97	13
Table 9: Percentage distribution of MOHFW expenditures by functional categories 1991/92-1996/97	14
Table 10: Health expenditures by ministries other than MOHFW	15
Table 11: Health expenditures by city corporations	15
Table 12: Health expenditures by selected municipalities	15
Table 13: Health-related expenditures by selected public corporations	16
Table 14: Estimated revenue by source of research and training institutions	17
Table 15: Revenue by source of research and training institutions (percentage of total)	17
Table 16: Estimated health expenditure by use of research and training institutions	17
Table 17: Health expenditure by use of research and training institutions (percentage of total)	18
Table 18: Funds disbursements by the development partners in 1997	18
Table 19: Percentage distribution of funds disbursements by the development partners in 1997	19
Table 20: Coverage of NGO survey	20
Table 21: Estimated total expenditure of the NGOs	20
Table 22: Percentage distribution of revenue by sources	21
Table 23: Estimated total number of outpatients served by the NGOs	21
Table 24: Estimated NGO hospital facilities and inpatient served by the NGOs	22
Table 25: Comparison of service volume, 1997	22
Table 26: Distribution of estimated expenditure by services provided	22
Table 27: Percentage distribution of expenditure by services provided by NGOs	22
Table 28: Household expenditure by provider type	23
Table 29: Premiums, claims and use of insurance expenditures	25
Table 30: Composition of labour force in Bangladesh	26
Table 31: Health expenditures by the three of the biggest tea companies	26
Table 32: Distribution of per capita expenditures for personal medical services by income quintiles	32
Table 33: Total expenditure on personnel medical services by income quintile	32
Table 34: Inpatient & outpatient subsidy per capita in government facilities by income quintiles	33
Table 35: Distribution of inpatient health expenditures per capita by gender and age	33
Table 36: Distribution of outpatient health expenditures per capita by gender and age	34
Table 37: Total expenditure on personnel medical services by gender and age	34
Table 38: Distribution of per capita expenditures per personal medical services by gender and age	35
Table 39: Distribution of per capita expenditures for personal medical services by location of household	35
Table 40: Total expenditure on personal medical services by location of household	35
Table 41: Inpatient and outpatient subsidy per capita in government facilities by location of household	35
Table 42: Classification of financing sources	38
Table 43: Classification of providers	39
Table 44: Functional classification of health expenditures in Bangladesh (for NHA)	40
Table 45: Household expenditure by provider type	43
Table 46: Household surveys reporting household health expenditures	43

Table 47: Comparison of household survey estimates of health spending as percentage of GDP	44
Table 48: Comparison of these independent estimates with the estimates derived from MHSS 1996-97	44
Table 49: Derivation of estimated household health expenditures by provider type	46

Annex-Tables

Table A1: Macroeconomic indicators	47
Table A2: Population, IMR, Male/Female LEB, TFR	47
Table A3: Basic demographic indicators	47
Table A4: Market segments covered by IMS audit	48
Table A5: Bangladesh pharmaceutical index data	48
Table A6: Percentage share of main channels of pharmaceutical distribution In Bangladesh	48

List of Figures

Figure 1: Infant mortality and health expenditure in selected countries	1
Figure 2: National Income and health expenditure of selected low-income countries	2
Figure 3: Sources of funds for Bangladesh's health care system	5
Figure 4: Flow of funds in Bangladesh health care system	6
Figure 5: Flow of funds from sources to financing intermediaries and to providers in Bangladesh health care system, 1996/97	7
Figure 6: Uses of national health expenditures by type of providers	8
Figure 7: Uses of public sector financing	9
Figure 8: Uses of private sector health care financing	10
Figure 9: Percentage distribution of household expenditures by provider type	25
Figure 10: Composition of household expenditures for medical services by provider type	25
Figure 11: Distribution of public and private health expenditures by income quintile	29
Figure 12: Distribution of health expenditures by income quintiles according to type of service	29
Figure 13: Distribution of public inpatient expenditure by per capita households income quintiles	30
Figure 14: Distribution of public outpatient expenditure by per capita households income quintiles	30
Figure 15; The distribution of per capita health expenditures by location of household	31
Figure 16: Distribution of public and private health expenditure by gender according to type of service	32
Figure 17: Distribution of per capita health expenditures by age group	32

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ACRONYMS

ADB	Asian Development Bank
ADP	Annual Development Programme
AUSAID	Australian Agency for International Development
BANHA	Bangladesh National Health Accounts
BBS	Bangladesh Bureau of Statistics
CAO	Chief Accounts Officer
CBR	Crude Birth Rate
CD	Customs Duty
CDR	Crude Death Rate
DFID	Department for International Development (formerly ODA)
DG	Director General
DGHS	Directorate General of Health Services
DFP	Directorate of Family Planning
DH	District Hospital
DHS	Demographic and Health Survey 1996/97
DI	Data International
ERD	Economic Relations Division
GDP	Gross Domestic Product
GOB	Government of Bangladesh
HCFA	Health Care Financing Administration
HDS	Health and Demographic Survey
HES	Household Expenditure Survey
HEU	Health Economics Unit
HH	Households
HKDHA	Hong Kong Domestic Health Accounts
ICDDR,B	International Center for Dhiarrhoeal Diseases and Research, Bangladesh
IDA	International Development Association
IHT	Institute of Health Technologist
IMED	Implementation, Monitoring and Evaluation Division
IMF	International Monetary Fund
IMPS	Integrated Multi-Purpose Sampling
IMR	Infant Mortality Rate
IPS	Institute of Policy Studies of Sri Lanka
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
LFS	Labour Force Survey
MAU	Management Accounting Unit
MATS	Medical Assistant Training School
MCH	Medical College Hospital
M/F	Male/Female
MHSS	Morbidity and Health Status Survey
MIS	Management Information Systems
MMR	Maternal Mortality Rate
MOD	Ministry of Defence
MOF	Ministry of Finance

MOHA	Ministry of Home Affairs
MOHFW	Ministry of Health and Family Welfare
MOLGRD	Ministry of Local Government & Rural Development
MOP	Ministry of Planning
NGO	Non-Government Organization
NHA	National Health Accounts
NHE	National Health Expenditure
ODA	Overseas Development Administration, UK (now DFID)
OECD	Organization for Economic Cooperation and Development
PFC	Project Finance Cell
PHC	Primary Health Care
PP	Project Proforma
PPC	Project Preparation Cell, MOHFW
PSU	Primary Sampling Unit
RIBEC	Reforms in Budgeting and Expenditure Control
RTI	Research and Training Institutions
SAR	Special Administrative Region
SLHA	Sri Lankan Health Accounts
SNA	System of National Accounts
SOE	State Owned Enterprise
TFR	Total Fertility Rate
THC	Thana Health Complex
Tk	Taka (Bangladeshi Currency Unit)
TOR	Terms of Reference
USAID	United States Agency for International Development
USD/US\$	U. S. Dollar
UNICEF	United Nations International Children's Emergency Fund
VAT	Value Added Tax
WDR	World Development Report
WHO	World Health Organisation

Currency information

Tk. in Crore	=	Tk. 10 million
Tk. in lakh	=	Tk. 100,000
US \$ 1.00	=	Tk. 41.79 (1996-97)

EXECUTIVE SUMMARY

1. Bangladesh spent a total of Tk. 54,700 million (Tk 5,470 crore) on health in 1996/97, equivalent to 3.9% of GDP and US\$ 10.6 per capita. This was financed 34% by public sources (including foreign assistance), 64% by households and the private sector, and 1% by NGOs. In comparative terms, national health expenditures in Bangladesh are about or above the level that one might expect for a country at its income level, although the public share in total financing is less than the norm. In fact, Bangladesh spends a marginally higher proportion of its national resources on health care than two other low-income developing countries with better health outcomes, China and Sri Lanka, do currently, and did previously when they were at Bangladesh's level of economic development. This suggests that the major issues for Bangladesh's financing policy framework should be improving the efficiency and effectiveness in the use of both national and public sector health care resources, as well as understanding the implications of the high reliance on private financing and the low share of public spending.

2. Government health expenditures (including donor funding) only account for 34% of the total. The actual funding of these expenditure remains unclear, as the MOHFW Development Budget accounts for the larger proportion of MOHFW expenditures, and the funding of the ADP is not particularly transparent. There is a need to substantially improve the quality and availability of information on donor financing and expenditures through the Development Budget, as the current situation does not readily permit analysis of the role and effectiveness of GOB funds. It is clear though that donor funding comprises a significant share of overall public sector health financing, perhaps accounting for as much as one half of the total.

3. In general, in poorer countries public financing accounts for a lower share of overall health financing. Bangladesh is not unusual in this respect. In general, as countries become wealthier, governments increase their role in financing health care, and public financing accounts for a larger share of overall health expenditures. In the richest capitalist economies, governments are the predominant source of all health care expenditures, typically accounting for more than 80% of health sector funds. This trend reflects improvements in taxation capacity with income, as well the need to use public spending to overcome well-known market failures in the health sector. Given that GOB's tax base remains less than 10% of GDP, the ability to increase public health spending will be limited in the foreseeable future. This indicates the need to place a priority on improving the effectiveness to which public health expenditures are used in a sector in which household financing is dominant, as well as emphasising the need for GOB to expand its revenue collection capacity in order to finance a more effective role in the social sectors. The evident need for more public involvement in the social sector, also underlines the urgency for Bangladesh to place higher priority when allocating budgetary resources on the objectives of equity and efficiency, rather than political and special interest group pressures. For instance, there is a huge drain on the public coffer to subsidise loss making SOE's. Considerable resources would be made available for the social sectors, if such transfers were removed. The option for reallocation of funds from such subsidies to social sector, including health should be addressed.

4. Although the level of national health expenditures is greater than the amount estimated as required for provision of the essential services package (US\$ 3.25 per capita per year), these expenditures are mostly not used for that purpose. Public spending is a little under US\$ 4 per capita, but is clearly not financing universal access to the essential services package. Reasons include allocation of government expenditures for purposes other than the essential services package, plus considerable inefficiency in the delivery of services. However, it may not be possible to reallocate substantial proportions of the existing government budget in favour of the essential services package, because of the inherent difficulty in moving resources out of existing programs, plus the presumed priority of some of these other uses.

5. Households account for the bulk of financing. There are three distinctive features in household spending: (i) 73% is used to purchase pharmaceuticals; (ii) 7% is spent on consultations at non-qualified or traditional medical providers, with only 10% being spent at qualified medical providers; (iii) a significant proportion is associated with visits to nominally free government facilities. These have important implications for any policy attempting to use these expenditures to improve

access to basic health services. The high proportion of expenditures on drugs reflects high levels of self-treatment and of self-medication. This might be because of difficulties in accessing qualified medical providers, as well as lack of confidence in them. Lack of trust in the effectiveness of modern medical providers is further underlined by the high level of other expenditures which are for the services of traditional and homeopathic providers, as well as unqualified modern medical providers. Household expenditure patterns reveal a population which is still early in the process of learning the effectiveness of modern medicine, and which lacks the information to distinguish between the technical competency of different providers. In this situation, relying on households to purchase appropriate and effective medical services would be premature, and highlights the need for a stronger government financing role in ensuring adequate use of modern medical services. At the same time, a significant proportion of existing household expenditures is associated with visits to nominally free government facilities. How much of this is due to the unavailability of services and supplies in the facilities, and how much is due to the payment of unofficial fees to government providers is unclear, but this should be an area of concern.

6. In terms of the use of expenditures, Bangladesh devotes a relatively small share of its total national (<10%) and total public sector expenditures (<17%) to the financing of inpatient care. This compares with more than 40% of national health expenditures in developed economies and superior developing country health performers such as China, Sri Lanka or Malaysia. Governments need to devote significant public resources to inpatient care in most countries, since private insurance markets generally fail to meet the need for protection against catastrophic illness, and since hospitalisation can impose substantial welfare losses on households. This suggests that GOB may be under-funding inpatient care and not over-funding it, as is commonly supposed

7. In distributional terms, the pattern of expenditures reveals a bias in government expenditures in favour of urban residents, largely driven by the availability of access to medical college hospitals and district hospitals. However, when the utilisation of services by income level is examined, MOHFW outpatient and inpatient services although used more by the highest income quintile, are not so skewed in favour of the higher income groups as expected. Overall 17% of total government health subsidies benefit the poorest quintile of the population, while 25% benefits the richest quintile. The poorer groups do receive a significant share of MOHFW expenditures, and in comparison with their household income, public sector health subsidies add considerably to their overall welfare. There is some gender bias in the distribution of public sector outpatient expenditures, but this is largely compensated for by a greater use of MOHFW inpatient services by women than men. In the overall targeting of government health subsidies Bangladesh does better in reaching the poor than some Asian countries, such as Indonesia and Viet Nam, but considerably worse than others, such as Sri Lanka, Malaysia and The Philippines. This indicates considerable potential for better targeting public health subsidies to the poorer groups, although it should not be forgotten that the bulk of the population is already poor. Possible options include better geographical allocation of budgets in favour of rural facilities, and away from the tertiary level medical college hospitals and other specialised and non-MOHFW hospitals towards district hospitals and thana health complexes.

8. NGOs are the third element in Bangladesh's health system after government and for-profit providers. They are largely funded by government subsidies and donor support, and they appear to generate few new additional resources for the health sector. Notwithstanding the fact that total NGO expenditure account for less than 3% of NHE, they account for 8.5% of total public sector funds and deliver a sizeable proportion of health services in certain areas favoured by donors, such as family planning. The data are insufficient to make a comprehensive assessment of the effectiveness and efficiency of NGO service delivery, but this should be a priority for further investigation given the large amount of public and donor funding directed to this subsector.

9. A detailed and comprehensive picture of health financing flows and their distribution and use has been compiled for Bangladesh. The experience demonstrates that the availability of data in Bangladesh and technical capacity are sufficient to regularly estimate national health accounts on a yearly basis at relatively low cost. Priorities for the future include institutionalising the compilation and use of NHA data, as well as improving the precision, reliability and detail of the accounts themselves.

OVERVIEW OF EXPENDITURES

National Health Expenditures 1996/97

In 1996/97, total national health expenditures in Bangladesh amounted to Tk. 54,700 million, or the equivalent of 3.9% of GDP. In per capita terms, this represented the equivalent of Tk. 443 per person, or US\$ 10.6 per person.

The level of national health expenditures is relatively high in Bangladesh in comparison with other low-income developing countries, and in comparison with some other Asian countries (Table 1). In the South Asian region,

this level of expenditures as a proportion of GDP is higher than that in Sri Lanka, but less than that in India. It should be noted that there is no direct link between the relative level of national resources devoted to health and actual health outcomes; Sri Lanka with a low level of health expenditures enjoys good health indicators, while Egypt with a relatively high level of health expenditures performs poorly in health terms (Figure 1).

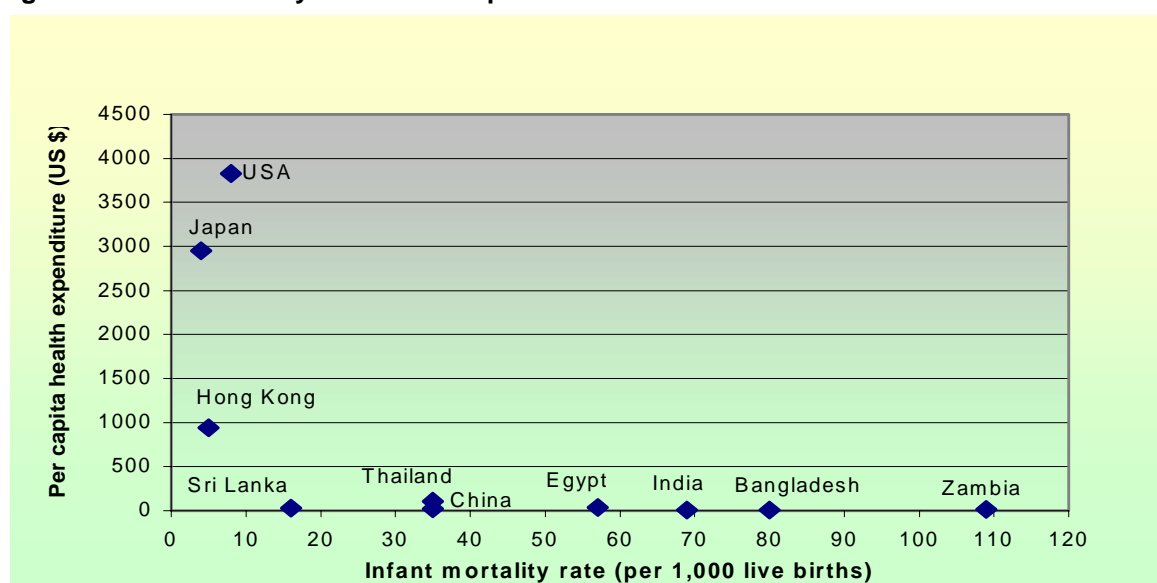
Table 1: Comparative national health expenditures and share from public sources for selected countries

Country	Year	National health expenditures (Percentage of GDP)	Percentage from public sources	Per capita income (1995) US\$	Per capita expenditure on health (US\$)
Bangladesh	1996-97	3.9%	34%	260	10.6
India	1992	5.6%	21%	340	8
Sri Lanka	1996	3.4%	50%	700	26
China	1993	3.8%	47%	620	19
Egypt	1995	3.7%	44%	790	38
Zambia	1990	3.3%	70%	400	17
Thailand	1992	5.3%	26%	2,740	103
Hong Kong	1996	5.0%	50%	22,990	944
Japan	1994	7.0%	79%	39,640	2947
USA	1995	14.5%	48%	26,980	3828

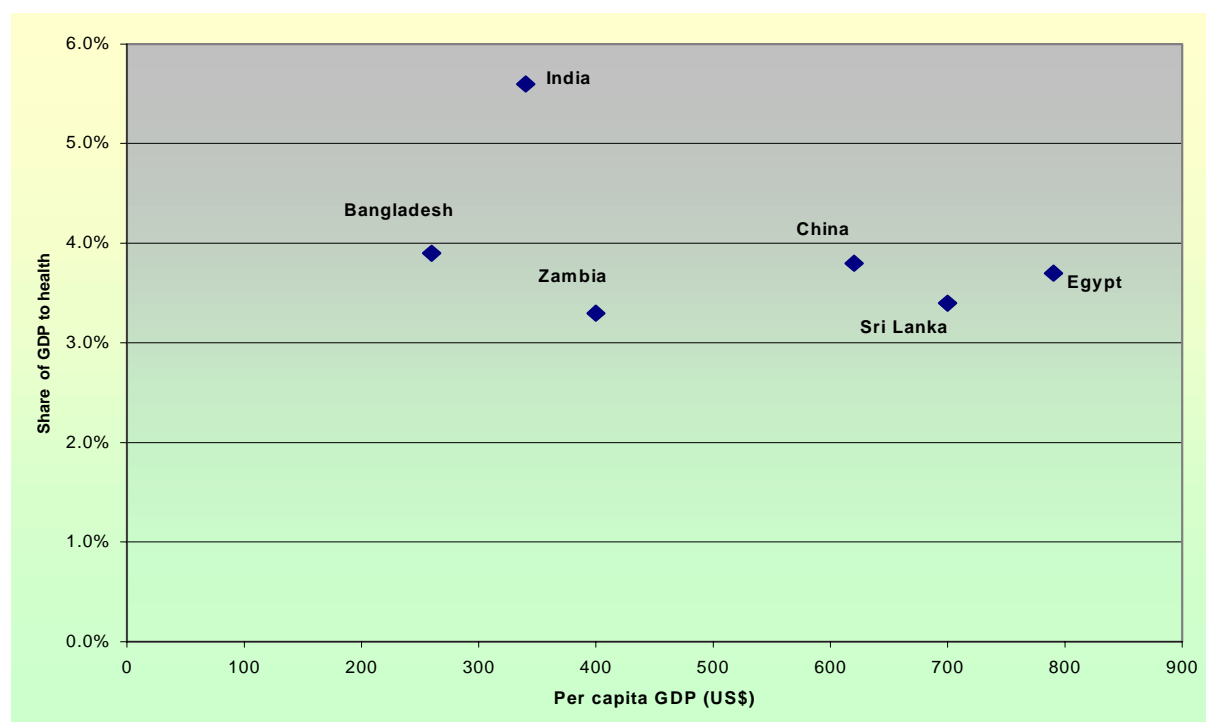
Notes: n.a. refers to not available
Figures for Bangladesh are for 1996/97

Source: World Bank (1997), World Bank (1993), Institute of Policy Studies of Sri Lanka, Rannan-Eliya, et al., (1997), Bangladesh NHA 1996/97 estimates.

Figure 1: Infant mortality and health expenditure in selected countries



Source: World Bank (1997), World Bank (1993), Institute of Policy Studies of Sri Lanka, Rannan-Eliya, et al., (1997), Bangladesh NHA 1996/97 estimates.

Figure 2: National income and health expenditure of selected low-income countries

Source: World Bank (1997a), World Bank (1997c), World Bank (1993), Institute of Policy Studies of Sri Lanka, Rannan-Eliya, et al., (1997), and Bangladesh NHA 1996/97 estimates.

Expenditures by the public sector accounted for 34% of the total. This was equivalent to 1.3% of GDP, or Taka 151 per capita (US\$ 3.6 per capita). In comparison with advanced capitalist market economies and other Asian countries, the share of government in total health financing in Bangladesh is small (Table 1).

Sources and Uses of Expenditures 1996/97

National health expenditures are funded from several sources. Table 2 and Table 3 give the estimated national health account for Bangladesh for 1996/97. The largest single source of health care financing is direct payments by households, which accounts for 63% of the total. Government financing is only the second largest source of funds, contributing 34% of the total. NGOs, private insurance and employers together account for less than 1% of total financing (Figure 3).

Public sector financing

Most government funding is undertaken by the central government. The role of local government and other public sector agencies is minimal. Government funding is largely

directed through the Ministry of Health and Family Welfare (MOHFW). Government health spending is derived from two components of the national budget: the revenue budget and the development budget. MOHFW recurrent expenditure is funded through the revenue budget. All MOHFW development programmes (mostly investment and technical assistance programmes) are financed through the development budget. The development budget is the largest in terms of contribution, accounting for 58% of the total MOHFW funding. About 66% of MOHFW spending takes place in hospital level facilities, consisting of medical college hospitals, district hospitals, thana health complexes and other specialised hospitals. The contribution of official user charges to public sector financing is minimal. Total public sector user fees were little more than Taka 170 millions, or less than 1% of total government expenditures.

Table 2: Bangladesh National Health Account, 1996/97 (Nominal million Taka)

Providers	Sources and Financing Intermediaries									TOTAL	
	Public Sector Financing						Private Sector Financing				
	MOHFW		Other Ministries & Divisions	Local Governments	Corporations & Autonomous Bodies	Donors	Non-Profit Inst & NGOs	Private Insurance	Firms		Households
Revenue Budget	Development Budget										
Government Providers											
MOHFW Secretariat	840.2	1364.9								72.0	2277.1
Medical College Hospitals	923.3	1011.7								28.0	1963.0
District Hospitals	646.5	1118.6								18.0	1783.1
Thana Level Facilities	2388.8	2599.1								14.0	5001.9
Lower Level Facilities	758.8	806.1									1564.9
Specilised Hospitals	1041.3	1621.4								22.0	2684.7
Other MOHFW Facilities	92.4	37.9									130.3
Other GOB Facilities			604.0							0.1	604.1
Local Government Facilities				180.5						4.6	185.0
Corporations & Autonomous Bodies					60.0						60.0
Research & Training Institutions											
Government	375.8	1544.3	14.0							11.7	1945.8
Non-Government			575.7			72.5				131.0	779.2
Non-Profit Institutions & NGO Facilities											0.0
NGO Affairs Bureau Registered			16.0			1043.2	141.2		9.1	127.1	1336.5
Social Welfare Department Registered			45.9			81.0	41.3		3.3	70.1	241.6
Private Modern Qualified Providers									200.0		200.0
Private Clinics/Hospitals										1135.6	1135.6
Private Practitioners, Others										2005.0	2005.0
Private Modern Unqualified Providers										1400.5	1400.5
Private Traditional Providers										205.0	205.0
Private Homeopathic Providers										102.5	102.5
Other Unqualified Providers										734.3	734.3
Diagnostic/Imaging Service Providers										3122.1	3122.1
Drug Retail Outlets										25234.5	25234.5
Private Health Insurance Administration								1.8			1.8
Foreign Providers											0.0
TOTAL	7067.1	10104.0	1255.6	180.5	60.0	1196.6	182.5	1.8	212.5	34438.0	54698.5

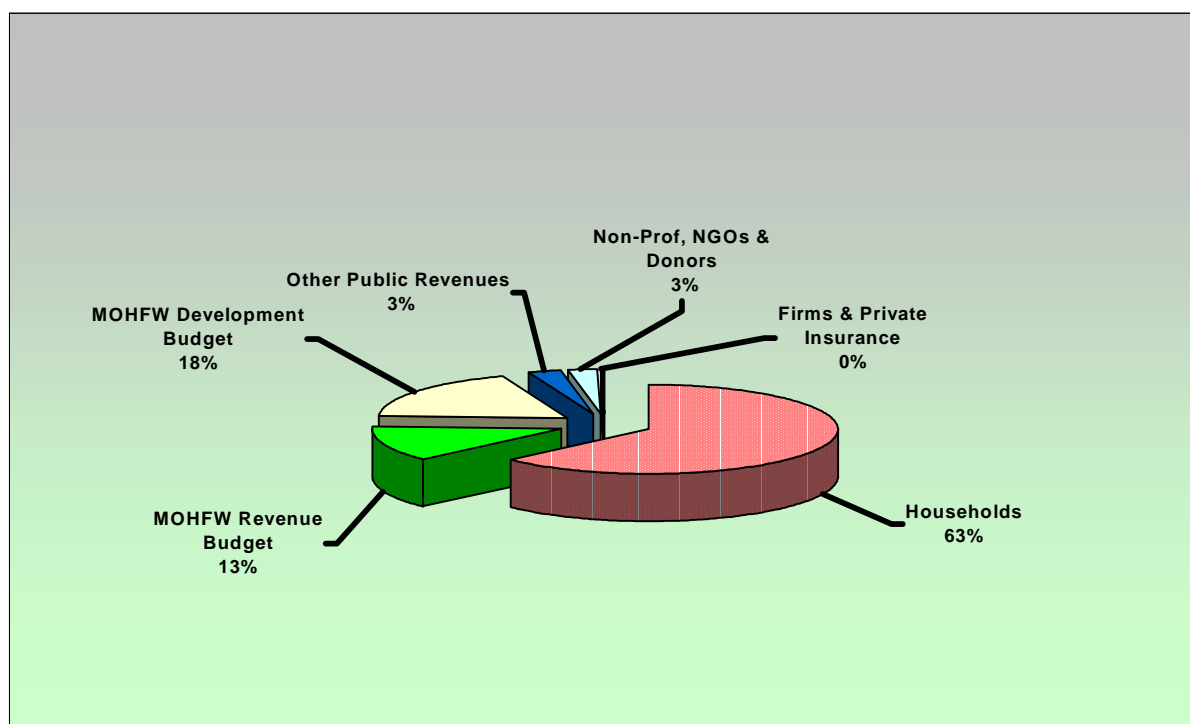
Source: Bangladesh NHA 1996/97

Note: Donors funding is only for private sector.

Table 3: Bangladesh National Health Account, 1996/97(percentage composition of expenditures

Providers	Sources and Financing Intermediaries									TOTAL	
	Public Sector Financing						Private Sector Financing				
	MOHFW		Other Ministries & Divisions	Local Governments	Corporations & Autonomous Bodies	Donors	Non-Profit Inst & NGOs	Private Insurance	Firms		Households
Revenue Budget	Development Budget										
Government Providers											
MOHFW Secretariat	1.5%	2.5%							0.1%	4.2%	
Medical College Hospitals	1.7%	1.8%							0.1%	3.6%	
District Hospitals	1.2%	2.0%							0.0%	3.3%	
Thana Level Facilities	4.4%	4.8%							0.0%	9.1%	
Lower Level Facilities	1.4%	1.5%								2.9%	
Specilised Hospitals	1.9%	3.0%							0.0%	4.9%	
Other MOHFW Facilities	0.2%	0.1%								0.2%	
Other GOB Facilities			1.1%						0.0%	1.1%	
Local Government Facilities				0.3%					0.0%	0.3%	
Corporations & Autonomous Bodies					0.1%					0.1%	
Research & Training Institutions											
Government	0.7%	2.8%	0.0%						0.0%	3.6%	
Non-Government			1.1%			0.1%			0.2%	1.4%	
Non-Profit Institutions & NGO Facilities										0.0%	
NGO Affairs Bureau Registered			0.0%			1.9%	0.3%	0.0%	0.2%	2.4%	
Social Welfare Department Registered			0.1%			0.1%	0.1%	0.0%	0.1%	0.4%	
Private Modern Qualified Providers								0.4%		0.4%	
Private Clinics/Hospitals									2.1%	2.1%	
Private Practitioners, Others									3.7%	3.7%	
Private Modern Unqualified Providers									2.6%	2.6%	
Private Traditional Providers									0.4%	0.4%	
Private Homeopathic Providers									0.2%	0.2%	
Other Unqualified Providers									1.3%	1.3%	
Diagnostic/Imaging Service Providers									5.7%	5.7%	
Drug Retail Outlets									46.1%	46.1%	
Private Health Insurance Administration							0.0%			0.0%	
Foreign Providers										0.0%	
TOTAL	12.9%	18.5%	2.3%	0.3%	0.1%	2.2%	0.3%	0.0%	0.4%	63.0%	100.0%

Source: Bangladesh NHA 1996/97

Figure 3: Sources of funds for Bangladesh's health care system

Source: Bangladesh NHA 1996/97

Private sector financing

Private financing is the predominant funding mechanism in Bangladesh's health system. Private sector funding consists almost completely of direct payments by households. The role of NGO financing is small (<3% of total), as NGOs receive most of their funds from foreign and local donors. Employer spending, private health insurance and other forms of third party financing are minimal (<1%). Public sector financing is directed almost exclusively through public sector providers, while private sector funding is largely used to finance services at private sector providers.

Foreign Donors

Although MOHFW development budget is financed largely through international donor assistance it is not feasible at present to make a detailed analysis of the extent to which donor contributions account for the financing of the development budget for the public

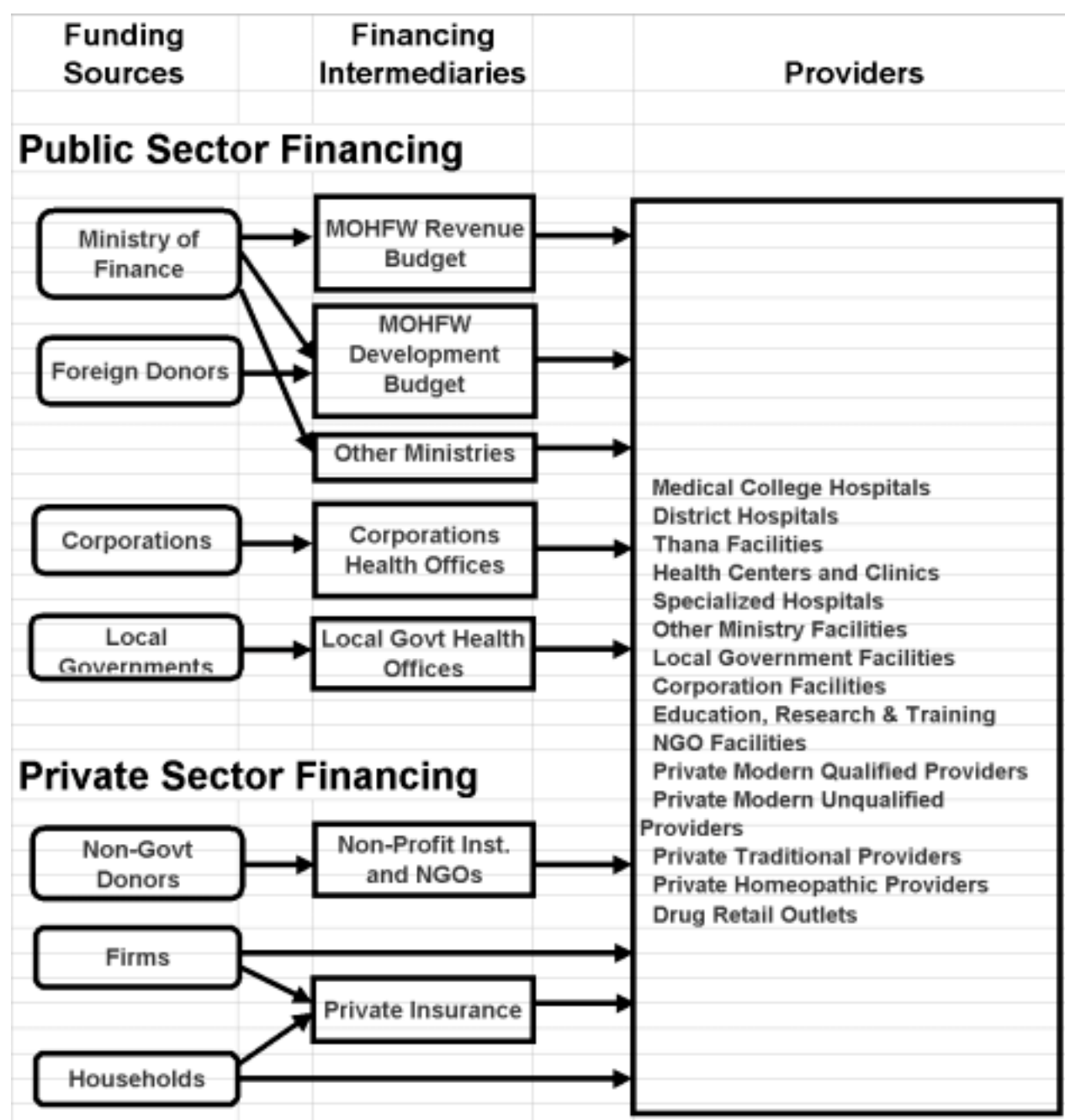
sector. The largest donors in the health sector are USAID, European Union, CIDA, DFID and the World Bank

International donors disburse funds both to government and NGOs. In the case of NGOs they account for a substantial share of all financing. In Tables 2 and 3 the column 'Donor' refers to foreign official aid agencies, non-government organisation, and individuals providing funds to private sector organizations such as NGOs, and private sector health research and training institutions.

Flow of funds

Third party payment mechanisms are not important in Bangladesh's health sector. Funds mostly pass directly from the funding agencies or sources to the providers of services. Within the public sector, the two key sources of funds are the revenue budget and development budget. Figures 4 and 5 illustrate the flow of funds in the health system.

Figure 4: Flow of funds in Bangladesh's health care system



Source: Bangladesh NHA 1996/97

Figure 5: Flow of funds from sources to financing intermediaries and to providers in Bangladesh's health care system, 1996/97

Funding Sources	Financing Intermediaries	Funds (Crore Taka)	Percent Total
Public Sector Financing			
Ministry of Finance	MOHFW Revenue Budget	717.3	12.6
Foreign Donors	MOHFW Development Budget	1069.8	18.8
	Other Ministries & Divisions	66.7	1.2
Corporations	Corporation Health Offices	3.0	0.3
Local Governments	Local Govt Health Offices	18.5	0.1
Private Sector Financing			
Non-Govt Donors	Non-Profit Inst & NGOs	207.6	3.6
Firms		5.0	0.1
	Private Insurance	0.6	0.0
Households		3604.1	63.3
	TOTAL	5692.6	100.0

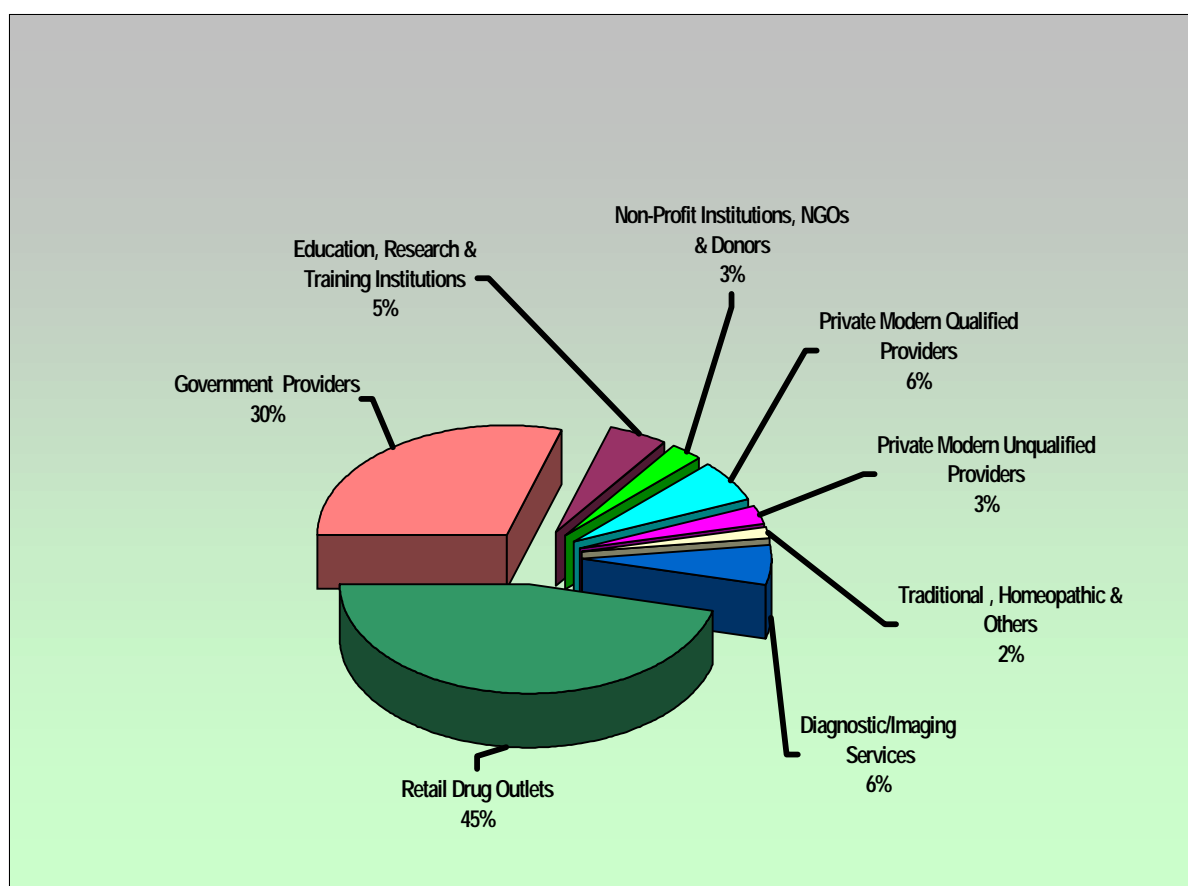
Source: Bangladesh NHA 1996/97

Expenditures by type of provider

The direct flow of funds to providers, and the small share of total financing accounted for by the government, combine to ensure that MOHFW expenditures represent a small

proportion of total health expenditures. MOHFW facilities account for 29% of total national health expenditures. Retail drug outlets account for 46%. Other government

Figure 6: Uses of national health expenditures by type of provider



Source: Bangladesh NHA 1996/97

providers account for another 1% and other modern private providers for 8% (Figure 6). The relatively small share of total expenditures at MOHFW facilities indicates the difficulties inherent in achieving public policy goals through the existing system.

Public financing is spent mostly at hospital-level facilities (Figure 7). A significant share of it is also allocated to research and training institutions. Private financing, which consists almost exclusively of household spending, is distributed quite differently (Figure 8). The largest share of household financing (73%) is spent purchasing drugs and medicines from pharmacies, shops and other drug retail outlets (Table 4). Since Bangladeshi medical practitioners and MOHFW facilities in general do not sell drugs, the bulk of these drug purchases are from private suppliers. However, it needs to be noted that a large proportion of household drug spending is associated with treatment episodes at

government providers. Owing to drug shortages at public sector providers plus possibly inappropriate referrals by official providers, households are forced often to purchase their medicines outside in the private sector.

Examination of household spending on items other than drugs and medicines (Table 4) reveal that a significant proportion of expenditures for medical treatment consist of expenditures at non-modern (3%) or unqualified modern providers (4%). Given that these providers provide treatment of less efficacy, the allocation of household spending must be associated with considerable inefficiencies, and reflects a lack of knowledge in using modern medical services prevalent in the population. Given that the population does not appear to be well-informed about the available treatment options, relying on households to finance effective health care services will face significant problems.

Table 4 shows that 9% of household health expenditures, i.e., 6% of national health expenditures is spent on diagnostic and

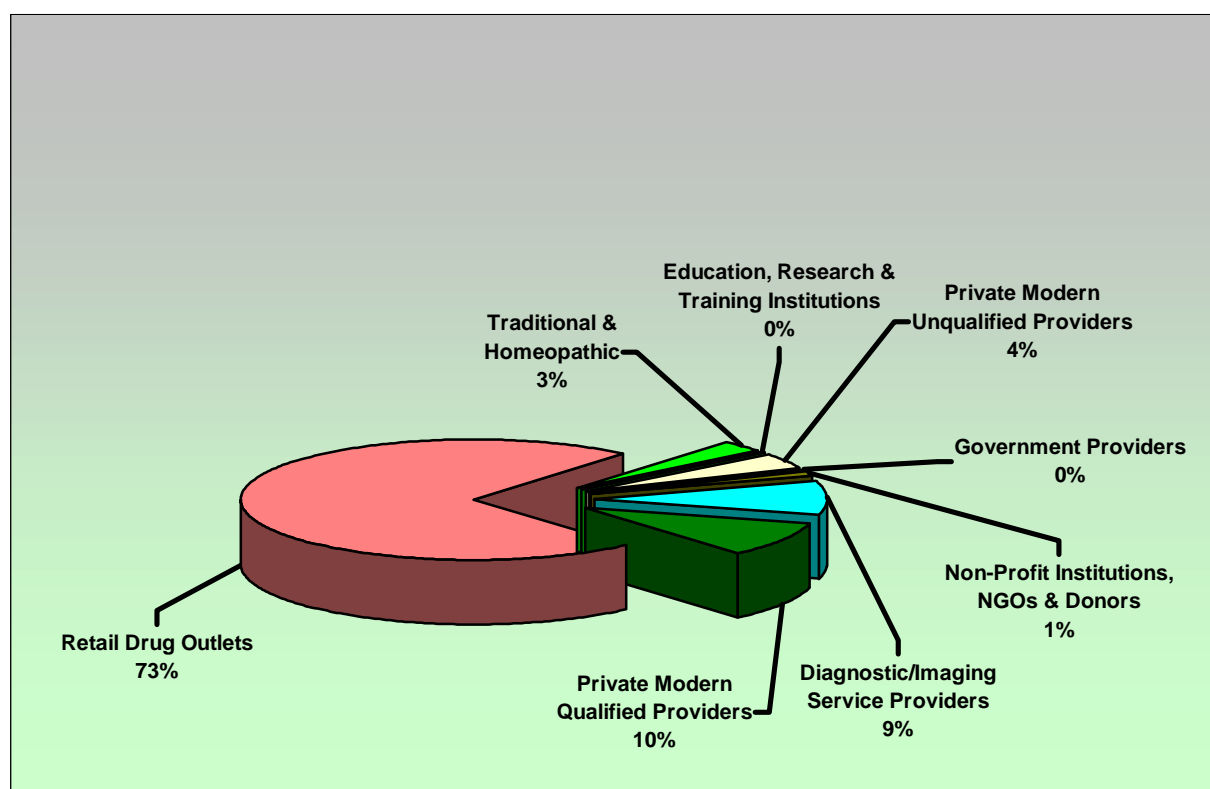
imaging services, provided by both private and public providers.

Table 4: Uses of household (HH) health expenditures by provider, 1996/97

Type of providers	HH health expenditures (nominal million Taka)	Percentage of HH health expenditures	Percentage of NHE
Traditional and homeopathic	1,042	3%	2%
Education, research and training	143	0%	0%
Private modern unqualified	1,400	4%	3%
Government providers	159	0%	0%
Non-profit and NGOs	197	0%	0%
Diagnostic/imaging	3,122	9%	6%
Private modern qualified	3,141	9%	6%
Retail Drug outlets	25,234	73%	46%
Total	34,438	100%	63%

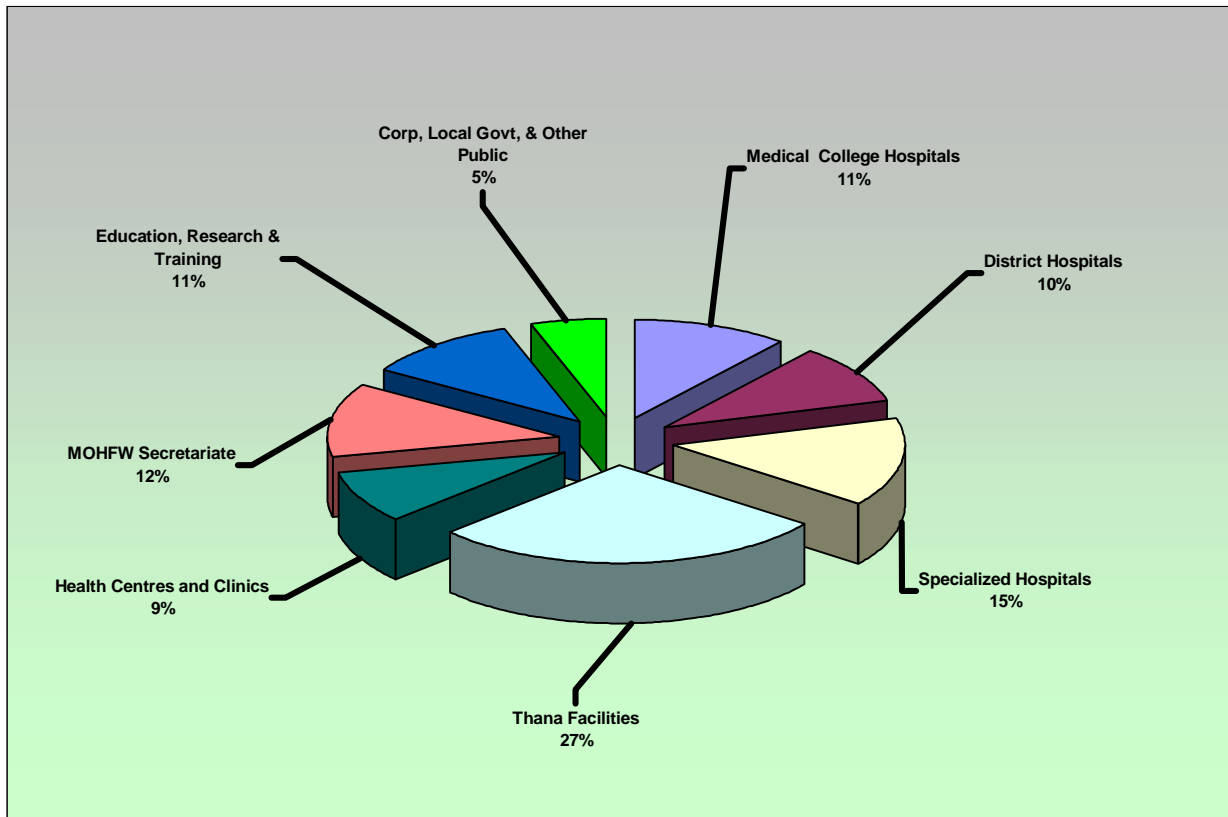
Source: Bangladesh NHA 1996/97

Figure 7: Uses of private sector financing



Source: Bangladesh NHA 1996/97

Figure 8: Uses of public sector health care financing



Source: Bangladesh NHA 1996/97

EXPENDITURES BY PUBLIC SECTOR

Government health expenditures are principally undertaken by the central government, funded mainly through general revenue taxation and support from international development partners.

Public sector health expenditures consist of expenditures by:

1. National Government
2. Local Governments
3. Corporations and autonomous bodies

National Government

National government expenditures are undertaken by:

1. Ministry of Health and Family Welfare (MOHFW)
2. Other Ministries

Ministry of Health and Family Welfare (MOHFW)

MOHFW Expenditures

The Ministry of Health and Family Welfare (MOHFW) is the largest institutional financing source for and provider of health care services in Bangladesh. The Ministry of Finance (MOF) allocates and disburses funds to MOHFW to carry out its activities, as well as to operate its various facilities.

MOHFW operates its facilities through its two Directorates: (a) Directorate General of Health Services (DGHS) and (b) Directorate of Family Planning (DFP). The budget for all health facilities and health activities is channeled through DGHS. The budget for family planning facilities and population related activities is disbursed through DFP.

As in other government ministries in Bangladesh, MOHFW expenditures are classified under two budgetary categories: (i)

Revenue Budget and (ii) Annual Development Programme (ADP). All recurrent expenditure is financed through the Revenue Budget, and all development programmes are funded through ADP. Revenue Budget is supported solely by the Government of Bangladesh (GOB) by its tax and non-tax revenue income. ADP is financed by the following sources: foreign loans, foreign grants, proceeds from commodity and food aid, GOB revenue surpluses, and self-financing by autonomous bodies.

MOHFW facilities generate income from their own sources mainly through user fees. However, the revenue generated through user fees is transferred directly to the treasury (MOF). MOHFW facilities are not authorised to retain any portion of the income generated through user fees. The rates at which different user fees are levied are determined by MOF in consultation with MOHFW and its Directorates. In 1996-97 MOHFW generated Tk. 166 million from user fees from hospitals and issuance of drug licenses and other.

Total expenditures by MOHFW under both Revenue Budget and ADP headings are given in Tables 5-6. As shown in the tables, with the exception of 1995-96, overall MOHFW expenditures have increased both in nominal and real terms during 1991-92 to 1996-97. During this period MOHFW expenditures increased from Tk. 7,500 million to Tk. 12,682 million. This represented a 69% increase in real terms. The increase in real per capita MOHFW expenditures was 50% during the same period. The revenue expenditures show a declining trend from 1993-94 onward although increased in nominal terms. Percentage share of MOHFW revenue expenditures declined from 52% to 42%. It is evident that the development share of MOHFW expenditure is increasing. MOHFW development funds are heavily donor financed.

Table 5: MOHFW expenditures (constant 1990 million Taka)

MOHFW Expenditure	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Revenue	3905.4	4755.8	5531.5	5452.5	5352.5	5290.9
ADP	3592.3	4388.9	6057.9	7139.4	5626.4	7391.3
Total MOHFW Expenditure	7497.6	9144.7	11589.4	12591.0	10978.9	12682.2

Source: Various issues of budget documents, ADP, IMED reports, CAO (Health)

Table 6: MOHFW expenditures per capita (constant 1990 Taka)

MOHFW Expenditure	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Revenue	35.5	42.2	48.0	46.3	43.9	42.8
ADP	32.7	38.9	52.6	60.6	46.1	59.8
Total MOHFW Expenditure	68.2	81.1	100.6	106.9	90.0	102.6

Source: Various issues of budget documents, ADP, IMED reports, CAO (Health)

Expenditures by Institutional Level

MOHFW is the largest institutional health care provider in Bangladesh. It operates several types of health care facilities at different levels. All MOHFW expenditure take place in the following seven categories of institutions and facilities:

1. MOHFW Secretariat
2. Medical College Hospitals (MCH)
3. District Hospitals (DH)
4. Thana and lower level Facilities
5. Specialised Hospitals
6. Research and Training Institutions
7. Other MOHFW Facilities

Two directorates and some other establishments, such as divisional administrative health offices, are classified as MOHFW Secretariat. District and General hospitals are grouped as district hospitals (DH). The facilities which cannot be classified into other categories are grouped as 'Other MOHFW Facilities' for the purpose of NHA.

Tables 7-8 provide the distribution of expenditures in MOHFW by type of institution, as estimated for 1991/92-1996/97. During this period allocation for thana and lower level facilities was the highest. MOHFW expenditures on these facilities increased from Tk. 3,414 million to Tk. 4,804 million in real terms, but the percentage share declined from 46% to 38%. The next highest receivers of the MOHFW funds are the tertiary facilities consisting of medical college hospitals and specialised hospitals. In 1996-97 MOHFW spent Tk. 3,400 million representing 27% of its funds at these tertiary facilities.

MOHFW Revenue Budget

MOHFW recurrent expenditure is funded through the Revenue Budget. In the revenue budget documents all recurrent budget and accounts are divided into the following major categories:

1. Salaries and Allowances
2. Contingencies (i.e. operational costs)
3. Medical and Surgical Requisites (MSR)
4. Works and Maintenance
5. Grants in Aid and Contributions

Detailed accounts of actual total expenditures by different levels and types of MOHFW facilities are available for the first and second categories. Breakdown of salaries and allowances by medical staff and non-medical staff is not available. Detailed accounts of the expenditures for the other three categories (3, 4, 5) by different levels are not available. It was not possible to estimate the actual expenditure by provider from the information collected from the above sources. Also it was not possible to estimate expenditures by different functions. For such an estimate primary data were required, as no secondary data were available. The estimation process made use of primary data, collected through HEU/DI Health Facility Survey, 1997, to estimate health expenditures by functional category.

MOHFW Annual Development Programme (ADP)

The MOHFW ADP finances all MOHFW development programmes, (mostly investment programmes). Published documents on ADP provides project-wise information. It shows local currency allocation, amount of CD/VAT, and direct project aid. It also mentions name of the foreign funding agencies. However, it does not provide any information on actual GOB contributions in the health sector or donor-wise project aid. The amount in local currency (i.e., Taka) in ADP consists of GOB revenue surpluses, self-financing by the autonomous bodies, and funds generated from commodity and food aid. This breakdown is available for the overall ADP but not for the health sector programmes.

Table 7: MOHFW Expenditures (net of user fees) by type of facility 1991/92 – 1996/97 (constant 1990 million Taka)

Provider Category	1991-92	1992-93	1993-94	1995-96	1996-97
MOHFW Secretariat	884.8	1562.7	2426.0	1989.0	1613.0
Medical College hospitals (MCH)	755.7	861.4	996.0	1072.5	1415.5
District hospitals (DH)	718.2	918.4	917.6	810.3	1291.2
Thana level facilities (THC)	2414.7	2745.7	3125.3	3081.0	3648.8
Lower level facilities	991.7	734.9	1198.0	1310.9	1144.7
Specialised hospitals	895.9	1364.1	1499.0	1515.4	1947.8
Research and training institutions	670.1	780.7	1174.8	984.0	1404.6
Other MOHFW facilities	78.1	87.2	104.9	97.8	95.3
Total MOHFW Expenditure	7409.3	9055.2	11441.6	10860.9	12561.0

Source: Various issues of budget documents, ADP, IMED reports, CAO (Health), DGHS (Finance Unit)

Table 8: Percentage distribution of MOHFW expenditures (net of user fees) by provider 1991/92 – 1996/97

Provider Category	1991-92	1992-93	1993-94	1995-96	1996-97
MOHFW Secretariat	12%	17%	21%	18%	13%
Medical College hospitals (MCH)	10%	10%	9%	10%	11%
District hospitals (DH)	10%	10%	8%	7%	10%
Thana level facilities (THC)	33%	30%	27%	28%	29%
Lower level facilities	13%	8%	10%	12%	9%
Specialised hospitals	12%	15%	13%	14%	16%
Research and training institutions	9%	9%	10%	9%	11%
Other MOHFW facilities	1%	1%	1%	1%	1%
Total MOHFW expenditure	100%	100%	100%	100%	100%

Source: Various issues of budget documents, ADP, IMED reports, CAO (Health), HEU/DI Facility Survey

IMED reports do not provide the donor's contribution in development programmes. ERD documents show donor contributions in currency units of respective donors for each project, but do not show GOB contributions.

Functional Classification of Expenditures

Published documentation on the Revenue accounts are not adequate to divide MOHFW revenue expenditures into different functional categories. Information collected from DGHS Finance Unit and CAO Health could not provide such breakdown. However, necessary information such as breakdown of Medical and Surgical Requisites and user fees generated by different provider categories were obtained from primary data collected by HEU/DI Health Facility Study, 1997.

Expenditures by Functional Classification

According to the Bangladesh NHA Conceptual Framework, all health related expenditures are

categorised into two types: (i) core health functions, and (ii) health related functions. Core health functions are further subdivided into:

- personal health services
- distribution of medical goods
- collective health services
- health programme and administration

Expenditures on hospital services include expenditures on providing both inpatient and outpatients services at a hospital. Ambulatory services include all medical and dental services provided on an outpatient basis by outpatient facilities or providers. Other personal health services cover the expenses on rehabilitation of patients such as drug addicts.

Population based health activities include community based health activities such as maternal and child health.

Disease prevention includes prevention against both communicable and non-communicable disease. Health promotion includes health education campaigns and information of the public.

An analysis of the MOHFW expenditures reveals the following functional use of expenditures as shown in Table 9. These tables show, as estimated for 1991/92 – 1996/97, that much of the MOHFW expenditures were made on core health functions. During this period the expenditures on core health care functions varied between 65% and 74%. Of the core health care functions hospital services received 29% of the total MOHFW funding in 1996-96. This represents 66% of the MOHFW revenue funds.

During 1991/92-1996/97 MOHFW development programmes spent more than half of its funds on disease prevention and health promotion including family planning services. During the same period percentage share of family planning services declined while percentage

share of investment into medical facilities increased. MOHFW development funds are mostly donor financed.

Expenditures by other GOB Ministries

A number of other ministries provide health services and operate health facilities of their own. The most important of these are the Ministry of Defence and the Ministry of Home Affairs (MOHA). MOHA operates health care facilities for Bangladesh Rifle (Border Security Force), Police and Prison departments. A total of 2,161 beds are available in 52 hospitals operated by the Ministry of Home Affairs. The Railway division of Ministry of Transport and Communication runs 10 hospitals with 440 beds for Railway employees and their dependants. The Ministry of Defence (MOD) operates hospitals in major cantonments run by the armed forces. The number of Combined Military Hospitals is 25 and the total bed strength is 3,500. The Military hospitals provide health care to the armed forces as well as civilian population. These military hospitals are better equipped than MOHFW hospitals and provide a much higher standard of care.

Table 9: Percentage distribution of MOHFW expenditures by functional categories 1991/92 – 1996/97

Code	Functional Category	1991-92	1992-93	1993-94	1995-96	1996-97
	Core functions of health care					
F1	Personal health services	40%	38%	32%	35%	32%
F1.1	Hospital services	37%	35%	30%	32%	29%
F1.2	Ambulatory services	3%	3%	3%	3%	3%
F1.3	Other personal health services	0%	0%	0%	0%	0%
F2	Distribution of medical goods	0%	0%	0%	0%	0%
F3	Collective health services	34%	34%	36%	31%	33%
F3.1	Disease prevention and health promotion	34%	34%	36%	31%	33%
F3.1.1	Population based health activities	3%	3%	5%	3%	2%
F3.1.2	Family planning	26%	25%	24%	24%	25%
F3.1.3	Disease prevention	5%	5%	6%	4%	5%
F3.1.4	Health promotion	0%	0%	1%	1%	1%
F3.1.5	School health	0%	0%	0%	0%	0%
	Health related functions					
F4	Health programme administration and health insurance	7%	9%	12%	10%	10%
F4.1	Health programme administration	7%	9%	12%	10%	10%
F4.2	Administration of health insurance	0%	0%	0%	0%	0%
F5	Investment into medical facilities	15%	14%	13%	17%	19%
F6	Education and training of health personnel	4%	4%	5%	5%	5%
F7	Research and development in health	1%	1%	1%	1%	2%
F8	Environmental health	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%

Source: Various issues of budget documents, ADP, IMED reports, CAO (Health), DGHS, DFP

Table 10: Health Expenditures by Ministries other than MOHFW (nominal million Taka)

Ministries/Divisions/departments	1996-97	Percentage
Bangladesh Railway Division	99	16.0%
Ministry of Home Affairs (MOHA)	189	30.6%
Ministry of Defence (MOD)	300	48.5%
CAO Health & Other	30	4.9%
Total	618	100.0

Source: Other Ministries Survey carried out by NHA Project, 1998

Table 11: Health Expenditures by City Corporations (nominal million Taka)

City Corporations	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Dhaka	11.5	11.8	9.5	14.1	22.0	25.3	28.3	36	49.6	62.0	n.a.	87.6
Chittagong	5.6	5.6	4.8	6.2	6.2	4.8	7.4	2.8	3.0	2.2	n.a.	69.1
Rajshahi	0.8	0.8	0.9	1.0	1.1	1.3	1.5	1.8	1.8	1.9	n.a.	9.7
Khulna	n.a.	n.a.	n.a.	n.a.	n.a.	12.3	13.1	18.3	17.5	18.6	n.a.	5.9
Total	17.9	18.1	15.2	21.3	29.3	43.8	50.3	58.9	71.9	84.7	n.a.	172.3

Note: n.a. refers to 'not available'

Source: City Corporations Survey carried out by NHA Project, 1998

Table 12: Health expenditures by selected municipalities (nominal million Taka)

Municipalities .	1995-96	1996-97
Mymensingh	0.2	0.6
Bogra	0.3	0.4
Dinajpur	0.2	0.3
Sylhet	0.9	1.0
Sirajganj	0.6	0.4
Sub-total for surveyed municipalities	2.2	2.7
Number of municipalities not surveyed		122
Total (estimated for whole country)		13

Source: Survey of Municipalities carried out by NHA project, 1998

Table 10 provides the expenditures by these ministries, other than MOHFW in 1996-97. The total health expenditures by these other ministries account for only 1% of NHE. The table shows that MOD spending was the highest, accounting for 49% of the total other ministries' health expenditures. MOHA spent Tk 189 million for health, which is 31% of the other ministries spending.

Local Government

There are four City Corporations in Bangladesh and 127 Municipalities. Of these

127 municipalities, 60 municipalities are in major district towns and the rest are in smaller towns. These local government bodies have health related activities. Most of them have immunisation and other public health activities, and two City Corporations operate health care facilities. These local bodies receive revenue allocations from the MOF and generate income from their own sources such as taxes levied on households under the municipality area.

Table 11 provide details of the health expenditures by the four city corporations

during 1985/86 to 1996/97. It shows that in 1996-97 health expenditures of Dhaka (51%) and Chittagong (40%) city corporations account for 91% of total city corporations health expenditures.

In addition to the city corporations five municipalities were surveyed to estimate health expenditures at municipality level. Using the information collected an estimate is made of health expenditures by all municipalities (Table 12).

Corporations and Autonomous Bodies

Many public corporations and autonomous bodies have health related expenditures. Some of them operate their own health care facilities to provide health care services, primarily offering ambulatory care to the employees and their families. Several provide medical benefits in the form of reimbursement of actual hospitalisation cost or treatment costs of their staff.

Data on health expenditures by these organisations are incomplete. Table 13 presents available details of total health expenditures for four corporations. Of the autonomous bodies, universities have their own medical centers to provide health care services -- mainly ambulatory care to the university students. Based on these information and collected data from public corporations national health expenditure by all corporations and autonomous bodies was estimated as Tk. 60 million.

Expenditures by Research and Training Institutions (RTI)

Expenditure on education, training and research is one component of health spending. There are a variety of education

and training institutes in the country that conduct professional education programmes for different categories of health workers. These include postgraduate and doctors, nurses, and medical assistants, as well as paramedics and health technicians in a variety of fields. A majority of the larger establishments are administered by the Directorate of Health Services of the MOHFW. Education and refresher training programmes for the workers in the family planning programme are conducted in several training institutes under the Family Welfare Division of the Ministry of Health and Family Welfare.

In recent years, several privately funded medical colleges have been set up for training doctors and nurses. Apart from these educational and training institutes, there are many government institutes that cater to training and research needs relevant to control programme for specific diseases or for strengthening and developing skills of health professionals. In addition to the above institutes, government and private education and training institutes exist for training health workers in the fields of traditional medicine, e.g., Ayurvedic and Unani.

Expenditures by research and training institutes in 1996/97, and how these were funded are given in Table 14. Public sector research and training institutions (RTI) receive funds mainly from MOHFW, other ministries, and foreign donors. According to Table 15, GOB is also the largest source of funds (74%) providing for the private sector research and training institutions. User fees account for 17% of total funds for the private sector RTI while public sector RTI generated only 1% total funds from user fees (Table 15).

Table 13: Health-related expenditures by selected Public Corporations (nominal million Taka)

Public Sector Corporations	1996-97	Percentage
Biman Bangladesh Airlines	30.3	89%
Bangladesh Steel and Engineering Corporation (BSEC)	0.6	2%
Bangladesh Small and Cottage Industries Corporation (BSCIC)	0.3	1%
Bangladesh Shipping Corporation	2.7	8%
Total	33.9	100%

Source: Public Sector Corporations Survey carried out by NHA Project, 1998

Table 16 and Table 17 provide details of the functional use of these expenditures. Research and training institutions spent Tk. 2,060 million in 1996-97, of which 62% was in the public sector. An analysis of the survey findings reveal that 80% of funds was spent on education while 20% was used for research purposes. A comparison between public and

private institutions show that public sector research and training institutions tend to spend most on education (94%). Private sector institutions spent 44% of their funds on research while public sector spent the least on research (<6%).

Table 14: Estimated revenue by source of research and training institutions (nominal million Taka)

Type of Research & Training Institutions (RTI)	Sources of Funds							
	Government Research & Training Institutions				Private Research & Training Institutions			
	GOB	Foreign donors	Local donors	Own sources	GOB	Foreign donors	Local donors	Own sources
Colleges (Modern & Traditional / Dental medicine)	614	4	-	4	0	0	36	117
Nursing schools/colleges /Directorate	198			0		3	6	3
MATS & IHTs	25			1				
Specialized/research institutes	329	99		7	576	4	23	11
Total (including ICDDR'B)	1,167	102		12	576	7	66	131

Source: Survey of RTI carried out by NHA project 1998

Table 15: Revenues by source of research and training institutions (percentage of total)

Type of Research & Training Institutions (RTI)	Sources of Funds							
	Government Research & Training Institutions				Private Research & Training Institutions			
	GOB	Foreign donors	Local donors	Own sources	GOB	Foreign donors	Local donors	Own sources
Colleges (Modern & Traditional / Dental medicine)	98.7%	0.6%	0.0%	0.7%	0.1%	0.0%	23.6%	76.3%
Nursing schools/colleges /Directorate	100.0%	0.0%	0.0%	0.0%	0.0%	25.0%	50.9%	24.1%
MATS & IHTs	97.5%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%
Specialized/research institutes	75.8%	22.7%	0.0%	1.5%	93.8%	0.6%	3.8%	1.9%
Total	91.0%	8%	0.0%	1.0%	74.0%	1.0%	8.0%	17.0%

Source: Survey of RTI carried out by NHA project, 1998

Table 16: Estimated Health expenditure by use of research and training institutions (nominal million Taka)

Type of Research & Training Institutions (RTI)	BANHA Functional Expenditure Type					
	Government RTI			Private RTI		
	Education and training of health personnel	Research and development in health	Total	Education and training of health personnel	Research and development in health	Total
Colleges (Modern & Traditional/Dental medicine)	622	-	622	152	1	153
Nursing schools/colleges /Directorate	163	35	198	12	-	12
MATS & IHTs	26	-	26	-	-	-
Specialized/research institutes	395	40	435	270	344	614
Total	1,206	75	1,281	434	345	779

Source: Survey of RTI carried out by NHA project, 1998

Table 17: Health expenditure by use of research and training institutions (percentage of total)

Type of Research & Training Institutions (RTI)	BANHA Functional Expenditure Type					
	Government RTI			Private RTI		
	Education and training of health personnel	Research and development in health	Total	Education and training of health personnel	Research and development in health	Total
Colleges (Modern & Traditional/Dental medicine)	100%	0%	100%	99%	1%	100%
Nursing schools/colleges /Directorate	82%	18%	100%	100%	0%	100%
MATS & IHTs	100%	0%	100%	0%	0%	0%
Specialized/research institutes	91%	9%	100%	44%	56%	100%
Total	94%	6%	100%	56%	44%	100%

Source: Survey of RTI carried out by NHA project, 1998

Expenditures by Development Partners

Foreign assistance is a significant source of financing in Bangladesh's health and population sector. And it is particularly important in certain areas, such as family planning and capital investment. As mentioned earlier, that no published documents are available which provide detail health related expenditures by development partners. Even combining the information from ERD, ADP, and IMED documents does not provide a complete picture of foreign assistance.

To reduce the information gap, a survey on development partners was carried out. A total of 20 development partners covering both multilateral and bilateral agencies were contacted. Sixteen development partners furnished information. The World Bank Resident Mission in Bangladesh did not provide any information on how much they disbursed funds to GOB and to NGOs or spending on their own research studies. As a result, findings of the survey do not provide a complete picture of the official foreign

assistance. Hence, survey findings could not be incorporated in the main NHA matrix.

During the survey development partners were asked about their disbursements to GOB and NGOs. Data was also collected on how much they spent on research activities. In most cases, disbursement data was expressed in foreign currencies. These figures were converted into Taka using the average exchange rate for the year as given in IMF's International Financial Statistics (1997). In several cases, donors were unable to provide accurate information on actual disbursements during the year.

In 1997, the development partners surveyed disbursed Tk. 5,843 million (Table 18). Of the total official aid bilateral donor agencies accounted for 78% of the total donor assistance. Table 19 shows that the United States Agency for International Development (USAID) was the most important development partner, accounting for 38% of the total funds disbursed.

Table 18: Funds disbursements by the development partners in 1997 (nominal million Taka)

Type of Development Partners	Total
Bilateral	4539.8
Multilateral	1,303.1
Grand Total	5842.9

Source: Development Partners' Health Expenditure survey carried out by NHA Project, 1998

Table 19: Percentage distribution of funds disbursements by the development partners in 1997

Development Partners	Percentage Share
Canadian International Development Agency (CIDA)	13.4%
Japanese International Cooperation Agency (JICA)	3.8%
Royal Norwegian Embassy & NORAD	2.1%
Australian Agency for International Development (AusAID)	2.5%
Embassy of Sweden & Swedish International Development Agency (SIDA)	6.1%
Royal Danish Embassy & DANIDA	0.2%
Department For International Development (DFID)	8.5%
Japan Embassy	0.4%
United States Agency for International Development (USAID)	38.2%
Royal Netherlands Embassy	1.3%
Korea International Cooperation Agency (KOICA)	1.0%
KfW and GTZ	0.3
Bilateral Total	77.7%
European Commission (EC)	8.2%
UNICEF	5.6%
UNFPA	5.0%
World Health Organization (WHO)	0.0%
Asian Development Bank (ADB)	3.2%
World Bank RMB	0.4%
Multilateral Total	22.3%
Grand Total	100.0%

Source: Development Partners' Health Expenditure survey carried out by NHA Project, 1998

Expenditures by Private Sector

Expenditures by NGOs

Non-profit institutions play a prominent role in the delivery of health services delivered in Bangladesh. They are largely financed by public funds, both from GOB revenue resources as well through official donor funds. However, total new resources mobilised by NGOs from their own activities, user fees and local donations are very small. It amounts to about Tk. 537 million, which is less than 1% of NHE.

There are two major groups of NGOs. The first group are those registered with the NGO Affairs Bureau to receive foreign funds. These are generally the larger NGOs. The second and much more numerous group are those which are only registered with the Department of Social Welfare, and are not registered with the NGO Bureau. All NGOs, including those registered with the NGO Bureau, are registered with the Department of Social Welfare. Hence, the NGO Bureau group are a subset of the second group.

There were about 24,000 NGOs registered with the Department of Social Welfare in 1996. Of these, 551 were registered also with the NGO Bureau. No regular reporting system exists to track health expenditures by NGOs, and no previous comprehensive estimates have been made. Surveys were carried out specifically for NHA estimates. Based on the results of these surveys, it is estimated that

approximately 3,730 of the first group, and 330 of the second group are involved in funding of health activities. A total of 221 NGOs registered with NGO Affairs Bureau were surveyed. During the survey 600 NGOs registered with Department of Social Welfare were also surveyed (Table 20).

NGO health services are funded by GOB contributions, foreign donor funds, donations by local sources, profits and other transfers from within the parent organisations, and user fees. Some larger NGOs also act as intermediaries transferring funds from donor to other smaller NGOs. Table 21 provides the estimated expenditures on health services by NGOs, and the funding sources used to finance these expenditures. It is estimated that Tk. 1,442 million were transferred from larger NGOs to smaller NGOs, which is 11% of total NGO funding.

From a national perspective, NGOs account for only a small proportion of total NHE (about 3%). A comparative analysis of NGO, private sector, and MOHFW expenditures and service volumes reveals that NGOs spend only 10% of what MOHFW spends. NGOs provide 26% of the MOHFW outpatient consultations. In case of inpatient service volume NGOs provide 11% of what MOHFW provides (Table 25). It implies that NGOs provide patient care especially, outpatient care at a lower cost.

Table 20: Coverage of NGO Survey

Type of Registration	National Total (N)	Number Surveyed (n)
NGO Affairs Bureau	551	221
Social Welfare Department	24,000	600
Total	24,000	821

Source: Bangladesh NHA, 1996/97

Table 21: Estimated total health expenditure of NGOs (nominal million Taka)

Type of Registration	National Estimate	Percentage
NGO Affairs Bureau	1,442	83.5%
Social Welfare Department	285	16.5%
Total	1,727	100.0%

Note: Sample total refers to total reported expenditure of NGOs surveyed in NGO Health Expenditure Survey carried out by NHA project, 1998.
Source: NGO Health Expenditure Survey carried out by NHA project, 1998

However, caution must be applied in drawing any conclusions from the data reported in the NGO surveys, since the same surveys report that only 2% of total NGO health expenditures

were for hospital services, which seems inconsistent with the volume of inpatient services being reported.

Table 22: Percentage distribution of revenue by sources

Sources of Fund	NGO Groups		
	NGO Bureau	Social welfare	Total
a) Foreign official assistance			
a1) Multilateral			
World Bank	1%	0%	1%
World Health Organization	0%	0%	0%
United Nations Children's Fund (UNICEF)	1%	0%	1%
United Nations Development Programme (UNDP)	0%	0%	0%
United Nations Fund for Population Activities (UNFPA)	1%	0%	1%
Other	3%	0%	2%
a2) Bilateral			
United States Agency for International Development (USAID)	9%	0%	8%
Department For International Development (DFID)	1%	0%	1%
Canadian International Development Agency (CIDA)	1%	0%	1%
NORAD	0%	0%	0%
Swedish International Development Agency (SIDA)	1%	0%	1%
Japan International Cooperation Agency (JICA)	0%	0%	0%
Danish International Development Agency (DANIDA)	0%	0%	0%
Australian Agency for International Development (AUSAID)	0%	0%	0%
Netherlands Embassy	6%	0%	5%
Other	16%	0%	13%
b) International NGOs	28%	2%	23%
c) Transfer from other NGOs	7%	15%	9%
d) Donation from private companies	1%	1%	1%
e) Donation from private individuals	5%	26%	8%
f) Grants/Contracts from GOB	1%	16%	4%
g) Own resources			
User fees	7%	24%	10%
Training	2%	0%	2%
Other sources	10%	14%	11%
Total	100%	100%	100%

Note: The percentage breakdown of expenditure is derived from the NGO Health Expenditure Survey carried out by NHA project, 1998.

Source: NGO Health Expenditure Survey carried out by NHA project, 1998

Table 23: Estimated total number of outpatients served by the NGOs (in number)

Outpatient	NGO Groups		
	NGO Bureau	Social Welfare	Total
Male	1,283,235	1,031,672	2,314,907
Female	3,441,403	2,427,720	5,869,123
Children	1,108,248	1,379,595	2,487,844
Total	5,832,886	4,838,987	10,671,873

Source: NGO Health Expenditure Survey carried out by NHA project, 1998

Table 24: Estimated NGO hospital facilities and inpatients served by the NGOs (in number)

	NGO Groups		
	NGO Bureau	Social Welfare	Total
Hospitals	155	-	155
Beds	3,781	-	3,781
Admissions	134,414	-	134,414
Inpatient days	1,005,200	-	1,005,200

Source: NGO Health Expenditure Survey carried out by NHA project, 1998

Table 25: Comparison of service volume, 1997 (in number)

	NGO Sector	Trust (not-for-profit)	Private (for-profit)	MOHFW
Number of Hospitals	155	12	584	501
Number of Beds	3,781	716	10,380	26,263
Inpatient Admission	134,414	78,798	431,190	1,273,147
Total Patient Days	1,005,200	n.a	2,134,391	6,064,541
Outpatient	10,671,873	342,259	n.a.	40,596,388

Note: n.a.' refers to not available

Source: NGO Health Expenditure Survey carried out by NHA project, 1998, Private Clinic Survey carried out by DI HEU, 1997, DGHS and DFP

Table 26: Distribution of estimated expenditure by services provided (nominal million Taka)

BANHA Functional Expenditure Code	Type of Services	NGO Groups		
		NGO Bureau	Social Welfare	Total
	Personal health services			
1.1	Hospital services	43	-	43
1.2	Ambulatory services	202	303	505
	Collective health services	-	-	-
3.1.1	Population based health activities	346	361	707
3.1.2	Family planning services	245	433	678
4.1	Programme administration	433	231	663
6	Education and training of health personnel	130	101	231
7	Research and development in health	43	14	58
	Total	1,442	285	1,727

Source: NGO Health Expenditure Survey carried out by NHA project, 1998

Table 27: Percentage distribution of expenditure by services provided by NGOs

BANHA Functional Expenditure Code	Type of Services	NGO Groups		
		NGO Bureau	Social Welfare	Total
	Personal health services			
1.1	Hospital services	3%	0%	2%
1.2	Ambulatory services	14%	21%	18%
	Collective health services			
3.1.1	Population based health activities	24%	25%	25%
3.1.2	Family planning services	17%	30%	24%
4.1	Programme administration	30%	16%	23%
6	Education and training of health personnel	9%	7%	8%
7	Research and development in health	3%	1%	2%
	Total	100%	100%	100%

Source: NGO Health Expenditure Survey carried out by NHA project, 1998

Functional Classification of Expenditures

NGO activities are largely ambulatory based. The purpose of their activities appears to closely reflect the priorities of certain donors, in particular an emphasis on family planning and other population activities (49%). A relatively high proportion of expenditures is devoted to programme administration (23%). Table 26 and Table 27 provides the functional classification of NGO health expenditures.

Household Expenditures

The main source of household expenditure data is Bangladesh Bureau of Statistics' Morbidity and Health Status Survey under the Health and Demographic Survey Project. Household expenditures are estimated to be Tk. 34,440 million in 1996/97, or the equivalent of 3.5% of GDP. Household financing thus composes 63% of total national health expenditures. Table 28 gives the estimated composition of household expenditures by provider type. As is evident from Figure 9, the largest proportion of household spending is devoted to purchasing drugs and medicines

(73%). These consist of both modern medicines as well as traditional and homeopathic products, and are purchased from pharmacies, shops and other retail outlets including itinerant traders.

The remaining share of household spending comprises expenditures for medical services. For the most part, these are mainly used for purchasing services from non-modern (11%) or unqualified modern providers (15%), as shown in Figure 10. Government providers and private modern providers do not account for the major part of this spending, indicating that the population still does not regard formal modern providers as inherently superior in terms of efficacy to the other non-qualified or non-modern providers.

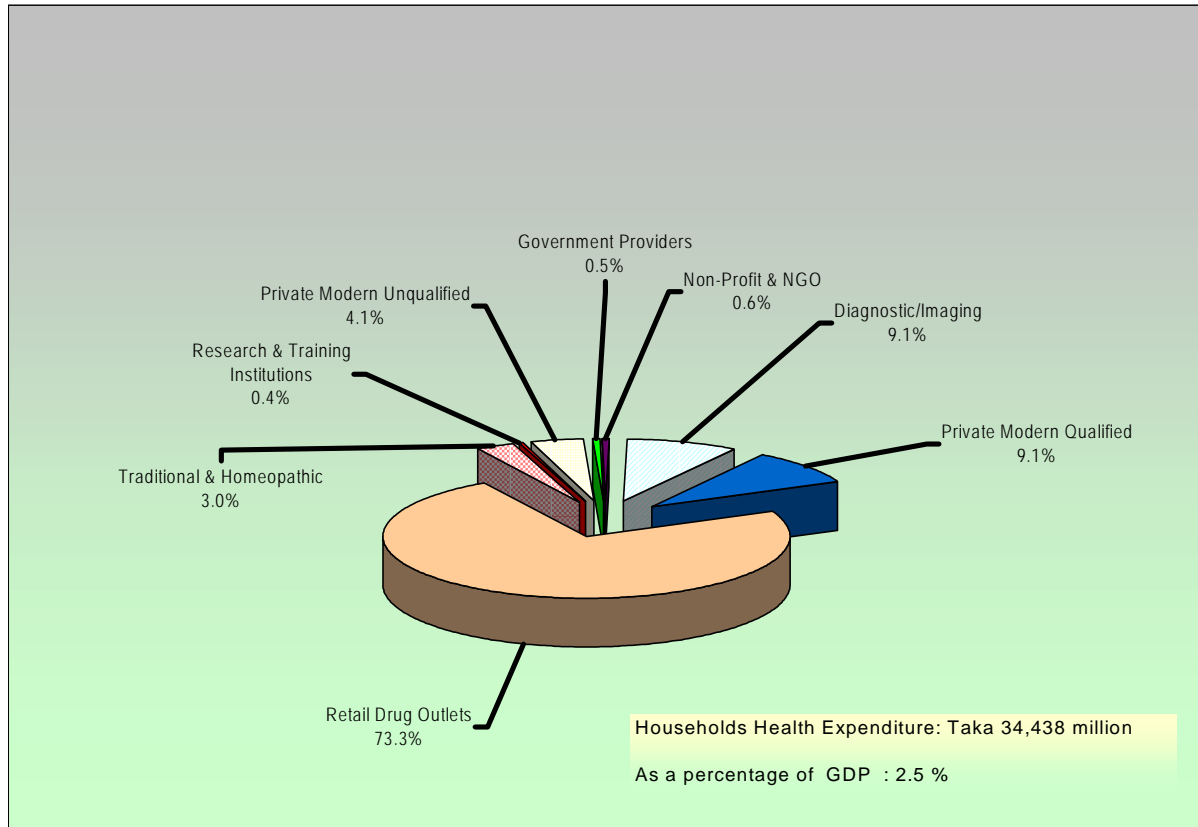
Considerable error is attached to these estimates of household health spending, and the methods used to make the estimates and issues in interpreting the available data are discussed later in this report.

Table 28: Household expenditure by provider type (nominal million Taka)

Provider	Household Expenditure
Drugs	25,234
Government Providers	159
Education, Research & Training Institutes	143
Modern Qualified Providers	
Private Clinics / Hospital	1,136
Private Practitioners & Others	2,005
Non-profit Institutions and NGOs	197
Modern Unqualified Providers	1,400
Homeopathic and Traditional Providers	1,042
Diagnostic & Imaging Providers	3,122
Total Households Expenditure	34,438

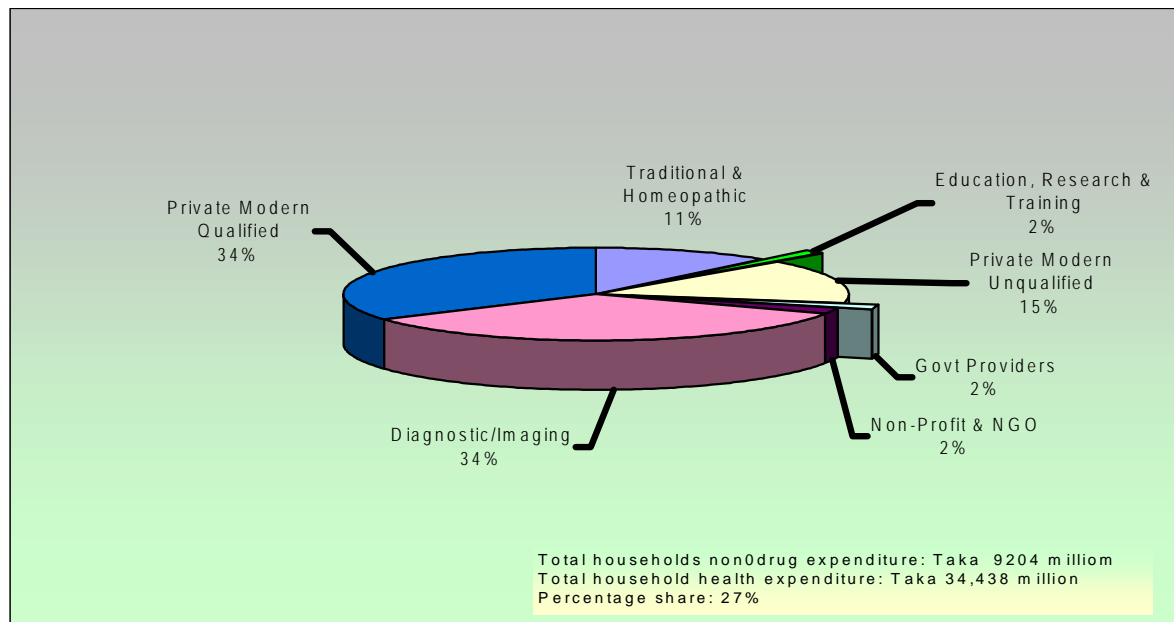
Source: Bangladesh NHA 1996/97

Figure 9: Percentage distribution of HH expenditures by provider type



Source: Bangladesh NHA 1996/97

Figure 10: Composition of household expenditures for medical services by provider type



Source: Bangladesh NHA 1996/97

Insurance Expenditures

Health Insurance

Commercial health insurance is extremely limited in Bangladesh. During 1996-97, there was only one company providing health insurance. Details of collections of premiums and expenditures reimbursed by this company are given in Table 29. The table shows that the size of insurance expenditure reimbursed by the company was Tk. 2 million. The table also provides information on the providers of care, whose treatment were reimbursed by this company's health insurance schemes. As evident in the table, 99.6% of the insurance expenditures were reimbursed for hospitalisation in private hospitals.

Firm Expenditures

No comprehensive data are available for expenditures by firms on providing health services for their employees. However, such expenditures are generally limited and restricted to the formal sector.

In 1995/96 Bangladesh's population was 124 million. The size of the working population, i.e., the population above 10 years was 86.4 million (BBS, 1996a). Of the 86.4 million, 56

million people (62% male, 38% female) were in the civilian labor force. The employed population was 54.6 million. Table 30 provides, in percentage terms, the composition of the employed civilian labor force.

As evident in Table 30, less than 1% of the labor force are salaried employees in the formal sector. The majority of the daily labourers are not eligible to receive any health or medical care. Hence, firm expenditures on health care are not expected to be significant.

The largest known example of employer provided health services is in the tea gardens, where employers have traditionally provided on-site medical services to their workers. There are 158 tea gardens owned by a few companies in the country. Comprehensive data on health expenditure from the largest three tea producers were collected. These three companies spent Tk. 80 million on health care provided to their employees (Table 31). It is estimated that the cumulative health expenditures of the tea estates and other firms are Tk. 200 million. A systematic survey of those tea producers is still needed to verify this estimate.

Table 29: Premiums, claims and use of insurance expenditures

	1992	1993	1994	1995	1996	1997
Total premiums collected (in Taka)	259,226	923,634	1,440,391	1,693,378	4,995,237	5,813,227
Total claims paid out (in Taka)	133,235	471,780	409,641	727,987	2,113,672	3,968,443
Net administration costs and profit (in Taka)	125,991	451,854	1,030,750	965,391	2,881,565	1,844,784
Net loading factor (%)	49%	49%	72%	57%	58%	32%
Use of insurance expenditure (%)						
Government hospitals				0%	5.20%	0.40%
Private hospitals				100%	94.80%	99.60%
Estimated use of insurance expenditures (nominal Taka)						
Government hospitals				0	109,030	17,601
Private hospitals	133,235	471,780	409,641	727,987	2,004,642	3,950,842

Source: Private Insurance Companies Survey, 1997, carried out by NHA Project

Table 30: Composition of labour force in Bangladesh

Labour Force	Percentage
Self-employed	29.3%
Employees	0.2%
Daily labour	12.3%
Unpaid family workers	40.3%
Not reported	17.9%
Total	100% (54.6 million)

Source: BBS (1996) TB

Table 31: Health expenditures by the three biggest tea companies

Company Information	Tea Companies		
	Company A	Company B	Company C
Number of tea gardens	14	20	4
Number of clinics and hospitals	16	30	4
Number of beds	100	180	80
Number of employees	18,150	16,425	2,242
Total wage bill (nominal million Taka)	226.1	177.7	27.1
Total health expenditures (nominal million Taka)	35	45.3	1.2
Health expenditure as a % of total wage bill	15%	25%	4.4%

Source: Selected Tea Company data, 1998

Expenditures by Beneficiary

The national health accounts detail total health expenditures in Bangladesh by source and use. Using available data, it is possible to further estimate the distribution of health expenditures by population subgroup, and such estimates are presented in this section.

There are two categories of health expenditures contributing to total national health expenditures: (i) public, and (ii) private. The distribution of each of these categories separately and combined by income level, age group, gender and location of household residence is estimated below.

Public expenditures in the health sector are largely for the provision of free health services to the population. The remaining amounts of public expenditure are mostly for provision of administrative functions. Using costing data and budgetary analysis it is possible to determine the cost to the government of producing different levels of patient services, distinguishing between inpatient and outpatient services, and between the level of facility used to deliver health services. If this is combined with data on the pattern of utilisation by the population of these different types of services, the distribution of government health expenditures by different groups can be estimated on the following basis:

$$S_{ix} = S_x \times U_{ix}$$

where,

- S** is national subsidy in programme x ,
- I** is any population subgroup,
- U_{xi}** is the percentage of utilisation of service x due to population subgroup i.

This approach assumes that the value to households of public services used by them is equivalent to the cost to the government of producing them. In the case of government health expenditures that are for collective health services, it is assumed that they benefit all Bangladeshis equally in per capita terms.

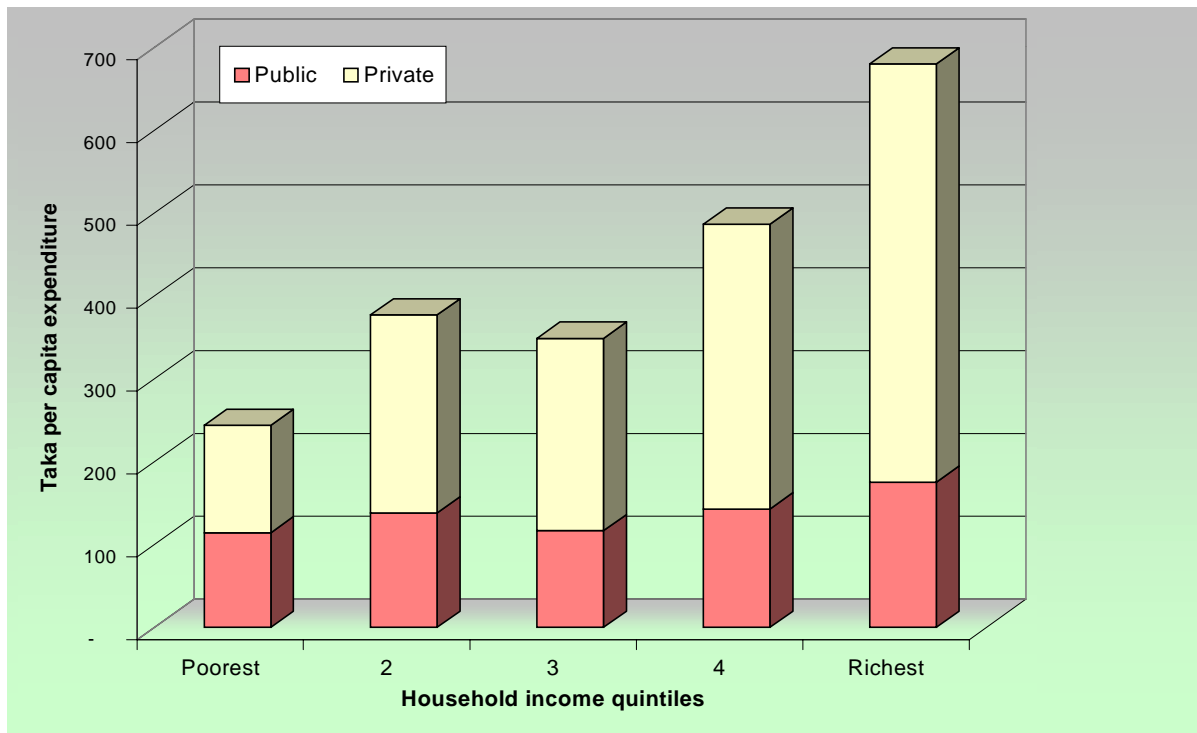
The distribution of private health expenditures is relatively straightforward to estimate. In Bangladesh's case more than 99% of total private health expenditures are direct payments by households. Information on the distribution of these expenditures in 1996/97

are available in MHSS. Combined with the NHA estimation of total household health expenditures, it is therefore possible to use the survey data to estimate total private health expenditures by population subgroup. To make such calculation, it has to be assumed that the total amount of household expenditures, as estimated in the NHA, was distributed in the same way as household expenditures reported in MHSS. Full details of the estimates obtained are given in Tables 32 to 40.

Figure 11 shows the estimated distribution of health expenditures by per capita income quintiles. Overall health expenditures are skewed towards the richer households, with total expenditures rising almost three fold between the first quintile and fifth quintile. This increase with income occurs both with public and private spending, although public expenditures rise less steeply. Amongst public expenditures, expenditures on outpatient services are the least skewed, with relative utilisation of such services being approximately equal across all income quintiles.

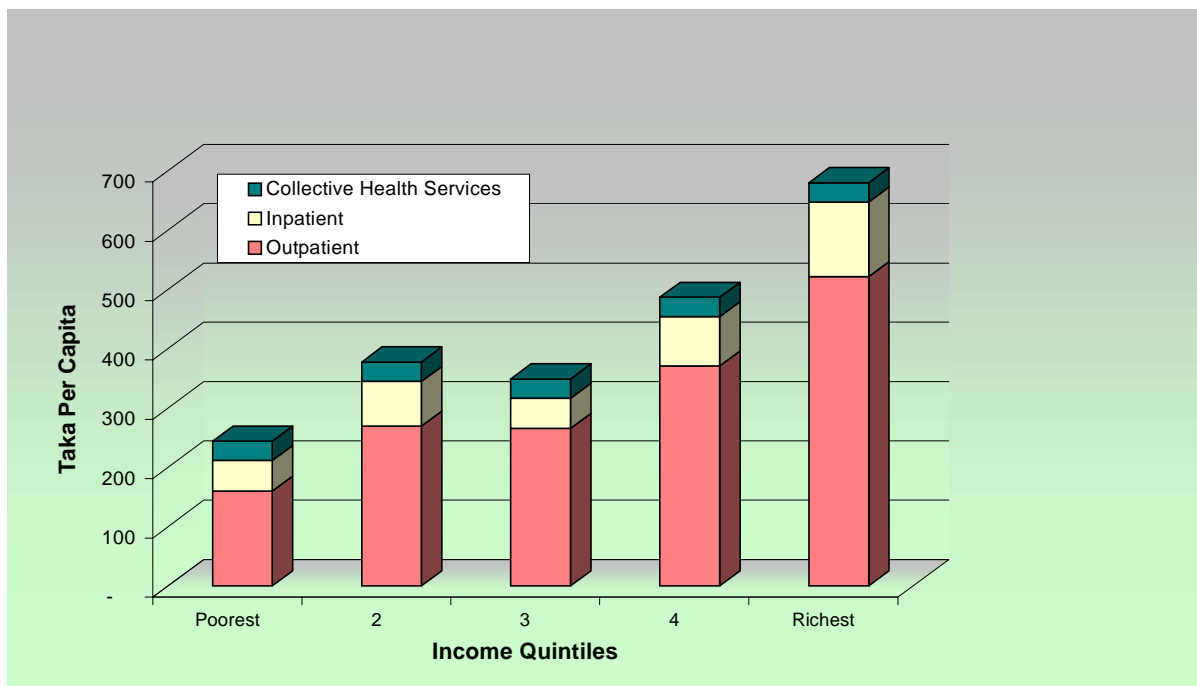
Services provided by different types of government facilities are distributed and utilised differently (Figure 12). Public sector inpatient expenditures show a pro-rich bias. However, this is largely driven by the distribution of expenditures on non-MOHFW facilities and services, such as those delivered by army hospitals. If MOHFW expenditures alone are examined, they are relatively equally distributed across all income groups. Even in the case of higher-level MOHFW inpatient services, such as medical college and district hospitals, these are distributed relatively equally, with these higher-level facilities accounting for almost half of total inpatient expenditure in the poorest quintile. The poorer group do receive a significant share of MOHFW expenditures. When their low income is taken into account, these subsidies account for a significant share of their overall consumption and add considerably to their overall welfare. In that respect, MOHFW subsidies appear to have a net redistributive impact with the overall distribution of consumption improved as a consequence.

Figure 11: Distribution of public and private health expenditures by income quintile



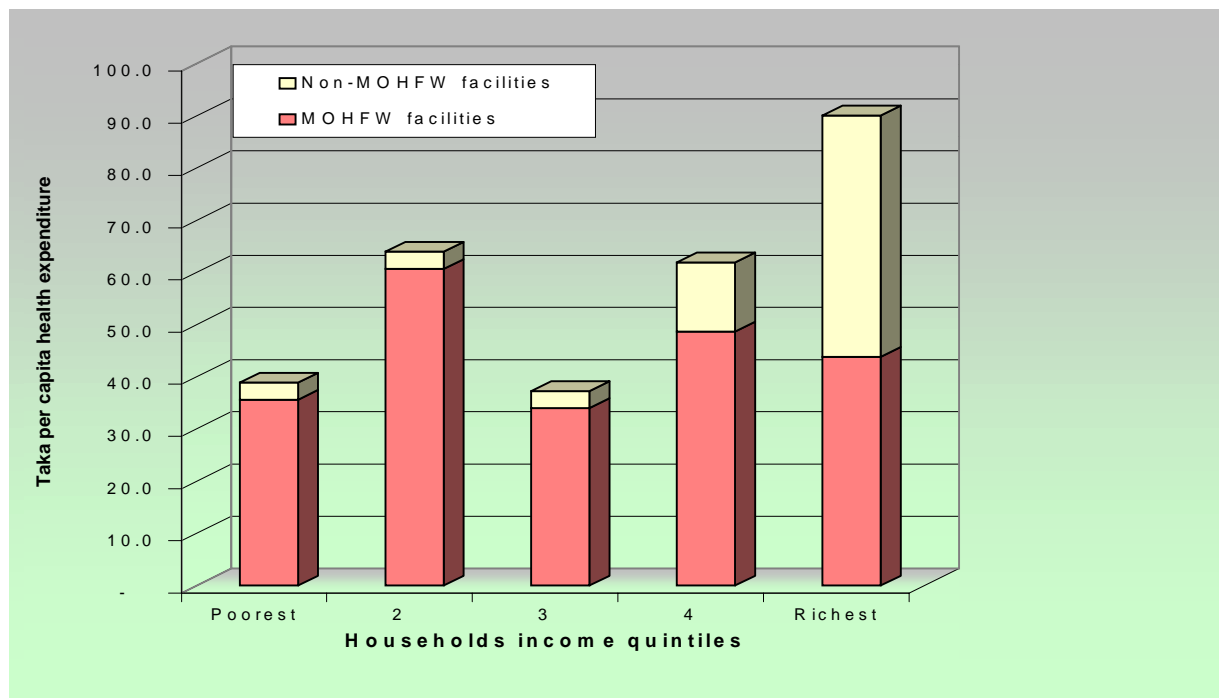
Source: Bangladesh NHA 1996/97

Figure 12: Distribution of health expenditures by income quintiles according to type of service



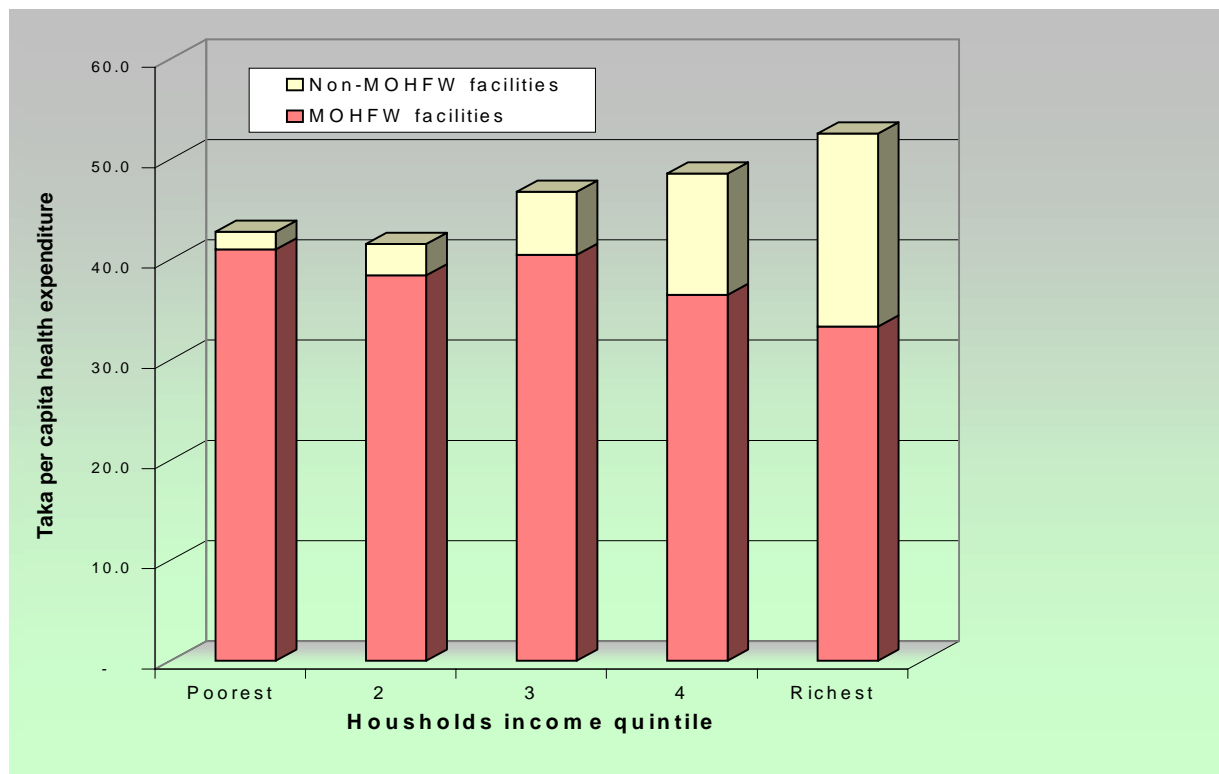
Source: Bangladesh NHA 1996/97

Figure 13: Distribution of public inpatient expenditure by per capita households income quintiles



Source: Bangladesh NHA 1996/97

Figure 14: Distribution of public outpatient expenditure by per capita households income quintiles



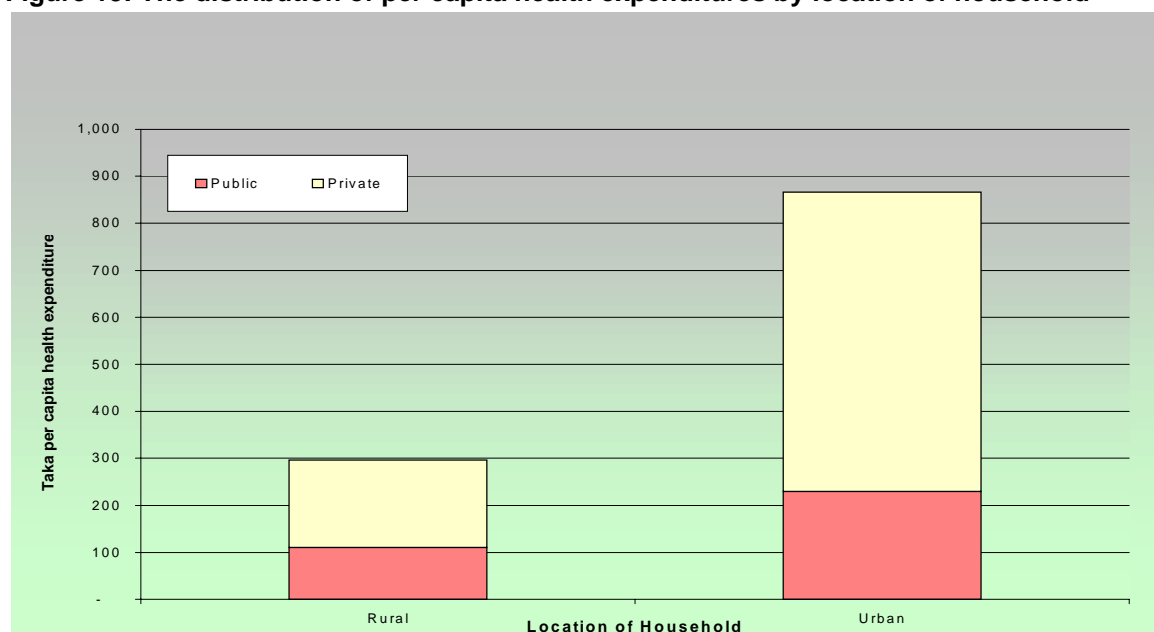
Source: Bangladesh NHA estimates 1996/97

The distribution of health expenditures by location of household residence shows marked bias. Both public and private expenditures are considerably lower in rural areas than urban areas, with public sector expenditure more skewed in favour of urban areas than private expenditures (Figure 15).

The observed bias in government expenditures, in favour of urban residents, is largely driven by the availability of access to non-MOHFW services and medical college hospitals and district hospitals (Table 39-41).

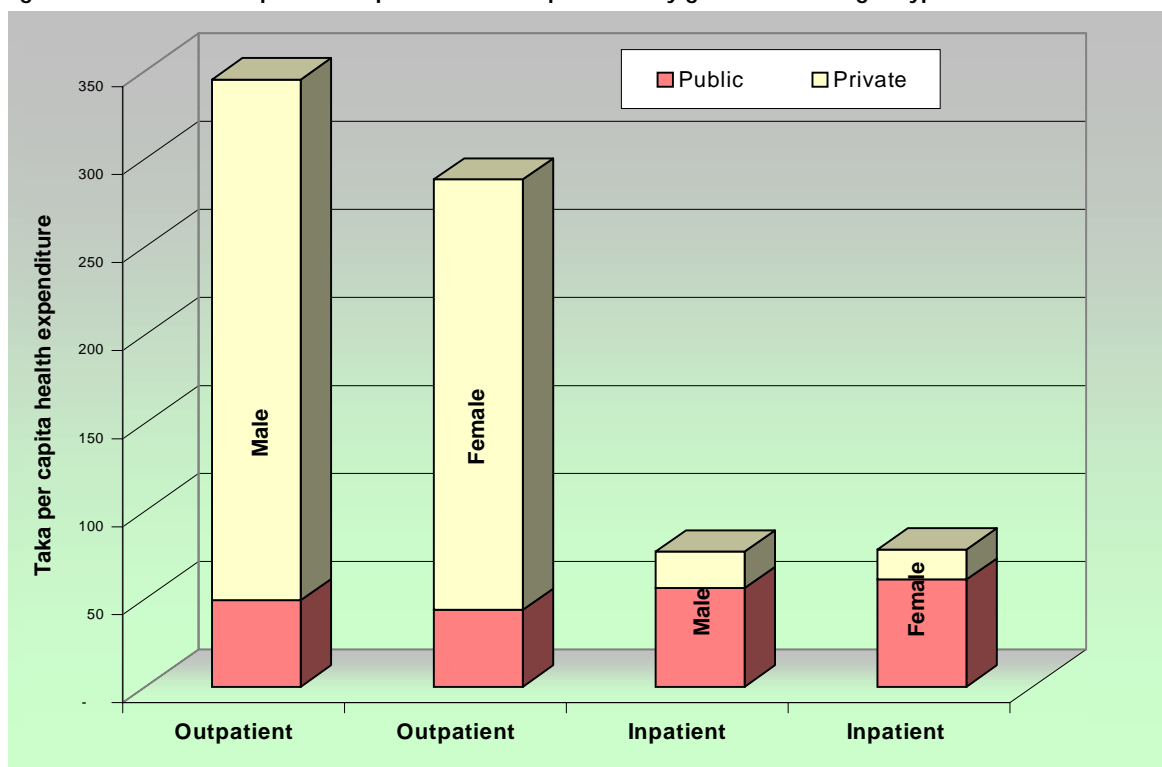
When expenditures are examined by demographic group, some gender bias in favour of males is evident in total health expenditures (Tables 35-38). However, this is primarily due to higher household spending on medical treatment for males; public expenditures are equal across the two genders, with higher inpatient use by females balancing higher outpatient use by males (Figure 16).

Figure 15: The distribution of per capita health expenditures by location of household



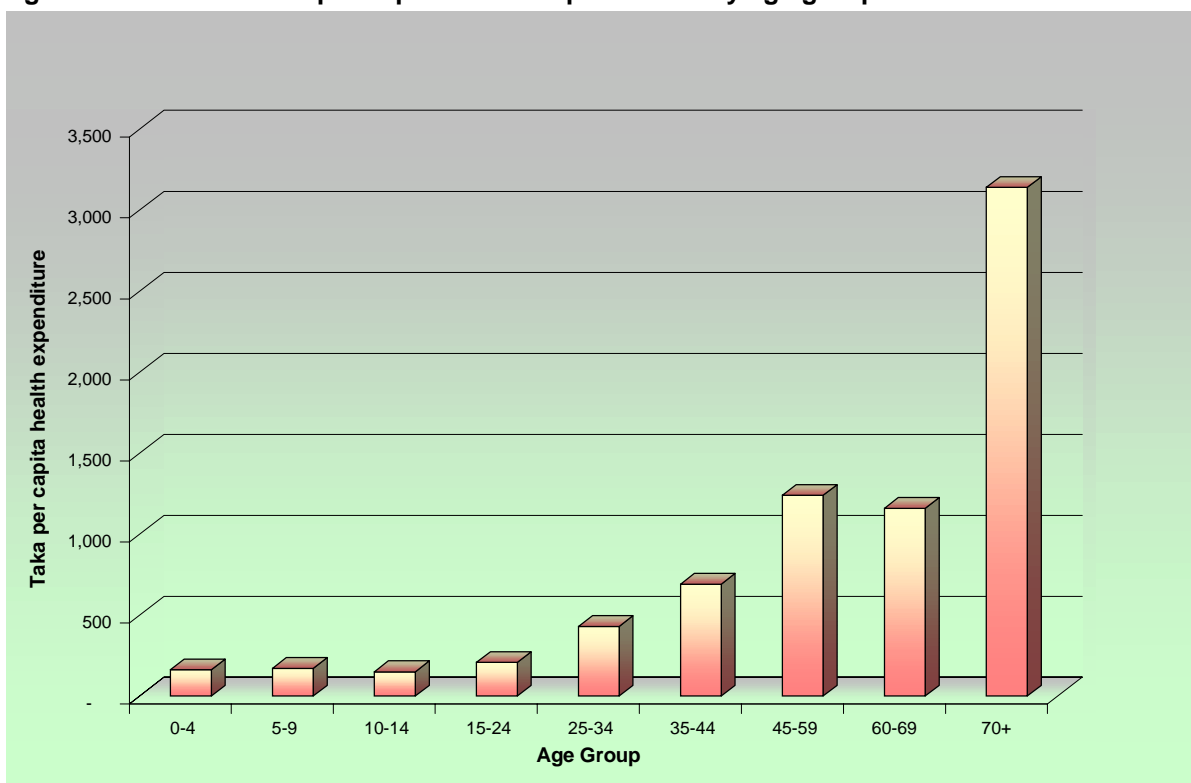
Source: Bangladesh NHA estimates 1996/97

Figure16: Distribution of public and private health expenditure by gender according to type of service



Source: Bangladesh NHA estimates 1996/97

Figure17: Distribution of per capita health expenditures by age group



Source: Bangladesh NHA 1996/97

The age distribution of expenditures are as one might expect a U-shaped distribution (Tables 35-38), in which expenditures per capita are lowest in the 10-14 year age group, and rise with age after that (Figure 17). Expenditures amongst those aged 45-59 years are almost ten times those in the 10-14 years

age group. Expenditures amongst the most elderly – those aged over 70 years – increase substantially, although the small number of very elderly people surveyed in MHSS results in considerable uncertainty in these estimates.

Table 32: Distribution of per capita expenditures for personal medical services by income quintiles (nominal Taka)

Income Quintiles	Inpatient Services			Outpatient Services		
	Public	Private	Total	Public	Private	Total
Poorest	39 (13%)	13 (13%)	52 (13%)	43 (18%)	117 (9%)	160 (10%)
2	64 (22%)	11 (12%)	75 (19%)	42 (18%)	228 (17%)	269 (17%)
3	37 (13%)	14 (14%)	51 (13%)	47 (20%)	219 (16%)	265 (17%)
4	62 (21%)	21 (23%)	83 (22%)	49 (21%)	322 (24%)	371 (23%)
Richest	90 (31%)	36 (38%)	126 (33%)	53 (23%)	469 (35%)	521 (33%)
National	58	19	77	46	271	317

Note: Percentage in parentheses represents column percentage
Source: Bangladesh NHA1996/97

Table 33: Total expenditure on personnel medical services by income quintile (nominal Taka)

Income Quintiles	Personal Health Services		Collective Health Services	All Health Services		
	Public	Private		Public	Private	Total
Poorest	82 (16%)	129 (9%)	33 (20%)	114 (17%)	129 (9%)	244 (11%)
2	106 (20%)	239 (16%)	33 (20%)	138 (20%)	239 (16%)	377 (18%)
3	84 (16%)	232 (16%)	33 (20%)	117 (17%)	232 (16%)	349 (16%)
4	110 (21%)	344 (24%)	33 (20%)	143 (21%)	344 (24%)	487 (23%)
Richest	143 (27%)	505 (35%)	33 (20%)	175 (25%)	505 (35%)	680 (32%)
National	105	290	33	138	290	427

Note: Percentage in parentheses represents column percentage
Source: Bangladesh NHA1996/97

Table 34: Inpatient and outpatient subsidy per capita in government facilities by income quintiles (nominal Taka)

Type	Medical College Hospital	District Hospital	Thana Health Complex	Other MOHFW	Other Government Hospital	Total
Inpatient Subsidy Per Capita						
Poorest	12.1	4.0	16.9	2.6	3.3	38.9
2	8.6	14.9	36.0	1.1	3.3	64.0
3	9.2	11.0	12.7	1.1	3.3	37.3
4	10.4	8.0	29.6	0.7	13.2	61.9
Richest	7.5	6.0	29.6	0.7	46.3	90.1
Total	9.6	8.8	25.0	1.3	13.9	58.4
Outpatient Subsidy Per Capita						
Poorest	3.3	5.0	15.3	17.4	1.8	42.8
2	5.2	4.6	14.7	14.0	3.1	41.6
3	5.2	6.9	18.8	9.6	6.3	46.7
4	6.9	5.7	13.7	10.2	12.1	48.6
Richest	8.7	4.7	14.1	5.8	19.2	52.5
Total	5.9	5.4	15.3	11.4	8.5	46.4

Source: Bangladesh NHA1996/97

Table 35: Distribution of inpatient health expenditures per capita by gender and age (nominal Taka)

Type	Medical College Hospital	District Hospital	Thana Health Complex	Other MOHFW	Other Government Hospital	Total
Gender						
Male	11.2	9.3	23.9	1.4	10.3	56.1
Female	7.8	8.2	26.1	1.1	17.7	60.9
National	9.6	8.8	25.0	1.3	13.9	58.4
Age Group						
0-4	5.0	5.8	9.3	1.1	4.8	26.0
5-9	3.1	2.6	8.4	0.5	0.0	14.6
10-14	5.4	3.1	13.1	1.2	0.0	22.7
15-24	6.5	4.1	6.5	0.4	6.8	24.4
25-34	8.2	7.8	33.0	0.5	12.9	62.4
35-44	7.4	19.1	36.1	3.2	21.2	87.0
45-59	28.3	21.0	89.1	3.5	54.1	196.1
60-69	20.0	27.7	88.2	2.6	45.9	184.4
70 +	108.2	57.5	61.1	5.4	143.0	375.1
Total	9.5	8.7	24.9	1.3	13.8	58.2

Source: Bangladesh NHA1996/97

Table 36: Distribution of outpatient health expenditures per capita by gender and age (nominal Taka)

Type	Medical College Hospital	District Hospital	Thana Health Complex	Other MOHFW	Other Government Hospital	Total
Gender						
Male	6.8	5.1	15.9	11.4	9.8	49.1
Female	4.9	5.6	14.6	11.4	7.2	43.7
Total	5.9	5.4	15.3	11.4	8.5	46.4
Age Group						
0-4	3.5	2.3	13.6	12.4	5.1	36.9
5-9	2.2	2.4	10.6	6.7	6.9	28.9
10-14	2.4	1.8	5.0	6.1	4.0	19.4
15-24	3.3	2.1	7.8	6.4	4.2	23.7
25-34	4.3	6.7	14.6	8.8	12.3	46.8
35-44	12.3	11.8	20.4	19.4	15.8	79.6
45-59	15.8	9.5	35.2	23.9	12.2	96.7
60-69	15.3	17.4	42.4	19.7	15.2	109.9
70 +	29.3	36.1	74.3	49.1	31.5	220.1
Total	5.9	5.4	15.3	11.4	8.5	46.4

Source: Bangladesh NHA1996/97

Table 37: Total expenditure on personnel medical services by gender and age (nominal Taka)

Type	Inpatient Expenditure			Outpatient Expenditure			Collective Health Services	Subtotals		Total
	Public	Private	Subtotal	Public	Private	Subtotal		Public	Private	
Gender										
Male	56	21	77	49	296	345	33	138	317	454
Female	61	17	78	44	244	288	33	137	262	399
National	58	19	77	46	271	317	33	138	290	427
Age Group										
0-4	26	2	29	37	64	101	33	96	67	162
5-9	15	7	22	29	87	116	33	76	94	170
10-14	23	4	27	19	72	91	33	75	75	150
15-24	24	8	33	24	119	142	33	81	127	208
25-34	62	14	76	47	274	320	33	142	288	430
35-44	87	27	114	80	463	543	33	199	491	690
45-59	196	73	269	97	841	938	33	326	914	1,240
60-69	184	49	233	110	783	893	33	327	832	1,159
70+	375	199	574	220	2,313	2,533	33	628	2,512	3,140
Total	58	19	77	46	271	317	33	137	290	427

Source: Bangladesh NHA1996/97

Table 38: Distribution of per capita expenditures for personal medical services by gender and age (nominal Taka)

Type	Inpatient Services			Outpatient Services		
	Public	Private	Total	Public	Private	Total
Gender						
Male	56	21	77	49	296	345
Female	61	17	78	44	244	288
National	58	19	77	46	271	317
Age Group						
0-4	26	2	29	37	64	101
5-9	15	7	22	29	87	116
10-14	23	4	27	19	72	91
15-24	24	8	33	24	119	142
25-34	62	14	76	47	274	320
35-44	87	27	114	80	463	543
45-59	196	73	269	97	841	938
60-69	184	49	233	110	783	893
70+	375	199	574	220	2,313	2,533
National	58	19	77	46	271	317

Source: Bangladesh NHA1996/97

Table 39: Distribution of per capita expenditures for personal medical services by location of household (nominal Taka)

Location of Households	Inpatient Services			Outpatient Services		
	Public	Private	Total	Public	Private	Total
Rural	41	13	54	37	173	210
Urban	118	39	157	79	598	677
National	58	19	77	46	271	317

Source: Bangladesh NHA1996/97

Table 40: Total expenditure on personnel medical services by location of household (nominal Taka)

Location of HH	Inpatient Expenditures			Outpatient Expenditures			Collective Health Services	Subtotals		Total
	Public	Private	Subtotal	Public	Private	Subtotal		Public	Private	
Rural	41	13	54	37	173	210	33	110	186	296
Urban	118	39	157	79	598	677	33	230	637	866
National	58	19	77	46	271	317	33	138	290	427

Source: Bangladesh NHA1996/97

Table 41: Inpatient and outpatient subsidy per capita in government facilities by location of household (nominal Taka)

Location	Medical College Hospital	District Hospital	Thana Health Complex	Other MOHFW	Other Government Hospital	Total
Inpatient Subsidy Per Capita						
Rural	6.7	7.2	20.3	1.3	5.1	40.7
Urban	19.1	13.9	40.5	1.3	43.1	117.8
Total	9.6	8.8	25.0	1.3	13.9	58.4
Outpatient Subsidy Per Capita						
Rural	3.1	3.7	13.7	12.5	3.7	36.7
Urban	15.1	11.0	20.6	7.8	24.5	79.1
Total	5.9	5.4	15.3	11.4	8.5	46.4

Source: Bangladesh NHA1996/97

ANNEX I: APPROACH AND METHODOLOGY

Conceptual Framework

Introduction

The compilation of National Health Accounts (NHA) estimates for Bangladesh accords essentially with the most recent norms and practices used in recent NHA work by most countries with NHA. There is currently no internationally accepted and agreed framework for NHA, but general practice, as it has evolved in the 1990s, is to estimate NHA in a manner similar to the National Income Accounts, but with some differences. NHA are generally not regarded as satellite accounts, as stipulated in the United Nations System of National Accounts 1993 (SNA).

Derivation of Framework

The conceptual framework for NHA involves the definition of what constitutes health expenditure and the institutional entities involved. The structure involves the classifications and nomenclature used to identify and desegregate expenditures, either by purpose, type or ultimate beneficiary, and the temporal reference period.

The conceptual framework and structure for Bangladesh's NHA have been developed according to the following criteria:

- It should be policy relevant and easily interpretable by health sector policy makers
- It should be compatible with international practice and norms
- It should be reproducible
- Categories used in classifications must be mutually exclusive
- It should be feasible to estimate given data availability

Bangladesh NHA Framework

This section describes the framework used in Bangladesh NHA.

Health Expenditure Definition

Health expenditures are defined as all expenditures or outlays for prevention, promotion, rehabilitation, and care; population activities; nutrition, and emergency programs for the specific and predominant objective of improving health. Health includes both the

health of individuals as well as of groups of individuals or populations. Expenditures are defined on the basis of their primary purpose, regardless of the primary function or activity of the entity providing or paying for the associated health services. Expenditures for the purpose of training or educating health sector personnel, which imparts health sector specific knowledge and skills, as well as health-related research are defined as being for the purpose of health improvement when applying this definition.

There is no internationally accepted definition of what constitutes health expenditures, but this definition is comparable to that conventionally used in other national health accounts and national health expenditure studies. Other countries and territories in the region with similar definitions include Hong Kong Special Administrative Region (SAR), Sri Lanka and the Philippines

Implications

- There are many activities which have multiple objectives, including those of improving health, such as food subsidy programs, or water and sanitation projects. These are only included, if the primary and main objective is the improvement of health itself. Therefore, most water, sanitation and nutrition projects are not included. Nutrition projects under the Ministry of Health and Family Welfare are included.
- Expenditures on health services by entities, the primary purpose of whose activities is non-health related, are defined as health expenditures. This definition differs from that used in the SNA, which focuses on the purpose of the primary activity of the entity. For example, provision of medical services to prisoners by correctional facilities is treated as a health expenditure in the NHA, unlike in the SNA.
- Training expenditures are included if they are specifically related to health. Hence expenditures for the primary and secondary education of those who enter medical or nursing school are not included, but training given within medical schools to future doctors are.

National Health Expenditures (NHE)

These are defined as all health expenditures for the benefit of individuals resident in Bangladesh. Expenditures for the benefit of Bangladeshis living abroad are excluded, although expenditures in foreign countries for the benefit of residents of Bangladesh are included, as well as expenditures for the benefit of foreign citizens resident in Bangladesh.

Implications

- This definition is comparable to that used by HCFA in estimating US National Health Expenditures, and in Egypt's National Health Accounts.
- Treatment sought at foreign providers by resident Bangladeshis are included.

Base Year for NHA

Bangladesh's NHA are estimated initially for a base year of 1996/97.

This year was chosen as it is the latest for which provisional final GOB budgetary accounts and BBS household survey data are available. The 12-15 month time gap between the end of the fiscal year and the release of the NHA estimates is relatively short in comparison with other NHA-compiling countries. The US NHA are released typically with a time lag of 18 months. 1996/97 was one year before the commencement of HAPP-5, therefore, the NHA estimates provide a useful baseline for national expenditures before the initiation of HAPP-5.

Accounting Basis

Bangladesh's NHA are estimated on a fiscal year basis (July 1 - June 30). The fiscal year of GOB runs from July 1 through June 30. Since the bulk of the data collected pertains to GOB's fiscal year and since planning in MOHFW is based on the fiscal year, the Bangladesh National Health Accounts are organised on that basis.

Expenditures are counted using an accrual definition, that is, the fiscal year defined for the provision of health care goods and services is the year in which the health care goods and services are actually received or contracted out. Annual government expenditures do not need to be adjusted using this definition, even though the accrual (obligation incurred) year may or may not exactly coincide with the fiscal year in which the cash transaction actually

occurs. This definition also implies that the incurrence of liabilities by an entity is equivalent to an actual expenditure.

Classifications

In Bangladesh's NHA, expenditures are measured and organised on the basis of the entities making the expenditures, and those entities passing or using the expenditures. The classification of entities within Bangladesh's health care system is thus critical for estimating and structuring Bangladesh's NHA. Three sets of entities must be defined: financing sources, financial intermediaries and providers. The following gives the provisional list of entities to be used in Bangladesh's NHA.

Entities are defined as economic agents which are capable of owning assets, incurring liabilities, and engaging in economic activities or transactions with other entities. They can consist of individuals, groups of individuals, institutions, enterprises, government agencies or NGOs.

Financing Sources

Financing sources are defined as entities which ultimately bear the expenses of financing the health care system. In operationalising this definition, a similar convention to that used in the SNA is followed. In general, non-government organisations are treated as ultimate financing sources, not the households or other entities who make contributions to them. Similarly, the government is considered an ultimate financing source, not the entities which pay taxes to it. One difference to SNA practice is observed -- where firms or employers provide or pay for health services as part of the regular compensation of employees, these expenditures are treated as being by the employer, and not expenditures out of the income of households, which is SNA practice.

Financing sources are grouped into five mutually exclusive institutional sectors:

1. Government
2. Foreign donors
3. Non-profit institutions
4. For-profit enterprises
5. Households

The classification of entities within each sector is given in Table 42 as follows:

Table 42: Classification of financing sources

Financing Sources	
1. Government of Bangladesh	
1.1	National Government
1.1.1	Ministry of Health & Family Welfare
1.1.1.1	Revenue budget
1.1.1.2	Development budget (ADP)
1.1.2	Ministry of Defence
1.1.3	Ministry of Home Affairs
1.1.4	Ministry of Education
1.1.5	Railway Division
1.1.6	Other ministries and divisions
1.2	Local Government
1.3	Corporations & autonomous bodies
2. Foreign donors	
2.1	Governmental sources
2.1.1	Multilateral agencies
2.1.2	Bilateral co-operation partners
2.2	Non-governmental sources
3. Non-profit institutions/NGOs	
4. For-profit enterprises	
5. Households	

Source: Bangladesh NHA 1996/97

Non-governmental sources are listed twice, once under foreign donors and secondly under non-profit institutions/NGOs. Category 2.B refers to funding from foreign-based NGOs. Where such funds are being transferred to the local offices of these same NGOs, these will be identified as transfers from abroad, when the local office is a separately and locally registered entity.

Financial Intermediaries

Financial intermediaries are defined as entities which pass funds from financing sources to other financial intermediaries or providers in order to pay for the provision of health services.

The following financial intermediaries are separately identified in the Bangladesh NHA:

1. NGOs acting as intermediaries
2. NGO health insurance/community financing schemes
3. Public sector employees insurance schemes
4. Commercial health insurance schemes

NGOs act as intermediaries when they receive funds from foreign donors, and then subcontract other NGOs. Public sector

employees insurance schemes do not currently exist in Bangladesh, but they are included in proposals made for the HAPP-5. In the event of such schemes being established, they will need to be included as a separate financial intermediary.

In addition to the above entities which act as financial intermediaries, the Revenue and Development budgets of MOHFW are treated in the accounts as intermediaries themselves. Although these are merely accounting heads within the Ministry, it is useful to distinguish between them as the flow of funds through each is different and distinctive. The Revenue budget is exclusively funded from GOB's own resources, while the Development budget is mostly funded from donor resources. It is not possible in this report to give an accurate and reliable disaggregation of the funding sources used for the Annual Development Budget (ADP).

Providers

Providers are defined as institutional entities who produce and provide health care goods and services, which benefit individuals or the population groups. The classification of providers is given in Table 43.

Non-profit institutions are defined as entities which are registered as non-government organisations with the Department of Social Welfare. There are some hospitals which are private in that they are not owned or run by the government, but which do not legally run on a for-profit basis; they may be registered as non-government organisations with the Department of Social Welfare. In these cases, if these hospitals are registered as private hospitals and clinics by the Director-General (Health Services), they are classified as for-profit providers, falling into category 4.1.1 (Inpatient medical facilities).

Inpatient medical providers in the private sector are defined as any facilities or entities which maintain beds for the overnight care of patients. In general this category includes all facilities, commonly termed as private hospitals, nursing homes and clinics. Inpatient medical facilities may provide both inpatient and outpatient care.

Outpatient medical providers are defined as medical providers who deliver personal medical services on an outpatient or ambulatory basis, and do not admit patients for medical care overnight.

Beneficiaries

Following international recommendations (United Nations, 1993), national health expenditures are disaggregated according to the beneficiary of those expenditures. The following break-down of beneficiaries is used.

Demographic

Age groups

Age categories are as follows: 0-1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70+ years.

Table 43: Classification of providers

Type of Providers	
1. Government of Bangladesh	
1.1. National Government	
1.1.1. Ministry of Health & Family Welfare	
1.1.1.1. Medical College hospitals	
1.1.1.2. District hospitals	
1.1.1.3. Thana and lower level facilities	
1.1.1.4. Specialised hospitals	
1.1.1.5. Other MOHFW facilities	
1.1.2. Other GOB facilities	
1.2. Local Government facilities	
1.3. Public corporations and autonomous bodies	
1.4. Research and training institutions	
2. Non-profit institutions/NGOs	
2.1. NGOs registered with NGO Affairs Bureau	
2.2. NGOs not registered with NGO Affairs Bureau	
3. Enterprise own services	
4. For-profit providers	
4.1. Private modern qualified medical providers	
4.1.1. Inpatient medical providers (hospitals/clinics)	
4.1.2. Outpatient medical providers	
4.2. Private modern unqualified medical providers	
4.3. Private homeopathic providers	
4.4. Private dental providers	
4.5. Diagnostic / imaging service providers	
4.6. Private traditional providers	
4.7. Drug retail outlets	
4.7.1. Pharmacies	
4.7.2. Shops	
4.8. Foreign providers	

Gender

Male and female

Socioeconomic

From the perspective of equity and poverty alleviation, the distribution of health expenditures across socioeconomic groups is important. Expenditures are disaggregated across income/expenditure quintiles, where individuals are ranked according to their per capita household income/expenditure, as reported in the BBS HDS surveys.

Geographical

The extent to which national health expenditures can be geographically disaggregated depends on the disaggregation of available data. However, its usefulness depends also on the extent to which other information is available on specific geographical units, which can allow policy makers to draw reasonable policy conclusions about the distribution of public resources, and the extent to which geographical areas correspond to geographical units with distinctive economic, social and health needs.

It is proposed in future to estimate health expenditures down to the level of divisions or the former revenue districts. While data were collected for this purpose during the

compilation of the NHA estimates, such geographical disaggregations are not presented here, as the data were not complete.

Functions

The functional use of health expenditures is estimated to indicate their final purpose. A classification of functions with a corresponding system of 3-digit codes (BANHA Codes) were developed based on previous OECD practices and current proposals, the functional classifications being developed for NHA in Hong Kong and Sri Lanka, and with input from Bangladeshi experts. The classification is presented in Table 45, with the corresponding codes used in Hong Kong's and Sri Lanka's national health accounts also given for reference.

No special attempt is made to separately estimate expenditures on reproductive health or on maternal and child health services. However, such expenditures are easily derivable from the age and gender breakdowns. This is possible if a more inclusive definition of reproductive health expenditures, such as all those expenditures for women aged 15-49 years is used.

Table 44: Functional classification of health expenditures in Bangladesh (for NHA)

FUNCTION	BANHA Code	SLHA Code	HKDHA Code
Core functions of health care			
1. Personal health services	1	1	1
1.1. Hospital services	1.1	1.1	1.1
1.2. Ambulatory services	1.2	1.2	1.2
1.3. Other personal health services	1.3	1.3 – 1.6	1.3 - 1.5
2. Distribution of medical goods	2	2	2
3. Collective health services	3	3	3
3.1. Health promotion and disease prevention	3.1	3.1	3.1
3.1.1. Population based health activities	3.1.1		
3.1.2. Family planning	3.1.2	3.1.2	3.1.2
3.1.3. Disease prevention	3.1.3	3.1.3	3.1.3
3.1.4. Health promotion	3.1.4	3.1.4	3.1.4
3.1.5. School health	3.1.5	3.1.5	3.1.5
3.2. Other collective health services	3.2	3.2	3.2
4. Health programme administration and health insurance	4	4	4
4.1. Programme administration	4.1		4.1
4.2. Administration of health insurance	4.2		4.2
Health related functions			
5. Investment into medical facilities	5	5	5
6. Education and training of health personnel	6	6	6
7. Research and development in health	7	7	7
8. Environmental health	8	8	8

Source: SLHA and HKDHA draft codes from IPS

Annex II: Methods and Data Sources Used in Estimates

This section describes the methods and data sources used in compiling Bangladesh's national health accounts. The conceptual framework used in compilation has been presented above.

Public Sector Expenditure

Ministry of Health and Family Welfare (MOHFW)

MOHFW expenditure data were collected from secondary sources. Where there were any data gaps primary data were used. The sources of secondary data used are the following:

1. GOB Revenue Budget documents published by Ministry of Finance (MOF)
2. ADP documents published by the Planning Commission under the Ministry of Planning
3. Unpublished accounts report from the office of the Chief Accounts Officer (CAO) Health, MOF
4. Unpublished reports from DGHS Finance Unit and DFP
5. Progress Reports published by Implementation, Monitoring and Evaluation Division (IMED) of the Planning Commission
6. Flow of External Resources into Bangladesh, published by Economic Relations Division (ERD), MOF
7. Unpublished data from Project Finance Cell, MOHFW

The sources of primary data collection are as follows:

1. HEU/DI Health Facility Survey, 1997
2. Health Education, Research and Training Institutions Survey, 1997
3. Development Partners' Health Expenditure Survey, 1997

It was not possible to estimate the actual expenditure by provider from the information collected from the above sources. Also it was not possible to estimate expenditures by different functions. For such an estimate primary data were required, as no secondary data were available. The estimation process made use of primary data, collected through HEU/DI Health Facility Survey, 1997, to estimate health expenditures by functional category.

The MOHFW ADP finances all MOHFW development programmes, (mostly investment programmes). Published documents on ADP provide project-wise information. These documents show local currency allocation, amount of CD/VAT, direct project aid, and also mention name of the foreign funding agencies. However, ADP documents do not provide any information on actual GOB contributions in the health sector or donor-wise project aid. The amount in local currency (i.e., Taka) in ADP consists of GOB revenue surpluses, self-financing by the autonomous bodies, and funds generated from commodity and food aid. This breakdown is available for the overall ADP but not for the health sector programmes.

IMED reports do not provide the donor's contribution in development programmes. ERD documents do show donor contributions for each project, but do not show GOB contributions. ERD reports also present the project aid in currency units of respective donors, not in Taka or US dollars.

Other GOB Ministries

A survey was carried out to capture the health expenditures of other Ministries. The survey covered the Ministry of Home Affairs, Ministry of Defence, and the Railway Division under the Ministry of Transport and Communication. A structured questionnaire was used to collect information on health related expenditure, revenue and utilisation of the health care services. It was not possible to obtain the utilisation information from the Ministry of Defence for their facilities, although expenditure information was made available.

Local Government

All four City Corporations were surveyed in order to collect information on health expenditures. These City Corporations are in Dhaka, Chittagong, Rajshahi, and Khulna. Information on expenditure and utilisation of health care services were collected through a structured questionnaire survey. In addition to the City Corporations five municipalities were surveyed to estimate health expenditures at municipality level.

Corporations and Autonomous Bodies

Many Public Corporations and Autonomous Bodies have health related expenditures. Some of them operate their own health care facilities to provide health care services, primarily offering ambulatory care to the

employees and their families. Several provide medical benefits in the form of reimbursement of actual hospitalisation cost or treatment costs of their staff. As no secondary data were available, ten public sector corporations were surveyed in order to get their health expenditures. For time and resource constraints, survey on autonomous bodies could not be conducted.

Facility Survey

A survey of 250 MOHFW inpatient facilities was carried out by HEU/DI during early 1998. The objective was to collect data on recurrent expenditures and service activities for each facility to permit an analysis of unit costs. The sample consisted of four subsamples: (i) 83 thana health complexes, (ii) 21 district hospitals, (iii) 10 medical college hospitals and (iv) 10 specialised facilities. The facility subsample was chosen using a probabilistic multistage cluster survey design, with the objective of producing nationally representative unit cost estimates. One district hospital and four thana health complexes were randomly chosen from each large division. The data collected were sufficient to estimate the inpatient-outpatient allocation of resources within the facilities.

Survey of Research and Training Institutes

The education/training and research institutes in the health sector were grouped under four major categories: (i) Medical and Dental Colleges (inclusive of colleges of traditional medicine), (ii) Nursing Training Schools and Colleges (inclusive of Nursing Directorate), (iii) Medical Assistants Training and Institutes of Health Technology, and (iv) Specialized Institutes and Research Organizations.

For this survey, a census approach was planned i.e., all the education/training institutes and organizations functioning in 1996-97 were approached. The overall response from these organizations (n=98) was encouraging, being at around 91%.

The composition of the surveyed research and training institutions was the following:

- Medical schools and colleges = 28
- Nursing schools and colleges = 46
- Paramedic training institutions = 8, and
- Specialised and research institutions = 16

Of these 98 research and training institutions surveyed 78% are public and 22% are private.

Survey of Development Partners

A survey was carried out to estimate development partners' expenditures on health and population activities. A total of 20 development partners were contacted and 17 provided expenditure information. Both bilateral and multilateral agencies were covered in the survey. Of the development partners, the World Bank Resident Mission in Bangladesh did not provide data on health related expenditures. A structured questionnaire was used for collecting data on fund disbursement to GOB, and NGOs in 1997.

Private Sector Expenditure

NGO Survey

There have been no previous attempts to estimate or report on total health service-related expenditures by NGOs in Bangladesh. There is no systematic reporting system for such expenditures, and no regular survey data available to enable such estimates. For the purpose of NHA estimations, a special survey of NGOs was carried out.

There are two types of NGOs working in Bangladesh:

- NGOs registered with NGO Affairs Bureau, who are permitted to receive foreign funds
- NGOs registered with the Department of Social Welfare, consisting mainly of NGOs who receive only local funds.

There were about 24,000 NGOs registered with the Department of Social Welfare in 1996. Of these, 551 were registered also with the NGO Bureau. Hence, the NGO Bureau group is a subset of the second group. Both groups were surveyed using the same structured questionnaire instrument, but the sampling procedure was different for the two groups. For carrying out this survey, two different sampling frames and two different sampling techniques were used.

NGO Affairs Bureau Registered NGOs

The NGO Bureau Directory of 1994 was used as the sampling frame, since no other more recent listing was available. The Directory provides name, addresses, and activities of the NGOs. The objective was to estimate health expenditures of NGOs in 1997. Hence, the survey focused on NGOs who cater to

health services. All NGOs working on health were identified in the directory, and included into the sample. A census survey of all the NGOs identified was attempted. The total number identified initially was 325, and the actual number of NGOs surveyed was 221. The completion rate for the survey was 68%. Some NGOs could not be covered either because of lack of co-operation, time constraint, bad weather or because they have stopped health activities since the publication of the NGO Directory, 1994.

Department of Social Welfare Registered NGOs.

A systematic sampling method was adopted to draw the samples. The Department of Social Welfare registers (where name, address, and major activities of the organizations are mentioned) were used as the sampling frame. A sample of 600 was drawn from the registers through a systematic sampling procedure. When surveyed, it was found that out of 600, 100 NGOs were providing health services and the rest (500) did not clearly mention their activities. All 600 NGOs enumerated were surveyed. The completion rate for the survey was 72% of the NGOs with health related

activities specifically mentioned in the Department of Social Welfare register, and 75% of NGOs with details of activities not mentioned. The non-surveyed NGOs could not be accessed because of bad weather and transportation difficulties.

Household Expenditures

Household expenditures comprise the largest part of overall national health expenditures, but estimation of their actual levels is associated with considerable error. Two principal information sources exist for estimation of household health expenditures:

1. Household survey data
2. Supply-side data from providers and other retail outlets.

Based on a review of these available data sources, household health expenditures are estimated to be Tk. 34,438 million in 1996/97, or the equivalent of 2.5% of GDP. Table 45 provides the estimated composition of these expenditures by provider type, and according to functional purpose.

Table 45: Household expenditure by provider type (nominal million Taka)

Provider	Household Expenditure)	Range of Estimates	
		Lower Bound	Higher Bound
Drugs	25,234	23,972	30,281
Government Providers	159	151	183
Education, Research & Training Institutes	143	136	172
Modern Qualified Providers			
Private Clinics / Hospital	1,136	1,079	1,363
Private Practitioners & Others	2,005	1,905	2,406
Non-profit Institutions and NGOs	197	187	236
Modern Unqualified Providers	1,400	1,330	1,680
Homeopathic and Traditional Providers	1,042	990	1,250
Diagnostic & Imaging Providers	3,122	2,966	3,746
Total Households Expenditure	34,438	32,716	39,604

Source: Bangladesh NHA estimates 1996/97

Table 46: Household surveys reporting household health expenditures

Survey	Executing agency	Time period	Type	Sample
Household Expenditure Survey (HES)	BBS	July 1995 – June 1996	Generalised household consumption survey	Nationally representative 7,420 Households
MHSS	BBS	Feb 1994 – Jan 1995	Single topic morbidity and health utilisation survey	Nationally representative 53,538 Households
MHSS	BBS	June 1997	Single topic morbidity and health utilisation survey	Nationally representative 97,836 Households

Source: Bangladesh NHA 1996/97

Table 47: Comparison of household survey estimates of health spending as percentage of GDP

Survey	National household health expenditures (nominal million Taka)	Method of derivation	Percentage of GDP
HES 1995/96	26,379	Direct estimation	2.03%
HES 1995/96	23,715	Multiplying health as share of overall household expenditures into National Income Accounts estimate of private consumption estimate	1.82%
MHSS1994/95	34,483	Direct estimation	3.13%
MHSS 1996/97	44,016	Direct estimation	3.14%

Source: Bangladesh NHA 1996/97

Table 48: Comparison of these independent estimates with the estimates derived from MHSS 1996-97

Item of household expenditure	MHSS 1996-97 estimate (nominal million Taka) (A)	Independent estimate (B)	Source of independent estimate	B/A (%)
Drug purchases	31,355	15,800	IMS	50.4%
Private hospital revenues	1,500	1,136	HEU/DI Private Clinic Survey 1997	75.7%
Government hospital user fees	1,643	166	DGHS, HEU/DI Facility Survey	10.1%
NGO user fees	111	197	DI NGO Survey 1998	177%
Total household health expenditures as % of GDP	3.1%	2.03%	BBS HES 1995/96	65.48%

Source: Bangladesh NHA 1996/97

No reliable data are available to estimate time series of trends in household health expenditures in recent years. It should be noted however that there is no evidence to indicate or suggest that there are any substantial changes during the 1990s in the share of GDP consisting of household expenditures on health services and products.

Household Survey Data

Several national household surveys provide estimates of household health expenditures in the 1990s. These are listed in Table 46. These surveys cover different time periods, are different in scope and purpose, and imply different levels of household health spending. Table 47 provides the estimates of household health expenditures.

Household Expenditure Survey (HES) 1995/96 is a generalised household consumption survey, and can be expected to underreport specific types of service expenditures. BBS notes that the survey tends to underreport service and non-food expenditures relative to expenditures on goods and food expenditures, which is in fact consistent with the survey research literature. Overall, total household consumption reported in the HES is 12.3%

less than the figure given for private consumption in the national income accounts. In the case of health expenditures, a reasonable assumption is that HES would underreport overall health expenditures by households, but relatively less so in the case of expenditures on medicines and other health goods. A simple and straightforward method of adjusting for the general effect of underreporting is to assume that underreporting is consistent across all consumption items. Hence, health expenditures can be derived by taking the share of household consumption devoted to health and multiplying that with the national income accounts estimate of private consumption, which is almost identical to household consumption (Table 48).

MHSS 1994-95 and 1996-97 are focused single topic health surveys. General experience with such surveys is that in comparison with generalised consumption surveys they tend to produce higher estimates of household health spending, ceteris paribus. This may result in either a lower level of underestimation, or an overestimation of household health spending. Where it is possible to verify this, national dedicated

household health utilisation and expenditure surveys, using similar instrument designs to that used in the MHSS, have most often produced over-estimates of spending. Examples of this include the Sri Lanka MOH/IDA Health Utilisation and Expenditure Survey 1992 and the Harvard/MOH Egypt Health Utilisation and Expenditure Survey 1995/96 (Rannan-Eliya et al, 1997).

The higher levels of household health spending reported by MHSS therefore are consistent with expectations. The MHSS 1997 reports even higher levels, but this survey was a one round survey conducted during July 1997, and not therefore adjusted for seasonal bias. Household health expenditures are generally higher during the monsoon months of July – October than during the rest of the year (Rabbani et al, 1997).

Supply Side Data

The estimates of household health spending derived from the household surveys must be cross-checked with data from the supply-side. In Bangladesh, the availability of such data is quite limited. The following are the only available items of household expenditure, which can be verified from alternative sources:

1. Drug and medicine purchases: IMS data on pharmaceutical wholesale sales¹
2. Fees paid to private hospitals: HEU/DI Private Clinic Survey 1997
3. Fees paid to government hospitals: DGHS data, HEU/DI Facility Survey data
4. Fees paid to NGO providers: DI NGO Survey 1998

Of these independent sources, those for private hospital revenues and for drug sales are considered most reliable. The figure for government user fees is accurate, but the amount reported in MHSS may not be strictly comparable, as it will include both official user fees, as well as unofficial fees paid to staff at government hospitals (Kawnine et al, 1997).

The independent estimates point to over-estimation in MHSS. However, it is difficult to determine from the limited data available the actual extent of this. In the absence of any other more reliable data in Bangladesh, the

NHA estimates assume that the actual level of household health expenditures is 80% of the average level reported in the MHSS of 1994/95 and MHSS 1997. This is a somewhat arbitrary choice, but it yields an estimate which is more consistent with the other data sources. It reflects all the available information, and is consistent with the general expectation that these types of survey are liable to overestimation of expenditures. This estimate accounts for more than 50% of total national health expenditures. Given the uncertainty attached to this estimate, which cannot be further verified, it demonstrates that an important area for attention in future NHA estimates will be determining more accurately household health expenditures using other independent data sources.

Having determined the total level of household health expenditures in this way, the distribution of expenditures by provider type was assumed to be the same as in the original survey results. For certain items however, more reliable data were available, and for which the more reliable estimate was used.

Table 49 gives the final estimation of household health expenditures by category, and the data sources used in each case.

¹ IMS is an international market research firm, which specialises in tracking pharmaceutical markets. Operating in more than 60 countries, it uses a standard methodology to track pharmaceutical sales in national markets. Its data are the standard source of information on market trends used by most multinational pharmaceutical firms, and HCFA, the US agency responsible for the US NHA estimations.

Table 49: Derivation of estimated Household health expenditures by provider type

Item of household health expenditures by provider	Amount (nominal million Taka)	Source
Government providers	159	DGHS records (actual)
NGO facilities	197	DI NGO Survey 1997
Private hospitals	1,136	HEU/DI Private Clinic Survey 1997
Private practitioners	2,005	MHSS
Private modern unqualified providers	1,401	MHSS
Private traditional providers	205	MHSS
Private homeopathic providers	102	MHSS
Private other unqualified providers	734	MHSS
Diagnostic/Imaging service providers	3,122	MHSS
Drug retail outlets	25,234	MHSS
Subtotal	34,295	MHSS
Subtotal (% of GDP)	2.4%	
Research and training institutions	14.3	DI Education, Research and Training Institute Survey 1997
Total	34,438	NHA final estimate
Total (% of GDP)	2.5%	NHA final estimate

Source: Bangladesh NHA estimates 1996-97

Annex III: Additional Tables

Table A1: Macroeconomic indicators

Year	(Values in billion Taka)					
	GDP at current price	GDP at constant price	GDP deflator (1990=100)	US/Taka exchange rate (Tk. Per US\$)	Govt. expenditure	Govt. revenues
1989-90	659.6	691.7	95.4	32.3	195.9	68.9
1990-91	737.6	737.6	100.0	35.8	219.9	80.0
1991-92	834.4	762.7	109.4	38.6	251.3	98.9
1992-93	906.5	794.9	114.0	39.0	282.8	113.6
1993-94	948.1	830.5	114.2	39.9	312.1	125.3
1994-95	1030.4	865.5	119.0	40.3	363.3	141.8
1995-96	1170.3	904.0	129.5	40.8	373.1	150.3
1996-97	1301.6	952.1	136.7	42.5	401.6	163.4

Notes: GDP deflator refers to GDP at current price/GDP at constant price
 'rf' refers to period average of market exchange rates & official exchange rates
 'aa' refers to end of period national currency value of the SDR
 'ae' refers to end of period SDR value of the national currency unit

Sources: International Monetary Fund, 1996, 1997

Table A2: Population, IMR, Male/Female LEB, TFR

Year	Population (in millions)	Infant Mortality Rate (per 1000 live birth)	Life Expectancy at Birth	Fertility Rate (per woman)
1990	108.1	94.0	56.0	4.3
1991	109.9	92.0	56.1	4.2
1992	112.7	88.0	56.3	4.2
1993	115.2	84.0	57.7	3.8
1994	117.8	77.0	58.0	3.6
1995	119.9	71.0	58.7	3.5
1996	122.1	67.0	58.9	3.4
1997	124.0	77.0	58.0	

Source: Statistical Yearbook of Bangladesh, 1996, Bangladesh Bureau of Statistics, Public Expenditure Review 1997 update, August 1997, South Asia Region, The World Bank. International Financial Statistics, 1996, International Monetary Fund

Table A3: Basic demographic indicators

Year	Population (in millions)	Infant Mortality Rate (per '000 live birth)	Life Expectancy at Birth	Fertility Rate (per woman)
1990	108.1	94.0	56.0	4.3
1991	109.9	92.0	56.1	4.2
1992	112.7	88.0	56.3	4.2
1993	115.2	84.0	57.7	3.8
1994	117.8	77.0	58.0	3.6
1995	119.9	71.0	58.7	3.5
1996	122.1	67.0	58.9	3.4
1997	124.0	77.0	58.0	

Source: Statistical Yearbook of Bangladesh, 1996, Bangladesh Bureau of Statistics, Public Expenditure Review 1997 update, August 1997, South Asia Region, The World Bank. International Financial Statistics, 1996, International Monetary Fund

Table A4: Market segments covered by IMS audit

To	Pharmacy	MD	Clinic/ Hospital	Special Outlets	Others	Percentage
Ethical Generals	87%	6%	4%	-	3%	100%
Total Market	87%	6%	4%	-	3%	100%

Source: IMS (South Asia)

Table A5: Bangladesh pharmaceutical index data

Year	Value in Taka '000	Value in US\$ '000
1993	7651873	193953
1994	9258767	229835
1995	9574172	235671
1996	11379913	269623
1997	13620920	309831

Note: Price Level Used to Calculate Local Currency Values: Pharmacy Purchase Trade Price includes 15% VAT. Pharmacy has a 16% margin on it

Source: IMS (South Asia)

Table A6: Percentage share of main channels of pharmaceutical distribution in Bangladesh

Type of Distribution Channels	Percentage Share
Private retail pharmacies	87%
Private hospitals	4%
MD/village foot peddling doctors	6%
Others	3%
TOTAL	100%

Source: IMS (South Asia)

Annex IV: Survey sources

BBS Household Expenditure Survey 1995/96

Sampling Design and Coverage

A two-staged stratified random sampling technique was used to draw the sample for Household Expenditure Survey (HES) 1995-96 by using the Integrated Multipurpose Sample (IMPS) design. The IMPS was developed on the basis of Population and Housing Census 1991. For the preparation of the IMPS design, Bangladesh has been divided into five administrative divisions, 64 districts and 490 thanas. In rural areas, thanas are divided into unions, and then mauzas. This design consists of 372 Primary Sampling Units (PSU) throughout the country. There are 252 rural and 120 urban PSUs. The PSU is defined as contiguous two or more enumeration areas (EA) used in the Population and Housing Census 1991. Each PSU comprises of around 250 households.

In the first stage, a total of 372 PSUs were drawn from the sample frame with probability proportional to size (PPS). These PSUs were selected from 14 (i. e. 5 rural strata and 9 urban strata) different strata. And urban strata consist of 4 Statistical Metropolitan Areas (SMA) and 5 municipal areas. In the second stage, 20 households were selected from each PSU by using systematic random sampling method.

A total of 371 PSUs were visited in 1995-96 HES (119 in urban and 252 in rural areas), where a total of 7,420 households were covered.

Morbidity and Health Status Survey

Sampling Design and Coverage

A two-staged stratified random sampling technique was used to draw the sample for Household Expenditure Survey (HES) 1995-96 by using the Integrated Multipurpose Sample (IMPS) design. The IMPS had been designed on the results of Population

Census 1991. For the preparation of the IMPS design, Bangladesh has been divided into five administrative divisions, 64 districts and 490 thanas. In rural areas, thanas are divided into unions, and then mauzas, the land administrative units. And urban areas are divided into wards and then mahallas. Each of the five divisions was stratified into three groups: (1) Statistical Metropolitan Areas (SMAs), (2) Municipalities (urban areas) and (3) Rural areas. Statistical Metropolitan areas and Municipalities constitute urban sample areas.

The IMPS design covered 210 sample mauzas (rural 150 and urban 60) out of 372 sample mauzas drawn from all over Bangladesh following a scientific sampling procedure. On an average an enumeration area consisted of 255 households and population of size 1,333 as per listing and mapping operation during May, 1994. A total of 53,538 households were covered that comprised a population size of 279,768 with a sex ratio of 104.

Private Clinic Survey 1997

The objective of the study was to develop a better understanding of the level, type, and quality of in-patient medical care offered by the for-profit private sector clinics and hospitals. Eighteen major administrative towns and cities of Bangladesh were covered in the survey. With the exception of the capital city, Dhaka, a census of the clinics and hospitals were attempted; over 80% response was achieved. Since Dhaka has over 200 clinics, due to budgetary and time constraints, a census was not feasible. Instead, a stratified representative sampling technique was followed. A total of 252 clinics across the country were covered, with 42 units interviewed in Dhaka.

Using a structured questionnaire, data has been generated to estimate: bed capacity, staffing, volume of patient, revenue generated by type of treatment, operational costs, etc. In addition, quality of the surveyed units was assessed by developing indicators on room and board (hotel services) as well as on medical equipment and infrastructural facilities. Problems and constraints encountered by the clinic owners were also

identified, and possible policy interventions discussed during the interviews.

NGO Survey 1998

There have been no previous attempts to estimate or report on total health service related expenditures by NGOs in Bangladesh. There is no systematic reporting system for such expenditures, and no regular survey data available to enable such estimates. For the purpose of NHA estimations, a special survey of NGOs was carried out.

There are two types of NGOs working in Bangladesh:

- NGOs registered with NGO Affairs Bureau who receive foreign funds
- NGOs registered with the Department of Social Welfare who rely on local funds

Both groups were surveyed using the same structured questionnaire instrument, but the procedure was different for the two groups. For carrying out this survey, two different sampling frames and two different sampling techniques were used.

NGO Affairs Bureau registered NGOs

The NGO Bureau Directory of 1994 was used as the sampling frame, since no other more recent listing was available. The Directory provides name, addresses, and activities of the NGOs. The objective was to estimate health expenditures of NGOs in 1997. Hence, the survey focused on NGOs who cater to health services. All NGOs working on health were identified in the directory, and included into the sample. The strategy was to follow the census method. The completion rate for the survey was 68%; others could not be covered either because of lack of cooperation, time constraint, bad weather or because they have stopped health activities since the publication of the NGO Directory, 1994

Department of Social Welfare registered NGOs.

A systematic sampling method was adopted to draw the samples. The Department of Social Welfare register of 2,089 pages

(where name, address, and major activities of the organizations are mentioned) was used as the sampling frame. It was observed that in most of the cases activities performed by the organizations were not mentioned clearly. A sample of size 600 was drawn from the registers through a systematic sampling method. One page in every 40 pages was selected randomly, and all those NGOs listed on the page were included in the sample to achieve a total sample size of 600. When surveyed, it was found that out of 600, 100 NGOs were providing health services and the rest (500) did not clearly mention their activities. All 600 NGOs enumerated were surveyed. The completion rate for the survey was 72% of the NGOs with health related activities specifically mentioned in the Department of Social Welfare register, and 75% of NGOs with details of activities not mentioned. The non-surveyed NGOs could not be accessed because of bad weather and transportation difficulties.

Facility Efficiency Survey 1998

A survey of 250 MOHFW inpatient facilities was carried out by HEU/DI during early 1998. The objective was to collect data on recurrent expenditures and service activities for each facility to permit an analysis of unit costs. The sample consisted of four subsamples: (i) 80 thana health complexes, (ii) 20 district hospitals, (iii) 10 medical college hospitals and (iv) 10 specialised facilities. The facility subsample was chosen using a multistage probabilistic design, with the objective of producing nationally representative unit cost estimates. One district hospital and four thana health complexes were randomly chosen from each large division. The data collected were sufficient to estimate the inpatient-outpatient allocation of resources within the facilities.

Survey of Research and Training Institutes

Coverage and completion rate:

The education/training and research institutes in the health sector were grouped under four major categories: (i) Medical and Dental Colleges (inclusive of colleges of traditional medicine), (ii) Nursing Training Schools and Colleges (inclusive of Nursing Directorate), (iii) Medical Assistants Training and Institutes of Health Technology, and (iv) Specialized Institutes and Research Organizations.

For this survey, a census approach was planned i. e. all the education / training institutes and organizations functioning in 1996-97 were approached. The overall response from these organizations (N=98) was encouraging being at around 91%. Category-wise response ranged between 63% (in case of MATS and IHT) to as high as 98% (incase of nursing training institutes). Response from specialized institutes and research organizations was at 94% level and from medical colleges at 86%.

The smaller proportion of non-response was due to failure of the institutes to provide information within specified period of time and inability of the interview to pay repeat visits due to adverse weather or other unavoidable difficulties.

The composition of the surveyed research and training institutions was the following:

- Medical schools and colleges 28
- Nursing schools and colleges 46
- Paramedic training institutions 8, and
- Specialised and research institutions 16

Of these 98 research and training institutions surveyed 78% are public and 22% are private.

IMS

IMS is an international company that estimates the size, structure and distribution channels of the pharmaceutical sector worldwide. Bangladesh NHA made use of IMS data as an input into estimating pharmaceutical expenditures for NHA and also for cross-checking the data on expenditures on medications reported by households in the BBS Morbidity and Health Status Survey.

The Pharmaceutical Sales tables represent the estimated purchases of pharmaceuticals by retail pharmacies, computed at the last effective trade price to the pharmacies for the reporting period. IMS monitors the purchases made by retail pharmacies. As a normal practice, most pharmacies include bonus goods as part of their stocks. Consequently they are reported as part of the pharmacy purchases in the IMS report.

Methodology

The data are supplied by a panel of 120 private pharmacies statistically selected to be representative of the universe of 11486 pharmacies located in four statistical regions. To monitor the movement of goods, purchase invoices are regularly collected from these pharmacies. These invoices represent purchases from the private distributors, wholesalers, agents or manufacturers and include data of ethical, generics and over-the-counter preparations.

Other non-Pharmacy outlets were not audited by IMS. Projections were made for the national level (pharmacy market segment) and covers both ethical and over-the-counter preparations marketed either officially or through illegal and smuggled sources, provided they move through retail pharmacies.

The IMS report does not cover the non-pharmacy sectors of the market and the sales estimates do not include the sales of pharmaceuticals through three other outlets.

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DATA COLLECTION MANUAL

INTRODUCTION: The Bangladesh National Health Accounts project relied on extensive primary and secondary data collection to complete the report. A wide range of data and information were collated from various government publications including from the Bureau of Statistics, the Ministry of Finance and the Ministry of Health and Family Welfare. In addition, several independent surveys were conducted under this project to complete the national health accounts matrix. The following five surveys were conducted:

- NGO Health Expenditure Survey, 1998
- Health Insurance Expenditure Survey, 1998
- Facility Efficiency Survey, 1997-98
- Health Education, Research and Training Institutions Survey, 1997-98
- Other Ministries' Health Expenditure Survey, 1998

Details on the methodology, sample, and major findings for each of the above surveys are included in the main report. In this section of the report, a copy of the questionnaire and instructions for field survey activities are presented. Diskettes containing the actual databases are being submitted to the Asian Development Bank and to the Ministry of Health and Family Welfare, Government of Bangladesh.

I. Manual for NGO Health Expenditure Survey, 1997

INTRODUCTION

Welcome to the NHA NGO Health Expenditure Survey. Data International has undertaken this survey on behalf of the National Health Accounts (NHA) Project of the Health Economics Unit (HEU) under the Ministry of Health and Family Welfare (MOHFW). The information collected will be useful to estimate NGO health expenditure in 1997. Your role as a Research Assistant is vital. Collecting accurate, timely, reliable data will enable NHA Project to estimate national health expenditure in Bangladesh in 1996/97.

Know that what you are doing is invaluable, and take great pride in your work. The following provide specific instructions for completing the questionnaire.

1. BROAD GUIDELINES

- (a) In addition to the questionnaires, you are being provided with the following :
 - i) Letter of introduction by the Joint Chief and the Project Director of the HEU, MOHFW, requesting respondents provide information and to place their queries with Ms. Tahmina Begum.

Carry these documents where ever you go.

- (b) You are being provided with pencils, eraser, pencil sharpener and paper pads. Make sure you are provided with these whenever you are on the field.
- (c) The supervisory group includes Messers Zillur Rahman, Tajul Islam Bulbul, and K.M. Shamsuzzaman Asif, who will be with you in the field survey.
- (d) If you have any problems feel free to contact your supervisor or Ms. Tahmina Begum at Data International.

2. GENERAL TIPS

- (a) Approach the NGO executives in a persuasive manner and try to impress on him the seriousness of your work and the importance of his cooperation. Be neat in what you wear and learn the art of smiling cheerfully and waiting patiently, even when you may feel irritated, because he/she is being particularly unresponsive.
- (b) Remember that the respondent's time is more valuable than yours. You are doing your job, but the respondent is rendering a voluntary service to the survey. So be accommodating and adjust your time according to the respondent's convenience. If any respondent refuses to provide information please inform your supervisor immediately. The supervisors should immediately contact Ms. Tahmina Begum.
- (c) It is not desirable to leave the questionnaire with the respondent for completion because he/she may not be able to clarify all points without your assistance. In some cases, however, you may leave the questionnaire at the request of the respondent so that he/she may go through it before providing information.
- (d) You have to collect required information for different section of the questionnaire from different persons. You may have to go through various registers in order to collect information. Remember to write N/A for NOT APPLICABLE wherever relevant.
- (f) Try to edit each questionnaire on the day you complete it, for maximum accuracy. It is unlikely that at a latter date you will be able to remember and understand all the notes you have jotted down. Besides, it takes at least an hour to edit each questionnaire. So try not to pile up all your editing sessions into one long boring session.
- (g) Of course, we understand that all of you will totally avoid manipulating the data. Supervisors will contact the NGO you have covered to ensure accountability.

3. NOTES FOR INDIVIDUAL QUESTIONS**PART A**

- 1-3. Don't forget to fill up the name of the NGO and its address, and telephone and fax numbers.
- 4. Write down the name of the respondent and his/her designation clearly.
- 5. Write down the dates of the visit
- 6. The year in which the NGO was established
- 7. The year in which the NGO was registered with NGO Affairs Bureau and the Directorate of Social Welfare
- 8. The Survey Coordinator will determine the appropriate answer
- 9. Please write down the appropriate number in the box.

PART B

- 1. If the NGO incurred any health and population related expenditures in 1997 or transferred any funds to other NGOs for health and population related activities then tick the box for Yes. If the answer is NO then skip questions 2-10 and ask the respondent question 11.\
- 2.
 - a. If the answer to the question 1 is yes then ask the respondent question 2. This question refers to whether the NGO transferred funds to other NGOs or contracted out health and population related activities to other NGOs in 1997. If answer yes No then skip 2b - 2d.
 - b. If the answer to the question 2a is yes then write down the value of the amount transferred or contracted.
 - c. This refers to the value of expenses or overheads the NGO charges for administering these transfers or contracts to other NGOs.
 - d. Provide the details of such transfer to other NGOs

3. This question refers to whether the NGO directly deliver any of the services listed in 3b in 1997. Inpatient services refers to curative care provided by health care facilities with beds for admitted patients.
4. Outpatient services provided by health centers including static and satellite clinics.
5. If the NGO directly delivered inpatient services then collect the number of hospitals i.e. health facilities with beds for patients, total number of beds in the hospitals, the number of admitted patients in 1997. One inpatient day refers to the number of patients stayed overnight at the facility in a particular day. This way total patient days needs to be calculated for the whole year i.e. for 1997.
6. Health related expenditures incurred for directly delivering health services excluding the funds transferred or contracted to other NGOs.
7. The percentage distribution of the expenditure for directly delivering health services. The total should add up to 100%.
8. The percentage distribution of expenditure incurred for clinic based curative and FP services. This is the detail breakdown of the figures given in 7a.
9. The percentage distribution of expenditures for directly delivering health services in 1997 by old greater districts. Don't forget that Old greater district Dhaka now consists of a number of new districts. Therefore, the amount of expenditure for Dhaka should include expenditures for Manikganj, Munshiganj, Gazipur, Narshingdi, and Dhaka.
10. Please write down the names of other multilateral or bilateral agencies if not listed. User fees and other household payments included user fees for using NGO services, NGO insurance payments, etc.
11. Whether the NGO produces any annual reports on physical or financial progress achieved or activities carried out.
12. This refers to whether the NGOs accounts are audited by an independent accountant.
13. Please mention from which month the fiscal year starts, e.g., from January or from July. etc.

2. Manual for Health Insurance Expenditure survey, 1998

INTRODUCTION

Welcome to the NHA Health Insurance Survey. Data International has undertaken this survey on behalf of the National Health Accounts (NHA) Project of the Health Economics Unit (HEU) under the Ministry of Health and Family Welfare (MOHFW). The information collected will be useful to estimate health insurance expenditure in 1997. Your role as a Research Assistant is vital. Collecting accurate, timely, reliable data will enable NHA Project to estimate national health expenditure in Bangladesh in 1996/97.

Know that what you are doing is invaluable, and take great pride in your work. The following provide specific instructions for completing the questionnaire.

1. BROAD GUIDELINES

- (a) In addition to the questionnaires, you are being provided with the following :
 - i) Letter of introduction by the Joint Chief and the Project Director of the HEU, MOHFW, requesting respondents provide information and to place their queries with Ms. Tahmina Begum.

Carry these documents where ever you go.

- (b) You are being provided with pencils, eraser, pencil sharpener and paper pads. Make sure you are provided with these whenever you are on the field.
- (c) The supervisory group includes Messers Zillur Rahman, Tajul Islam Bulbul, and K.M. Shamsuzzaman Asif, who will be with you in the field survey.
- (d) If you have any problems feel free to contact your supervisor or Ms. Tahmina Begum at Data International.

2. GENERAL TIPS

- (a) Approach the relevant insurance company official in a persuasive manner and try to impress on him the seriousness of your work and the importance of his cooperation. Be neat in what you wear and learn the art of smiling cheerfully and waiting patiently, even when you may feel irritated, because he/she is being particularly unresponsive.
- (b) Remember that the respondent's time is more valuable than yours. You are doing your job, but the respondent is rendering a voluntary service to the survey. So be accommodating and adjust your time according to the respondent's convenience. If any respondent refuses to provide information please inform your supervisor immediately. The supervisors should immediately contact Ms. Tahmina Begum.
- (c) It is not desirable to leave the questionnaire with the respondent for completion because he/she may not be able to clarify all points without your assistance. In some cases, however, you may leave the questionnaire at the request of the respondent so that he/she may go through it before providing information.
- (d) You may have to collect required information for different section of the questionnaire from different persons. You may have to go through various registers in order to collect information. Remember to write N/A for NOT APPLICABLE wherever relevant.
- (f) Try to edit each questionnaire on the day you complete it, for maximum accuracy. It is unlikely that at a latter date you will be able to remember and understand all the notes you have jotted down. Besides, it takes at least an hour to edit each questionnaire. So try not to pile up all your editing sessions into one long boring session.

3. NOTES FOR INDIVIDUAL QUESTIONS

- 1-4. Don't forget to fill up the name of the Insurance company and its address, and telephone and fax numbers.
4. Write down whether the company is under government ownership or private ownership
5. Write down the name and designation of the respondent clearly.
6. Whether the company offers health insurance scheme.
7. In which year the company introduced the health insurance scheme.
8. Whether the company covers health expenditures under life insurance scheme.
9.
 - 9.1 Total premiums collected related to health insurance
 - 9.2 Total claims paid out related to health insurance claims
 - 9.5 Percentage of total bills reimbursed in terms of the amount of claims, NOT in terms of the number of claims. As percentage of the total bills presented by the medical provider. Therefore, if the hospital charged Taka 100 and they paid out Taka 80, the ratio would be 80%.
 - 9.6 Breakdown of bills should be provided in two different ways. One will show the detail breakdown of bills by type of services and the other will present the breakdown of bills by type of medical providers.

3. Manual for Facility Efficiency Survey, 1998

INTRODUCTION

Welcome to the HEU-NHA Facility Survey. Data International has undertaken this survey on behalf of the National Health Accounts (NHA) Project of the Health Economics Unit (HEU) under the Ministry of Health and Family Welfare (MOHFW). The information collected will be useful to policy makers as well as to future researchers, for estimating unit cost and for assessing the allocative efficiency and technical efficiency of the MOHFW health facilities at the district and thana levels. Your role as a Research Assistant is vital. Collecting accurate, timely, reliable data will enable policy makers to analyze the state of the health facilities at these two levels.

Know that what you are doing is invaluable, and take great pride in your work. The following provide specific instructions for completing the questionnaire.

1. BROAD GUIDELINES

- (a) In addition to the questionnaires, you are being provided with the following :
 - i) Letter of introduction by the Director General of the Directorate General of Health Services (DGHS), MOHFW requesting the Directors of hospitals, Civil Surgeons (CS) and Thana Health and Family Planning Officers (THFPO) to provide all possible assistance to you.
 - ii) Letter of introduction by the Joint Chief and the Project Director of the HEU, MOHFW, requesting respondents provide information and to place their queries with Ms. Tahmina Begum.

Carry these documents where ever you go.

- (b) You are being provided with pencils, eraser, pencil sharpener and paper pads. Make sure you are provided with these whenever you are on the field.
- (c) The supervisory group includes Messers Zillur Rahman, Tajul Islam Bulbul, and K.M. Shamsuzzaman Asif, who will be with you in the field survey.
- (d) If you have any problems feel free to contact your supervisor or Ms. Tahmina Begum at Data International.

2. GENERAL TIPS

- (a) Approach the Civil Surgeon for District hospital/ Thana Health and Family Planning Officer (THFPO) for Thana Health Complex (THC)/ and Director for Medical College Hospitals and Specialised Hospitals in a persuasive manner and try to impress on him the seriousness of your work and the importance of his cooperation. Be neat in what you wear and learn the art of smiling cheerfully and waiting patiently, even when you may feel irritated, because he is being particularly unresponsive.
- (b) Remember that the respondent's time is more valuable than yours. You are doing your job, but the respondent is rendering a voluntary service to the survey. So be accommodating and adjust your time according to the respondent's convenience. If any respondent refuses to provide information please inform your supervisor immediately. The supervisors should immediately contact Ms. Tahmina Begum.
- (c) It is not desirable to leave the questionnaire with the respondent for completion because he/she may not be able to clarify all points without your assistance. In some cases, however, you may leave the questionnaire at the request of the respondent so that he/she may go through it before providing information.

- (d) You have to collect required information for different section of the questionnaire from different persons. You may have to go through various registers in order to collect information. Remember to write N/A for NOT APPLICABLE wherever relevant.
- (f) Try to edit each questionnaire on the day you complete it, for maximum accuracy. It is unlikely that at a latter date you will be able to remember and understand all the notes you have jotted down. Besides, it takes at least an hour to edit each questionnaire. So try not to pile up all your editing sessions into one long boring session.
- (g) Of course, we understand that all of you will totally avoid manipulating the data. Supervisors will visit facilities you have covered to ensure accountability.

3. NOTES FOR INDIVIDUAL QUESTIONS

PAGE 1:

- A. Don't forget to fill up the name of the facility and its address. Write down the dates and your names as you are supposed to be working in a team comprising two or three Research Assistants.

TYPE OF FACILITY

Information for this section can be obtained from the facility administrator i.e. THFPO for THC, CS for District hospital, Director for MCH and Specialised Hospitals.

- 1.1 Year of establishment as a health facility
- 1.4 It is not applicable for Thana Health Complex (THC) or District Hospital (DH)
- 1.5 Population of the Thana or District for the year 1997. If population for the previous year is available instead of 1997 population do not forget to mention the year for which population figure is collected.
- 1.6 TFIPP stands for Thana Functional Improvement Pilot Project. This is not applicable for District Hospital or Medical College Hospitals or Specialised Hospitals.

INFRASTRUCTURE AND PHYSICAL FACILITIES

For the information on this section you have to visit different departments and wards. You have to collect information from different people. They include Resident Medical Officer, Statistician, Ward master, Nursing Supervisors, Instrument Caretaker

- 2.1.b Tick any one of Room/hall/space
- 2.1.d Ward total means the number of total wards in the hospital
- 2.1-2.3 Number available refers to the number of equipment or vehicles a facility has.
Number functional refers to the number of equipment or vehicles, which are in working condition
Number available must be equal to or greater than the number functional.
- 2.4 General ward means if there is no beds reserved for different departments
- 2.5.b The number should be collected for THC and also for EPI. Record it in the following way:
The number for THC+the number for EPI
- 2.5.c Same as 2.5.b
- 2.5.h Toilets Total meant total number of toilets in the hospital

- 2.5.i Same as 2.5.h
- 2.7 Official hour. Please collect also the actual hour as a note
- 2.8 Supervisor will complete this question
- 2.9 Same as 2.8

TYPE OF SERVICES PROVIDED

Information for this section can be obtained from facility administrator and Resident Medical Officer (RMO). They will help you in identifying the appropriate person who can give you these information.

- 3.2 Curative services designated to provide curative services that a facility is allowed to provide
- 3.5 Hospital based refers to training provided at the hospital
Community based refers to training provided outside the hospital and at the community level

STAFFING

Information for this section may have to be collected from different department. You should contact Administrative Officer, Statistician, Accounts department, Nursing Supervisors, Ward master to collect required information.

- 4.2 Approved position sanctioned position for a facility
Presently filled position filled at the time of facility survey
Deputation to a staff deputed to this facility from another facility
Deputation from a staff deputed from this facility to another place
Last column A position may remain vacant for more than 12 months even then mention only 12 months.
- 4.2.a Specialist MO with a six months' specialist training

Mention MO at the right of Specialist if the MO is working in the post of a Specialist
- 4.7 Official hour
- 4.8 Officially assigned i.e., officially supposed to work
- 4.9 Actually working
- 4.10 Collect the number in hour. While editing later it can be converted into percentage

UTILISATION OF SERVICES

For information on utilisation of facility services you have to contact a number of people from different department and may have to go through a good number of thick registers. The sources of information include Statistician, RMO, Dental Surgeon, Nursing Supervisors, Outpatient Department (OPD) registers, Ward registers, Operation Theater registers, In-charge of Pathological laboratory, Radiological Department, and EPI programme.

- 5.1 Second column if the services listed in the first column are not provided by the facility
Third-Sixth column will show the number of males, females and children received the listed services at the facility
- 5.9 Infant death refers to the number of less than one-year-old babies died at the facility after admitted into the hospital

Child death refers to the number of children aged one year or more died at the facility after admission

Neo-natal death refers to the number of new-born baby died at the hospital

5.11 Major surgeries refer to the number of performed surgeries required general anesthesia
Minor surgeries refer to the number of surgeries done without general anesthesia

5.12 ICU stands for Intensive Care Unit

AVAILABILITY OF DRUGS, SUPPLIES AND EQUIPMENT

For information on this section you should contact Hospital store, Pharmacist, In-charge of Dispensary, EPI programme and other vertical programme, and go through issue slips and store registers.

6.1 The names of the drugs are **generic** not brand.
Currently available means available during the survey period

EXPENDITURE AND REVENUE

Accounts department is the main source of information for this section. You should go through financial reports prepared for the DGHS Finance section or internal use. You should also convince the Accountant to allow you to go through different registers to cross check the data presented in the reports. For information on MSR you should also contact Hospital store people and go through their registers and documents.

7.3.1 Expenditure from Government budget expenditures from revenue budget
Expenditure from other sources expenditure from development budget

MANAGEMENT INDICATORS

Information for this section is based on the interview with the facility administrator.

8.1.7 Ask for the latest copy of CV

8.3.1 Public means Government or semi-government health facilities
Private means privately owned health facilities

Take time listening to the respondent. Don't insult the respondent by cutting him short, but don't waste too much time either.

4. Manual for Health Education, Research and Training Institutions Survey, 1997

INTRODUCTION

Welcome to the NHA Health Education, Research and Training Institutions Survey. Data International has undertaken this survey on behalf of the National Health Accounts (NHA) Project of the Health Economics Unit (HEU) under the Ministry of Health and Family Welfare (MOHFW). The information collected will be useful to estimate health expenditure on health education, research and training in 1996/97. Your role as a Research Assistant is vital. Collecting accurate, timely, reliable data will enable NHA Project to estimate national health expenditure in Bangladesh in 1996/97.

Know that what you are doing is invaluable, and take great pride in your work. The following provide specific instructions for completing the questionnaire.

1. BROAD GUIDELINES

- (a) In addition to the questionnaires, you are being provided with the following :
- i) Letter of introduction by the Joint Chief and the Project Director of the HEU, MOHFW, requesting respondents provide information and to place their queries with Dr. Sadiqa Tahera Khanam.

Carry these documents where ever you go.

- (b) You are being provided with pencils, eraser, pencil sharpener and paper pads. Make sure you are provided with these whenever you are on the field.
- (c) The supervisory group includes Messers Zillur Rahman, Tajul Islam Bulbul, and K.M. Shamsuzzaman Asif, who will be with you in the field survey.
- (d) If you have any problems feel free to contact your supervisor or Dr. Sadiqa Tahera Khanam at Data International.

2. GENERAL TIPS

- (a) Approach the relevant research and training institution official in a persuasive manner and try to impress on him the seriousness of your work and the importance of his cooperation. Be neat in what you wear and learn the art of smiling cheerfully and waiting patiently, even when you may feel irritated, because he/she is being particularly unresponsive.
- (b) Remember that the respondent's time is more valuable than yours. You are doing your job, but the respondent is rendering a voluntary service to the survey. So be accommodating and adjust your time according to the respondent's convenience. If any respondent refuses to provide information please inform your supervisor immediately. The supervisors should immediately contact Dr. Sadiqa Tahera Khanam.
- (c) It is not desirable to leave the questionnaire with the respondent for completion because he/she may not be able to clarify all points without your assistance. In some cases, however, you may leave the questionnaire at the request of the respondent so that he/she may go through it before providing information.
- (d) You may have to collect required information for different section of the questionnaire from different persons. You may have to go through various registers in order to collect information. Remember to write N/A for NOT APPLICABLE wherever relevant.

- (f) Try to edit each questionnaire on the day you complete it, for maximum accuracy. It is unlikely that at a latter date you will be able to remember and understand all the notes you have jotted down

3. NOTES FOR INDIVIDUAL QUESTIONS

1. Write down the ID code for the questionnaire.
2. Don't forget to write down the date of the interview or visit.
3. Write down clearly the name and designation of the respondent.
4. Write down clearly the name of the organisation or institute engaged in health education, research or training.
- 5-6 Don't forget to write down the correct address and telephone numbers. Please also collect the fax number if any.
7. Please tick the appropriate box for the function the organization or institution performs.
8. Whether the organisation/institution is a government or private one.
9. The year in which it was established
10. The year in which the organisation/institution was registered with Bangladesh Medical and Dental Council (BMDC)
11. The year in which the organisation/institution received Government permission or approval.
12. Please tick the appropriate box against the list of options
13. The year in which the first batch of graduates or trainees graduated or trained.
14. How many times in a year admission takes place.
15. This refers to the number of sanctioned seats for the trainees or students to be admitted.
16. In 1996/97 how many trainees or students or admitted into the institution.
17. The number of trainees/students trained in 1996/97.
18. Detail breakdown of administrative and academic staff the organisation/institution had in 1996/97. Faculty members mean trainer/teaching staff.
19. This refers to the sources of funds received by the organisation/institution.
20. Distribution of funds received by the organisation/institution in 1996/97 by sources. Please match the sources with the sources given in response to question 19.
21. Detail breakdown of sanctioned budget for 1996/97. Please convince the respondent to show you the budget document in order to collect accurate information.
22. Detail breakdown of actual expenditure for 1996/97. Please try to convince the respondent to allow you to go through different registers in order to collect accurate information on actual expenditures.

5. Manual for Other Ministries' Health Expenditure Survey, 1998

INTRODUCTION

Welcome to the NHA Other Ministries' Health Expenditure Survey. Data International has undertaken this survey on behalf of the National Health Accounts (NHA) Project of the Health Economics Unit (HEU) under the Ministry of Health and Family Welfare (MOHFW). The information collected will be useful to estimate health insurance expenditure in 1997. Your role as a Research Assistant is vital. Collecting accurate, timely, reliable data will enable NHA Project to estimate national health expenditure in Bangladesh in 1996/97.

Know that what you are doing is invaluable, and take great pride in your work. The following provide specific instructions for completing the questionnaire.

1. BROAD GUIDELINES

- (a) In addition to the questionnaires, you are being provided with the following :
 - i) Letter of introduction by the Joint Chief and the Project Director of the HEU, MOHFW, requesting respondents provide information and to place their queries with Ms. Tahmina Begum.

Carry these documents where ever you go.

- (b) You are being provided with pencils, eraser, pencil sharpener and paper pads. Make sure you are provided with these whenever you are on the field.
- (c) The supervisory group includes Messers Zillur Rahman, Tajul Islam Bulbul, and K.M. Shamsuzzaman Asif, who will be with you in the field survey.
- (d) If you have any problems feel free to contact your supervisor or Ms. Tahmina Begum at Data International.

2. GENERAL TIPS

- (a) Approach the relevant other ministries' official in a persuasive manner and try to impress on him the seriousness of your work and the importance of his cooperation. Be neat in what you wear and learn the art of smiling cheerfully and waiting patiently, even when you may feel irritated, because he/she is being particularly unresponsive.
- (b) Remember that the respondent's time is more valuable than yours. You are doing your job, but the respondent is rendering a voluntary service to the survey. So be accommodating and adjust your time according to the respondent's convenience. If any respondent refuses to provide information please inform your supervisor immediately. The supervisors should immediately contact Ms. Tahmina Begum.
- (c) It is not desirable to leave the questionnaire with the respondent for completion because he/she may not be able to clarify all points without your assistance. In some cases, however, you may leave the questionnaire at the request of the respondent so that he/she may go through it before providing information.
- (d) You may have to collect required information for different section of the questionnaire from different persons. You may have to go through various registers in order to collect information. Remember to write N/A for NOT APPLICABLE wherever relevant.

- (f) Try to edit each questionnaire on the day you complete it, for maximum accuracy. It is unlikely that at a latter date you will be able to remember and understand all the notes you have jotted down

3. NOTES FOR INDIVIDUAL QUESTIONS

- 1-5. Don't forget to fill up the name of the department/division and its address, and telephone and fax numbers.
10. Write down the name and designation of the respondent.
11. Write down the name of the line ministry i.e. the ministry under which the department/division operates.
12. Tick the appropriate services, listed in the first column, delivered by the department/division in 1997. Inpatient services refer to medical services provided by the facility to admitted or hospitalised patients.
13. Outpatients services provided from static i.e. the health facility and from the satellite clinics. For outpatient services a patients does not need to be admitted into the hospital.
14. Sick beds refer to beds kept in an Outdoor clinic or a department's sick room or medical emergency room to observe a patient before referred to a hospital.
15. Distribution of health and Family Planning related expenditures incurred by the department/division in 1996/97. Recurrent expenditures refer to expenditures to be incurred repeatedly in a given year and financed by Revenue budget. Development or capital expenditures refer to expenditures incurred for capital formation or investment purpose.
16. Expenditures from Government budget means that the expenditure financed by the Government budget. Expenditure from other sources means expenditures financed by other sources including donation from local or foreign sources other than Government budget.
17. Breakdown of capital/development expenditures incurred in 1996/97
18. Whether the department/division had any health and family planning related project in 1996/97.
19. Detail breakdown of health project related expenditures in 1996/97.
20. Distribution of Health and family planning related expenditures incurred in 1996/97 by old greater districts. Remember the one old greater district consists of several new districts. For example greater Dhaka district now consists of Dhaka, Gazipur, Manikganj, Munshiganj, and Narshingdi. Therefore, amount spent for greater Dhaka district must include amount spent for Dhaka, Gazipur, Manikganj, Munshiganj, and Narshingdi districts.
21. Percentage distribution of health and family planning expenditures. Remember that the total must add up to 100%.
22. Write down the amount of income received by the department/division in 1996/97 by sources of income list in the first column.
23. Whether the department/division produces any annual report on their activities carried out or progress made in physical and financial terms.