

Maldives National Health Accounts 2011

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Ministry of Health, Maldives

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Abbreviations

GDP	gross domestic product
HIES	Household Income and Expenditure Survey
HSC	Health Service Corporation
IGMH	Indira Gandhi Memorial Hospital
MoFT	Ministry of Finance and Treasury
MoHF	Ministry of Health and Family
MVR	Maldivian Rufiyaa
NCD	noncommunicable disease
NGO	nongovernmental organization
NHA	National Health Accounts
NSPA	National Social Protection Agency
OECD	Organisation for Economic Co-operation and Development
PHI	private health insurance
SHA	System of Health Accounts
TB	tuberculosis
THE	total health expenditures
WHO	World Health Organization

Foreword

Maldives is witnessing a demographic and epidemiological transition that has put the health system under serious constraints to support financially the burden of disease and to adjust the supply of services and manpower to emerging needs.

The global financial downturn has affected health financing across countries, and Maldives is no exception. With limited financial resources, providing universal access to health services remains a major concern for the Government of Maldives. This concern was the driving force behind the key reform policies of the Ministry of Health and the Government for public sector development, and behind modernization to improve the efficiency and effectiveness of the health system and service delivery.

Given the complexity of issues to address, in order to ensure the optimal road for health sector development, the Ministry of Health had to find answers to basic questions such as:

- what policy can ensure equal access to services for all those in need?
- at what price?
- at what burden on households?

The National Health Accounts team gives a comprehensive description of resource flows in a health-care system, showing where resources come from and how they are used. Although previous health-care expenditure studies have been carried out in Maldives, none have used the integrated framework of National Health Accounts to organize and compile data.

This study will certainly have a great impact in shaping the health financing reform. Most importantly, it constitutes an essential benchmark for assessing the health system performance and evaluating health policies in the future.

Dr Ahmed Jamsheed Mohamed
Minister of Health

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The 2011 National Health Accounts Survey was undertaken to provide information and evidence for health policy decisions and resource distribution to improve the quality of health service delivery in the Republic of Maldives. The survey is a result of the cooperation between the Ministry of Health (MOH) and the World Health Organization (WHO) and relentless efforts of the technical teams at all levels. Leadership for this important work was consistently provided by Dr Aminath Jameel (Minister of Health, 2008–2012) in conceptualizing the survey, and by Dr Ahmed Jamsheed Mohamed (Minister of Health, 2012–2013) in guiding data collection, analysis and dissemination. Dr Akjemal Magtymova, WHO Representative to the Republic of Maldives, led WHO coordination efforts and technical guidance throughout. In addition, implementation of the study would not have been possible without the contribution of the many individuals mentioned below.

The National Health Accounts Team of the MOH with technical and financial support from WHO conducted the survey data collection and analysis. The current publication was drafted by Ms Aminath Nafha, Senior Administrative Officer, MOH, and Dr Osmat Azzam, Technical Officer of the WHO Country Office Maldives.

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1. Introduction

1.1 Background

The Republic of Maldives is an archipelago in the Indian Ocean comprising 1190 islands spread over 820 km long and 120 km wide, with an area of 90 000 km². Only 198 islands are inhabited, 84 of which are used as resorts, and 14 serve industrial purposes. The inhabited islands are very small: only 33 have an area larger than 1 km². The capital city of Malé with an area of almost 2 km² accommodates a third of the country's population of 320 000. The country's land area is estimated to be 300 km². For administrative purposes, the 26 natural atolls of Maldives are classified into 20 groups, each of which is referred to as an administrative atoll.

The geographic characteristics of Maldives present a tremendous challenge for resource allocation and health facility distribution. There has been some recognition that the quality of available health-care services available is poor. While Maldives achieved significant reduction in child mortality up until 2011, its overall health performance has been, and remains poor compared with countries with the same income level.

Maldives' gross domestic product (GDP) has grown at an annual rate of 6–8%, driven by investment in tourism and a low level of inflation. Significant progress has also been achieved in human and social development over the last two decades, lifting Maldives from its status as one of the 20 poorest countries in the 1970s to one that shares characteristics of a lower-middle income country today with a GDP of Maldivian Rufiyaa (MVR) 29 936 million (US\$ 1941 million) and a per capita GDP of US\$ 6067.

The Government is currently faced with an alarming burden of escalating health-care costs. This, along with the population profile and disease patterns, led the Government to consider the financial effects on the health system and the most pressing issues for health reform, which resulted in the creation of the National Health Insurance Scheme in 2012.

1.2 Maldives health sector

The Maldives health sector is undergoing significant changes. The Government is revising its main policy document on health priorities, and at the same time moving to a system of national health insurance that will cover the whole population.

The Ministry of Health and Family (MoHF) coordinates and manage health sector reforms with significant support from its major development partners such as the World Health Organization (WHO) and other donors like the World Bank and United Nations agencies, to implement government reforms and address key health sector systemic and operational issues. The MoH developed a health financing reform plan based on its priorities, and the National Health Accounts (NHA) was one of the priorities, to be developed in 2012. Four key health policy reform approaches needed to be introduced:

- (1) Improve the health status of the people
- (2) Improve access to services

- (3) Improve the quality of services delivered
- (4) Make more effective use of resources.

To undertake the above health financing policy reforms, comprehensive and reliable health system information was required about the composition of the health system, the key actors in the system, their relationship with each other, and the key financing sources, agents and users of national health funds in Maldives.

NHA is a widely accepted tool that is promoted by WHO and the World Bank to allow policy-makers to understand and manage their health systems, and to improve system performance. It is a framework for measuring total – public, private, and donor – national health expenditure. Formatted in a standard set of tables, NHA methodology organizes, tabulates, and presents information on health spending in a user-friendly format. This format can be easily interpreted by policy-makers, including those without a background in economics. NHA essentially measures the “financial pulse” of a national health system by answering questions like:

- Who in the country is financing health services?
- How much do they spend and on what types of services?
- Who benefits from these health expenditures?

Thus, NHA is designed to give a comprehensive description of resource flows in a health-care system, showing where resources come from, and how they are used.

As a macroeconomic policy tool, NHA can assist the Government of Maldives in obtaining “the big picture” of the size, structure, and relative efficiency of the health-care sector. It allows the Government:

- to estimate the proportion of GDP spent on health care;
- to identify areas within the health system that may be operating less efficiently;
- to assess the alignment of the health-care system with national health policies; and
- to assist in evaluating the impact of national and health sector policies over a period of time.

1.3 Socioeconomic background

1.3.1 Population

This chapter provides the demographic and socioeconomic characteristics of the Maldives for 2011 and a descriptive assessment of the health characteristics and environment in which populations live. Information on age and gender distribution is presented, as it could serve as useful input for social and economic development planning and help understand the results presented in the following sections.

The first data for Maldives, recorded in 1911, showed a population of only 72 237. This figure nearly doubled over the next 60 years (Census 2006 Analytical Report), and the population has grown since the 1960s at an average 3% per year. The annual growth rate then decreased significantly from 3.43% in 1985–1999 to 1.69% in 2000–2006. The 2006 population census put the total population at 298 968, of which about 49% were women.

Maldives has recorded significant achievements in human development. The infant mortality rate declined from 63 in 1986 to 4 deaths per 1000 births in 2010 (Maldives Health Statistics, 2011). The crude death rate declined from 17 in 1971 to 4 deaths per 1000 population in 2010. Effective immunization programmes and access to better health care throughout the country have played a major role in the fall of death rates. The crude birth rate, which was 49 per 1000 population in 1985, declined to 23 births in 2010. In the same year, life expectancy at birth was 72.8 years for men and 74.8 years for women (Maldives Health Statistics, 2011).

1.3.2 Age and composition of the population

Table 1 presents the distribution of households by gender and individual age groups according to the last three censuses conducted in Maldives in 1995, 2000 and 2006. The age distribution of the population differs slightly to the results presented in this report, as the latter includes more recent data.

Table 1: Population distribution of Maldives for the years 1995, 2000 and 2006

Age group	1995 Census			2000 Census			2006 Census		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Under 4	36 972	19 113	17 859	30 912	15 699	15 213	26 171	13 362	12 809
5 to 14	76 629	39 126	37 503	70 016	40 233	38 783	66 866	34 463	32 403
15 to 39	92 113	44 983	47 130	110 730	54 733	55 997	138 103	67 805	70 298
40 to 59	25 715	13 439	12 276	31 826	16 431	15 395	43 235	21 893	21 342
60+	12 842	7 570	5 272	16 341	9 289	7 052	19 510	10 642	8 868
Age not stated	543	391	152	1276	815	461	5 083	3 294	1 789
Total	244 814	124 622	120 192	270 101	137 200	132 901	298 968	151 459	147 509

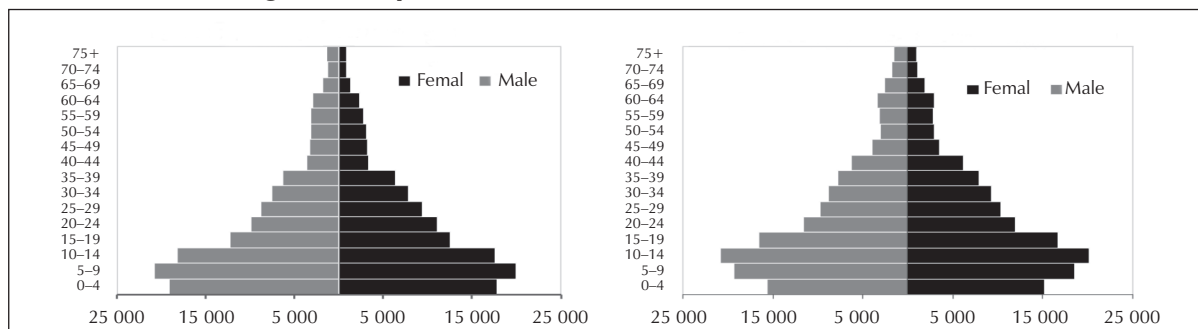
Source: Census 2006.

From the trends over the past 10 years and according to the most recent census in 2006, it can be seen that the population growth stabilized, mostly due to a decline in birth and death rates. However, it has to be noted that a rise in the population growth rate is envisaged: an increase in birth rates is predicted in the years to come when the dominating young people in the age structure of the population reach reproductive age.

The information on age and gender distribution was used to construct population pyramids for both urban and rural areas, and for Maldives as a whole, which is represented in Figure 1. These pyramids have a wide base indicating a large concentration of population under the age of 15 years.

The 2011 population, projected by the Department of National Planning and the MOH, is 320 000, distributed by broad age groups as indicated in Table 2 and Figure 2.

Figure 1: Population distribution in Maldives, 1995–2000

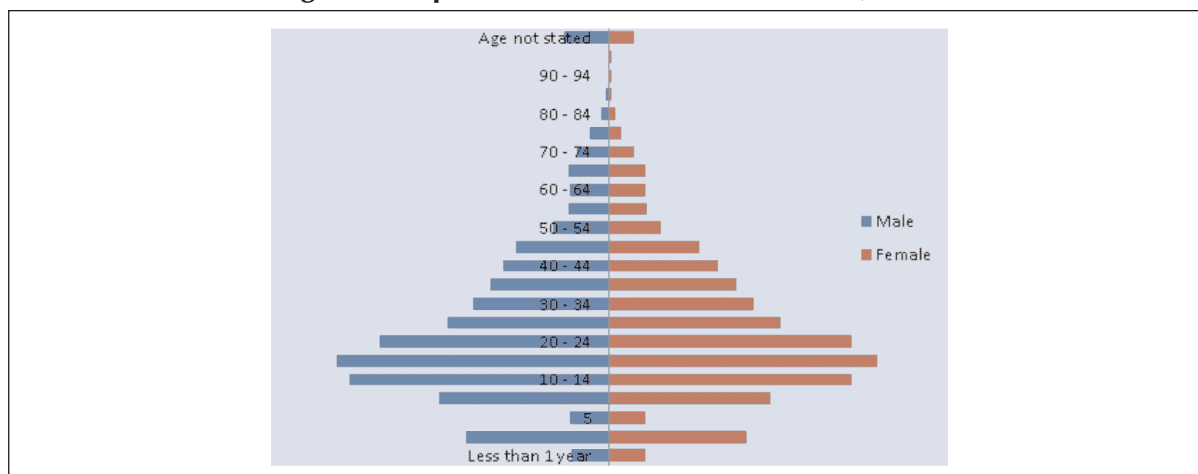


Source: Census 2006.

Table 2: Projected population distribution of Maldives for the year 2011

Age group	Number			Percentage		
	Both sexes	Male	Female	Both sexes	Male	Female
Under 4	28 012	14 302	13 710	8.8%	8.8%	8.7%
5 to 14	71 570	36 887	34 683	22.4%	22.8%	22.0%
15 to 39	147 818	72 575	75 243	46.2%	44.8%	47.7%
40 to 59	46 277	23 433	22 843	14.5%	14.5%	14.5%
60+	20 883	11 391	9 492	6.5%	7.0%	6.0%
Age not stated	5 441	3 526	1 915	1.7%	2.2%	1.2%
Total	320 000	162 114	157 886	100%	100%	100%

Figure 2: Population Distribution in Maldives, 2011



Using the 2006 census data, the following table presents a projected distribution of gender, household size and annual population growth according to the region of residence.

Table 3: Projected distribution of households by gender, household size and region of residence in 2011

Population by island							
Region	Locality	Both sexes	Male	Female	Number of households	Average household size	Annual population growth rate (expn)
	Malé	110 988	55 650	55 338	15 099	7.9	6.0
Malé	Malé (excluding other areas)	109 579	54 251	55 328	14 804	7.5	6.2
	Other areas	1 409	1 399	10	295	5.4	(6.0)
	Atolls	209 012	106 464	102 548	34 344	6.5	(0.1)
North	North Thiladhunmathi (Haa AlifAtoll)	14 444	6 755	7 689	2 596	6.0	(0.9)
	South Thiladhunmathi (Haa Dhaalu Atoll)	17 379	8 031	9 348	3 198	5.8	(0.7)
	North Miladhunmadulu (Shaviyani Atoll)	12 780	6 038	6 742	2 247	6.1	0.9
North Central	South Miladhunmadulu (Noonu Atoll)	10 720	4 912	5 808	1 938	5.9	(0.7)
	North Maalhosmadulu (Raa Atoll)	15 794	7 638	8 156	2 717	6.2	0.3
	South Maalhosmadulu (Baa Atoll)	10 252	5 323	4 929	1 661	6.6	(0.1)
	Faadhippolhu (LhaviyaniAtoll)	9 837	5 065	4 772	1 551	6.7	(0.3)
Central	Malé Atoll (Kaafu Atoll)	16 527	11 663	4 865	1 633	10.8	2.5
	North Ari Atoll (Alif Alif Atoll)	6 182	3 566	2 616	828	8.0	0.9
	South Ari Atoll (Alif Dhaal Atoll)	8 968	5 053	3 915	1 135	8.5	1.3
	Felidhu Atoll (Vaavu Atoll)	1 719	944	775	278	6.6	(1.6)
South Central	Mulakatholhu (Meemu Atoll)	5 041	2 589	2 452	849	6.3	(1.4)
	North Nilandhe Atoll (Faafu Atoll)	4 030	1 957	2 073	607	7.1	(0.3)
	South Nilandhe Atoll (Dhaalu Atoll)	5 316	2 758	2 558	822	7.0	(0.3)
	Kolhumadulu (Thaa Atoll)	9 090	4 513	4 578	1 556	6.2	(1.6)
	Hadhdhunmathi (Laamu Atoll)	12 833	6 607	6 226	2 109	6.5	0.6
South Region	North Huvadhu Atoll (Gaafu Alif Atoll)	8 843	4 479	4 364	1 576	6.0	0.01
	South Huvadhu Atoll (Gaafu Dhaalu Atoll)	11 788	5 775	6 013	2 296	5.5	(1.4)
	Fuvahmulah (Gnaviyani Atoll)	8 173	3 807	4 366	1 426	6.1	0.2
	Addu Atoll (Seenu Atoll)	19 294	8 992	10 302	3 322	6.2	(0.4)

Source: 2006 Census data.

1.4 Demographic and health status indicators in Maldives

The last Household Income and Expenditure Survey (HIES) was carried out in 2009–2010, covering 4.5% of the population (2060 households) and representing all Maldivians. The estimated average household size is 6.2 people (7 in Malé and 5.9 in the atolls). The estimated population in 2009 was 307 000. Around 35% of households live in Malé, while 65% live in the atolls.

Table 4: Household Income and Expenditure Survey, 2009–2010

Indicator	Republic	Malé	Atolls
Sample size (as a % of households)	4.5%	4.3%	4.6%
Number of islands surveyed	40	1	39
Number of blocks surveyed	113	40	73
Sample size (households)	2 060	600	1 460
Total population	306 730	109 494	197 236
Total number of households	49 321	15 637	33 684
Average household size	6.2	7	5.9

Source: Household Income and Expenditure Survey 2009–2010.

Limited data available from this Household Survey show that spending on health services in the atolls is almost double compared to Malé. Outpatient services account for 30% of household expenditure on health in Malé, while in the atolls these account for 35%. Of the total household expenditure on health, pharmaceuticals account for 26% in Malé and only 16% in the atolls. This may be due to the fact that items that households purchase (medicines, for instance) are harder to obtain and more expensive in the atolls.

1.4.1 Health services in Maldives

The last few years in Maldives have seen the beginnings of wide-ranging reforms in the health-care system. Reforms cover the scope, financing, costing, organization and management of health-care services and insurance cover. The estimated 8% of health-sector spending in GDP for 2009 (WHO) remains unusually high for a low- to middle-income country, while access to health care remains highly uneven. The high spending is in part due to challenges of geographical distribution of the islands.

By the end of 2011, the Government had engaged in major health-system reforms, transferring the responsibility of hospitals and health centres to eight health service corporations (HSC). The health sector governmental structures within each HSC differed markedly. Under the Decentralization Act, primary health care functions that were not institution based were moved to island councils. However, in May 2012 the Government decided to discontinue the operations of HSCs and essentially reintegrate service delivery facilities within the structures of the Ministry of Health.

1.5 The national health care system

One of the goals of the Maldives Government is to improve the health status of all citizens via a health system that assures universal coverage for all Maldivians. This will be accomplished by improving the basic coverage package of the health system based on the principles of equity, efficiency, quality, affordability, sustainability and client satisfaction.

Health services in Maldives are provided through a network of two tertiary referral hospitals – one public hospital (Indira Gandhi Memorial Hospital) and one private hospital (ADK) – six regional public hospitals, thirteen atoll hospitals, 132 health centres, 108 private and polyclinics and 290 dispensing pharmacies. Some major tertiary services are not available in Maldives and are referred for treatment overseas, mainly in India. Most of the health services provided in 2011 were funded through the Ministry of Finance and Treasury (MoFT), allocated to the MoH, the National Social Protection Agency (NSPA) and HSC. Significant out-of-pocket expenses include private doctor visits and charges at private pharmacies and the ADK hospital. All health services are heavily subsidized at government health facilities. The availability of various specialized health services in Malé means that the urban population has better access compared to the atolls. The health system is also constrained in relation to the availability of qualified human resources at all levels.

1.5.1 Health infrastructure distribution

As noted above, there is one tertiary public hospital in Malé and secondary level public hospitals are located in each atoll. In addition, one tertiary level private hospital exists in Malé and private clinics are concentrated mostly in urban regions.

Maldives has 2.5 hospital beds per 1000 population, which is a high ratio compared with neighbouring countries. However, the beds are not uniformly distributed among the islands. For example, South Central Region (Thaa and Laamu atoll hospitals) has 135 hospital beds for 36 312 population (3.7 per 1000), while the Central Region excluding Kaafu Atoll (Alif Alif, Alif Dhaaland Vaavu atoll hospitals) has 39 hospital beds for 33 397 population (1.2 per 1000). The beds to population figures are relatively low in the Central Region as it is in close proximity to Malé. Table 5 shows the distribution of population, beds and utilization rates as per the Maldives Health Statistics 2011.

Tables 6 and 7 summarize the distribution of providers and hospital beds from 2006 to 2010 as per the Maldives Health Statistics 2011.

Table 5: Population and hospital bed utilization in Maldives, 2011

Region	Total population	No. of hospitals	No. of beds	Beds/1000 population	Hospital admissions	OPD visits	OPD visits/1000 population
Malé	110 988	3	335	3.02	15 473	333 115	3 001
North	44 602	3	68	1.52	4 566	81 462	1 826
North Central	46 602	4	80	1.72	3 780	90 057	1 932
Central	33 396	3	39	1.17	922	29 030	869
South Central	36 310	5	135	3.72	4 550	85 645	2 359
South	48 098	4	143	2.97	9 093	143 028	2 974
All regions	320 000	22	800	2.50	38 384	762 337	2 382

OPD: outpatient department.

Source: Maldives Health Statistics 2011.

Table 6: Hospital utilization in Maldives, 2011

Region	Locality	Total population	No. of hospitals	No. of beds	Beds per 1000 pop	Hospital admissions	OPD visits	Admissions per 1000	OPD visits per 1000	Occupancy rate
Malé	Malé (excluding other areas)	110 988	3	335	3.02	15 473	333 115	139	3 001	83%
North	North Thiladhunmathi (HA)	14 444	1	18	1.25	1 108	22 677	77	1 570	9%
	South Thiladhunmathi (HDh)	17 379	1	33	1.90	2 911	48 357	167	2 782	67%
	North Miladhunmadulu (Sh)	12 780	1	17	1.33	547	10 428	43	816	33%
	South Miladhunmadulu (N)	10 720	1	17	1.59	674	12 476	63	1 164	22%
North Central	North Maalhosmadulu (R)	15 794	1	26	1.65	1 444	34 017	91	2 154	60%
	South Maalhosmadulu (B)	10 252	1	18	1.76	648	17 613	63	1 718	29%
	Faadhippolhu (Lh)	9 837	1	19	1.93	1 014	25 951	103	2 638	41%
Central	Malé Atoll (K)	16 527	0	-	-	-	-	-	-	-
	North Ari Atoll (AA)	6 182	1	17	2.75	221	6 735	36	1 089	10%
	South Ari Atoll (ADh)	8 968	1	16	1.78	592	18 340	66	2 045	20%
	Felidhu Atoll (V)	1 719	1	6	3.49	109	3 955	63	2 301	5%
South Central	Mulakatholhu (M)	5 041	1	30	5.95	411	12 752	82	2 529	6%
	North Nilandhe Atoll (F)	4 030	1	15	3.72	456	10 110	113	2 509	23%
	South Nilandhe Atoll (Dh)	5 316	1	15	2.82	615	14 851	116	2 793	11%
	Kolhumadulu (Th)	9 090	1	24	2.64	765	16 024	84	1 763	17%
	Hadhdhunmathi (L)	12 833	1	51	3.97	2 303	31 908	179	2 486	26%
South	North Huvadhhu Atoll (GA)	8 843	1	18	2.04	698	19 961	79	2 257	11%
	South Huvadhhu Atoll (GDh)	11 788	1	50	4.24	2 649	37 430	225	3 175	41%
	Fuvahmulah (Gn)	8 173	1	33	4.04	2 174	33 851	266	4 142	35%
	Addu Atoll (S)	19 294	1	42	2.18	3 572	51 786	185	2 684	74%
Country		320 000	22	800	2.50	38 384	762 337	120	2 382	

OPD: outpatient department; pop: population.

Table 7: Hospital utilization in Maldives, 2009–2011

Hospital	Total inpatient admissions			Total outpatient visits			Average length of stay days			Bed occupancy rate		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Kuldhufushi Regional Hospital	2 461	2 620	2 911	45 833	48 605	48 357	3	3	3	53	53	67
Ungoofaaru Regional Hospital	1 018	1 317	1 444	22 889	23 413	23 413	3	4	4	39	61	60
Muli Regional Hospital	523	396	411	13 242	12 814	12 814	3	1	1	15	...	6
Gan Regional Hospital	1 672	1 481	2 303	25 306	29 093	29 093	3	3	3	40	32	26
Thinadhoo Regional Hospital	1 887	2 395	2 649	24 790	34 334	34 334	3	3	3	32	33	41
Hithadhoo Regional Hospital	...	3 209	3 572	...	45 405	45 405	3	3	3	NA	68	74
Haa Alif Atoll Hospital	816	1 204	1 108	20 755	22 828	22 828	3	2	3	12	16	9
Shaviyani Atoll Hospital	67	238	547	1 831	10 787	10 787	5	2	...	17	...	33
Noonu Atoll Hospital	505	341	674	12 179	12 491	12 491	2	...	2	16	...	22
Baa Atoll Hospital	762	630	648	15 419	16 509	16 509	3	3	3	33	...	29
Lhaviyani Atoll Hospital	895	873	1 014	25 907	23 481	23 481	3	4	3	32	39	41
Alif Alif Atoll Hospital	367	249	221	8 064	9 153	9 153	3	2	2	26	12	10
Alif Dhaalu Atoll Hospital	712	710	592	14 610	16 165	16 165	2	2	2	31	28	20
Vaavu Atoll Hospital	126	195	109	4 112	5 098	5 098	1	1	1	10	...	5
Faafu Atoll Hospital	410	525	456	9 751	10 144	10 144	3	2	3	18	20	23
Dhaalu Atoll Hospital	633	567	615	15 445	11 942	11 942	3	0	3	12	...	11
Thaa Atoll Hospital	642	664	765	14 849	15 002	15 002	2	3	2	17	19	17
Gaaf Alif Atoll Hospital	879	796	698	18 876	20 688	20 688	2	2	2	16	12	11
Gnaviyani Atoll Hospital	1 701	1 859	2 174	26 740	31 129	31 129	2	2	2	44	44	35
Hulhumale' Hospital	...	2 516	1 368	...	21 861	21 861	...	3	4	...	18	24

Source: The Maldives Health Statistics 2011
 ... - data not available

1.5.2 Health indicators

The prevalence and incidence rates of tuberculosis (TB) have generally declined in the past few years. However, appropriate interventions and public health promotion activities need to be undertaken to maintain these low rates. The HIV/AIDS status in Maldives shows that since 2008, only one Maldivian has tested positive, although several HIV-positive cases are found each year during expatriate medical examinations, and these workers are deported. In addition, there are alarming risk factors in Maldives such as the increased number of injecting drug users. Appropriate monitoring of high-risk groups and other measures are needed to maintain the low HIV status in the country.

Vector-borne diseases such as dengue and chikungunya are prevalent throughout the year. Data show that dengue fever was most prevalent from June to August in both 2009 and 2010; measures therefore need to be taken to eliminate mosquito breeding grounds, along with special precautions during the peak seasons to reduce the number of dengue cases.

On the morbidity side, proper data collection mechanisms need to be established for noncommunicable diseases (NCDs) as these are becoming a higher burden in the country than communicable diseases. A basic health services network for handling communicable diseases had been established in the outer atolls, but facilities for diagnosis and treatment of NCDs were not available. Moreover, the extensive use of foreign health personnel and their high turnover made it difficult to ensure standardized treatment.

Tables 8, 9 and 10 show the key health indicators as per the Maldives Health Statistics 2011.

Table 8: Health indicators in Maldives

Indicators	2011
Estimated population*	320 000
Crude Birth Rate/1000 persons	22
Crude death rate/1000 persons	4
Maternal mortality rate/1000 live births	112
Infant mortality rate/1000 live births	11
Total fertility rate	2.15
Median age of the population/years	19.4

*Government estimation based on Census 2006.
Source: Maldives Health Statistics 2011.

Table 9: Leading reportable communicable diseases in Maldives, 2011

Rank	Cause	Number of cases	% of total cases
1	Acute respiratory infections	113 834	54.04
2	Viral fever	70 608	33.52
3	Diarrhoea	18 979	9.01
4	Dengue fever	2 909	1.38
5	Conjunctivitis	2 878	1.37
6	Chickenpox	1 186	0.56
7	Scrub typhus	91	0.04
8	Hand, foot and mouth disease	71	0.03
9	Mumps	69	0.03
10	Chikungunya	39	0.02
	Total	210 664	100

Source: Vital Statistics System, Ministry of Health, 2011.

Table 10: Leading causes of mortality in Maldives, 2009

Rank	Cause (in brackets ICD-10 codes)	Cases	% of total cases
1	Diseases of the circulatory system (I00–I99)	458	39.55%
2	Diseases of the respiratory system (J00–J99)	142	12.26%
3	Neoplasm (C00–D48)	81	6.99%
4	Certain conditions originating in the perinatal period (P00–P96)	55	4.75%
5	External causes of morbidity and mortality (V01–Y99)	50	4.32%
6	Endocrine, nutritional and metabolic diseases	42	3.63%
7	Diseases of the nervous system (G00–G99)	41	3.54%
8	Certain infectious and parasitic diseases (A00–B99)	35	3.02
9	Diseases of the digestive system (K00–K93)	32	2.76%
10	Diseases of Genitourinary System (N00–N99)	26	2.25%
11	Symptoms, signs, and abnormal findings not classified elsewhere (R00–R99)	158	13.64%

Source: Vital Statistics System, Ministry of Health, 2011.

1.6 Profile of the health system in Maldives

The following table summarizes the key components and players in the Maldives health system, in terms of health-service coverage, source of financing, prevailing provider–payer relationships, and the size of each health-care subsystem.

Table 11: Profile of the health system in Maldives

Benefits by health subsystem ^a	Coverage/ special categories ^b	Principal financing sources ^c	Provider-payer relationship ^d	Population covered or eligible ^e	Size of operation ^f
I. GOVERNMENT SECTOR					
Ministry of Health and Family					
Provides comprehensive public health care services – primary, preventive and curative – through its facilities in addition to partial funding of overseas treatment including round trip tickets, per diem and part of the medical bill.	All citizens of Maldives.	<ul style="list-style-type: none"> Ministry of Finance and Treasury (general revenues). Household spending (out-of-pocket). 	Primary and secondary services treatment as well as tertiary treatment provided by the MoH – financed through budget derived from general revenue.	All Maldives citizens are eligible.	<p>Health facilities are owned by the MoH including 363 licensed health facilities, 80 of which are located in Malé. The MoH operates all public health facilities:</p> <ul style="list-style-type: none"> Primary care: 132 health care centres and 108 polyclinics (81 medical clinics, 8 eye clinics, 16 dental, 1 skin clinic and 2 ENT clinics). Secondary care: 6 Regional Public General Hospitals and 13 Atoll Hospitals. Tertiary care: one General Hospital (IGMH) and one private referral hospital (ADK) and overseas treatment.
Health Service Corporations (8)					
Provides comprehensive primary, preventive and curative care services through its facilities on each inhabited island and atoll.	All citizens residing in each island.	Ministry of Finance and Treasury (general revenues).	<p>Primary and secondary service treatment provided by health centres.</p> <p>Tertiary treatment provided by Atoll Hospitals, financed through budget derived from general revenue.</p>	All resident Atoll citizens are eligible.	<p>Health facilities are owned by the Government that operates:</p> <ul style="list-style-type: none"> Primary care: 132 health care centres, 108 polyclinics, community health workers and family health workers. Secondary care: 6 Regional Public General Hospitals and 13 Atoll Hospitals. Tertiary care: 2 referral general hospitals: one public (IGMH) and one private hospital (ADK), both located at Malé.

Benefits by health subsystem ^a	Coverage/ special categories ^b	Principal financing sources ^c	Provider-payer relationship ^d	Population covered or eligible ^e	Size of operation ^f
Two city councils (Malé and Addu City)					
Provides comprehensive primary and curative health services financed by the Ministry of Finance and Treasury and managed by the Local Government Authority.	All citizens residing in each city and all referrals from the atolls.	<ul style="list-style-type: none"> Ministry of Finance and Treasury (general revenues). Local Government Authority reports to the Ministry of Home Affairs. 	Primary and curative health services financed by the Ministry of Finance and Treasury and managed by the Local Government Authority.	All citizens residing in each city and all referrals from the atolls.	City councils operate one primary health care centre in Malé and polyclinics.
The National Social Protection Agency (through a social insurance scheme named 'Madhana')					
NSPA is a separate body accountable to the Government. It designs policy and standards on the national health insurance scheme and monitors and regulates the scheme. Universal health insurance is managed by Allied Insurance Company through a scheme called Madhana. It covers Maldives nationals and non-nationals contributing to the scheme.	<p>Coverage is all-inclusive.</p> <p>Eligible groups:</p> <ul style="list-style-type: none"> Maldives locals Citizens of other countries contributing to the scheme. Expatriates contributing to the scheme. <p>A cap of MVR 100 000 per year.</p>	<p>Principally funded through a system of premiums paid by the Government and other contributors. Contribution rates are set per capita rather than health risks.</p> <p>Insurance contributions are collected by the NSPA.</p> <p>Premium set for Madhana was MVR 2000 for basic package and additional 1500 for Madhana Plus (services abroad) per person.</p> <p>Self-employed contribution is based on number of dependents.</p>	Contracted providers include MoHF and private providers. Medical benefits and health-related social assistance budgets are consolidated and managed by the NSPA which is under the control of the MoHF.	Serves all individuals covered. 11.67% of the population of Maldives (35 000/300 000) were registered for coverage on 27 August 2008. A third of the population was covered by 2011.	Contracted providers include MoH and private providers.

Benefits by health subsystem ^a	Coverage/ special categories ^b	Principal financing sources ^c	Provider-payer relationship ^d	Population covered or eligible ^e	Size of operation ^f
II. PRIVATE SECTOR					
Private Health Insurance Scheme (PHI)					
PHI aims to offer a broad range of health services, to control administrative costs and ensure equity.	The scheme covers different scenarios of benefit packages and may top up the NHI coverage affecting the premium price. Eligible groups: Maldivians and non-nationals contributing to the scheme.	Principally funded through a system of premiums. Contribution rates are set according to benefit package and health risks.	Contracted providers may be from the public or private sector.	Serves covered groups.	Contracted private providers operate within: <ul style="list-style-type: none"> • public facilities • private practices • private pharmacies • private dental clinics.
Private providers (clinics, dental surgeries and pharmacies) not included within PHI scheme above					
These are pharmacies, private clinics and any health provider owned by individuals operating in the private sector.	All citizens are eligible to use services. Costs are high compared with the public sector.	Mainly household out-of-pocket spending.	Sale of outpatient care, dental care, medicines and drugs.	All citizens can choose to access these services provided they can afford to meet the costs.	Providers operate: <ul style="list-style-type: none"> 99 private medical clinics 290 dispensing pharmacies 13 dental centres 2 ENT clinics 10 eye clinics.
Traditional healers and traditional birth attendants					
These traditional healers operate in the private sector, mainly in rural areas.	All citizens are eligible to use services.	Mainly in-kind payment by households living in rural areas.	Services are provided against in-kind payment.	All citizens can choose to access these services.	In this category, there are: <ul style="list-style-type: none"> 8 registered traditional healers 11 alternative medical clinics.
Household (out-of-pocket)					
This is spending by individuals on health services offered by health providers.	All citizens.	Mainly from their disposable income.	Payments for primary, secondary and tertiary care.	All citizens.	Analysed by number of visits/ admissions per capita.

Benefits by health subsystem ^a	Coverage/ special categories ^b	Principal financing sources ^c	Provider-payer relationship ^d	Population covered or eligible ^e	Size of operation ^f
III. OTHER SOURCES					
Nongovernmental organizations (NGOs)					
NGOs mostly provide health-related programmes to raise public awareness and improve sanitation and the environment; in some cases they provide primary health care medicines and first-aid kits to village-based organizations.	All citizens subject to an application being lodged through a recognized (often religious) organization, providing proof that they are able to carry out the activity.	Mainly from international NGOs, donors and donations from large local employers, corporations and companies, as well as fund raising organized by NGOs.	Delivery of primary health care-related activities and first-aid kits mainly through grants and donations from international NGOs. Implementation of village interventions for prevention and awareness programmes.	The population covered is not defined.	The number of NGOs has recently increased in Maldives and are mostly working closely with Government ministries and religious groups to deliver their messages to the community.
Donors					
These are external governments and organizations that donate both cash (in the form of grants and short-term loans) and in-kind items for the health sector, mainly through the Government but occasionally through NGOs.	Everyone is covered through these funded programmes.	Mainly from external governments and organizations.	Providing funds for primary health service programmes and secondary health services.	All citizens are eligible.	The most prominent donors and international organizations are the European Union, Japanese International Cooperation Agency (JICA), United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Population Fund (UNFPA), World Bank, and the World Health Organization.

^aType of services and benefits available.

^bCoverage and eligibility criteria, and special programmes for specific population groups.

^cMain sources of financing.

^dRelationship between financing and service delivery functions.

^eNumber of people covered or eligible by health system nationwide.

^fAs indicated by staff, beds, or number of facilities.

ENI: ear, nose and throat; NGO: nongovernmental organization; NSPA: National Social Protection Agency; PHI: private health insurance.

2. National Health Accounts activity in Maldives

2.1 Overview

This NHA report details the overall national health expenditure for Maldives, the main sources of health funds, the main users and utilization of health funds for the year 2011. It is intended to present the key findings on how much Maldives is spending on health, who is paying what, and what on. The report attempts to highlight broad policy issues arising from the findings.

Up until now, information on health resources, expenditure and its distribution in Maldives has been limited to the public health sector. Health expenditure information previously reported thus reflected mainly the Government's expenditure on health. This NHA report includes health financing information for Maldives including the formal private health sector, donors, NGOs and other major players in the health sector.

The 2011 National Health Accounts Report is the result of collaborative efforts of many individuals, teams, organizations and institutions. The diligent work of the NHA team, the Ministry of Health staff, the NSPA and the WHO Country Office is appreciated. The NHA team posed several key questions related to the health financing issues faced by the country, such as:

- Is Maldives spending an appropriate amount on health?
- Is the health budget appropriately distributed among islands, between urban and rural areas, different population groups, and across different socioeconomic categories?
- Is the amount spent on health being used efficiently and effectively and is there a balance between expenditure on hospital-based services, outpatient care, and preventive and public health services?
- Is the pattern of expenditures aligned with the desire of the Government that individuals take greater responsibility for their health status?

2.2 Methodology

The Maldives NHA study followed the methodology recommended in the Guide to Producing National Health Accounts (2003) prepared by WHO in collaboration with the World Bank and the United States Agency for International Development (USAID). The methodology is based on information matrices that allow four levels of analysis: (i) sources of health funds, (ii) financing agents handling funds, (iii) providers of services, and (iv) health functions. Needed adjustments were made to the classification schemes to bring them in line with the Maldives national specifications as well as preparing the team to use the new System of Health Accounts (SHA II).

Several criteria were used to adapt the classifications. The transactions were grouped so that they each represent an important, policy-relevant dimension. Partitioned transactions are mutually exclusive and exhaustive, so each transaction of interest is placed in one– and only one –category.

Efforts were made, to the extent possible, to consider existing international standards and conventions when placing certain transactions into groups to assure international comparability of Maldives data. While preparing preliminary 2011 NHA tables, the NHA team relied on existing data sources but, when essential, additional efforts were made to compile the information.

The following is a list of the key components of the information matrices and levels of analysis:

- (1) Sources of health funds
 - Ministry of Finance and Treasury
 - Private sector (employers and households)
 - Donors and other sources.
- (2) Financing agents
 - Public health sector (MOH, HSC, NSPA and other ministries, and public firms)
 - Private health sector (household out-of-pocket, private insurance companies, NGOs, employer benefit schemes, etc.)
 - Donors.
- (3) Health providers
 - Government facilities (hospitals and health centres)
 - Private facilities (hospitals and doctors)
 - Private pharmacies
 - Health administration providers
 - Other providers
 - Providers of other health-related functions.
- (4) Functional classification of health
 - Inpatient care services
 - Outpatient care services
 - Medical goods and pharmaceuticals
 - Preventive and public health services
 - Health administration
 - Other health-related functions.

The compilation of National Health Accounts 2011 for Maldives commenced in January 2012 with extensive meetings between WHO, MoH officials, NSPA, key stakeholders, and the NHA team. The aim of this round was to support and guide the Government and MoH officials in reforming the health sector, highlighting the key health funds and actors, as well as assessing national health expenditures (public and private). Reforming the health sector will have an impact on the provision, financing and regulation of health services, and access to these services in Maldives. Thus the MOH with the help of WHO undertook research and studies to understand better the composition of the health-care system. This round of NHA 2011 provides the total health expenditures (THE) and traces the flow of health spending and resource allocation within the entire health sector.

The NHA working team was led by the MOH Accounts Division. Secondary data sources were identified and analysed, data gaps were identified, and survey and data collection instruments developed. Surveys on NGOs, donors, private insurers, employers and providers were completed. Data on government spending from the MoFT as well as data from the Maldives Statistics Reports contributed to the finalization of the NHA report.

The following sources informed the report:

- Ministerial accounts using the MoH Annual Report (Maldives Health Statistics 2011)
- Provider and facility-based surveys (time-use surveys, equipment and supplies surveys, and utilization surveys)
- Health Facility Registry (as at 13 November 2012)
- Annual Communicable Disease Report 2011
- Donor/lender records from the Donor Survey and “donations missions consultancies updates”
- NGO Survey
- Household Income and Expenditure Survey, Findings 2009–2010 (Department of National Planning, Ministry of Finance and Treasury, 22 May 2012)
- Census 2006
- Insurance Records Survey (public and private insurers)
- Traditional Healers Survey (NHA team 2013)
- Poverty Reduction in the Maldives (Asian Development Bank, January 2002)
- Interviews or expert opinions
- Health management information systems (Demographic and Health Survey 2009 (October 2010 publication))
- Central purchasing and essential drugs programmes.

2.3 Study limitations

The preliminary NHA report revealed several strengths as well as shortcomings in the existing systems and data in the Maldives.

The main challenges faced were:

- Household-level expenditure captured by the HIES 2009–2010 was insufficient for NHA purposes.
- Significant variations from the Government classification and the NHA Producers Guide classification led to shared concerns on the quality of the data, and preliminary plans for future data quality improvement were identified.
- Disaggregating spending by medical schemes of different ministries, other than the MoH, proved difficult, although special efforts were made by the NHA team to collect as much data as possible.

- Data from private insurance companies and private hospitals were sometimes either inadequate or unavailable. Further analyses were therefore used to extrapolate data from NSPA and other available research and studies.
- NGO expenditure data were of poor quality and those available were aggregated rather than by function or provider.
- Household expenditure data were available from the HIES by broad categories; special efforts were made to disaggregate the data according to specific types of provider and/or function. The Provider Survey was used to extrapolate household spending by function and provider to eliminate any significant limitation on the presented analysis.
- The quality of household-level data has been given particular attention because this will help to improve NHA estimates, and contribute to better private health spending and thus better health-care financing policy development. Thus, the presented data should be treated as best possible estimates.
- Data on the private pharmaceuticals market were derived mainly from the Provider Survey as well as data from the 2012 Pharmacy List of the MoH.

In addition, actual volumes of health expenditure described in this first ever NHA report in Maldives are reflected in the required format without adjustments, if not stated otherwise. These are the first NHA estimates and attempt to achieve a compromise between timeliness and detail on the one hand and data quality on the other. As with any such estimation, revisions will be necessary to the methodology and numbers as new data sources become available, and as improved estimation procedures are developed. Routine revisions will therefore be necessary in future years in order to maintain, improve and update the quality and usefulness of the NHA.

The NHA estimates reported are based on primary and secondary data collection. The NHA team was not able to run a Household Utilization and Expenditure on Health Survey for 2011 and used the NHA surveys to validate main data on household spending detailed in the HIES Findings 2009–2010. The figures were treated as best possible estimates before initiation of the primary data collection.

2.4 National Health Accounts main findings in 2011 financial year

The main findings inferred from the NHA matrices are summarized in Tables 12. More detailed explanations of the summary findings are presented in Tables 13, 14 and 15.

Table 12 above shows that the total national health expenditures in Maldives amounted to MVR2 766 million (US\$ 179 million) in 2011 fiscal year, with per capita health spending of MVR8 646 (US\$ 561). Health spending as a share of GDP came to 9.2%. This represents a high range for low- and middle-income countries.

The NHA 2011 results show that almost 44% of the total funds originate from public sources, whereas 53% are apportioned by private funds and the remaining 3% are contributed by international donors. Household out-of-pocket spending represented 49% of total health expenditure.

A breakdown of total health expenditures by function (Table 15) indicates that over 23% is spent on inpatient curative services, 24% on inpatient treatment abroad, 19% on outpatient basic services, 2% on prevention and public health services, 17% on medicines, 12% on health administration

and the remaining 2% on health-related functions such as education and research. Expenditure on drugs in Maldives is thought to be higher than most neighbouring countries with similar income levels. It is important to remember that this is the first ever estimation of functional classification at the national level in Maldives.

Table 12: Summary of National Health Accounts findings, 2011

Total Government budget	MVR 12 824 579 283
Government budget on health	1 217 423 491
Total health expenditure	2 766 573 290
Government budget on health as a % of its total budget	9.5%
Government budget on health as a % of total health expenditure	44%
GDP estimate for Maldives	MVR 29 936 000 000
GDP per capita	93 550
Total health expenditure as a % of GDP	9.2%
Public sector expenditure on health as % of GDP	4.4%
Private sector expenditure on health as % of GDP	4.8%
MoH budget as a % of Government budget	3.1%
Household out-of-pocket expenditure as a % of total health expenditure	49.0%
Drugs as a % of total health expenditure	17.0%

Maldives population: 320 000; Exchange Rate: MVR 15.42 for US\$ 1.0.

2.5 Health care financing in Maldives

The past several years in Maldives have seen the beginnings of wide-ranging reforms in health-care financing. Reforms cover the scope, financing, costing, organization and management of health-care services and insurance schemes. The share of health-sector spending in GDP (9% for 2011) remains unusually high for a country of low-to mid-level income, while access to health care remains highly uneven. High spending relative to GDP is accompanied by prevailing weaknesses in the efficiency, equity and quality of health services and marked fragmentation in service delivery and financing. Deeper reforms are necessary if the financial sustainability of the health-care system is to be maintained and the population provided with adequate access to quality health care. Among the key challenges to be addressed over the coming years is the centralization of the country's health-care system to allow for better exploitation of economies of scale in delivery, financing and administration of health care.

In 2011, the Government engaged in major health system reforms, transferring hospitals and public health centres to seven HSCs and a State Trade Organization. The health sector governmental structures within each HSC differed markedly. Federal law stipulates that the authority over health sector operations resides with the local authorities, including service delivery, revenue/insurance collections, expenditures, policy and planning. Yet in May 2012, the Government decided to discontinue the operations of HSCs and essentially reintegrate service delivery facilities within the MoH structures.

Table 13: Sources of funds for health budget in Maldivian Rufiyaa, 2011

	FS.1 Public Funds		FS.2 Private Funds			FS.3 Rest of the world	TOTAL MVR
	Ministry of Finance & Treasury (FS.1.1)	Other public funds (FS.1.2)	Household funds (FS.2.2)	Non-governmental organizations (FS.2.3)	Employers' funds (FS.2.4)		
HE.1.1	National Government						
HE.1.1.1	Central Government						
HE.1.1.1.1	181 108 426		22 165 836			17 125 657	220 399 919
HE.1.1.1.2							–
HE.1.1.1.3	811 660 976						811 660 976
HE.1.1.1.4							–
HE.1.1.1.5							–
HE.1.1.1.6							–
HE.1.1.2	Local Government						
HE.1.2	Social health protection agencies						
HE.1.2.1	216 453 532		34 361 685				250 815 216
HE.1.2.5							–

	FS.1 Public Funds		FS.2 Private Funds			FS.3 Rest of the world		TOTAL MVR
	Ministry of Finance & Treasury (FS.1.1)	Other public funds (FS.1.2)	Household funds (FS.2.2)	Non-governmental organizations (FS.2.3)	Employers' funds (FS.2.4)	ROW international gov't (FS.3)		
HF.2	Non-public sector							
HF.2.2		8 200 557	63 554 904		19 853 903		91 609 364	
HF.2.3			1 245 290 196				1 245 290 196	
HF.2.4				4 910 654			4 910 654	
HF.2.5					68 111 166		68 111 166	
HF.3	Rest of the world							
HF.3.1						73 775 797	73 775 797	
HF.3.2							–	
TOTAL (THE)	1 209 222 934	8 200 557	1 365 372 621	4 910 654	87 965 070	90 901 454	2 766 573 290	

Table 14: Source and distribution of funds to providers, 2011

	HF.1 National Government										HF.2 Non public sector					HF.3 Rest of the world		MWR
	Central Government				Social health protection agencies			Private insurances	Private households' out of pocket	Local non-governmental organizations	Private firms and employers	Donors agencies	International NGOs	Total				
	MOHF	MOD	HSC	MOPS	NSPA (Madhiana)	Other health protection agents												
HP.1	Hospitals																	
HP.1.1	General hospitals																	
HP.1.1.1			217 038 981		4 206 901		111 562	9 831 472	3 914 169	57 476 768				292 579 853				
			184 492 714		44 534 498		8 624 689	43 281 270	10 108 520					291 041 691				
HP.1.1.2			179 764 536		3 395 085		151 550	6 019 379	968 623	279 780				190 578 953				
HP.1.1.3	Private sector general hospitals																	
HP.1.1.9	Other ministries & departments general hospitals																	
HP.1.2	Rehabilitation hospitals																	
HP.1.3	Specialized hospitals																	
HP.1.3.1	MOHF specialized hospitals																	
HP.1.3.2	Private specialized hospitals																	
HP.3	Other providers of health																	
HP.3.1	Clinics and physicians														303 691 114			
HP.3.2	Dentists clinics														8 450 000			
HP.3.3	Traditional healers and other health practitioners														8 072 736			
HP.3.4	Primary health care centres														-			
HP.3.4.1			197 855 298		2 294 040			7 184 284	27 862					207 361 484				
HP.3.4.2			32 509 447					28 793						32 538 240				

	HE.1 National Government				HE.2 Non public sector					HE.3 Rest of the world		MVR
	Central Government				Private insurances	Private households/ out of pocket	Local non-governmental organizations	Private firms and employers	Donors agencies	International NGOs	Total	
	MOHF	HSC	MOPS	Social health protection agencies								
		NSPA (Madhama)	Other health protection agents									
HP.3.5	Medical and diagnostic laboratories											-
HP.3.9	Emergency and transport											-
HP.4	Retail sale and other providers of medical goods											
HP.4.1	Public pharmacies	10 785 384										10 785 384
HP.4.2	Private pharmacies		181 459 639		27 221 399	250 065 925	246 098					458 993 061
HP.4.3	Providers of medical equipments and supplies											-
HP.4.4	Pharmaceutical factories											-
HP.5	Providers and administration of public health programmes	36 698 893							10 595 663			47 294 555
HP.6	General administration of health and insurance											
HP.6.1	Government administration	134 243 141	7 282 682									141 525 823
HP.6.2	Private administration				14 954 593							14 954 593
HP.8	Institution providing health related services	38 672 501	677 250						63 180 135			102 529 886
HP.9	Rest of the world providers					656 175 917						656 175 917
HP.N.S.K	Provider not specified by kind											
	TOTAL (THE)	220 399 919	811 660 976	-	91 609 365	1 245 290 196.18	68 111 166	4 910 654	73 775 797	-		2 766 573 290

Table 15: Source and distribution of funds per function, 2011

	HE.1 National Government										HE.2 Non public sector					HE.3 Rest of the World		MWR			
	Central Government				Social health protection agencies						Private insurances	Private households' out of pocket	Local non-governmental organizations	Private firms and employers	Donors agencies	International NGOs					
	MOHF	MOD	HSC	MOPS	NSPA (Madhiana)	Other health protection agents															
HC.1 Services of curative care																					
HC.1.1 In-patient curative care			448 148 388		52 136 484					8 887 801	591 32 121	4 882 792	67 865 068								641 052 654
HC.1.2 In-patient treatment Abroad											656 175 917										656 175 917
HC.1.3 Out-patient curative care																					-
HC.1.3.1 Out-patient curative care (Without Dental)			220 797 724		9 259 161					40 545 572	263 393 497	27 862									534 023 817
HC.1.3.2 Out-patient dental care			155 102								8 450 000										8 605 102
HC.1.3.3 All other specialized health care (TH Curative Care)											8 072 736										8 072 736
HC.1.9.9 Emergency services within hospitals								39 927													39 927
HC.2 Services of rehabilitative care																					
HC.2.1 In-patient rehabilitation care																					-
HC.2.3 Out-patient rehabilitative care																					-
HC.4 Ancillary services to health care																					
HC.4.1 Clinical laboratory			2 189 930																		2 189 930
HC.4.2 Diagnostic imaging								115 925													115 925
HC.4.3 Patient transport and emergency rescue								684 164													684 164

	HE.1 National Government										HE.2 Non public sector					HE.3 Rest of the World		MVR
	Central Government				Social health protection agencies			Private insurances	Private households/ out of pocket	Local non-governmental organizations	Private firms and employers	Donors agencies	International NGOs	Total				
	MOHF	MOD	HSC	MOPS	NSPA (Madhava)	Other health protection agents												
HC.5	Medical goods dispensed to out-patients																	
HC.5.1	10 785 384		29 020		181 459 639		27 221 399	250 065 925		246 098					469 807 465			
HC.5.2			458 851												458 851			
HC.5.3			79 657												79 657			
HC.5.4			142 321												142 321			
HC.6	Prevention and public health services																	
HC.6.1												13 174 414			13 174 414			
HC.6.2												37 500			37 500			
HC.6.3	32 807 518											536 236			33 343 754			
HC.6.4	3 891 375											507 348			4 398 723			
HC.6.5												29 812			29 812			
HC.6.9												574 544			574 544			
HC.7	Health administration and health insurance																	
HC.7.1															-			
HC.7.1.1	134 243 141		138 819 968												273 063 109			
HC.7.1.2					7 282 682										7 282 682			
HC.7.2							14 954 593								14 954 593			

	HE.1 National Government				HE.2 Non public sector				HE.3 Rest of the World		MVR			
	Central Government				Private insurances	Private households/ out of pocket	Local non-governmental organizations	Private firms and employers	Donors agencies	International NGOs				
	MOHF	MOD	HSC	MOPS								Social health protection agencies		
				NSPA (Madhava)	Other health protection agents									
HCR	Health related functions													
HCR.1	Capital formation of health care provider institutions	30 907 652			677 250				3 427 280			35 012 182		
HCR.2	Education and training of health personnel	7 764 849							54 931 958			62 696 808		
HCR.3	Research and development in health								339 068			339 068		
HCR.4	Food, hygiene and drinking water control program								176 896			176 896		
HCR.5	Environmental health								40 740			40 740		
HCR.nsk	HCR expenditure not specified by kind											-		
	TOTAL (THE)	220 399 919	-	811 660 976	-	250 815 216	-	91 609 365	1 245 290 196	4 910 654	68 111 166	73 775 797	-	2 766 573 290

The main government source of health-care financing is the MoFT, which derives its resource base from wage taxes, an unclear flow of funds between various extra budgetary social insurance funds, and limited Government contributions to compensate for cases that are exempt from obligatory contributions. The financing of health care scores poorly on equity and efficiency grounds. The extreme fragmentation of financing and delivery systems makes the use of health insurance revenues highly inefficient across the country. Insurance revenues fall significantly short of covering legislated entitlements due to a combination of expensive service delivery and weak revenue collection.

To help increase the efficiency of service delivery and sectoral resource use, the authorities aim to introduce a revised system of provider payments that would create incentives for cost containment and improve provider performance. The MoH plans on switching from a system with different provider mechanisms to a prospective payment system, with some form of capitation payments for primary care and possibly outpatient secondary care. Prospective payment (possibly with fee-for-service) would also be considered for hospital care and for established package services. The Ministry now wishes to take this work a step further and develop and test a new, integrated system of payment mechanisms that provides incentives for more rational resource use and quality care. The Minister of Health has sought assistance for this task from WHO, and terms of reference have been submitted for this technical assistance.

Preparatory work has been carried out to prepare the primary health care payment pilots and to start costing a potential basic package of health-care services to be provided through health insurance. A detailed study is needed to get data on demographics, epidemiology, and health service utilization, and particularly costs and use of funds.

2.5.1 Sources of finance

There are three principal sources of finance for the health sector in the Maldives: public, private, and external.

Public sources (or Ministry of Finance and Treasury). Public sources include government financing for health care distributed to all HSCs in the atolls as well as the MoH and the NSPA.

Private sources (household and employer funds). Private sources are payments made directly to a wide range of providers, including public hospitals, private practitioners and private pharmacies. User fees, whether for government or privately provided health services, are out-of-pocket payments and therefore considered here as health financed from a private source. Other indirect payments for health-care services are made by major companies and employers. Private sources of health financing also include NGOs and charities.

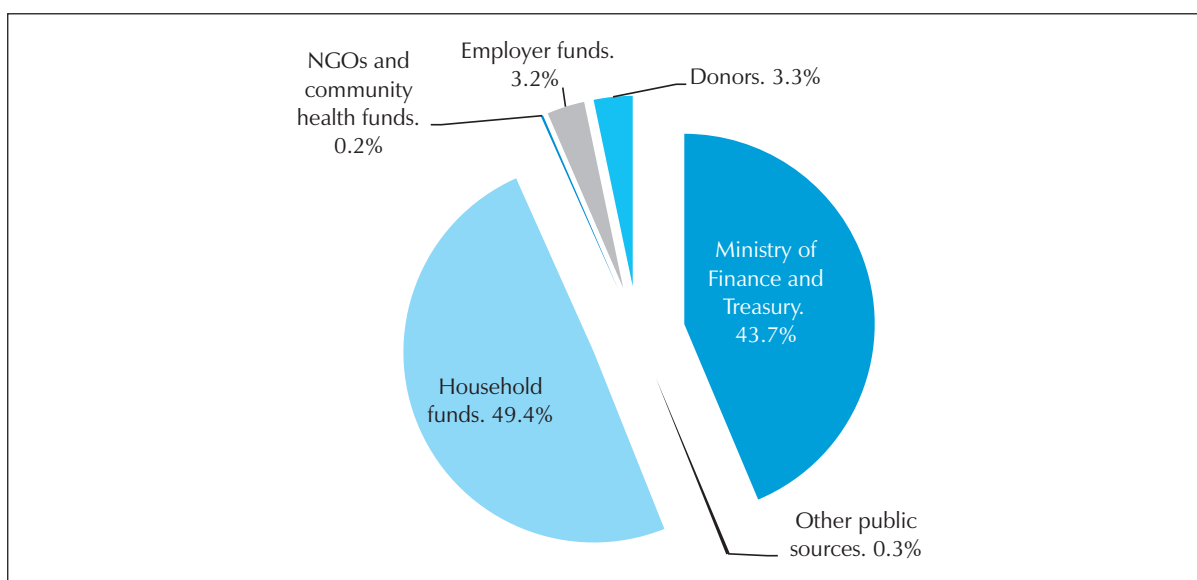
Donors (rest of the world). Donors are an alternative mechanism of raising finance at the community level. These include United Nations agencies like WHO, the World Bank and foreign government funds. Some of these are linked to service use and programme funds, while others are directly community-based. External sources consist mainly of multilateral and bilateral aid donors.

A summary of the sources of funds for the year 2011 is provided in Table 16.

Table 16: Source of funds, 2011

Source of health funds	Amount in MVR	Percentage	Amount in US\$	Per capita in US\$
Ministry of Finance and Treasury	1 209 222 934	43.7%	78 419 127	245
Other public sources	8200557	0.3%	531 813	2
Household funds	1 365 372 621	49.4%	88 545 566	277
NGOs and community health funds	4 910 654	0.2%	318 460	1
Employer funds	87 965 070	3.2%	5 704 609	18
Donors	90 901 454	3.3%	5 895 036	18
Total	2 766 573 290	100%	179 414 610	561

Figure 3: Sources of health funds, 2011



As shown in Table 16 and Figure 3, the major source of health funds is the people of Maldives (49.4%). The second main source of finance is the Government (43.7%). External sources, such as multilateral and bilateral donations and grants for aid, contributed 3.3%, and employers contributed 3.2% to cover their employees for health insurance.

2.5.2 Financing agents

Financing agents in the Maldives receive health funds from the three main sources. The involvement of the HSC at the atoll level, and the MoH and NSPA as main Government agencies merits clarification of their roles in the share of financial risks, in regulating and managing providers through incentive schemes, and in controls and utilization reviews. HSC administers 29% of the health funds market. Financing agents are divided into several categories, as listed in Table 11.

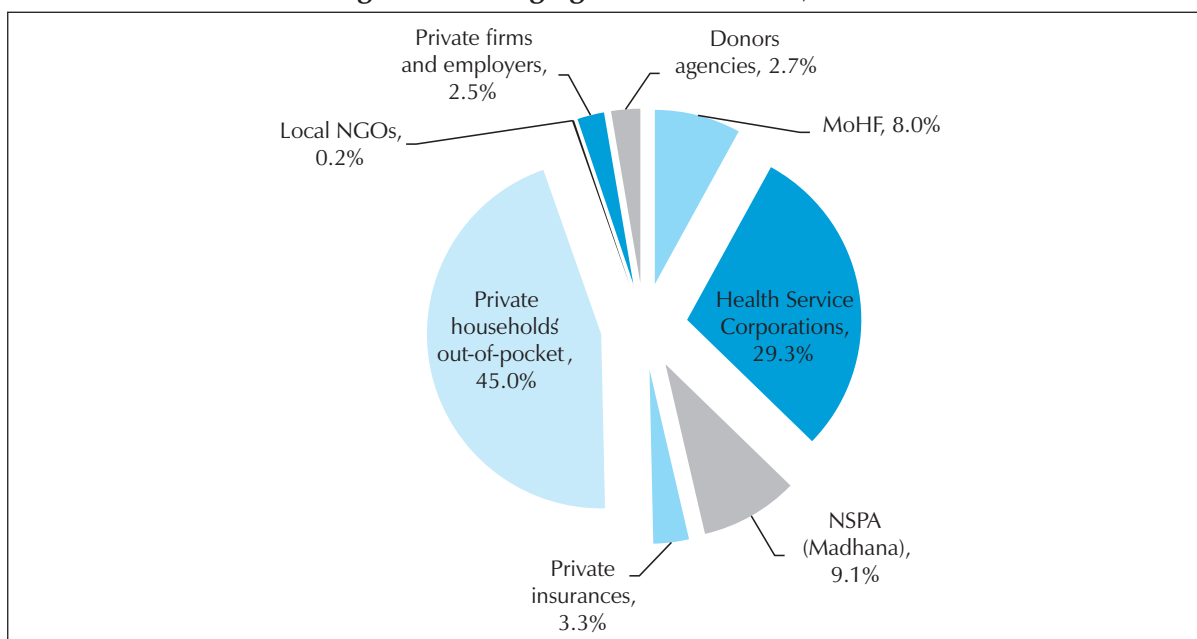
2.5.3 Expenditure by financing agents

As shown in Table 17, direct out-of-pocket expenditures are high. Overall, more than 49% of total health expenditure is managed and spent directly by the household, 45% by public financing agents and 3% by donors and NGOs. HSC manages most of the public financing resources (29% of THE) and includes public health issues in its mandate; however most of these resources have been diverted to curative care services at the atoll level. Private insurance sources manage a growing amount of health funds in Maldives and represent almost 4% of THE. Donors transfer most of their funds to the MoHF and then to their own donor-run health service facilities and other aid groups and NGOs.

Table 17: Share of health-care services by financing agent

Financing agent	Amount in MVR	Percentage	Amount in US\$	Per capita in US\$
MoH	220 399 919	8.0%	14 293 121	45
Health Service Corporations	811 660 976	29.3%	52 636 899	164
NSPA (Madhana)	250 815 216	9.1%	16 265 578	51
Private insurances	91 609 364	3.3%	5 940 945	19
Private households' out-of-pocket	1 245 290 196	45.0%	80 758 119	252
Local NGOs	4 910 654	0.2%	318 460	1
Private firms and employers	68 111 166	2.5%	4 417 067	14
Donors agencies	73 775 797	2.7%	4 784 423	15
Total	2 766 573 290	100%	179 414 610	561

Figure 4: Managing the health funds, 2011



2.5.4 Providers of health services

Public providers are the major recipients of national health funds, and receive more than 38% of total health expenditures. Public providers consist of MoH facilities, including regional Government hospitals, atoll hospitals, outpatient health-care centres and health posts. Public hospitals receive more than 30% of THE, public outpatient health centres 7.5%, and health posts receive the remaining 1%. Private providers account for just 28% of THE. The major private actors are private physicians, dentists and pharmacists. The external providers account for 23%, mainly overseas treatments and paid mostly by the people of Maldives.

Table 18: Total health care expenditure by type of facility

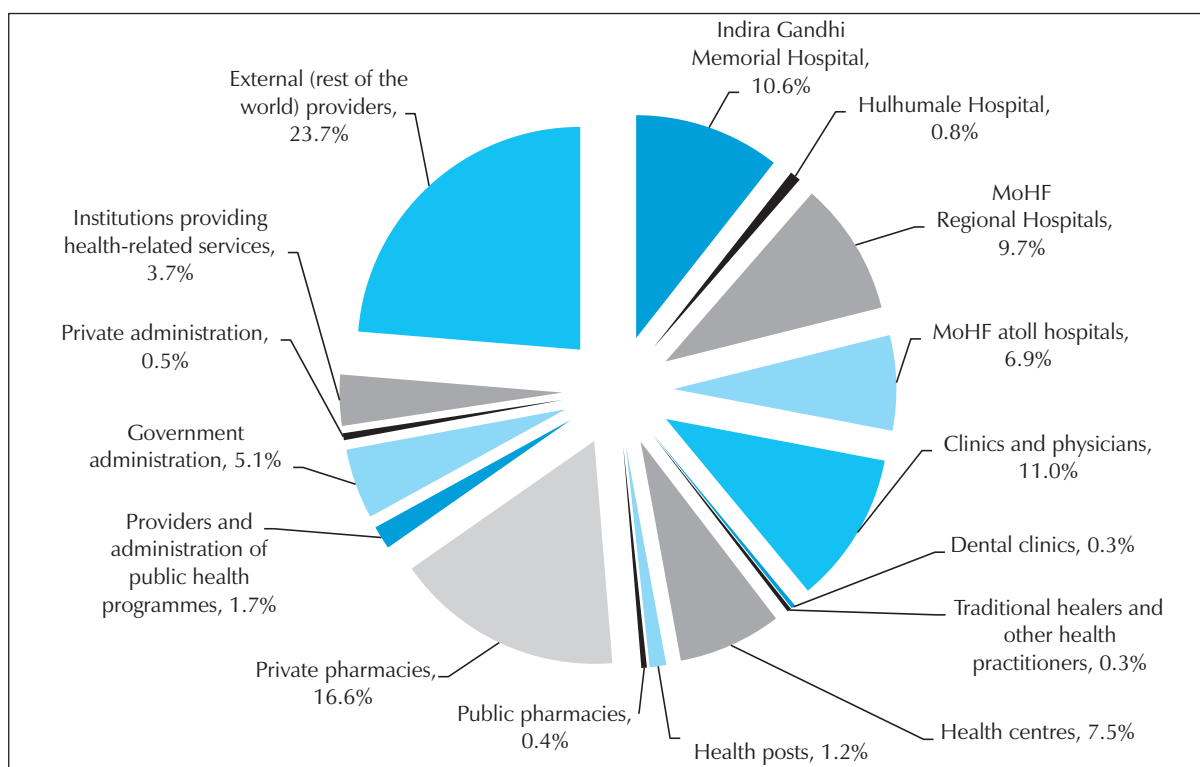
Type of facility	Amount in MVR	%	Amount in US\$	Per capita in US\$
Indira Gandhi Memorial Hospital	291 908 358	10.6%	18 930 503	59
Hulhumale Hospital	22 162 080	0.8%	1 437 230	4
MoHF Regional Hospitals	269 551 106	9.7%	17 480 616	55
MoHF atoll hospitals	190 578 953	6.9%	12 359 206	39
Clinics and physicians	303 691 114	11.0%	19 694 625	62
Dental clinics	8 450 000	0.3%	547 990	2
Traditional healers and other health practitioners	8 072 736	0.3%	523 524	2
Health centres	207 361 484	7.5%	13 447 567	42
Health posts	32 538 240	1.2%	2 110 132	7
Public pharmacies	10 785 384	0.4%	699 441	2
Private pharmacies	458 993 061	16.6%	29 766 087	93
Providers and administration of public health programmes	47 294 555	1.7%	3 067 092	10
Government administration	141 525 823	5.1%	9 178 069	29
Private administration	14 954 593	0.5%	969 818	3
Institutions providing health-related services	102 529 886	3.7%	6 649 150	21
External (rest of the world) providers	656 175 917	23.7%	42 553 561	133
Total	2 766 573 290	100%	179 414 610	561

2.5.5 Functional breakdown of health expenditures

This section presents estimates of the distribution of health expenditures by function. Health expenditures are disaggregated into spending categories as defined in the NHA Producers Guide framework. Using available data and making certain assumptions, the distribution of both public and private health expenditures across the country was estimated.

The estimation of health expenditures by function requires a wider definition of health than is historically reported in government budgetary estimates in two respects. First, a wider range of health categories is proposed. Second, for comparison purposes, health expenditure needs to be

Figure 5: Providers of health services, 2011



aggregated as per the international classification for health accounts. Thus, for the purpose of the NHA estimates, health expenditures in Maldives were defined to include the following components:

- curative health
- prevention
- drugs
- public health programmes
- health administration
- capital investment and other health-related functions.

As is evident, the pattern in use of public and private expenditures is different. The aggregated categories ultimately used in this report are based on the classification of the NHA Producers Guide. The most significant difficulty in producing this round of NHA was the lack of a functional classification, due to the use of Government line items classification. Therefore the NHA team in Maldives used a special methodology for estimating the functional classification. Most of the Government statistical reports, MoH and donor reports contributed to the NHA analysis. The National Accounts of Maldives and the household survey data were also used to extrapolate the functional classification and out-of-pocket expenses.

The NHA results show that Maldives health funds are primarily spent on curative, rather than preventive care. The majority of total health expenditure in Maldives (66.8%) is spent on inpatient and outpatient curative care, with almost 11% spent on administration, 5.5% on prevention, and 17% on drugs.

Table 19: Functional distribution of total health expenditure

Function	Amount in MVR	Percentage	Amount in US\$	Per capita in US\$
Services of curative care	1 847 970 152	66.8%	119 842 422	375
Ancillary services to health care	2 990 018	0.1%	193 905	1
Medical goods dispensed to outpatients	470 488 294	17.0%	30 511 562	95
Prevention and public health services	51 558 748	1.9%	3 343 628	10
Health administration and health insurance	295 300 385	10.7%	19 150 479	60
Health-related functions	98 265 693	3.6%	6 372 613	20
Total	2 766 573 290	100%	179 414 610	561

A summary of the functional breakdown in Table 20 shows that nationwide, Maldives spent US\$ 130 per capita on inpatient curative services and the same amount on inpatient treatment abroad. Only US\$ 11 per capita was spent on public health programmes. The Pharmaceutical Survey revealed that US\$ 95 per capita was spent on drugs in 2011. This high spending is a great concern for the Government and further attention has been given to the Pharmaceuticals and Drugs Policy in terms of consumption and control of import–export operations. Administration accounts for 10% of THE, and 3% was spent on health-related functions, new investments and technology for health, mostly paid by donors.

Table 20: Aggregated functional distribution of total health expenditure

Function	Amount in MVR	%	Amount in US\$	Per capita in US\$
Inpatient curative care	641 052 654	23.2%	41 572 805	130.0
Inpatient treatment abroad	656 175 917	23.7%	42 553 561	133.0
Outpatient curative care (without dentistry)	534 023 817	19.3%	34 631 895	108.0
Outpatient dental care	8 605 102	0.3%	558 048	2.0
All other specialized care (total curative care)	8 072 736	0.3%	523 524	1.6
Emergency services within hospitals	39 927	0.0%	2 589	0.0
Clinical laboratory	2 189 930	0.1%	142 019	0.4
Diagnostic imaging	115 925	0.0%	7 518	0.0
Patient transport and emergency rescue	684 164	0.0%	44 369	0.1
Medical goods dispensed to outpatients	470 488 294	17.0%	30 511 562	95.0
Maternal and child health, family planning and counselling	13 174 414	0.5%	854 372	3.0
School health services	37 500	0.0%	2 432	0.0
Prevention of communicable diseases	33 343 754	1.2%	2 162 371	7.0
Prevention of noncommunicable diseases	4 398 723	0.2%	285 261	1.0
Occupational health	29 812	0.0%	1 933	0.0
All other miscellaneous public health services	574 544	0.0%	37 260	0.1
Government administration of health (except social security)	273 063 109	9.9%	17 708 373	55.0
Administration, operation and activities of social security	7 282 682	0.3%	472 288	1.0
Private health administration and health insurance	14 954 593	0.5%	969 818	3.0
Capital formation of health care providing institutions	35 012 182	1.3%	2 270 570	7.0
Education and training of health personnel	62 696 808	2.3%	4 065 941	13.0
Research and development in health	339 068	0.0%	21 989	0.1
Food, hygiene and drinking water control programme	176 896	0.0%	11 472	0.0
Environmental health	40 740	0.0%	2 642	0.0
Total	2 766 573 291	100%	179 411 970	560

3. Sectoral analysis: 2011

3.1 Ministry of Health and Family

The MoHF provides comprehensive public health services – primary, preventive and curative care – through its facilities. It highly subsidizes health-care services for the entire population. These are funded by general tax revenues and donations. In the year 2011, health facilities were under HSC and Councils management and provided comprehensive health services at each inhabited island and atoll. NHA results found that almost 90% of inpatient and 70% of outpatient services were provided by these facilities in 2011 (Provider Survey). All Maldives citizens were eligible. This coverage is independent of the income and asset status of the individual. In addition the MoHF, with the help of its donor partners, also covers the cost of all preventive services and immunization.

In term of national policy and planning, a major role of the MoH was to formulate policy, health planning regulation and monitor health service functions, facilities and health professionals.

In term of providers of health services, the HSCs operate a total of 363 licensed health facilities, 80 of which are located in Malé. MoHF providers and facilities included:

- 1 main central referral general public hospital
- 6 regional public general hospitals
- 13 atoll hospitals
- 132 health-care centres
- 108 health aid posts.

3.1.1 Ministry of Health and Family budget evolution

The MoH health expenditure grew from MVR 157 million in 1995 to MVR 546 million in 2011. Total Government expenditure grew from MVR 1709 billion to MVR 12 160 billion during the same period, as seen in Table 21.

As per Figures 6, 7 and 8, the MoH budget accounted for more than 9% of the total Government budget in 1995, dropping to 4.5% in 2011. Yet from 1995 to 2007, MoH expenditures grew much faster than the Government budget and the GDP evolution. After 2008, the Government budget evolution surpassed MoH expenditures, which could have been due to a shift in Government priorities or a change in the policy and distribution of the budget. In retrospect, there were two reasons: the first was a change in Government policy and leadership, and the second was the privatization of health-service providers. By 2011, MoH expenditures accounted for around MVR 220 million (not including NSPA), almost 2% of the Government budget.

Table 21: Ministry of Health and Government expenditures and Gross Domestic Product evolution, 1995–2011

Financial year	MoHF expenditures		Government expenditures		Gross Domestic Product		Yearly evolution		
	In million MVR	Annual increase (%)	In million MVR	Annual increase (%)	In million MVR	Annual increase (%)	MoH budget index	Government budget index	GDP budget index
1995	157		1 709		4 696		100	100	100
1996	191	21.7%	1 702	-0.4%	5 301	12.9%	122	100	113
1997	212	11.0%	1 906	12.0%	5 982	12.8%	135	112	127
1998	224	5.7%	2 053	7.7%	6 357	6.3%	143	120	135
1999	259	15.6%	2 506	22.1%	6 935	9.1%	165	147	148
2000	305	17.8%	2 694	7.5%	7 348	6.0%	194	158	156
2001	301	-1.3%	2 886	7.1%	9 650	31.3%	192	169	205
2002	317	5.3%	3 117	8.0%	10 425	8.0%	202	182	222
2003	327	3.2%	3 388	8.7%	11 931	14.4%	208	198	254
2004	400	22.3%	3 583	5.7%	13 552	13.6%	255	210	289
2005	551	37.8%	5 658	57.9%	12 704	-6.3%	351	331	271
2006	668	21.2%	6 948	22.8%	16 683	31.3%	425	407	355
2007	712	6.6%	8 201	18.0%	19 737	18.3%	454	480	420
2008	1 019	43.1%	10 176	24.1%	24 213	22.7%	649	596	516
2009	1 073	5.3%	10 953	7.6%	24 858	2.7%	683	641	529
2010	761	-29.0%	10 815	-1.3%	26 566	6.9%	485	633	566
2011	546	-28.3%	12 160	12.4%	29 936	12.7%	348	712	637

Figure 6: Ministry of Health and expenditures, 1995–2011 (in million MVR)

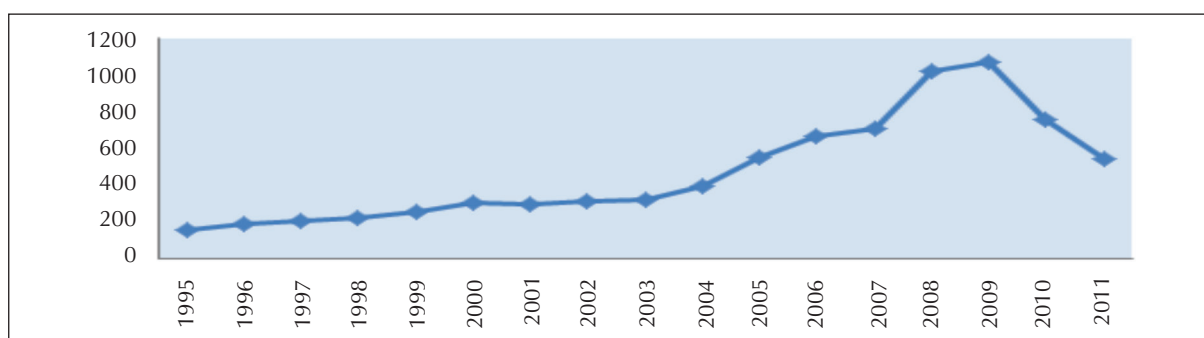


Figure 7: Ministry of Health and expenditures as a percentage of Government budget, 1995–2011

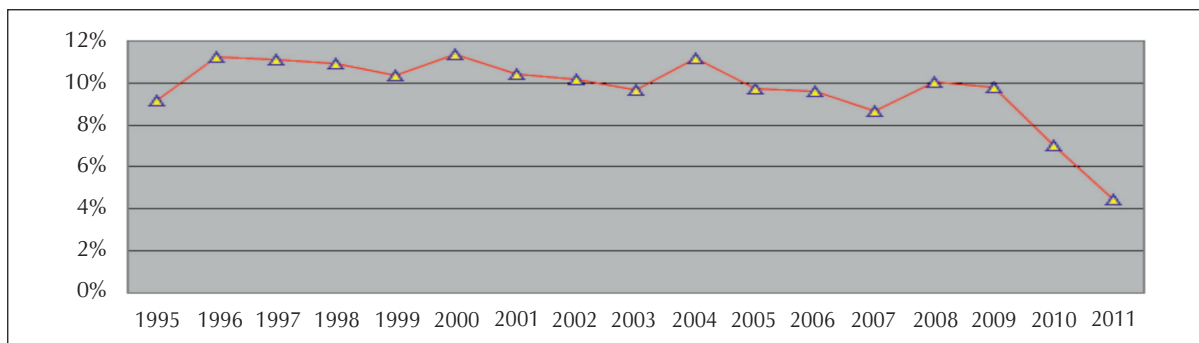
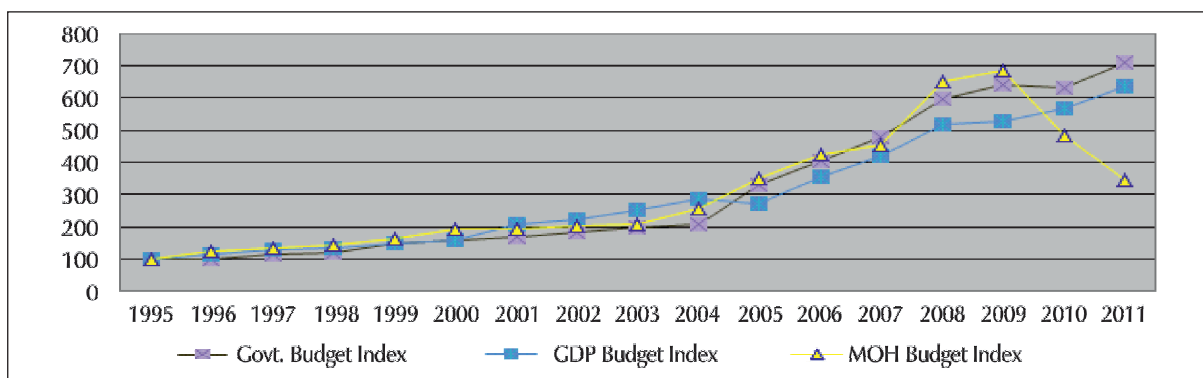


Figure 8: Ministry of Health and Family, Government and GDP evolution (in US\$), Index, 1996–2005



3.1.2 Source of Ministry of Health funds

The main source of MoH funds, as shown in Table 22, is the Government budget, which amounts to over 82% of its total expenditure. Donors contributed 7.8% of the MoH budget, mainly to public programmes that they finance through the Government channel. The other source of funding is household out-of-pocket income, which constituted 10% of the budget, based on registration and licensing fees paid to MoH headquarters in Malé.

3.1.3 Total Ministry of Health expenditures by function

The MoH budget uses the system of national accounts of the Ministry of Finance and Treasury based on chapter classification (or line items). One of the most significant challenges was to distribute the chapter classification into the NHA functional classifications. The accounts system used by the MoH, as at other public agencies, is summarized by:

- Item 1: Expenditures at MoH management
- Item 2: Centre for Community Health and Disease Control
- Item 3: All the atoll health services budgets.

Table 22: Source of Ministry of Health and Family funds (in MVR), 2011

Source	Funds	Percentage
Ministry of Finance and Treasury	181 108 426	82.2%
Households	22 165 836	10.0%
Foreign capital	17 125 657	7.8%
Total	220 399 919	100%

Figure 9: Sources of Ministry of Health and Family funds, 2011

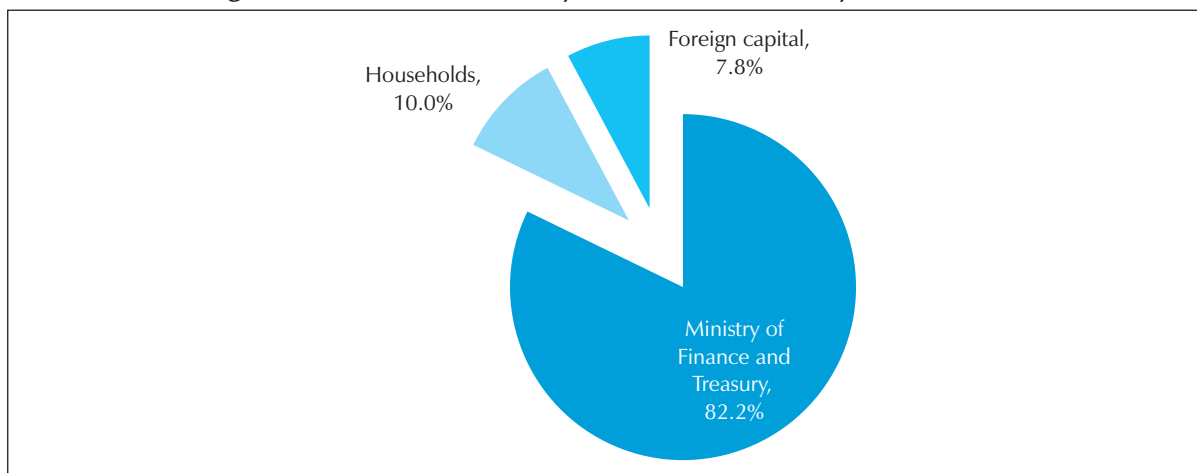


Table 23 below describes the sub-classification used by the MoH as total expenditure (current and capital). Expenditures are itemized into departments and sections. It should be noted that the atolls expenditures are those spent by atoll providers before the responsibilities were moved to HSC in February 2011.

Table 23: Use of Ministry of Health and Family funds

User of funds	From Government	From donors	Total	Percentage
Ministry of Health and Family	66 077 469	14 889 072	80 966 541	36.7%
Centre for Community Health and Disease Control	30 570 933	2 236 585	32 807 518	14.9%
Department of Gender and Family Protection Services	2 882 023	3.2	2 882 023	1.3%
Family and Children Services Centre	9 871 169	3.3	9 871 169	4.5%
National Blood Transfusion Service	838 338	3.4	838 338	0.4%
Home for People with Special Needs	8 816 449	3.5	8 816 449	4.0%
Maldives Food and Drugs Authority	7 930 406	3.6	7 930 406	3.6%
Children's Home	2 284 904	3.7	2 284 904	1.0%
Department of Drugs Prevention and Rehabilitation Services	11 956 455	3.8	11 956 455	5.4%
Atolls Health Services (before HSC)	62 046 114	3.9	62 046 114	28.2%
Total	203 274 262	17 125 657	220 399 919	100%

As classified by the MoH, the budget funds allocated to personnel is over 62% versus 40% for goods and services (Table 24). In the health industry, this can be unclear if it is not related to a health account functional classification. However, the NHA classification shows that the MoH spent 61% of its budget on personnel including doctors and nurses, 17% on prevention, 14% on capital investments, 3% on education and training and 5% on pharmaceuticals.

Table 24: Ministry of Health and Family budget line items

Code	Budget line	MVR
210	Salary and allowances	40 924 817
213	Pension	1 417 355
221	Travelling expenses	649 979
222	Administrative supplies	1 755 556
223	Administrative services	9 489 438
224	Operational consumables	6 904 162
225	Training expenses	3 721 459
226	Repairs and maintenance	618 381
228	Grants, contributions and subsidies	223 922
281	Losses from private parties	305 650
421	Capital expenditures	66 750
Total budget		66 077 469

Table 25: Ministry of Health and expenditures based on NHA classification

Allocation of funds		Amount	Percentage
HC.5	Medical goods dispensed to outpatients	10 785 384	4.9%
HC.6	Prevention and public health services	36 698 893	16.7%
HC.7	Administration and salaries	134 243 141	60.9%
HC.R.1	Capital formation of health-care provider institutions	30 907 652	14.0%
HC.R.2	Education and training of health personnel	7 764 849	3.5%
Total		220 399 919	100.0%

HC: health care.

3.2 Insurance market in Maldives

The insurance sector started playing a major role in financing the Maldives health system in 2011. The main insurance company was Madhana, a social public insurance. Three other private insurance companies offer health insurance to the private sector. Premiums are for one year and paid in advance.

An NHA survey completed by the NHA team shows that the health insurance market in Maldives was estimated at around 161 612 persons in 2011, representing more than 50% of the total population and covered by the three private and one social health insurance entity. The survey

objective was to highlight deductibles, co-payments, basic and additional benefits and geographical coverage. Most insurers provide comprehensive health plans covering inpatients, outpatients and drugs, with some offering additional benefits (treatment overseas, evacuation, etc.).

The rating methodology is an essential tool to fix a premium payment scheme. There are two major rating methodologies for insurance companies: experience rating and community rating. Under experience rating, health insurers collect information regarding the health status and the claims history of the insured group to determine the premium rate to be charged to the group. Under community rating, premiums are based on average costs of the whole population. Currently, while premiums charged by insurance companies in Maldives are based on neither of the two methodologies, they are more in line with experience rating. This is influenced by three parameters. Firstly, insurance companies may go through an underwriting process that screens for previous medical conditions. Secondly, as mentioned above, they price their products based on experience rating and the premiums are likely to increase if the utilization rate of services increases more than expected. Finally, insurance companies may have lower premiums since the privately insured often use publicly financed health services even when the same services are covered by private health insurance.

3.2.1 Social health insurance scheme (NSPA/Madhana Scheme in 2011)

The 2011 model introduced a social health insurance scheme to which both employees and employers contributed, and with the Government supposedly subsidizing the rest of the population for health services. In order to ensure the quality and affordability of benefits received under the scheme, the Government defined the content of the benefit package and put a cap of MVR 100 000 per person (applied in 2012). If a higher level of benefit package is required by employees, they have the choice to contribute to any private insurance policy in Maldives or pay out-of-pocket.

Key characteristics of the NSPA/Madhana

Based on information collected by the NHA team, the main characteristics of the NSPA are as follows:

- It is compulsory for individuals working in the civil service.
- The Government subsidizes the elderly, minors, the vulnerable, and the unemployed.
- The Government will continue to finance the provision of public health services, preventive care, and the management and regulation of the health system.
- The scheme covers a basic benefit package that includes outpatient curative care, drugs, local inpatient curative care and an allocation paid to cover health insurance for treatment abroad, provided this takes place in selected hospitals in India.
- The scheme is financed through employer/employee contributions and Government subsidies.
- Beneficiaries are restricted to the use of local health-care facilities and the selected hospitals abroad, if insured.
- Private insurance can cover services not in the basic benefits package or provide for higher level of care.
- Off-site referral (treatment abroad) is not covered under Madhana, but under Madhana Plus described in Table 11.
- The NSPA/Madhana is administered by the NSPA Administration separately from the MoH.

NSPA sources of funds

The main source of NSPA funds in 2011 (Table 26) was the Government budget, which amounted to 86.3% of total expenditure. Households and individuals contributed the remaining 13.7% in the form of premiums and deductibles.

Table 26: Sources of NSPA/Madhana funds, 2011

Source	Amount	Percentage
Individual contributions/premiums	34 361 685	13.7%
Government grants	216 453 532	86.3%
Total	250 815 217	100%

Use of NSPA funds by providers

Private pharmacies are the major recipients of NSPA funds, which amounted to MVR 181 million over 72% of total NSPA funds in 2011. Public providers, consisting of IGMH Hospital, other Government regional hospitals, atoll health centres, receive 22% of funds. NSPA salaries and administration costs account for the remaining 6% use of the funds, which is considered low compared with other agencies in the country.

Table 27: NSPA expenditure by type of health provider in MVR, 2011

Health-care provider	Amount	Percentage
MoH regional hospitals	4 206 901	1.7%
Indira Gandhi Memorial Hospital	44 534 498	17.8%
MoH atoll hospitals	3 395 085	1.4%
Clinics and physicians	6 965 121	2.8%
Health centres	2 294 040	0.9%
Private pharmacies	181 459 639	72.3%
Government administration	7 282 682	2.9%
Institutions providing health-related services	677 250	0.3%
Total	250 815 216	100%

Functional distribution of NSPA funds

The NHA surveys found that NSPA funds were primarily spent on medicines (MVR 181.5 million, over 72%). Inpatient curative care absorbed MVR 52 million and accounted for nearly 21%; basic outpatient care for a further 4%, with the remaining 3% spent on administration (Table 28).

Table 28: Functional distribution of NSPA funds

Function	Amount	Percentage
Inpatient curative care	52 136 484	20.8%
Outpatient curative care (without dentistry)	9 259 161	3.7%
Medicines	181 459 639	72.3%
Administration, operations and activities of social security	7 282 682	2.9%
Capital formation of health-care provider institutions	677 250	0.3%
Total	250 815 216	100%

3.2.2 Private insurance in Maldives

As part of the NHA study, various efforts were made to collect more accurate information on the private insurance sector. The NHA team used two methods to do this: collecting data through insurance companies; and approaching all providers in Maldives.

According to the insurance companies, the monthly premium in Maldives varies between US\$ 50–70 per individual and US\$ 200 per family. Based on the survey, the total private insurance for the health market was estimated at MVR 91.6 million (US\$ 6 million) in 2011. Of this market, 69.4% was contributed by individuals, 21.6% by employers and 9% came as grants from the Government (Table 29).

Table 29: Sources of private insurance funds, 2011

Source	Amount	Percentage
Employer contributions/premiums	19 120 485	20.9%
Group contributions/premiums	733 418	0.8%
Individual contributions/premiums	63 554 904	69.4%
Grants from Government	8 200 557	9.0%
Total	91 609 364	100%

In term of providers, most funds from the private insurance companies were used in private clinics and private chemists (44% and 30% respectively), 10% at the hospital level (mainly IGMH) and almost 16% was on administration and return on operations.

Table 30: Use of private insurance funds by provider, 2011

Provider	Amount	Percentage
MoH regional hospitals	111 562	0.1%
Indira Gandhi Memorial Hospital	8 624 689	9.4%
MoH atoll hospitals	151 550	0.2%
Clinics and physicians	40 545 572	44.3%
Medicines	27 221 399	29.7%
Administrative expenditures	14 954 593	16.3%
Total	91 609 365	100%

In term of functions, and as described in Table 31, private insurance funds are mainly spent on outpatient care and drugs.

Table 31: Use of private insurance funds by function, 2011

Function	Amount	Percentage
Inpatient curative care	8 887 801	9.7%
Outpatient curative care (without dentistry)	40 545 572	44.3%
Medicines	27 221 399	29.7%
Administrative expenditures	14 954 593	16.3%
Total	91 609 365	100%

3.3 Health Service Cooperations

HSCs absorbed 29% of total health expenditures and almost 65% of the total Government budget for health in 2011. The HSC plays the primary role in managing and distributing funds to all public facilities at the three levels of care, i.e. primary, secondary and tertiary.

HSC sources of funds. The sole source of HSC funds in 2011 was the Government budget, which derives its resource base from taxes. The HSC budget in 2011 amounted to MVR 812 million (US\$ 53 million).

Use of HSC funds by providers. Table 32 shows the distribution of HSC funds by type of provider. Hospitals are the major recipients of HSC funds, and received almost MVR 600 million or 72% of this budget in 2011. IGMH alone absorbed 23% of the HSC budget as it is a major provider of health services in the country. Health centres and health posts received the remaining 28%.

Table 32: Health Service Corporations expenditures by provider type, 2011

Provider of health services	Amount	Percentage
MoH regional hospitals	217 038 981	27%
Indira Gandhi Memorial Hospital	184 492 714	23%
MoH atoll hospitals	179 764 536	22%
Health centres	197 855 298	24%
Health posts	32 509 447	4%
Total	811 660 976	100%

Use of HSC funds by function. As shown in Table 33, the NHA surveys showed that HSC funds are primarily spent on inpatient curative care. The second highest was outpatient care, and administration of HSCs cost the Government 17% of the funds allocated to HSC.

Table 33: Functional distribution of NSPA funds

Category	Amount	Percentage
Inpatient curative care	448 148 388	55%
Outpatient curative care (without dentistry)	220 797 724	27%
Outpatient dental care	155 102	0.02%
Emergency services within hospitals	39 927	0.00%
Clinical laboratory	2 189 930	0.27%
Diagnostic imaging	115 925	0.01%
Patient transport and emergency rescue	684 164	0.08%
Medicines	29 020	0.00%
Medical supplies non-durable	458 851	0.06%
Medical supplies durable	79 657	0.01%
Medical equipment	142 321	0.02%
Administration	138 819 968	17%
Total	811 660 977	100%

3.4 General private practitioners

In 2011, the NHA team surveyed 16 clinics and 67 pharmacies. Data in this section are related to the private sector providers market as perceived and reported by general practitioners through personal visits, mostly in the capital cities in Maldives.

3.4.1 Data on clinic visits

According to the Private Physicians Survey, the number of people who visited a health professional for an illness was 66 334 in 2011, which was higher than expected and reported in previous reports. The cost per private visit ranged between US\$ 31 for a first visit to US\$ 15 for a follow up. This is valid regardless of whether an individual lives in an urban or rural area.

3.4.2 Sources of general practitioner funding

Total provision of ambulatory care visits to private clinics and physicians amounted to MVR 31 million (US\$ 2 million) in 2011 and absorbed almost 1.5% of THE. Of this total, 84% was paid by household out-of-pocket funds and the remaining reimbursed by private and public health insurance.

3.5 Pharmaceutical sector analysis

The MoH bulk medicines budget in 2011 amounted to MVR 10.8 million (US\$ 700 000), less than 5% of the total MoH budget. The Ministry supplies essential drugs and chronic drugs through its central warehouse and health-care dispensaries to the public. A minor user fee is in place which covers less than 10% of the cost per prescription.

In addition, there is a growing private sector in Maldives. Private importers are now significant in the city of Malé and even sell pharmaceuticals to Government agencies and facilities. The number of private pharmacies in Maldives has increased in the last few years due to liberalized practice, and now consists of 290 main pharmacies selling drugs on prescription and over the counter. This has had a direct impact on the availability of drugs, but not necessarily on accessibility and affordability.

Maldives is expected to have many non-registered drugs on the market. For a long time, the public has been able to buy a large number of prescription drugs over the counter and this might contribute to escalating drug costs.

3.5.1 Estimating the size of the pharmaceutical private sector

Pharmaceutical expenditures accounted for over 17% of THE in 2011. Considerable uncertainty exists about the size and composition of the pharmaceutical sector in Maldives. All pharmaceuticals are imported as there is no local manufacture. Thus, Maldives has not only high per capita expenditure on pharmaceuticals (US\$ 95) but almost all of the drugs are trade name products.

As per the NHA Provider Survey, private spending on pharmaceuticals or household out-of-pocket expenditures amounted to US\$ 16 million, which accounts for 53% of spending on pharmaceuticals at an average US\$ 13 per sale unit. Public spending on pharmaceuticals is the second largest category at US\$ 14 million.

It is clear that at 17% of total health expenditures, pharmaceuticals is a major area of the health sector that needs to be managed and regulated if health-care costs are to be held in check. The rapid growth in the pharmaceutical sector, and the near complete reliance on imported brand name drugs to meet demand, make rationalizing expenditure on pharmaceuticals a key area for policy intervention.

3.6 Household expenditures on health

Data on household expenditures from the HIES 2009–2010 and the Census 2006 were used, along with data from additional NHA surveys of the major providers in Maldives, to extrapolate total out-of-pocket spending. Thus, the estimated household expenditure is based on different private provider surveys conducted by the team in 2012. The draft estimates for out-of-pocket spending were cross-validated with HIES 2009–2010 numbers.

Household out-of-pocket expenditures account for almost 49% of total health expenditure in Maldives. The percentage of household contributions to health expenditures highlighted in this NHA report was above expectations. This high percentage is due to a variety of reasons including a higher estimate for the cost of pharmaceuticals and for treatment abroad, derived from HIES 2009–2010. A more systematic approach was used to estimate household expenditures taking into account the market size, including the private sector and user fees at different provider levels.

3.6.1 Estimating the total household expenditure on health

A variety of data sources were used to calculate household expenditures as follows:

- The HIES 2009–2010 estimated total out-of-pocket health expenditures and treatment abroad (MVR 656 million). It is assumed that most of these expenditures are reflected in the provider data, and that adding the out-of-pocket expenditures to the total would result in significant over-reporting.
- The General Practitioner and Private Pharmacy Surveys were used to estimate out-of-pocket expenditure at private providers.

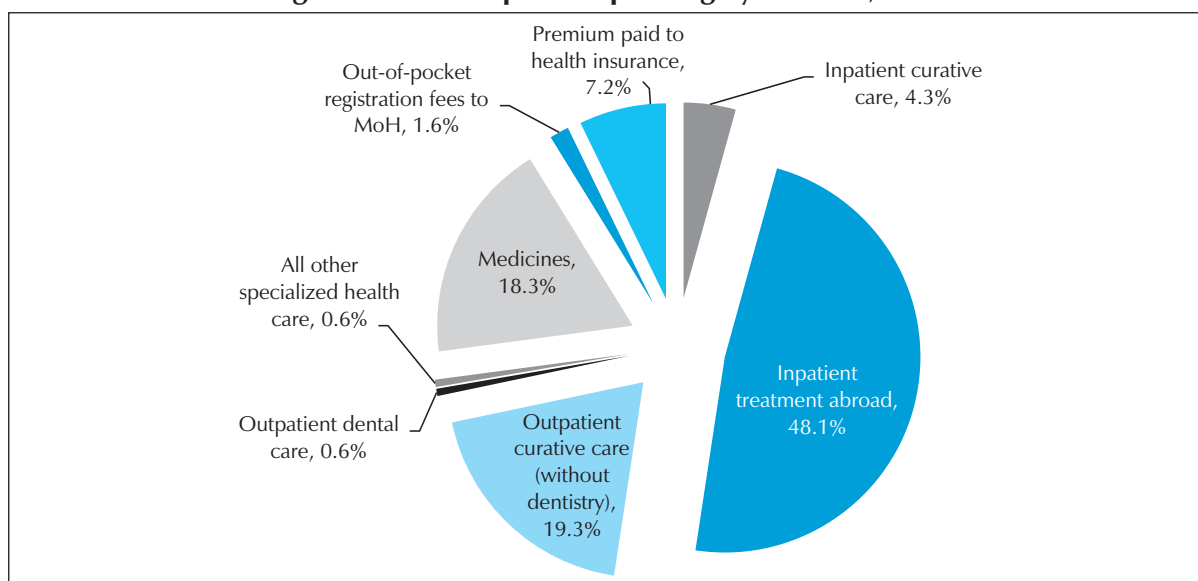
- The Private and Social Insurance Survey was used to estimate the total premium paid by households.
- The Traditional Healer Survey was used to derive out-of-pocket costs on traditional healers.
- Total household spending at public facilities is also included.
- However, household spending on patient transport could not be estimated.

In summary, the total household expenditure on health in 2011 amounted to MVR 1.3 billion (US\$ 88.5 million) or 49% of total health expenditure in Maldives. The amount of US\$ 277 out-of-pocket spending per capita on health is extremely high compared with most countries in the region. Almost 53% of household expenditure was spent on public providers and 47% in the private sector. Table 34 and Figure 10 below show the distribution of out-of-pocket expenses per function.

Table 34: Out-of-pocket expenditures by function, 2011

Function	Amount in MVR	Percentage	Amount in US\$	Per capita in US\$
Inpatient curative care	59 132 121	4.3%	3 834 768	12
Inpatient treatment abroad	656 175 917	48.1%	42 553 561	133
Outpatient curative care (without dentistry)	263 393 497	19.3%	17 081 290	53
Outpatient dental care	8 450 000	0.6%	547 990	2
All other specialized health care (traditional healer curative care)	8 072 736	0.6%	523 524	2
Medicines	250 065 925	18.3%	16 216 986	51
Out-of-pocket registration fees to MoH	22 165 836	1.6%	1 437 473	4
Premium paid to health insurance	97 916 589	7.2%	6 349 973	20
Total	1 365 372 621	100%	88 545 565	277

Figure 10: Out-of-pocket spending by function, 2011



3.7 Traditional healers

Traditional healers are defined as people with knowledge of healing using indigenous plant and animal remedies. These practitioners acquire their trade through the passing of skills from healers as an apprentice or receiving skills and knowledge through dreams and communication with the supernatural or ancestors (Rogers, 2001). Traditional healers are an integral part of the informal sector of health care in Maldives; it is estimated that more than 200 traditional healers exist with an average of two in every village. The 50 registered traditional healers are located in the capital city of Malé.

3.7.1 Estimating the magnitude of traditional healers

The MOH carried out a mini-survey by interviewing 6 out of the 50 registered traditional healers. The main purpose of the survey was to find out how much Maldivians spent on traditional healers and how often they use their services. Although the exact number of traditional healers and traditional birth attendants is still uncertain, their number is estimated at almost 200.

3.7.2 Survey findings

In the four weeks preceding the survey, it was reported that the six main traditional healers in Maldives treated a total of 754 patients. This round of NHA presents a more conservative number of traditional healers and people treated, based on the number patients and costs derived from the survey (Table 35).

Table 35: Household spending on traditional healers, 2011

TH	Ave LOS days	Ave cost per patient (in MVR)	Ave MVR per visit	No. of patients (over one month)	Total HH spending at TH per month	Total HH spending at surveyed TH per year
TH1	8	308	39	313	96 404	1 156 848
TH2	13	1 600	121	141	225 600	2 707 200
TH3	10	1 620	159	98	158 760	1 905 120
TH4	12	998	85	170	169 660	2 035 920
TH5	12	214	18	16	3 424	41 088
TH6	22	1 180	53	16	18 880	226 560
Total	13	1 019	79	754	672 728	8 072 736

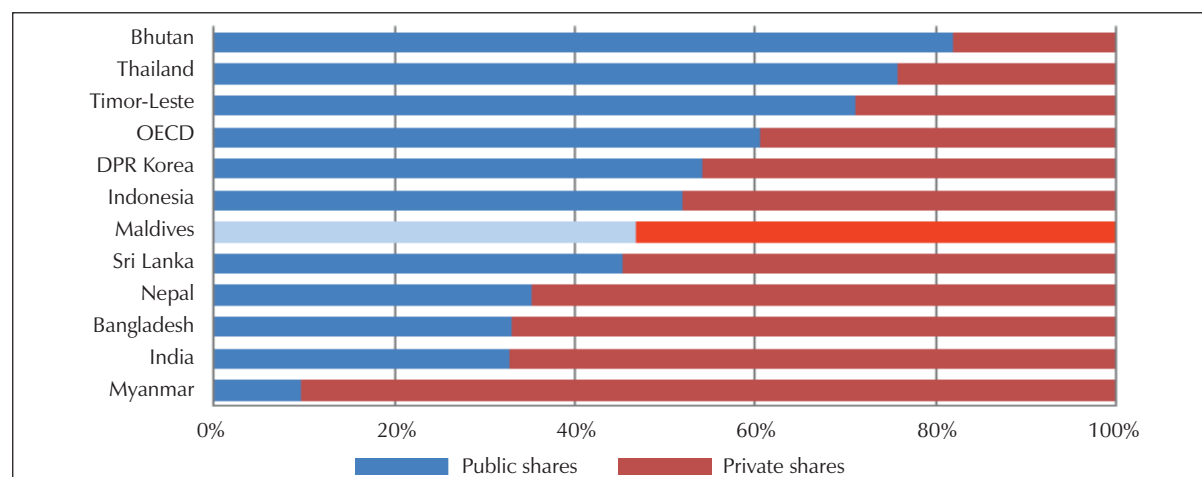
Ave: average; HH: household; LOS: length of stay; TH: traditional healer.

In summary, the NHA reports that Maldives spent around MVR 8 million (US\$ 524 000) on traditional healers per year based on an estimated 754 visits per month.

3.8 Cross-country comparative analysis

As seen in Figure 11, the public share of health expenditures in Maldives is reasonably high at 47%.

Figure 11: Comparison of public and private share of total health expenditure in South-East Asia countries



OECD: Organisation for Economic Co-operation and Development; DPR: Democratic People's Republic (of).
Source: World health statistics 2010.

As reported in Table 36, a comparison of total health expenditures with neighbouring countries shows that Maldives spends more and is in line with high-income countries and countries of the Organisation for Economic Co-operation and Development.

Table 36: Comparison of health expenditures as a percentage of gross domestic product in the South-East Asia Region

Country	Year	Per capita GDP (US\$)	Health expenditure per capita (US\$)	Health expenditure as a % of GDP		
				Total	Public	Private
Bangladesh	2009	559	19	3.4	1.1	2.3
Bhutan	2009	2 882	98	5.5	4.5	1.0
DPR Korea	2009	32 588	1 108	6.5	3.5	3.0
India	2009	1 324	45	4.2	1.4	2.8
Indonesia	2009	1 618	55	2.4	1.2	1.2
Maldives	2011	6 067	561	9.2	4.4	4.8
Myanmar	2009	353	12	2.0	0.2	1.8
Nepal	2009	735	25	5.8	2.0	3.8
Sri Lanka	2009	2 471	84	4.0	1.8	2.2
Thailand	2009	4 941	168	4.3	3.3	1.0
Timor-Leste	2009	2 147	73	12.3	8.7	3.6
OECD	2009	24 930	2 470	9.9	6.0	3.9

DPR: Democratic People's Republic (of); GDP: gross domestic product; OECD: Organisation for Economic Co-operation and Development.

Source: World health statistics 2010.

4. Conclusions and recommendations

At this stage of the health sector reform, this first NHA report focuses on identifying total health expenditures, to allow the Government of Maldives to make active policy decisions based on the results. Key policy issues that arise from the NHA findings are broad and numerous, and include:

- How much should Maldives spend on health services?
- How much should the Ministry of Health spend?
- How much can the people of Maldives afford to spend?
- How can the Government recover some of its health budget?
- How might the Government realign its budget process on health and how can the NHA findings be used to formulate an equitable and sustainable health insurance scheme?
- How should the Government shape health sector financing to control any under/or overuse of curative versus preventive services?
- What should be the role of donors, and the public and private sector in Maldives?

4.1 Notes on health-care financing

Several key issues in health-care financing are identified in the paper.

- There is little coordination among multiple public delivery systems or among public and private systems.
- The way the health sector is managed changed in 2012, when the national health insurance scheme started. Two things need to be kept in mind: (1) Actuarial studies are of critical importance at this stage in order to calculate risks and premiums; and (2) the methods used to pay providers of care can influence access, efficiency, and quality.
- Expenditures in relation to GDP are high and in line with OECD countries averages (9.2%).
- Almost half of Maldives' health expenditures derive from out-of-pocket payments of the population (inclusive of the premium for health insurance deducted from their salaries). This is high and precarious, and begs the question of what impact this will have on poverty and vulnerability: can the Government cover this amount or reduce the gap?
- Can the Government afford to sustain contributing 44% of the health budgeting the future?
- Very little (3%) is paid for prevention and mostly funded by donors. Prevention is stated to be one of the health-care priorities of the nation – health promotion, prevention, and primary health care – what action is the Government taking towards preventing diseases?
- Why does donor support to health in Maldives not exceed 3% of total health expenditures?
- Private expenditures represent 53% of sector-wide expenditures – 6 times the MoH expenditures.
- There is only one private hospital in the capital city of Malé and the Government is the only provider of inpatient care in the atolls.
- Pharmaceuticals accounted for over 17% of total health expenditure. The majority of pharmaceuticals sold in Maldives are brand names, and only very few are generics.

4.2 Notes on the insurance market

A major issue for the health insurance market in Maldives is that the insurance companies make no enquiries on the insured's medical condition, income, business or profession, place of work, etc. To be insured at any private insurer, it is sufficient to pay the premium in advance. The average premium is low as people are not encouraged to have a private policy. The private insurance industry is hoping to develop products that will be attractive to the emerging middle- and upper-income groups. It also intends to capture the people currently going abroad for treatment.

There is limited capacity to regulate the private insurance industry. Although the Government, through its agency the NSPA, launched a national health insurance scheme, the public sector still lacks the expertise to operate a such a scheme. The lack of actuaries to calculate risks and premiums is currently a major constraint for the development of any public health insurance. There is a need to train actuaries for the development of health insurance products, and for the NSPA to run an assessment in the near future for the national health insurance scheme. This assessment should:

- (1) evaluate the sustainability of the national health insurance scheme and the long-term potential to provide equity, coverage and financial protection;
 - (2) test different scenarios of "provision/payment" to inform stakeholders on how the NSPA can be fiscally sustainable and how Maldives' other health financing objectives can be met;
 - (3) address current national attention on the health insurance plan preparation, which necessarily brings into sharp focus the question of how to assure adequate, community-wide, health-care financing in Maldives;
 - (4) build basic knowledge of the national health insurance plan model and different scenarios and options that can be applied based on the proposed Bill started in January 2012;
 - (5) study the Basic Benefit Package on coverage and services caps;
 - (6) study the provider payment mechanism;
 - (7) analyse the different contribution/collection mechanisms and Government disbursement;
 - (8) recommend appropriate contribution rates subject to the anticipated effectiveness of the Government funds and the employers/employees market; and
 - (9) propose an appropriate Government contribution rate for the identified disadvantaged groups in the context of principles of risk pooling and solidarity; and study specifically an impact analysis focusing on:
 - the impact on public finances and on total health spending;
 - possible effects on equity, access, coverage and health-seeking behaviours;
 - potential for financial protection against catastrophic spending including that related to overseas treatment; and
 - possible effects on the current level and quality of health-care services.
-

Annex 1: Piloting the System of Health Accounts 2011 in Maldives

The key concepts for describing the structure of health financing under the System of Health Accounts (SHA) 2011 are based on measuring:

- the expenditure of health care financing schemes, under which good and services are purchased directly from health care providers, and
- the types of revenues of health-care financing schemes (such as Government domestic revenues, social insurance contributions, and voluntary prepayments).

Health-care financing schemes are perceived in SHA 2011 as the main building blocks of the structure of a country's health financing system: they are the main types of financing arrangements through which people can access health care, for example government schemes, social insurance and voluntary insurance.

Classifying financing schemes in Maldives

As described in SHA 2011, health-care financing schemes are structural components of health-care systems. They are the main types of financing arrangements through which people obtain health services. Health financing schemes include direct payments by households for services and goods and third-party financing arrangements. Third-party financing schemes are a distinct body of rules that govern the mode of participation in the scheme, the basis for entitlement to health services and the rules on raising and then pooling the revenues of the given scheme. Financing agents are perceived under SHA 2011 as the institutional units that operate the financing schemes in practice. There is not necessarily a one-to-one correspondence between financing schemes and financing agents.

Table A1.1 shows the flow of funds under each financial scheme by type of agent.

Financing schemes by type of provider

Knowing how much health providers spend under each financial scheme was not easy to identify during this round of NHA, as the data collected were not disaggregated by scheme but by type of agent. The NHA team in Maldives tried to map these data in order to know how much health providers spent on the inputs to produce health-care services under each scheme. In this light, the total distribution of expenditures under each scheme is expected to equal the disaggregation by provider type. Table A1.2 shows the flow of funds under each financial scheme by type of provider.

Table A1.1: Financing schemes by type of agent, in MVR, 2011

New financing agent code	Financing agent	Financing agent						All financing schemes
		FA1	FA2	FA3	FA4	FA5	FA6	
	General Govt.		Insurance Corp.	Corporations (other than Insurance Corp)	Non-profit institutions serving households	Households	Rest of the world	
HF1	Governmental and compulsory health insurance							-
HF1.1	Ministry of Health and Family	181 108 426				22 165 836	17 125 657	220 399 919
HF1.2	Health Service Corporation	811 660 976						811 660 976
HF1.3	Compulsory health insurance (NSPA)		216 453 532			34 361 685		250 815 217
HF2	Voluntary health care payments	8 200 557		87 965 070	4 910 654	63 554 904		164 631 185
HF3	Household out-of-pocket payments					1 245 290 196		1 245 290 196
HF4	Rest of the world financing schemes (non-resident)						73 775 797	73 775 797
Total	All financing schemes	1 000 969 959	216 453 532	87 965 070	4 910 654	1 365 372 621	90 901 454	2 766 573 290

HH: household.

Table A1.2: Providers of health services by financing scheme, 2011

	Financing scheme										Total providers
	Governmental schemes and compulsory health insurance					Individual and private schemes				Rest of the world financing schemes (non resident)	
	Ministry of Health and Family	Health Service Corporation	Compulsory health insurance (NSPA)	Voluntary health-care payment	Household out-of-pocket payment	Rest of the world financing schemes (non resident)					
HF1.1	HF1.2	HF1.3	HF2	HF3	HF4						
HP:1	Hospitals	581 296 231	52 136 484	81 635 661	59 132 121						774 200 497
HP:2	Residential long-term care providers										–
HP:3	Providers of ambulatory health care	230 364 745	9 259 161	40 573 434	279 916 233						560 113 574
HP:4	Providers of ancillary services										–
HP:5	Retailers and other providers of medical goods	10 785 384		181 459 639	27 467 497	250 065 925					469 778 445
HP:6	Providers of preventive care	36 698 893							10 595 663		47 294 555
HP:7	Providers of health administration and financing	134 243 141		7 282 682	14 954 593						156 480 416
HP:8	Other health-care providers										–
HP:9	Health care related providers: rest of economy	38 672 501		677 250					63 180 135		102 529 886
HP:10	Rest of the world							656 175 917			656 175 917
	All health providers	220 399 919	811 660 976	250 815 216	164 631 185	1 245 290 196	73 775 797				2 766 573 290

Financing schemes by expenditures type in the Maldives

To be able to classify expenditures by health-care function, the team first linked the function with the provider type and then attributed the function to a financing scheme. Thus, all factors were considered in this classification. As mentioned above, it was difficult to determine a clear classification that includes cash in-kind contributions, and describes the factors of health-care provision that can account for the total value of the resources. The report aims to classify the amount paid to providers by the financing schemes for health-care goods and services consumed during the accounting period. Spending on health-care related functions is still included given the difficulty to separate those funds from total spending.

As mentioned before, this pilot study was a first attempt by the NHA team to address information on health financing schemes and distribution of expenditures by provider and expense type. Health expenditure information previously reported, not only in Maldives but around the globe, was mainly from the National Health Accounts. This SHA includes all NHA available data as at 2011, while accepting that, as with all new initiatives to establish baseline information on a national scale, there are inherent delays and limitations in the completeness and validity of these data.

Table A1.3: Health services by financing scheme, 2011

Financing schemes Health-care function	Governmental schemes and compulsory health insurance				Voluntary health-care payment schemes	Household out-of-pocket payments	Rest of the world financing schemes (non resident)		Total providers
	Ministry of Health and Family Scheme	Health Service Corporation Scheme	Compulsory health insurance (NSPA Scheme)						
	HF1.1	HF1.2	HF1.3	HF3			HF4		
HC.1 Curative care		669 141 141	61 395 645	122 209 095	995 224 271			1 847 970 152	
HC.2 Rehabilitative care								–	
HC.3 Long-term health care								–	
HC.4 Ancillary services not specified by function		2 990 018						2 990 018	
HC.5 Consumption of medical goods	10 785 384	709 849	181 459 639	27 467 497	250 065 925			470 488 294	
HC.6 Preventive care	36 698 893					14 859 855		51 558 748	
HC.7 Governance: management and health administration	134 243 141	138 819 968	7 282 682	14 954 593				295 300 385	
HC.8 Other health-care functions								–	
HC.9 Health-care related functions: rest of economy	38 672 501		677 250				58 915 942	98 265 693	
All health-care functions	220 399 919	811 660 976	250 815 216	164 631 185	1 245 290 196		73 775 797	2 766 573 290	

HC: health care.

Annex 2: National Health Accounts 2011 summary tables

Table A2.1: Source of funds

Sources of health funds	Amount MVR	Percentage	Amount US\$	Per capita US\$
Ministry of finance & treasury	1 209 222 934	43.7%	78 419 127	245
Other public	8 200 557	0.3%	531 813	2
Household funds	1 365 372 621	49.4%	88 545 566	277
NGOs and community health	4 910 654	0.2%	318 460	1
Employers' funds	87 965 070	3.2%	5 704 609	18
Donors	90 901 454	3.3%	5 895 036	18
Total	2 766 573 290	100%	179 414 610	561

Table A2.2: Share of total health-care expenditures by financing agent

Financing Agents	Amount MVR	Percentage	Amount US\$	Per capita US\$
MoH	220 399 919	8.0%	14 293 121	45
Health service corporations	811 660 976	29.3%	52 636 899	164
NSPA (Madhana)	250 815 216	9.1%	16 265 578	51
Private Insurances	91 609 364	3.3%	5 940 945	19
Private households' out of pocket	1 245 290 196	45.0%	80 758 119	252
Local nongovernmental organizations	4 910 654	0.2%	318 460	1
Private firms and employers	68 111 166	2.5%	4 417 067	14
Donors agencies	73 775 797	2.7%	4 784 423	15
Total	2 766 573 290	100%	179 414 610	561

Table A2.3: Distribution of health-care expenditures by provider

Expenditures by Providers	Amount MVR	Percentage	Amount US\$	Per capita US\$
Indhira Gandhi Memorial Hospital	291 908 358	10.6%	18 930 503	59
Hulhumale Hospital	22 162 080	0.8%	1 437 230	4
MoHF Regional Hospitals	269 551 106	9.7%	17 480 616	55
MoHF Atolls Hospitals	190 578 953	6.9%	12 359 206	39
Clinics and physicians	303 691 114	11.0%	19 694 625	62
Dentists clinics	8 450 000	0.3%	547 990	2
Traditional healers and other health practitioners	8 072 736	0.3%	523 524	2
Health centres	207 361 484	7.5%	13 447 567	42
Health posts	32 538 240	1.2%	2 110 132	7
Public pharmacies	10 785 384	0.4%	699 441	2
Private pharmacies	458 993 061	16.6%	29 766 087	93
Providers and administration of public health programmes	47 294 555	1.7%	3 067 092	10
Government administration	141 525 823	5.1%	9 178 069	29
Private administration	14 954 593	0.5%	969 818	3
Institution providing health related services	102 529 886	3.7%	6 649 150	21
Rest of the world providers	656 175 917	23.7%	42 553 561	133
Total	2 766 573 290	100%	179 414 610	561

Table A2.4: Use of total health funds – functional classification

Expenditures by functions	Amount MVR	%	Amount US\$	Per capita US\$
Services of curative care	1 847 970 152	66.8%	119 842 422	375
Ancillary services to health care	2 990 018	0.1%	193 905	1
Medical goods dispensed to out-patients	470 488 294	17.0%	30 511 562	95
Prevention and public health services	51 558 748	1.9%	3 343 628	10
Health administration and health insurance	295 300 385	10.7%	19 150 479	60
Health related functions	98 265 693	3.6%	6 372 613	20
Total	2 766 573 290	100%	179 414 610	561

Table A2.5: Out-of-pocket distribution by function

HH OOP expenditures by functions	Amount MVR	Percentage	Amount US\$	Per capita US\$
In-patient curative care	59 132 121	4.3%	3 834 768	12
In-patient treatment abroad	656 175 917	48.1%	42 553 561	133
Out-patient curative care (without dental)	263 393 497	19.3%	17 081 290	53
Out-patient dental care	8 450 000	0.6%	547 990	2
All other specialized health care (TH curative care)	8 072 736	0.6%	523 524	2
Medicines	250 065 925	18.3%	16 216 986	51
Out-of-pocket registration fees to MoHF	22 165 836	1.6%	1 437 473	4
Premium paid to health insurance	97 916 589	7.2%	6 349 973	20
Total	1 365 372 621	100%	88 545 566	277