



HARYANA 2014/15 STATE HEALTH ACCOUNTS: MAIN REPORT





HARYANA 2014/15 STATE HEALTH ACCOUNTS REPORT

This report was made possible through funding from the US Agency for International Development to the Health Finance and Governance Project



DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government.

CONTENTS

Acronyms.....	iii
Executive Summary	v
1. Background and Context.....	1
1.1 Health Accounts in India.....	1
1.2 Objectives of Haryana State-Level Health Accounts.....	2
1.3 Methodology in Brief	2
1.4 Accomplishments.....	4
1.5 Challenges	4
2. Key Findings	5
2.1 Who Pays for Health Care in Haryana and How Much Do They Contribute?.....	6
2.2 How Are Health Care Funds Managed and Distributed in Haryana?	7
2.3 What Types of Services Are Provided with Health Funds?.....	8
2.4 How Are Health Care Funds Distributed Between Health Care Providers?.....	9
2.5 Which Diseases and Health Conditions Does Haryana Spend On?	10
2.6 Which Entities Manage Government Spending?.....	12
2.7 Capital Spending.....	14
3. Analysis of Household Spending.....	15
3.1 Where Are Households Spending Out Of Pocket?	16
3.2 What Health Services Are Households Purchasing?	17
3.3 Household Spending Analysis by Income Quintile	20
4. Policy Implications	22
5. Recommendations for Future Resource Tracking Exercises	25
Annex A: Health Accounts Tables	27
Annex B: References	37

List of Tables

Table I. Key HA Findings.....	5
-------------------------------	---



List of Figures

Figure 1. Summary of Haryana 2014/15 HA Results	vi
Figure 2. CHE by Financing Source	6
Figure 3. CHE by Financing Scheme	7
Figure 4. CHE by Health Care Function	8
Figure 5. CHE by Provider	9
Figure 6. CHE by Disease or Health Condition.....	10
Figure 7. Disease Burden in India, Both Sexes, 2013	11
Figure 8. Government Spending by Financing Agent.....	12
Figure 9. Government Spending by Health Care Function	13
Figure 10. Breakdown of Capital Spending.....	14
Figure 11. OOP Spending as a Percentage of THE	15
Figure 12. Household Spending by Type of Provider	16
Figure 13. Spending Managed by Households by Type of Service	17
Figure 14. Household OOP Spending by Disease or Health Condition	18
Figure 15. Household Spending on Inputs	19
Figure 16. Household Spending by HFG-compiled “Income Group” for Outpatient and Inpatient Care	20
Figure 17. Spending By Social Group for Outpatient and Inpatient Care	21
Figure 18. Percentage of Household Income Spent on Inpatient and Outpatient Care	21

ACRONYMS

CGHS	Central Government Health Scheme
CHC	Community Health Center
CHE	Current Health Expenditure
DHS	Department of Health Services
DoHFW	Department of Health and Family Welfare
ESI	Employee State Insurance
ESIC	Employee State Insurance Corporation
HA	Health Accounts
HFG	Health Finance and Governance
HMIS	Health Management Information System
HSHRC	Haryana State Health Resource Center
IDSP	Integrated Disease Surveillance Program
IEC	Information, Education and Communication
IIB	Insurance Information Bureau
MMIY	<i>MukhyaMantri Muft Ilaaj Yojana</i> health insurance scheme
MER	Department of Medical Education and Research
MOHFW	Ministry of Health and Family Welfare
NCD	Non-communicable Disease
NGO	Non-governmental Organization
NHATS	National Health Accounts Technical Secretariat
NHM	National Health Mission
NHSRC	National Health Systems Resource Center
NSSO	National Sample Survey Office
OOP	Out-of-Pocket
PGIMER	Post Graduate Institute of Medical Education and Research, Chandigarh
PHC	Primary Health Center
RSBY	<i>Rashtriya Swasthya Bima Yojana</i> health insurance scheme
SHA	System of Health Accounts
SLHA	State-Level Health Accounts
THE	Total Health Expenditure
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

This report presents the findings and policy implications of Haryana's first Health Accounts (HA) estimation, for fiscal year April 2014 through March 2015. The estimation was conducted using the most recent Systems of Health Accounts (SHA) framework, which was updated in 2011. HA capture spending from all sources: central- and state-level governments, non-governmental organizations, external donors, private employers, insurance companies, and households. The analysis breaks down spending into the standard classifications defined by the SHA 2011 framework, namely, sources of financing, financing schemes, financing agent, type of provider, type of activity, and disease/ health condition.

Findings

The Haryana HA for 2014/15 found total health expenditure (THE) in the state to be Rs. 8,682 crores (Rs. 86,825,631,060). This equates to Rs. 3,243 on a per capita basis. THE as a proportion of Haryana's GDP is 1.99 percent. Ninety-seven percent of health spending is recurrent, that is, spending on health goods and services that are consumed within the year of the HA analysis, or current health spending (CHE). The remaining 3 percent of spending is for capital investment, spending on goods and services whose benefits are consumed over more than one year. Households are the largest source of health financing (74 percent), followed by the government (23 percent) and corporations (3 percent).

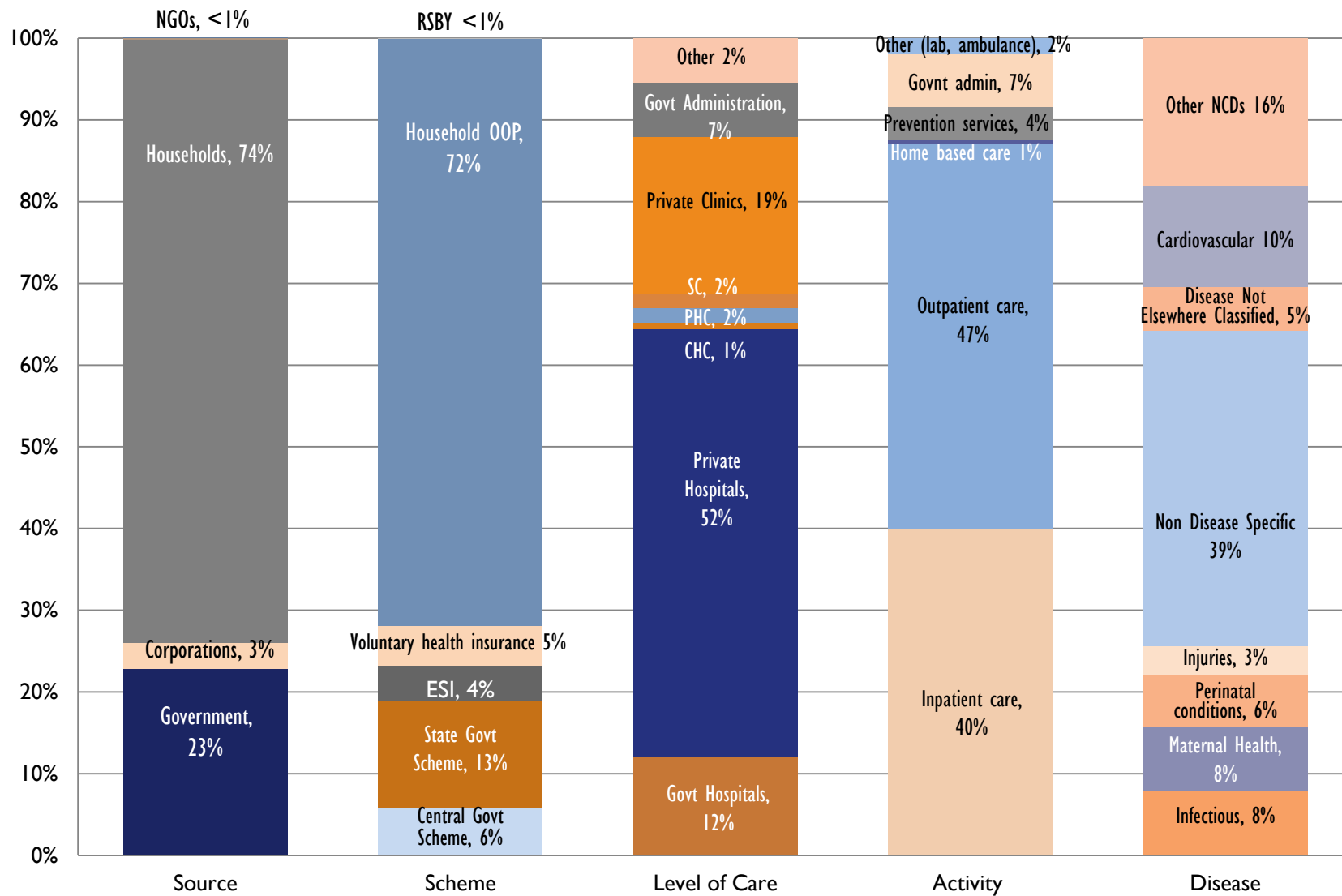
Out-of-pocket (OOP) payment is the largest financing scheme, representing 72 percent of CHE. National government schemes account for nearly one-fifth of spending, with 13 percent via state-sponsored schemes. The Employee State Insurance scheme accounts for 4 percent of CHE, and voluntary insurance schemes for 5 percent (either through individual or employer-based insurance policies).

Over half of spending takes place at private hospitals, followed by 19 percent at private clinics. Spending at government facilities accounts for approximately 16 percent of THE; the vast majority of this spending is at district hospitals. Curative care represents 87 percent of care, with 47 percent for outpatient care and 40 percent for hospitalizations. General administration and management consume 7 percent, and prevention services 4 percent. Of the spending data that could be allocated to a disease or health condition, the HA exercise found that non-communicable diseases (including diabetes, cardiovascular diseases, respiratory illnesses, cancers) constitute 26 percent of CHE. Reproductive health (maternal and perinatal conditions, family planning) account for 14 percent, and infectious and parasitic diseases followed at 9 percent.

Figure 1 illustrates this breakout of CHE.



Figure 1. Summary of Haryana 2014/15 HA Results



Policy Implications

Nearly three-quarters (72 percent) of health spending in Haryana is direct OOP payment in private facilities at the time of need. There are several possible causes for this, including households, even poor ones, perceive these facilities as providing better quality care or that government-sponsored schemes do not provide adequate financial protection for the services that are most needed. The high proportion of OOP spending shows that households have little financial risk protection. Pooling of this significant amount of resources could help make households' health payments more predictable and affordable. The situation in Haryana reflects India as a whole – since the early 2000s, household spending nationwide has been more than 70 percent. This is despite numerous schemes introduced by central and state governments to make health care more affordable in public facilities, for example, *Rashtriya Swasthya Bima Yojana* and *MukhyaMantri Muft Ilaaj Yojana*.

Analysis conducted by type of household indicates that absolute spending for health is directly proportionate to income.¹ Absolute spending is even more proportionate to social group, with scheduled tribes and scheduled castes spending less than other social groups for outpatient care but considerably more for inpatient care. The analysis found that health spending ranged between 5 and 12 percent of total household consumption, indicating no catastrophic spending. However, the spending adversely affects the poorest 80 percent of the population of Haryana, who pay a much larger proportion of their consumption of health than do the wealthiest residents.

Spending by government is skewed toward secondary care, i.e., the district hospital level. This is also reflected in the analysis of spending by activity, where prevention spending, which typically takes place at the primary care level, accounts for only 4 percent of health spending. This may be an indication of people bypassing the referral system (because of drug stock-outs, lack of available qualified personnel, or lack of perceived quality). Low prevention spending risks higher health care costs for the state, especially as the incidence of non-communicable diseases rises and behavioural risk factors are increasing.

The profile of spending by disease differs in the public and private sector. For example, 95 percent of cardiovascular spending and 97% of diabetes spending are by household OOP payment, predominantly at private providers, despite its high burden on disability-adjusted life years. In contrast, another high burden disease, respiratory illnesses, are predominantly funded by government. A more in-depth study of the availability of services at public and private facilities may explain the spending patterns of households. The package of services provided and subsidized by the government should be reviewed to ensure that it responds to the burden of disease while providing the risk protection that households need.

Recommendations for Future HA Exercises

Early and strong engagement of public and private sector stakeholders is necessary to increase response rates – the accuracy and utility of the HA findings depend largely on the data provided by these organizations. Where primary data collection is necessary, it is important that the private sector provide the necessary data. The state should consider how to improve accountability with the private sector, to encourage regular submission of non-confidential data.

Haryana and neighbouring states should utilize and continue to develop the capabilities of regional organizations to support regular production of HA. The Haryana State Health Resource Center and Post Graduate Institute of Medical Education and Research, Chandigarh are strong partners that understand and can use the SHA 2011 framework and HA methodology. States should use these resources to help produce HA estimations, leaving the states to focus on using the data for decision making.

¹ The analysis uses consumption data from the 71st round of the National Sample Survey as a proxy for income.

The SHA 2011 framework enables detailed analysis of spending by type of provider, type of activity, and disease or health condition. However, this analysis is only possible if data are available to calculate the distribution keys that are applied to spending. For this, better compilation of utilization data, particularly by disease, is useful not only for HA, but for the state to understand which services people are using.

To the extent possible, the state and central governments should continue to expand the availability of secondary spending data, building upon data already available for households (via household surveys) and for insurance (via the Insurance Information Bureau).

I. BACKGROUND AND CONTEXT

I.1 Health Accounts in India

Resource tracking in health is a key element of effective decision making at the policy level. Policymakers often do not have access to complete and detailed information on spending across the health system to use in their policy decisions. To provide such information, developing countries are using powerful resource tracking frameworks such as the System of Health Accounts (SHA) and Health Accounts (HA), a globally accepted exercise that helps countries produce the evidence that can help them define health system reform. HA findings have been critical evidence informing policy and resource allocation decisions. As HAs are produced over time, they can also be used to track progress against these policies and strategies.

India has recognized the importance and utility of HA and has done two rounds of HA at the national level. The country did a first round of HA in 2006 using health expenditures from fiscal 2001/02. The second round was conducted in 2009² for expenditures from 2004/05 (Ministry of Health and Family Welfare 2009). A key finding from the 2004/05 HA was that household spending accounts for 70 percent of total health expenditure (THE) in India. This finding was used to inform and structure the national health insurance scheme Rashtriya Swasthya Bima Yojana (RSBY). RSBY provides financial protection to the poor and helps to reduce their out-of-pocket (OOP) expenditure on health. The insurance scheme aims to support the informal sector and the population living below the poverty line. The findings were also used to advocate for the establishment of the National Health Mission (NHM).

In the Indian context, HA at the state level are important because the majority of decisions on resource allocation for the health sector, strategy design and program implementation are done by the state. Application of the HA methodology at the state level gives state policymakers reliable state-level information on the sources and uses of funds for health. HA at the state level were initially done for Karnataka (Garg 1998) and Punjab (Garg 2001), followed by Andhra Pradesh in 2004.

Recognizing the value of information generated by HA estimations, the Haryana Department of Health and Family Welfare (DoHFW) undertook its first HA exercise. As part of the exercise, the department is putting in place processes and mechanisms to institutionalize HA to ensure regular production and use. In line with the national model, the DoHFW and other state-level stakeholders such as the State-Level Health Accounts (SLHA) steering committee have decided to house the HA exercise at the Haryana State Health Systems Resource Center (HSHRC), the state-level policy think tank providing technical assistance to the department, and to the NHM in Haryana. In order to accomplish this, the state has established a HA cell at the HSHRC, under the leadership of HSHRC's Executive Director. Further, the state also appointed a nodal person from the DoHFW to coordinate the HA work and align the system and process with the National Health Accounts Technical Secretariat (NHATS). NHATS has been established at the National Health System Resource Center (NHSRC), the national-level policy think tank supporting the Ministry of Health and Family Welfare (MOHFW). The objective of NHATS is to develop an India-specific HA framework and oversee the regular production of SLHA and national HA.

NHM Haryana and HSHRC are being supported in this endeavour by USAID's Health Finance and Governance (HFG) project. During this HA exercise, the HFG project provided technical assistance

² Delays in publication of earlier reports were mainly due to the wait for household expenditure data from the National Sample Survey Organization (NSSO).



to NHM by providing the training, technical assistance, and tools and other materials required for the production of HA, using international expertise.

1.2 Objectives of Haryana State-Level Health Accounts

While Haryana has been making notable progress toward reducing maternal and child mortality, it grapples with accelerating this progress in the context of limited health resources and population growth. A key concern for the state is how to reduce OOP spending and have a financing mechanism in place to improve equity of access to health care. Given the level of traction that the internationally standardized HA methodology has around the world and the robustness of the SHA framework in providing key information on the magnitude and flow of resources through the health sector, Haryana State conducted the first round of HA estimates, for 2014/15. The objective of the exercise was to provide the state with critical information related to health expenditure flows across public, private, and external sectors. In conducting the exercise, the state aimed at understanding the health financing landscape for Haryana to answer the following key questions:

- Who finances health in the state?
- How are health care funds managed and distributed in Haryana?
- For what purpose are these resources used?
- Which diseases and health conditions does Haryana spend on?
- What is the burden of financing on households?
- What is the role of the private sector in health?

The findings from the SLHA report will be used to derive meaningful insights for strengthening decision making and priority setting in public health financing in Haryana

1.3 Methodology in Brief

The Haryana SLHA was developed using the SHA 2011 framework (OECD, WHO, and Eurostat 2011). The SHA framework has been used by over 135 countries to track the amount and flow of spending in their health sectors. It has helped ministries of health to negotiate for additional funding for health and the establishment of health insurance schemes for poorer households and to inform reallocation of health spending.

The India-specific Health Accounts Manual (Institute of Health Systems 2009), developed for the MOHFW's NHSRC, was used in conjunction with the SHA 2011 framework to derive a spending analysis tailored to the Indian context. This included specific classifications tailored to the health system in Haryana, such as analysis of spending by specific state-sponsored health insurance schemes, specific types of providers, and specific types of care such as the Indian System of Medicine (ISM).

The HA estimation comprised four stages: planning (including orientation for HSHRC on the SHA 2011 framework), data collection, data analysis, and report writing. Technical assistance was provided by the HFG project throughout the HA process, incorporating best practice for HA estimations in other countries. The exercise began in July 2014, when HSHRC was appointed the technical secretariat for conducting the HA in Haryana. In May 2015, an orientation to the SHA 2011 framework for HSHRC staff took place, which signalled the beginning of the HA exercise on a full-time basis. Secondary data collection began in June 2015 and primary data collection in August 2015; both were completed in November 2015. Data analysis was conducted in November 2015 with representatives from HSHRC, Post Graduate Institute of Medical Education and Research, Chandigarh (PGIMER), HFG India, and HFG headquarters. The preliminary data was validated with the Executive Director of HSHRC and representatives from PGIMER. Using feedback from the validation, the mapping was reviewed and modified and a draft report was completed in December

2015. This draft was shared with stakeholders for feedback. After receiving comments between February and May 2016, the HA team collected additional data to incorporate comments and finalized the HA report.

To gather health expenditure data, the technical team surveyed a wide range of institutions to understand their health spending in detail. The following primary data sources were:

- Non-governmental organizations (NGOs) involved in health, to understand flows of health resources through NGOs that manage health programs;
- Private employers, to understand the extent to which employers provide health insurance through the workplace and, where applicable, which employers manage their own health facilities or provide workplace prevention programs; and
- Private insurance companies, to understand total expenditures on health by insurance companies through health, motor (accident), or any other type of insurance.

The following secondary data was also collected:

- Audited budget report from DoHFW and NHM to understand government expenditures;
- Audited budget report from other departments for spending information via on-site facilities (e.g. Department of Railways) or through medical reimbursements to civil servants;
- RSBY report from the RSBY Management Information System³
- Annual reports from the Employee's State Insurance Corporation (ESIC) to capture spending for eligible members;
- The Central Government Health Scheme (CGHS) facility in Chandigarh to capture spending for eligible CGHS members residing in Haryana
- Demands for grants (DDGs) for FY 2015/16 to understand the expenditure of the central government on Railway Hospitals and the Health Directorate of Indian Railway website⁴, for the number beds in Railway Hospitals in Haryana
- National Sample Survey Office's (NSSO) Socio-Economic survey (71st Round) and Consumer Expenditure Survey (68th Round) for household spending in Haryana
- Insurance Information Bureau (IIB) of India to help unpack the spending on health claims settled and reported by insurance companies
- Utilization data from the health management information system (HMIS) portal, the MMIY scheme and Panchkula Civil Hospital
- List of vaccines from the central government distributed to the Haryana state
- For costing data, PGIMER costing study of district hospitals in Haryana, World Health Organization (WHO) CHOICE, RHInterchange⁵, and Resource for the Future's 2007 "Cost-effectiveness of Disease Interventions in India" study.

³ <http://www.rsby.gov.in/Index.aspx>. Accessed December 2015

⁴ http://www.indianrailways.gov.in/railwayboard/uploads/directorate/health/health_1.jsp accessed on 15 Jan 2016

⁵ <https://www.myaccessrh.org/rhi-home>. Accessed November 2015

Spending data collected from two or more sources were triangulated and cases of double-counting removed. Each individual spending line was then allocated a code for each of the eight SHA classification dimensions. Aggregated spending data had to be analyzed by detailed categories, as per the SHA 2011 framework, for example, analysis of government spending by type of provider and type of service (inpatient curative care, outpatient curative care, and prevention spending). In these cases, distribution keys were calculated using utilization data weighted for unit costs. More details on the calculation of distribution keys and other aspects of the methodology can be found in the Haryana 2014/15 State Health Accounts: Methodological Report (Ahmed, Bhuwantee, Cogswell et al. 2015).

As recommended by WHO, the Health Accounts Production Tool was used for creating the HA surveys, for data import and data analysis. The Production Tool facilitates the analysis of spending data with in-built functionality for managing double-counting, weighting, automatic quality checks, and generation of HA tables.

1.4 Accomplishments

The HA estimation strengthened the HSHRC and PGIMER staff's knowledge of and experience with HA and the SHA 2011 framework. Through training and involvement in data analysis, PGIMER is equipped to become a regional expert on the framework, enabling the institute to support the production of HA in both Haryana and neighbouring states.

The HA team used secondary data to the greatest extent possible in order to save time and resources and avoid survey fatigue among respondents. This was successfully done in the case of insurance spending (using information from the IIB) and household spending (using the NSSO's 71st round household survey). A private data collection firm was hired to support primary data collection; it could support future HA estimations in Haryana and / or in other states.

Haryana is the one of the first state that has completed its SLHA using the SHA 2011 framework. The experience gained during this process will provide useful lessons learned for other states that will produce HA. The 2009 India-specific Health Accounts Manual (Institute of Health Systems 2009) shows how HA should be done in India, including guidance for specific classifications of spending. However, it is based on an earlier (2000) version of SHA. At the time of the HA estimation in Haryana, the manual had not yet been updated to incorporate the updates of the SHA 2011 framework. The HA team therefore used a combination of the standard SHA 2011 framework and the 2009 manual. This approach will inform the ongoing updating of the India-specific manual.

1.5 Challenges

During primary data collection, the HA team experienced a low response rate from the private institutions – NGOs, private corporations, and insurance companies – that were surveyed. While this is not unusual for a first HA estimation, greater engagement with the private sector will be required in future to improve the accuracy of the HA. Where possible, secondary data (e.g., insurance spending data from IIB) were used to fill the information gap, with the use of distribution keys to break down spending to the SHA classifications. For NGOs and employers, reliable secondary data was not available, resulting in underestimation of health spending.

It is unclear whether household health spending obtained from the NSSO survey includes drug spending outside of a facility-based episode of care. The logical flow of questions in the survey indicates a focus on facility-based care. If NSSO results do include drug spending at private pharmacies, it was not possible to disaggregate them from drug spending during an episode of curative care. Drug spending by households is therefore likely underestimated.

2. KEY FINDINGS

This chapter provides a summary of the HA results, also listed in Table I. The full results are shown in the HA tables in Annex A.

Table I. Key HA Findings

Indicator	2014/15 (INR unless otherwise stated)
Total population (2014/15)	26,776,000*
Exchange rate (INR/US\$1)	61.05
Haryana GDP	4,353,100,000,000
GDP per capita	162,575
Total current health expenditure (CHE)	84,632,413,600 (US\$ 1,386,280,321)
Total capital health expenditure	2,193,217,460
Total Health Expenditure (THE)	86,825,631,060 (US\$ 1,422,205,259)
THE per capita	3,243 (US\$ 53)
THE/GDP	1.99%
Health care-related spending - Current	4,054,372,951
Health care-related spending - Capital	5,414,346,000
Total government health expenditure	21,375,789,309
Current government health expenditure	19,182,657,840
Capital government health expenditure	2,193,131,469
Haryana government health spending as a percentage of total Haryana government expenditure	1.94%**
Household OOP spending (direct payments to providers only) as a percentage of CHE	71.9%

*Source: India Census

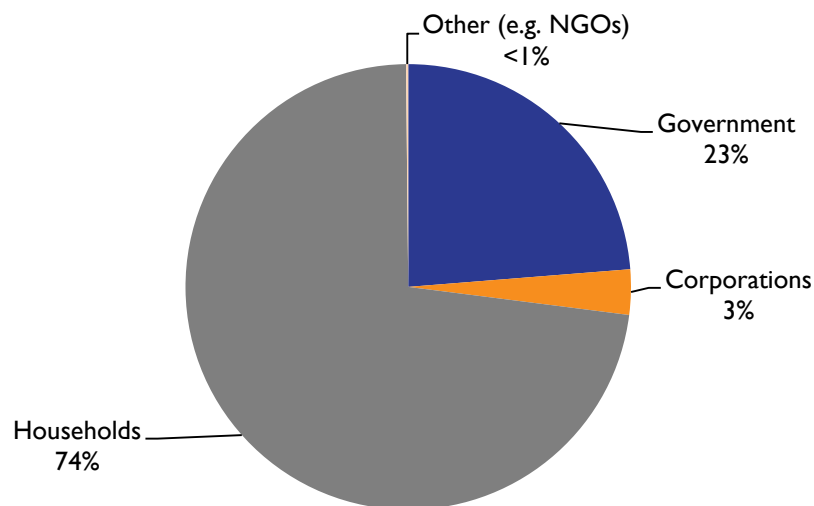
**Total Haryana government expenditure represents Revised Estimates for 2014/15. Source: Finance Department, Haryana

2.1 Who Pays for Health Care in Haryana and How Much Do They Contribute?

Financing sources include all entities and institutions that contribute funds to the health system. Households, primarily via OOP payments for health goods and services, are the biggest contributors to health spending in Haryana State, representing 74 percent of health spending (Figure 2). This level of spending by households is higher than in neighbouring lower-middle-income countries, such as Bangladesh, Sri Lanka, and Vietnam. A more detailed analysis of household spending is provided in Section I.

Government contributes 23 percent of health spending, primarily via central and state government revenues. Corporations contribute 3 percent of health spending, primarily via contributions to insurance schemes paid on behalf of their employees. NGOs and donors together represent less than 1 percent of current health expenditure; however, due to a poor response rate, the expenditure from these entities may be underrepresented.

Figure 2. CHE by Financing Source



2.2 How Are Health Care Funds Managed and Distributed in Haryana?

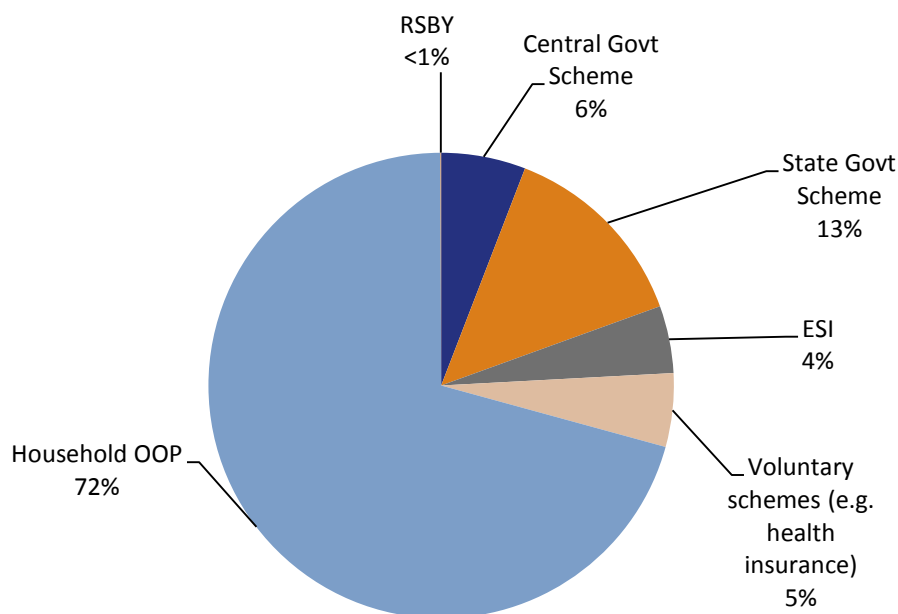
Risk pooling in health spending is one indication of the level of equity in paying for health care. Pooling risk across a large group of individuals is important to ensure that risks are spread evenly so those who cannot afford health care and are most sick are supported by those who are wealthier and less sick.

In the SHA 2011 framework, Financing Schemes describe the type of financing arrangement through which people receive health care. This classification can give an indication of the level of risk pooling in the financing for health in Haryana.

Households contribute 74 percent of CHE to the health system, only 2 percent of which goes to insurance schemes. The remaining 72 percent of health spending is incurred by households paying out of pocket for the full cost of health goods and services at the time of seeking care. The level of household OOP spending in Haryana is very high, well more than the WHO's guidance to keep OOP spending below 20 percent of THE in order to reduce the likelihood that households incur catastrophic expenditures when seeking care (Xu et al. 2010).

The public health sector, split between the "Central government" and "State government" schemes and RSBY, accounts for a total of 19 percent of CHE and pools resources (and therefore spreads the risk) across the entire population. An additional 4 percent of government spending is allocated to the Employee State Insurance (ESI) Scheme, with the level of risk pooling limited to employees in the organized sector. Another 5 percent of health spending is pooled via private voluntary financing schemes, predominantly via group or individual insurance. Voluntary, regular pre-payments to these schemes pool resources across policyholders in order to reduce the financial risk for households that might otherwise incur large outlays at the time they receive care.

Figure 3. CHE by Financing Scheme

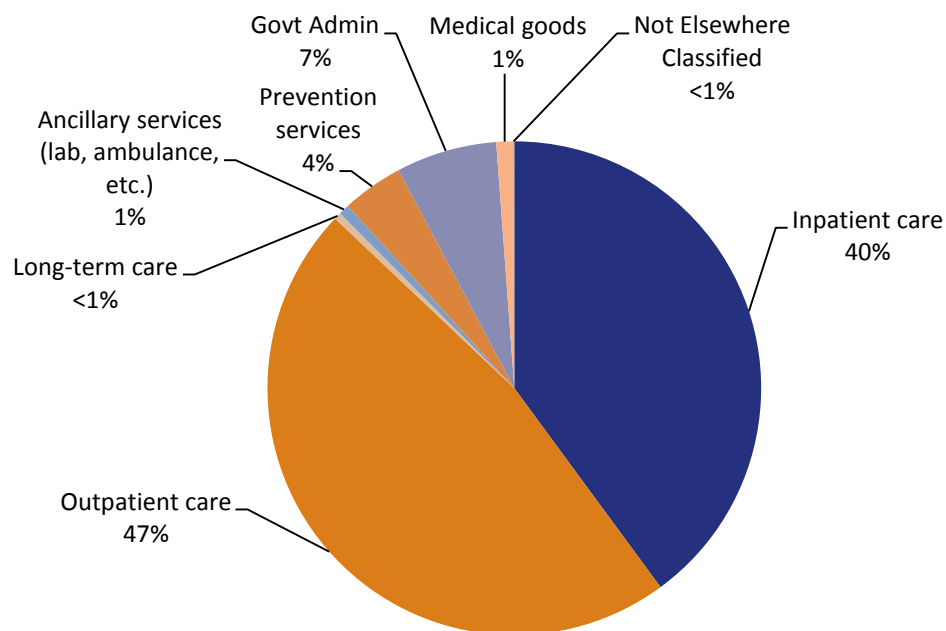


2.3 What Types of Services Are Provided with Health Funds?

Health spending in Haryana is predominantly for curative care. Forty-seven percent goes to outpatient care and 40 percent to inpatient care at all health facilities, both public and private. Deliveries are counted as inpatient curative care. At 4 percent of CHE, spending on prevention services is low. Prevention services include spending on family planning, antenatal care, postnatal care, immunizations, and information, education and communication (IEC). If other prevention services were provided as part of an integrated package of services (e.g., IEC delivered as part of a facility visit), then prevention spending is underestimated in the HA estimates, because those services that were delivered as part of a package could not be disaggregated to identify the prevention component. This breakdown between spending on treatment and prevention provides insight into cost efficiency: limited prevention spending may cause patients to seek treatment only after illnesses become more acute – and therefore more expensive to treat.

General management and administration, which is conducted by the state government units, such as Department of Health Services (DHS), Department of Medical Education and Research (MER), AYUSH, and other ministries, accounts for 7 percent of recurrent spending.

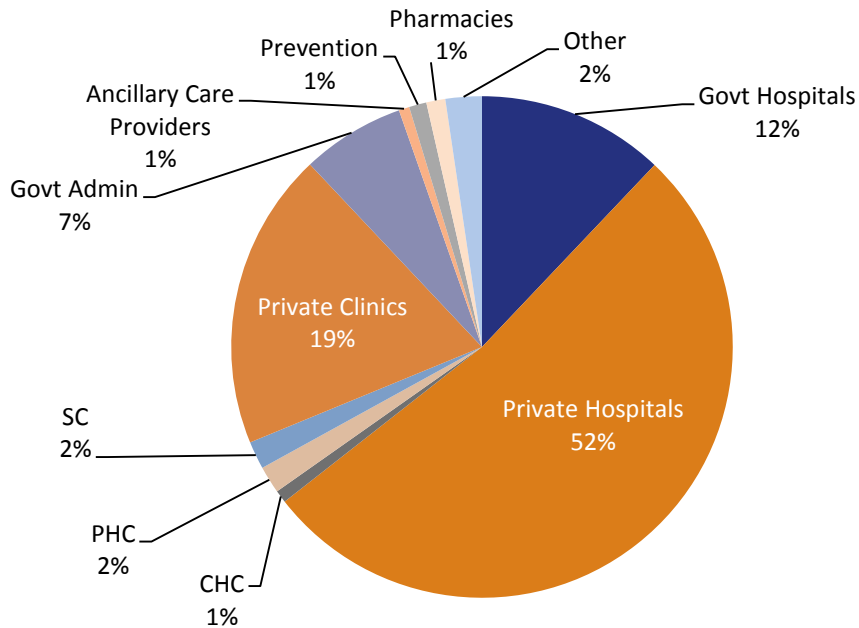
Figure 4. CHE by Health Care Function



2.4 How Are Health Care Funds Distributed Between Health Care Providers?

An analysis of spending by provider reveals that the majority of spending occurs at hospitals, with private and public hospitals together accounting for 64 percent of CHE. Public hospital spending is predominantly at the secondary care level.⁶ Private hospitals provide both secondary and tertiary care. Spending by public sector primary care facilities (community health centers (CHCs), primary health centers (PHCs), and sub-centers) is small at 4 percent. Fifty-nine percent of spending by private hospitals is for inpatient care, and the remaining 41 percent is on outpatient care.

Figure 5. CHE by Provider



⁶ As per NHSRC Budget Tracking toolkit.

2.5 Which Diseases and Health Conditions Does Haryana Spend On?

There was limited information available on spending by the disease/health condition category. Therefore, estimations were based on the health service utilization data weighted by the intensity of resource use. Non-communicable diseases (NCDs) receive the highest allocation of funds, 26 percent of CHE. Of the NCDs, cardiovascular diseases make up the largest portion of spending at 10 percent of CHE, followed by diabetes at 5 percent and cancer at 4 percent. Mental health, respiratory, genito-urinary, and oral and other non-communicable diseases all comprise 7 percent of CHE. Following NCDs are infectious disease at 9 percent and maternal health (including antenatal, delivery, and postnatal care) at 9 percent of CHE. Infectious diseases comprise: 1) HIV/AIDS and other sexually transmitted diseases (0.03 percent of CHE), tuberculosis (1 percent), malaria (0.7 percent), respiratory infections (3 percent), diarrheal diseases (0.9 percent), neglected tropical diseases (0.01 percent), vaccine preventable diseases (3 percent), and other unspecified infectious and parasitic diseases (0.6 percent).

Approximately 5 percent of CHE is spent on perinatal conditions. However, given the nature of disease / health condition classification in the SHA 2011 framework, immunizations given to infants and children are counted as part of the infectious disease spending. Three percent of CHE is spent on injuries and 1 percent on family planning.

“Non-disease specific” spending represents government administrative support to the entire state health sector and other spending that is difficult to assign to a particular disease. In the absence of more detailed data, the HA team chose not to arbitrarily disaggregate this spending to specific diseases or conditions. In contrast, “Disease not elsewhere classified” represents spending that is likely related to a specific disease but that the HA team was unable to allocate to a disease area due to lack of data. As improvements in data collection enable a greater proportion of spending to be disaggregated to a disease or health condition, this analysis will also permit a comparison of spending with state priorities.

Figure 6. CHE by Disease or Health Condition

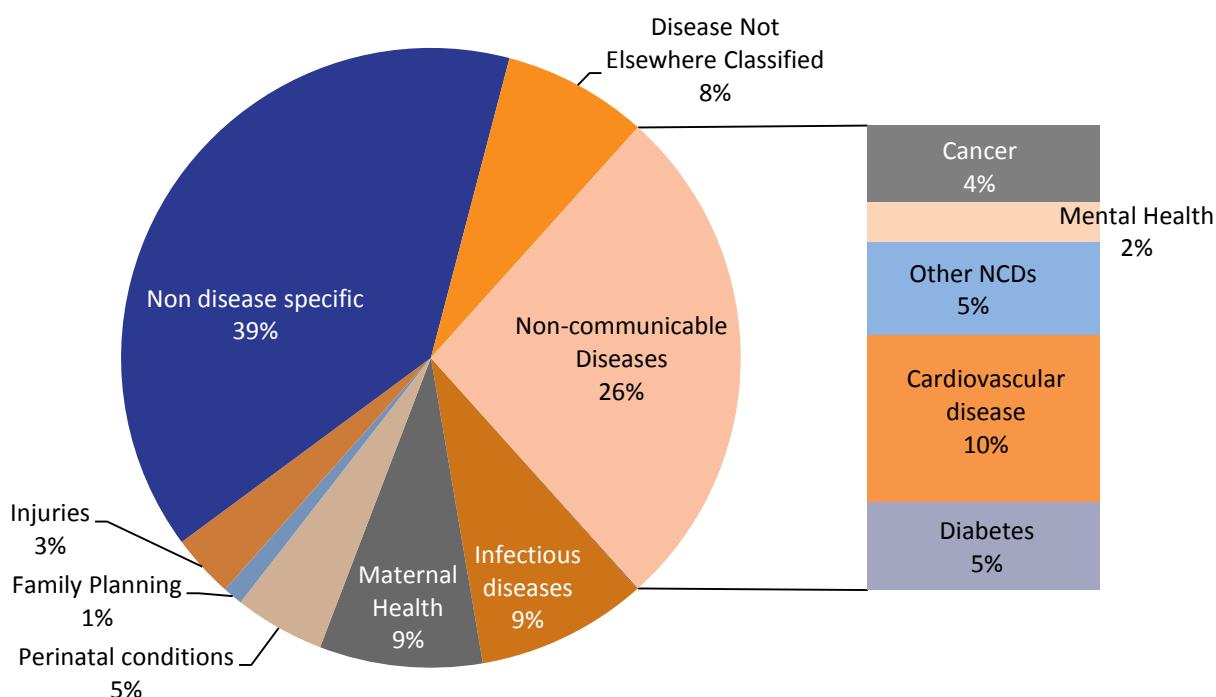
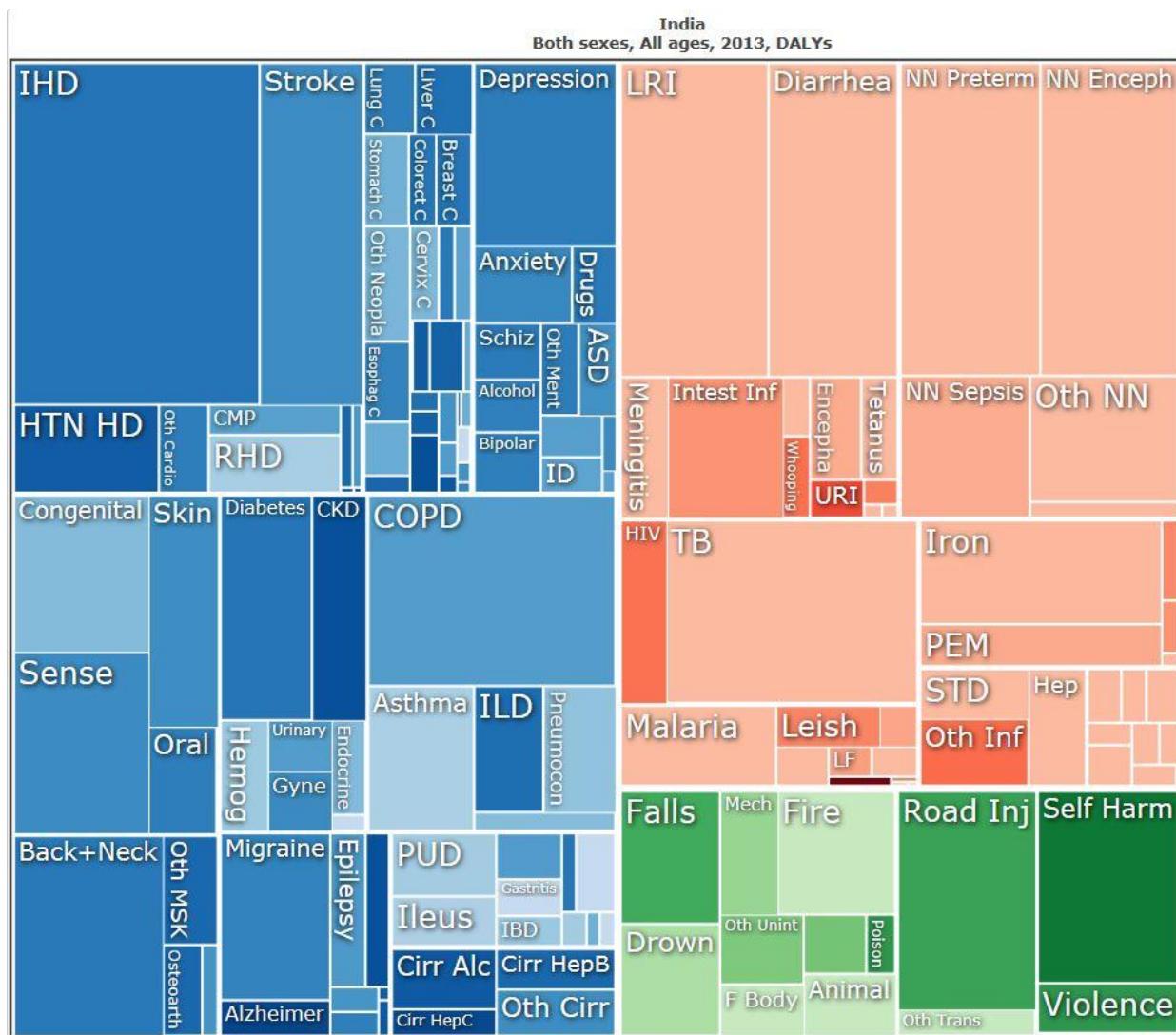


Figure 7 shows the disease burden in India (measured in disability-adjusted life years). Blue represents NCDs, red represents communicable, maternal, neonatal, and nutritional causes, and green represents injuries. The darker the color, the larger the increase in that disease's burden between 1990 and 2013. NCDs currently represent approximately half of the disease burden and they are an increasing percentage of the burden (IHME 2015). The spending on NCDs (26 percent) is commendable. However, further analysis is required to confirm whether this is sufficient to respond to the increasing burden of NCDs. In addition, financial risk protection for households should be monitored as the majority of spending on NCD is currently incurred by households (84 percent).

Figure 7. Disease Burden in India, Both Sexes, 2013

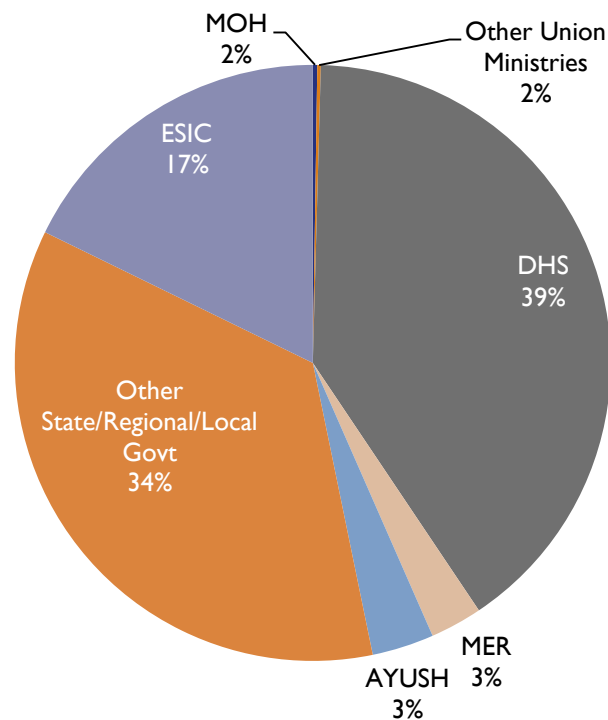


* Source: IHME (2015)

2.6 Which Entities Manage Government Spending?

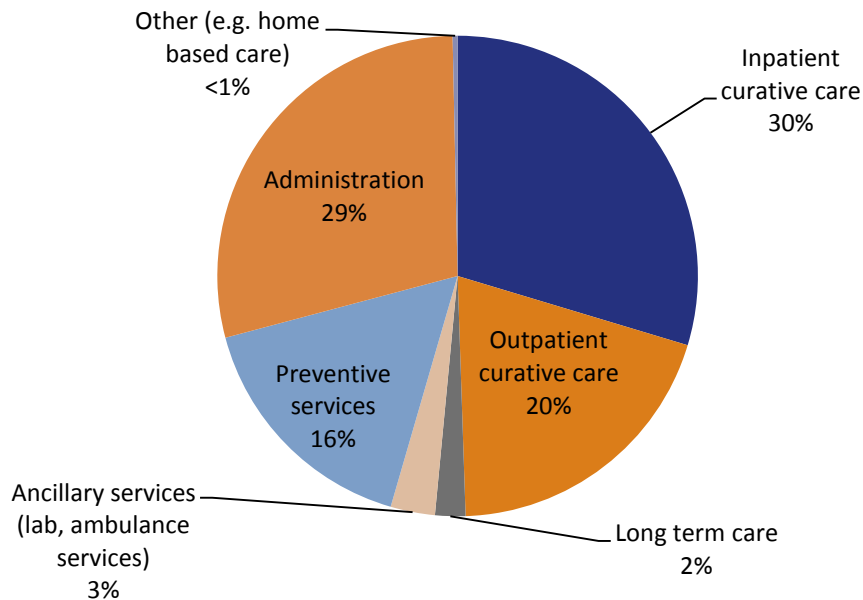
In the SHA framework, the Financing Agent classification comprises the institutional units that manage the financing schemes. For example, in household OOP spending, the household itself is considered the agent since it decides how much to spend and which services to seek. Figure 8 shows the key financing agents of government spending. The state governs the largest piece of government spending, 79 percent, which is to be expected since health is predominantly a state-managed affair. The ESIC is also notable and is the second biggest agent, managing nearly one-fifth of government spending. Central governments manage 0.4 percent of government spending, for example, the RSBY scheme.

Figure 8. Government Spending by Financing Agent



An analysis of government spending by health care function is shown in Figure 9. Curative care accounts for half of CHE. In its role as the steward of the state health system, the government also spends 30 percent of health spending on administration, which includes policy formulation, financial administration, and other activities at the state level. Preventive services represent 15 percent of health spending.

Figure 9. Government Spending by Health Care Function

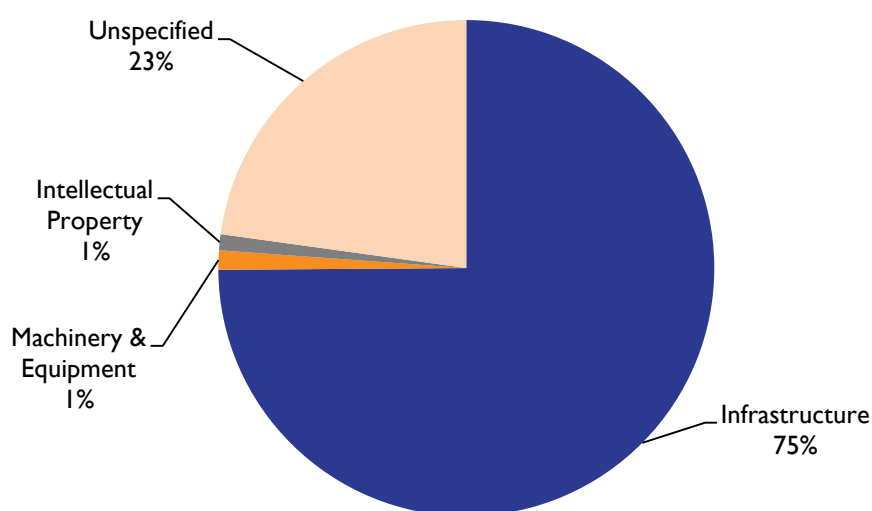


Spending that doesn't fit the functional definition of health, according to SHA 2011, but is still health-related, is classified as "health care-related (HCR)." This includes spending on things such as non-emergency and non-professionally recommended transportation by the Food and Drug Administration. Health care-related spending amounted to Rs. 4.05 billion.

2.7 Capital Spending

Capital spending refers to the total value of assets acquired during the accounting period that are used continuously in the production of health services for more than one year. SHA 2011 separates capital from current expenditure; the sum of both capital and current is “total health expenditure.” In 2014/15, capital expenditure of Haryana was 2.5 percent of THE. Seventy-five percent was spent on infrastructure development such as the construction of residential and non-residential buildings. This was followed by 1 percent for the purchase of machinery and equipment, which includes medical, transport, and communication technology equipment, and 1 percent for intellectual property.

Figure 10. Breakdown of Capital Spending

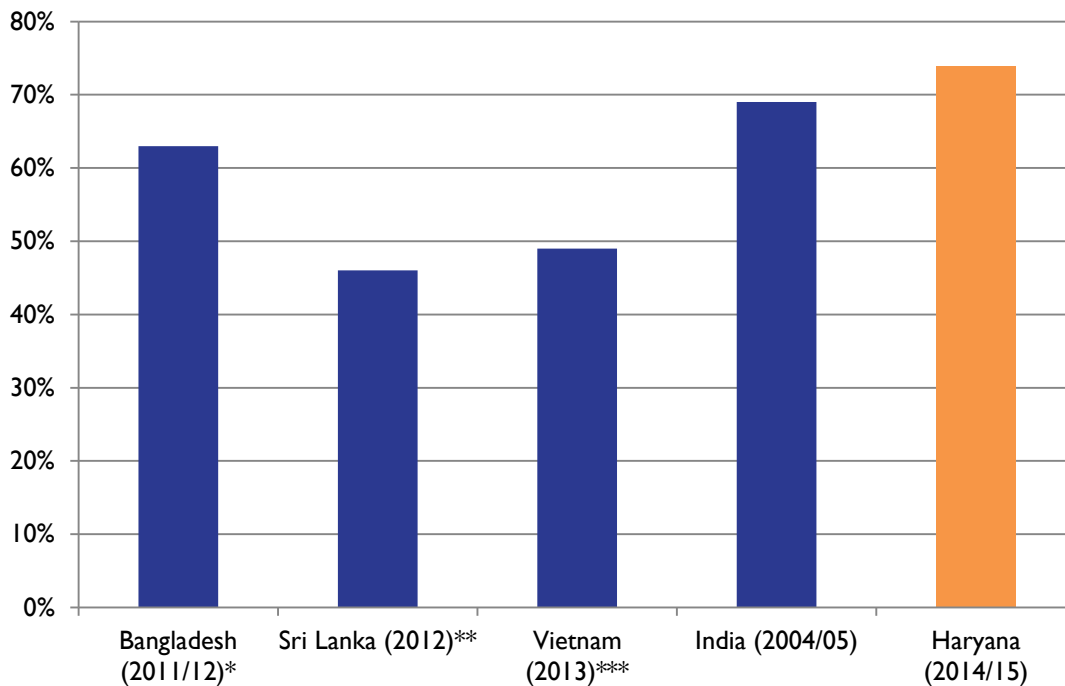


Capital spending for items that are not directly for health services but are “health-care related” were also analyzed. It totaled Rs. 5.41 billion and included spending on education and training of health personnel, and research and development in health.

3. ANALYSIS OF HOUSEHOLD SPENDING

With households representing nearly three-quarters of health spending, this section looks in more detail at household spending. Figure 11 shows that, in comparison to several countries in the region that share the same income status⁷, Haryana incurs the highest proportion of household OOP spending.

Figure 11 OOP Spending as a Percentage of THE



*Source: <https://www.hfgproject.org/wp-content/uploads/2015/05/Tracking-Urban-Health-Expenditures-Preliminary-Results-from-Secondary-Analysis-of-Bangladesh-National-Health-Accounts.pdf>

**Source: <http://www.ihp.lk/publications/docs/HESI403.pdf>

***Source: <http://apps.who.int/nha/database/ViewData/Indicators/en>

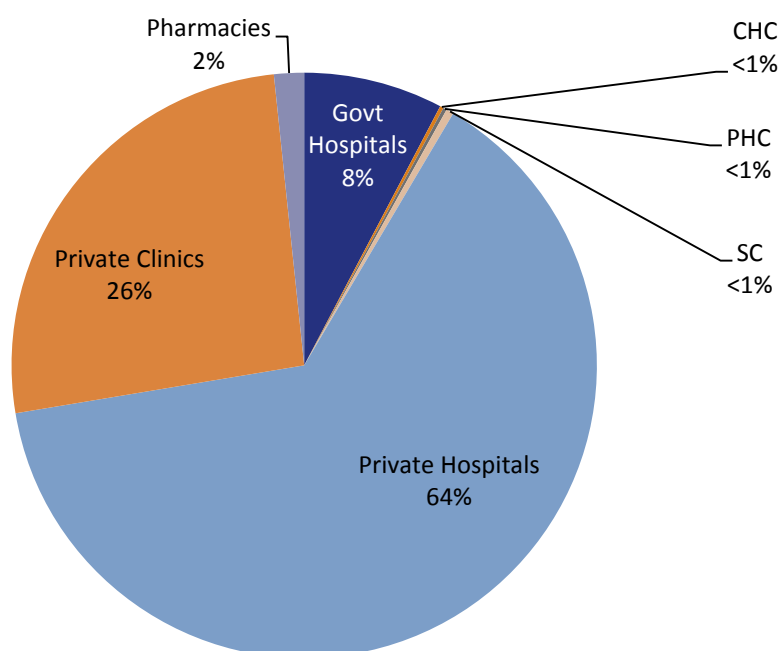
⁷ These are lower-middle income countries, as defined by the World Bank

3.1 Where Are Households Spending Out Of Pocket?

The HA exercise shows that, in Haryana, 97 percent of household spending is incurred by households paying out of pocket for health goods and services at the time of seeking care, which can be a significant financial burden. High levels of OOP payments are inequitable and an inefficient way to finance health care in comparison to pre-payment schemes, which spread payments into more predictable, affordable amounts.

The HA exercise also broke down household spending by type of health care provider. Ninety-two percent of household spending is on private sector providers, 64 percent at private hospitals, 26 percent at private clinics and 2 percent at retail pharmacies (Figure 12). Eight percent of household spending is at public (mainly district) hospitals and 0.8 percent at public primary care providers (CHCs, PHCs, and sub-centers). This low proportion of OOP spending at public sector facilities is expected, given the variety of government-sponsored schemes for free (or subsidized) health care in these facilities.

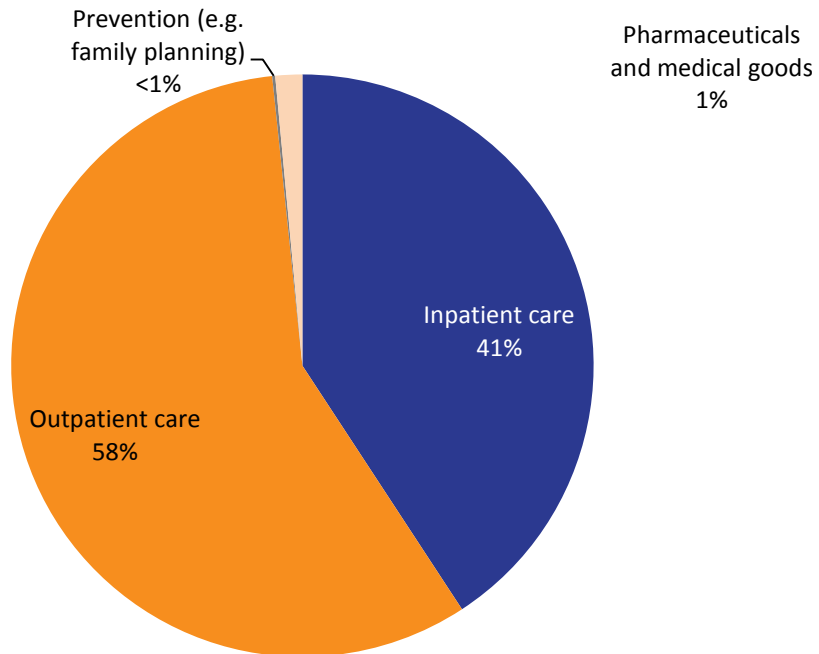
Figure 12. Household Spending by Type of Provider



3.2 What Health Services Are Households Purchasing?

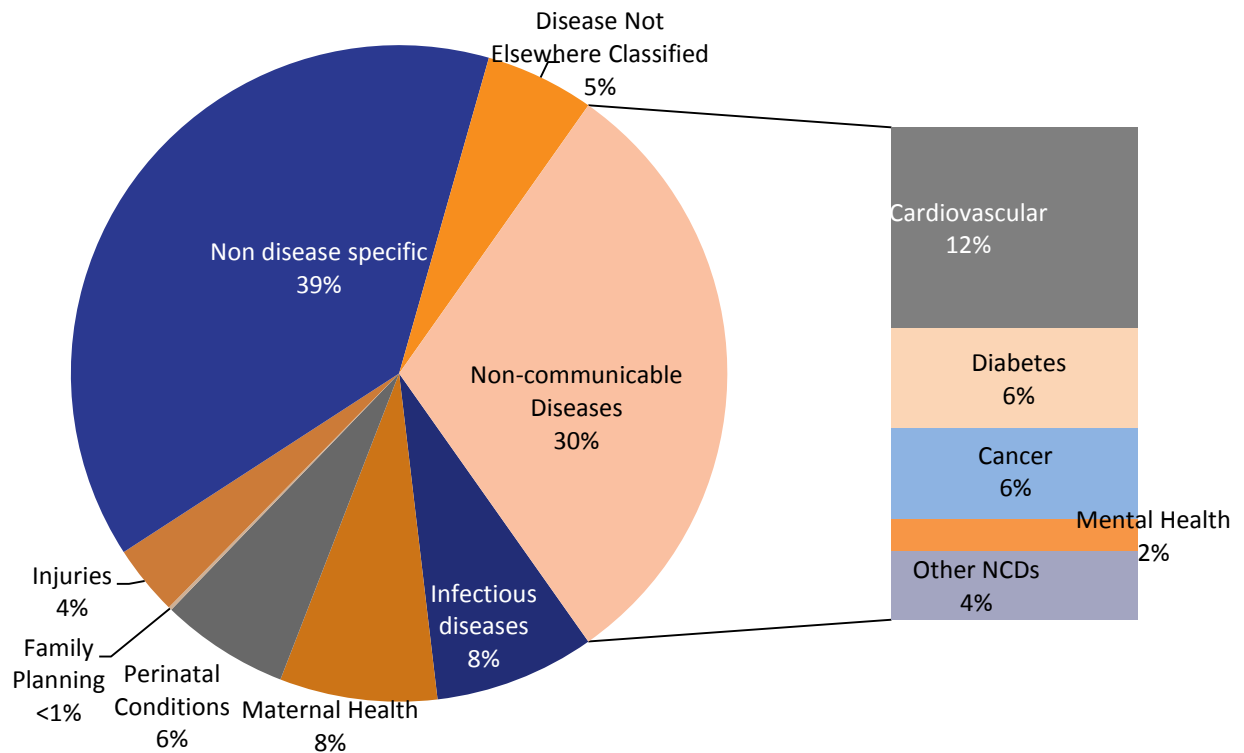
Figure 13 illustrates that household spending goes primarily to outpatient curative care (58 percent); 41 percent goes to inpatient curative care and the remainder is spent on preventive services, and pharmaceuticals and medical goods.

Figure 13. Spending Managed by Households by Type of Service



Thirty percent of household spending is on NCDs (Figure 14). The disease area of greatest spending is cardiovascular diseases, at 12 percent. This is followed by diabetes and cancer at 6 percent each and mental health and genito-urinary disease at 2 percent each. Household spending on infectious diseases and maternal health is 8 percent each, similar to the overall disease distribution of spending.

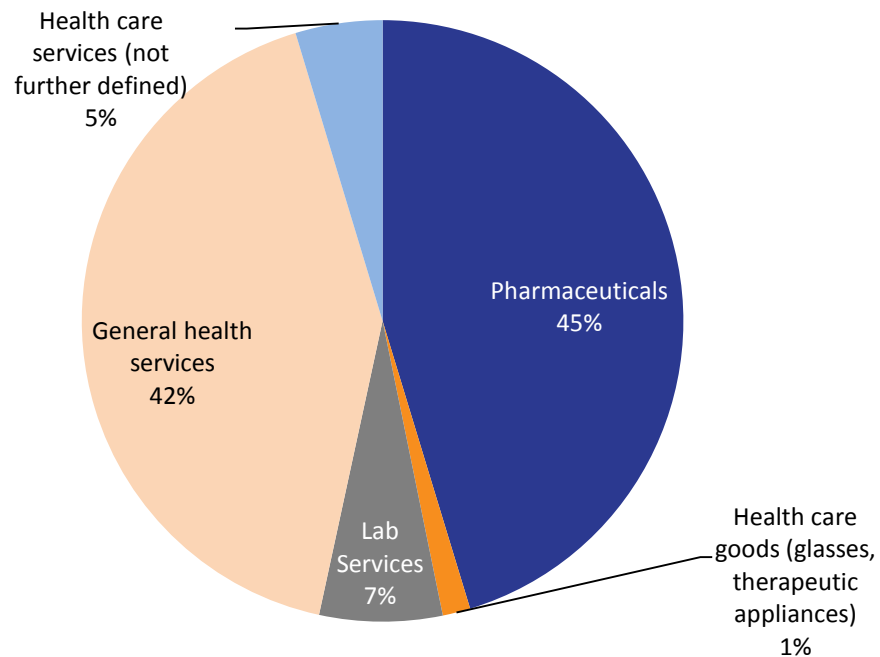
Figure 14. Household OOP Spending by Disease or Health Condition



Forty-five percent of total household spending is on pharmaceuticals, 42 percent on health care services, 7 percent on laboratory services and 1 percent on health care goods (Figure 15).

Household expenditure data was analysed from the NSSO household survey. That survey asked respondents to report total spending by category (doctor's fees, medicines, x-rays, and other diagnostic tests). However, at the provider level, respondents were not given the option to report "private pharmacy." Therefore, the HA exercise could not determine if the spending on medicines was part of an episode of care at a facility, or if the medicines were purchased independently, for example at a private pharmacy.

Figure 15. Household Spending on Inputs

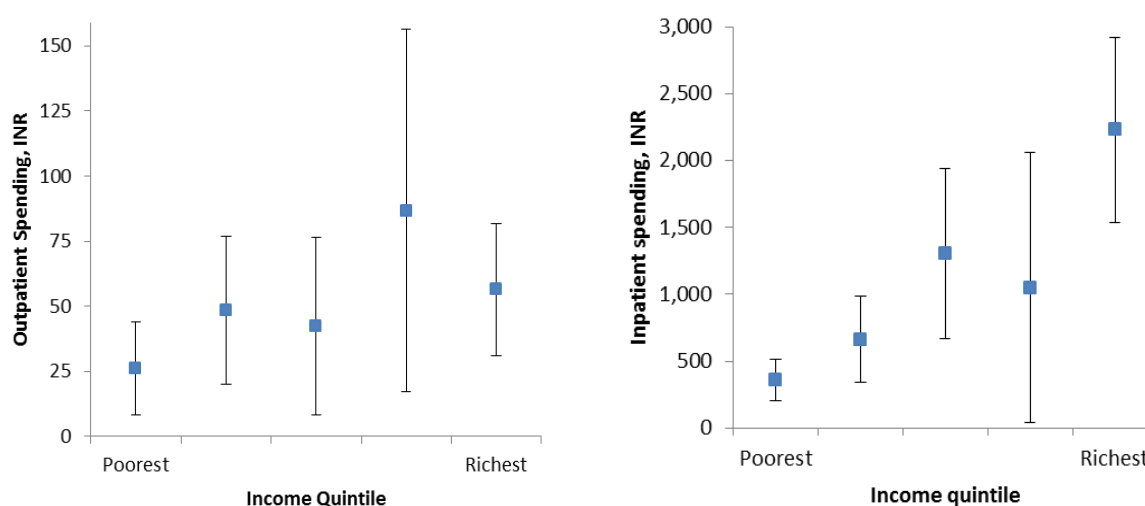


3.3 Household Spending Analysis by Income Quintile

Using the data collected from the NSSO survey, the HA team divided the respondents into five groups based on their reported monthly consumption of durable goods, wages in kind, home grown stock, and free goods. In the absence of a wealth index in the household survey, the estimate of monthly consumption is used here as a proxy for monthly income.

An analysis of household spending on health reveals that spending at an absolute level increases with income – richer households spend more than others did on outpatient and inpatient care. The richest fifth average about six times as much spending as the poorest fifth for inpatient admissions and twice as much for outpatient services (Figure 16). They also receive almost all of the insurance reimbursement, indicating that few lower-income households have health insurance or are reimbursed through their employer.

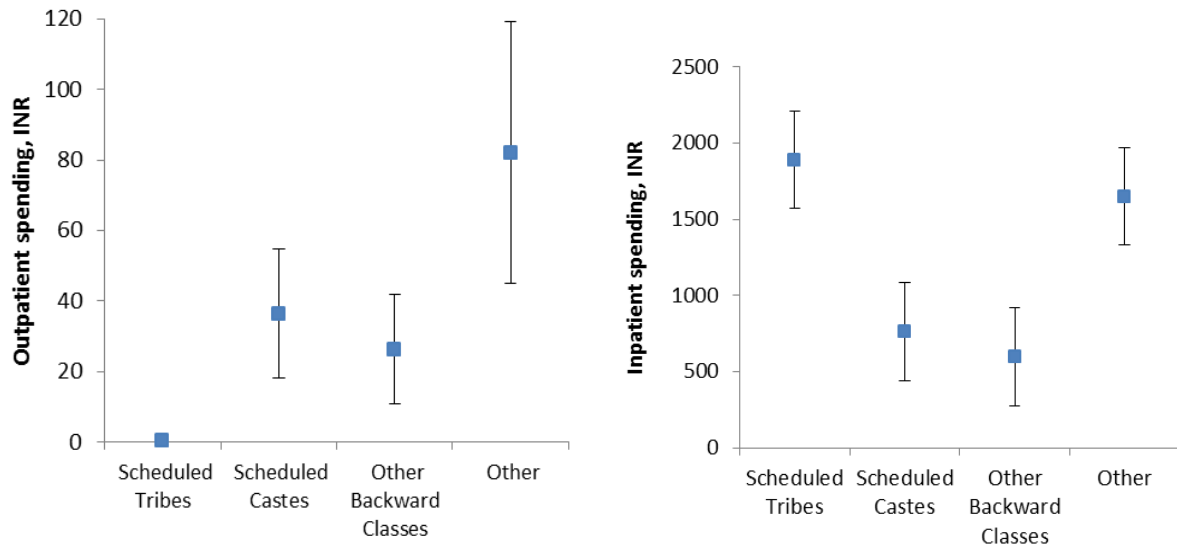
Figure 16. Household Spending by HFG-compiled “Income Group”⁸ for Outpatient and Inpatient Care



The NSSO survey also asked respondents’ social group (e.g., scheduled tribes, scheduled castes, other backward classes, and other). The data shows that social group is a stronger indicator of spending than is income (Figure 17). For outpatient care, members of historically disadvantaged groups spent significantly less than other social groups. However, for inpatient care, the data show that scheduled tribes paid more than any other social group. This is likely to be because of the high use of private providers, even by poorer households.

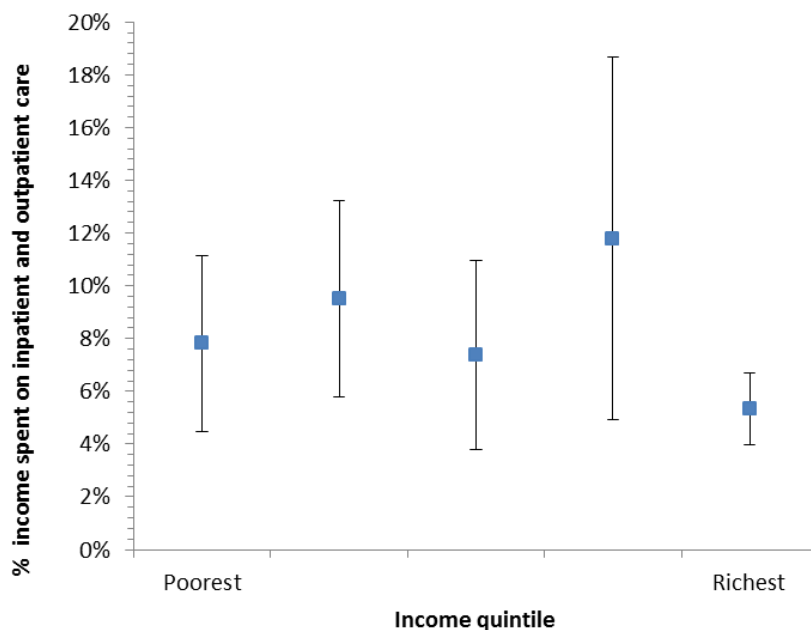
⁸ The household’s annual income was divided into five groups containing approximately equal numbers of people, and analyzed the medical spending of each individual by the income of his or her household

Figure 17. Spending By Social Group for Outpatient and Inpatient Care



An analysis of medical spending as a share of total household consumption was conducted to shed light on whether or not the OOP payments that households made on health resulted in catastrophic spending. Spending for health ranges between 5 and 12 percent of total income. Health spending as a proportion of household income is similar across the lower 80 percent of households, but the richest 20 percent of households spend a smaller share of household income on outpatient care than do other income groups. These results show that spending as a proportion of consumption is higher for low-income households. The official definition for catastrophic spending is when a household's health spending accounts for "40% [or more] of a household's non-subsistence income, i.e. income available after basic needs have been met" (Xu et al. 2005). Even using consumption as a proxy for income, which may overestimate the proportions of health spending, the NSSO data suggest that these spending levels do not represent catastrophic spending.

Figure 18. Percentage of Household Income Spent on Inpatient and Outpatient Care



4. POLICY IMPLICATIONS

High out-of-pocket spending leaves households with little financial risk protection

The vast majority of household spending in Haryana (92 percent) is at private providers. This may be due to households paying for specialised services that may not be easily available in the public sector. However, it is possible that many of the households are paying to use private providers for services that are available free in the public sector. Stakeholders mentioned that fewer drug stock-outs, greater availability of doctors, and perceived better quality of care at private providers were possible causes for the latter. The government in Haryana may want to conduct further analysis of household spending behaviour, in order to confirm whether OOP spending in the private sector is due to low perceived quality of care in the public sector or because of household provider preferences. Further analysis may be needed to be conducted to ensure that the benefits for schemes such as MMIY and RSBY are providing financial risk protection for services that are most needed.

The 2004/05 India Health Accounts found that over 70 percent of health spending was out of pocket. This led to the establishment of numerous government-subsidized initiatives such as the National Rural Health Mission, RSBY and MMIY, to reduce the burden of spending on households. However, 10 years later in Haryana, the OOP share of health spending remains high. While the analysis of the NSSO data does not indicate catastrophic health spending, Figure 18 suggests that the poorest three quintiles still spend a larger proportion of their income on health than the richest quintile. This finding, together with households supporting nearly three-quarters of total health spending, is reason for concern. OOP spending provides neither financial risk protection for households nor a risk-pooling mechanism for the government to effectively manage health resources.

A 2010 WHO study (Xu et al., 2010) suggests that OOP spending should remain below 20 percent of health spending, to minimize the risk of catastrophic spending or impoverishment from seeking health care. At Haryana's current share of OOP spending, the study estimates that more than 6 percent of households may suffer catastrophic spending or impoverishment. Further study of household spending, especially to include drug spending at pharmacies, is needed to confirm how Haryana compares to this benchmark and to confirm the analysis presented in Section 3.3.

Government spending leans toward secondary health care

Forty-one percent of government spending goes to public hospitals, twice what the government spends in PHCs, CHCs, and sub-centers. While recognizing the cost differences in running the different types of facilities, the overall share of spending between the two levels warrants a closer look to identify user and provider behaviour. For example, patients may be bypassing the referral system and making the district hospital their entry point into the health system because they perceive a lack of quality, drug-stock-outs, or unavailability of qualified personnel at primary care facilities. In addition, primary care facilities may be excessively referring patients to the district hospital, because they lack the resources to offer preventive care and to adequately treat patients.

Understanding the causes for this distribution of spending between levels of care will help the government to assess whether resource re-allocations may be needed. Greater investment at CHCs, PHCs, and sub-centers could improve the quality of services by increasing the availability of qualified personnel and ensuring a regular supply of pharmaceuticals and supplies. This in turn would help to improve utilization in public facilities and contribute to lower OOP spending.

Low prevention spending risks higher health care costs

Health prevention and promotion services are more cost-effective for a health system than curative care. The low share of prevention and promotion spending causes a risk that households will access more costly curative care at hospitals when they get sick. Increasing spending on prevention services has the potential to reduce the incidence for communicable, but also non-communicable diseases. Since 1990, NCDs overtook communicable, maternal, neonatal and nutritional diseases as the primary cause of death in India⁹. As countries grow economically, such a transition from “traditional” causes of deaths that are often related to poverty, to “modern” causes linked to lifestyle behaviours is common (WHO, 2009). This equally applies to a relatively wealth and growing state such as Haryana. Therefore, greater investments in prevention services can not only help to curtail the incidence of NCDs, but will also help reduce health care costs in the long run.

Profile of health spending by disease differs in the public and private sector

For certain diseases or conditions (e.g. malaria, diarrheal diseases, family planning, and nutritional deficiencies), the government is the primary source of spending. This demonstrates the commitment of the government to tackle diseases that affect a large group of the population in Haryana, particularly poorer households. However, as Figure 7 showed, NCDs is the primary cause of deaths in India and potentially Haryana’s, assuming that the disease profile is broadly consistent with the national level. At the same time, 84 percent of NCD spending is financed OOP by households. Using the Health Accounts data to understand what services households are paying for OOP can help to review the minimum package of services provided in public facilities to ensure that it responds to the population needs. Equally, these HA findings can also be used to monitor whether government-subsidized schemes such as RSBY and MMIY are providing the appropriate financial risk protection for the target groups.

⁹ IHME. 2015

5. RECOMMENDATIONS FOR FUTURE RESOURCE TRACKING EXERCISES

Early and strong engagement of public and private sector stakeholders in the HA process

The completeness and accuracy of the HA depends greatly on public and private sector actors to provide spending data. It is therefore crucial that these stakeholders are part of the HA process from beginning to end, and that the importance of their role is highlighted. The HA Steering Committee should include representatives from actors such as the DoHFW, the Finance Department, NGOs, insurance companies, and employers. Representatives from umbrella organizations for the private sector could also be helpful on the Committee as they can facilitate data collection by communicating the data collection exercise to a large number of organizations. Regular meetings of the Steering Committee, as well as an inclusive launch event, could help to make the private sector feel more involved in the process and will help to improve the response rate. The private sector looks to the state government for this engagement and communication: Organizations that did not complete the HA survey often said they did so because they expected communication from a government official, since the HA is a government exercise. Over time, increasing the accountability between the private and public sector will facilitate data collection. For example, in some countries, government has made it mandatory for NGOs to submit annual reports detailing their activities and expenditures in the health sector. The state government should consider ways to encourage private sector organizations to provide expenditure data on a regular basis, and in a way that does not compromise their confidentiality.

Utilize and continue to develop the capabilities of regional organizations to support regular production of HA

The first HA exercise in Haryana benefitted from a fruitful collaboration with HSHRC and PGIMER. These organizations were involved throughout the HA process and have been trained in the SHA 2011 methodology and Production Tool. However, capacity in producing HA is truly built when knowledge and skills can be put into practice. As such, states should utilize such regional organizations to support future HA exercises. The concentration of HA expertise within regional organization is not only more cost effective than at the state level, but is also helpful to ensuring consistent application of the SHA 2011 framework. This also removes the burden of production away from the state so that it can become an effective consumer of HA data.

Producing HA on a routine basis is important to ensure that the health expenditure information remains up to date and relevant to policy discussions. It enables more powerful analyses, as data over time allow for identifying trends in health spending, and more meaningful application of results, because more stakeholders are aware of the results and how to use them effectively. As part of its institutionalization of the HA process, Haryana should aim to produce HA on a regular basis so that the HA results are available in time to be used for annual planning and budgeting decisions.

Better compilation of utilization data, particularly by disease

The analysis of spending data by type of provider, type of care, type of disease (and eventually, by age) requires the application of distribution keys. These keys are calculated using utilization data and weighted by unit cost to the same level of detail as the analysis that is required (i.e., type of provider, type of care, type of disease). The availability of data for the calculation of distribution keys proved challenging in Haryana. Often, utilization data was compiled to the level of detail required, but was only available at the facility level and not aggregated at the state level. Costing data was also minimal. Reporting systems such as HMIS or the Integrated Disease Surveillance Program (IDSP) are not complete and focus on certain disease areas, for example, the HMIS on child and maternal health and the IDSP on communicable diseases. If the state wishes to understand the breakdown of spending by provider, type of care and by disease, it is important that utilization data be better compiled. The availability of costing information for government-provided services is equally important, not only for HA, but also to monitor that reimbursement rates for government-sponsored schemes remain financially sustainable. Ideally, costing studies should be comprehensive and capture the unit cost across the full package of services in facilities, in order to avoid the use of multiple studies with potentially differing methodologies.

Continue to utilize secondary data for more cost-effective HA estimations

The HA exercise was made more timely and cost-effective by the availability of secondary spending data. India is making great strides in generating data for HA that will reduce the need for primary data collection for the sole purpose of HA. For example, the NSSO survey provides detailed information on household spending that facilitates analysis of SHA classifications. In the future, the survey instrument could be improved to reflect drug spending outside of a facility more clearly, as well as spending on prevention services, vitamins and contraceptives. In addition, data from IIB were very useful in estimating insurance spending for health. More information about claim payments by types of facilities and type of service would help to increase the accuracy of insurance spending data in the HA. This information is likely collected but is not reported publicly. Going forward, national-level employer surveys conducted by Public Health Foundation of India will be available to estimate employer health spending, which will reduce the need for primary data collection for employer spending.

ANNEX A: HEALTH ACCOUNTS TABLES

The HA tables provided here summarize the HA data through a series of two dimensional tables. Each table cross-tabulates spending for two HA classifications. Unless otherwise specified, these tables summarize recurring health spending only.

FS x HF

Financing schemes				Revenues of health care financing schemes	Transfers from government domestic revenue (allocated to health purposes)	FS.1				FS.3		FS.5		FS.6			FS.7		All FS		
						FS.1.1		FS.1.2	Social insurance contributions	FS.3.2	Voluntary prepayment	FS.5.1		Other domestic revenues n.e.c.	FS.6.1		Direct foreign transfers	FS.7.1			
						Internal transfers and grants	FS.1.1.1					Voluntary prepayment from individuals/households	Voluntary prepayment from employers		Other revenues from households n.e.c.	Other revenues from NPISH n.e.c.		Direct foreign financial transfers		FS.7.1.1	
							Central government revenues	State government revenues	Transfers by government on behalf of specific groups	Direct bilateral financial transfers											
HF.1				Government schemes and compulsory contributory health care financing schemes	19,381	16,037	4,105	11,932	3,343	363	363								19,744		
	HF.1.1			Government schemes	16,001	16,001	4,069	11,932											16,001		
		HF.1.1.1		Central government schemes	4,908	4,908	3,756	1,152											4,908		
		HF.1.1.2		State/regional/local government schemes	11,094	11,094	313	10,781											11,094		
	HF.1.2			Compulsory contributory health insurance schemes	3,379	36	36		3,343	363	363								3,743		
		HF.1.2.1		Social health insurance schemes	3,379	36	36		3,343	363	363								3,743		
			HF.1.2.1.1	Employee State Insurance (ESI)	3,343				3,343	363	363								3,707		
			HF.1.2.1.2	RSBY	36	36	36												36		
				Voluntary health care payment schemes	0.02	0.02	0.02					3,923	1,687	2,236	0.06		0.06	125	125	125	4,049
	HF.2.1			Voluntary health insurance schemes								3,923	1,687	2,236						3,923	
		HF.2.1.1		Primary/substitutory health insurance schemes								3,923	1,687	2,236						3,923	
			HF.2.1.1.1	Employer-based insurance (Other than enterprises schemes)								2,236		2,236						2,236	
			HF.2.1.1.3	Other primary coverage schemes								1,687	1,687							1,687	
	HF.2.2			NPISH financing schemes (including development agencies)	0.02	0.02	0.02								0.06		0.06	125	125	125	125
		HF.2.2.1		NPISH financing schemes (excluding HF.2.2.2)	0.02	0.02	0.02								0.06		0.06	125	125	125	125
	HF.3			Household out-of-pocket payment											60,840	60,840				60,840	
		HF.3.1		Out-of-pocket excluding cost-sharing											60,840	60,840				60,840	
All HF					19,381	16,037	4,105	11,932	3,343	363	363	3,923	1,687	2,236	60,840	60,840	0.06	125	125	125	84,632

HP x HC

Health care functions				Health care providers							HP.2											HP.3											HP.4	HP.5	HP.6	HP.7	HP.8	HP.nec	All HP
				Hospitals							Residential long-term care facilities	Providers of ambulatory health care	Medical practices	Dental practice	Ambulatory health care centres	Non-specialised ambulatory health care centres	HP.3.4.5				Providers of home health care services	Unspecified providers of ambulatory health care (n.e.c.)	Providers of ancillary services	Retailers and Other providers of medical goods	Providers of preventive care	Providers of health care system administration and financing	Rest of economy	Unspecified health care providers (n.e.c.)											
																	HP.1.1	HP.1.1.1	HP.1.1.4	HP.1.2										HP.1.3	HP.1.4	HP.3.4.5.1	HP.3.4.5.2	HP.3.4.5.3	HP.3.4.5.nec				
				General hospitals	Government owned hospitals	Private hospital	Mental health hospitals	Specialised hospitals (Other than mental health hospitals)	Hospital in Indian System of Medicine	PHC	GHC	Sub-center	Other Non-specialised ambulatory health care centres	Providers of home health care services	Unspecified providers of ambulatory health care (n.e.c.)	Providers of ancillary services	Retailers and Other providers of medical goods	Providers of preventive care	Providers of health care system administration and financing	Rest of economy	Unspecified health care providers (n.e.c.)																		
Indian Rupee (INR), Million				HP.1	HP.1.1	HP.1.1.1	HP.1.1.4	HP.1.2	HP.1.3	HP.1.4	HP.2	HP.2	HP.3.1	HP.3.2	HP.3.4	HP.3.4.5	HP.3.5	HP.3.nec	HP.4	HP.5	HP.6	HP.7	HP.8	HP.nec	All HP														
HC.1				Curative care	54,621	54,054	9,771	44,282	244	323	0.1	19,053	##	0.02	2,766	2,766	1,430	474	362	501	4	49				8		0.1	73,682										
	HC.1.1			Inpatient curative care	33,234	32,892	6,703	26,189	122	220	0.02	539			529	529	275	223	0.4	30						4		0.04	33,777										
		HC.1.1.1		General inpatient curative care	32,976	32,846	6,669	26,177		130	0.0	539	3,976		529	529	275	223	0	30										33,515									
		HC.1.1.2		Specialised inpatient curative care	258	46	34	11	122	90																4		0.04	262										
	HC.1.3			Outpatient curative care	21,387	21,162	3,068	18,094	122	103	0.1	18,510	16,234	0.02	2,237	2,237	1,155	250	361	470	39					4		0.04	39,900										
		HC.1.3.1		General outpatient curative care	21,172	21,162	3,068	18,094		10	0	17,964	16,234		1,691	1,691	609	250	361	470	39								39,135										
		HC.1.3.2		Dental outpatient curative care								546		0	546	546	546												546										
		HC.1.3.3		Specialised outpatient curative care	215				122	93																4		0	219										
	HC.1.4			Home-based curative care								4								4									4										
HC.3				Long-term care (health)	122				122			273																	395										
HC.4				Ancillary services (non-specified by function)																					579				579										
HC.5				Medical goods (non-specified by function)																					933				933										
HC.6				Preventive care	413	412	397	15		0.5	0.01	1,492			1,489	1,489	63	214	1,153	59	3				104	950	45	398	3,401										
	HC.6.1			Information, education and counseling (IEC) programmes	19	19	19					1			1	1	0.1	0.2	0.3							274	45	68	407										
	HC.6.2			Immunisation programmes								782		782	782		156	625								185		68	1,035										
	HC.6.3			Early disease detection programmes	245	245	245					28		28	28	4	6	18								314		68	655										
	HC.6.4			Healthy condition monitoring programmes	137	136	121	15		0.5	0.01	631		628	628	59	51	509	10		3				104			68	940										
	HC.6.5			Epidemiological surveillance and risk and disease control programmes	12	12	12					1		1	1	0.2	0.3	1								121		125	260										
	HC.6.nec			Unspecified preventive care (n.e.c.)								49		49	49				49							57			106										
HC.7				Governance, and health system and financing administration																						5,583			5,583										
HC.9				Other health care services not elsewhere classified (n.e.c.)	55	55	55					0.03		0.02	0.02	0.003	0.004	0.01		0.01	0.01						5		60										
All HC					55,211	54,521	10,223	44,298	367	323	0.1	273	20,545	##	0.02	4,255	4,255	1,493	687	1,515	559	4	52	579	1,036	950	5,635	403	0.1	84,632									

HF x HC

Health care functions		Financing schemes	Government schemes and compulsory contributory health care financing schemes	HF.1								HF.2						HF.3		All HF	
				HF.1.1		HF.1.2				Voluntary health care payment schemes	HF.2.1			HF.2.2		Household out-of-pocket payment	Out-of-pocket excluding cost-sharing				
				Government schemes	HF.1.1.1		Compulsory contributory health insurance schemes	Social health insurance schemes	HF.1.2.1		Voluntary health insurance schemes	HF.2.1.1		NPSH financing schemes (including development agencies)	HF.2.2.1						
					Central government schemes	State/regional/local government schemes			Employee State Insurance (ESI)			RSBY	Primary/substitutory health insurance schemes						Employer-based insurance (Other than enterprises schemes)	Other primary coverage schemes	NPSH financing schemes (excluding HF.2.2.1)
		Curative care	9,955	8,871	2,808	6,063	1,084	1,084	1,048	36	3,923	3,923	3,923	2,236	1,687	0.02	0.02	59,803	59,803	73,682	
HC.1	HC.1.1	Inpatient curative care	6,050	5,174	2,103	3,071	876	876	841	36	3,923	3,923	3,923	2,236	1,687			23,803	23,803	33,777	
	HC.1.3	Outpatient curative care	3,900	3,693	701	2,993	207	207	207		0.02					0.02	0.02	36,000	36,000	39,900	
	HC.1.3.1	General outpatient curative care	3,135	2,928	701	2,228	207	207	207									36,000	36,000	39,135	
	HC.1.3.2	Dental outpatient curative care	546	546		546					0.02					0.02	0.02			546	
	HC.1.3.3	Specialised outpatient curative care	219	219		219														219	
	HC.1.4	Home-based curative care	4	4	4																4
HC.3		Long-term care (health)	395	395		395														395	
HC.4		Ancillary services (non-specified by function)	579	579	282	297														579	
HC.5		Medical goods (non-specified by function)																933	933	933	
HC.6		Preventive care	3,172	3,132	1,190	1,942	40	40	40		125					125	125	104	104	3,401	
	HC.6.1	Information, education and counseling (IEC) programmes	407	407	60	347					0.02					0.02	0.02			407	
	HC.6.2	Immunisation programmes	1,035	1,021	537	483	14	14	14		0					0	0			1,035	
	HC.6.3	Early disease detection programmes	655	655	17	638					0					0	0			655	
	HC.6.4	Healthy condition monitoring programmes	836	810	539	271	26	26	26										104	104	940
	HC.6.5	Epidemiological surveillance and risk and disease control programmes	134	134	35	100						125					125	125			260
	HC.6.nec	Unspecified preventive care (n.e.c.)	106	106	2	104															106
HC.7		Governance, and health system and financing administration	5,583	2,964	568	2,396	2,619	2,619	2,619											5,583	
HC.9		Other health care services not elsewhere classified (n.e.c.)	60	60	60						0.02					0.02	0.02			60	
All HC			19,744	16,001	4,908	11,094	3,743	3,743	3,707	36	4,049	3,923	3,923	2,236	1,687	125	125	60,840	60,840	84,632	

HF x FP

Financing schemes				Factors of health care provision	FP.1 Compensation of employees	Materials and services used	FP.3											FP.5 Other items of spending on inputs	FP.nec Unspecified factors of health care provision (n.e.c.)	All FP					
							Indian Rupee (INR), Million	FP.3.1 Health care services	Health care goods	FP.3.2				FP.3.2.2 Other health care goods	Non-health care services	FP.3.3					FP.3.4 Non-health care goods	FP.3.nec Other materials and services used (n.e.c.)			
										Pharmaceuticals	FP.3.2.1					FP.3.3.1 Training	FP.3.3.2 Technical Assistance						FP.3.3.3 Operational research	FP.3.3.nec Other non-health care services (n.e.c.)	
											FP.3.2.1.4 Vaccines	FP.3.2.1.5 Contraceptives	FP.3.2.1.nec Other pharmaceuticals (n.e.c.)												
			Government schemes and compulsory contributory health care financing schemes	13,753	5,376	3,174	981	636	313		323	345	649	163		2	485	311	260	86	530	19,744			
HF.1			Government schemes	10,726	4,668	2,654	959	636	313		323	323	649	163		2	485	252	154	78	529	16,001			
		HF.1.1.1	Central government schemes	2,790	1,522	465	343	323			323	20	603	163		2	439	111		67	529	4,908			
		HF.1.1.2	State/regional/local government schemes	7,937	3,146	2,189	616	313	313			303	46	1			45	141	154	11			11,094		
		HF.1.2	Compulsory contributory health insurance schemes	3,027	707	520	22					22						59	106		8	0.4	3,743		
		HF.1.2.1	Social health insurance	3,027	707	520	22					22						59	106		8	0.4	3,743		
		HF.1.2.1.1	Employee State Insurance	3,027	672	485	22					22						59	106		8	0.4	3,707		
		HF.1.2.1.2	RSBY		36	36																	36		
HF.2			Voluntary health care payment schemes	0.02	4,049	3,923	0.01	0.01			0.01	0.002	125		125			0.03	0.01				4,049		
		HF.2.1	Voluntary health insurance schemes		3,923	3,923																		3,923	
		HF.2.1.1	Primary/substitutory health insurance schemes		3,923	3,923																			3,923
		HF.2.1.1.1	Employer-based insurance (Other than enterprises)		2,236	2,236																			2,236
		HF.2.1.1.3	Other primary coverage		1,687	1,687																			1,687
		HF.2.2	NPISH financing schemes (including development)	0.02	125		0.01	0.01			0.01	0.002	125		125			0.03	0.01						125
HF.3			Household out-of-pocket payment		60,840	28,661	29,255	28,323		104	28,219	933	2,924				2,924							60,840	
		HF.3.1	Out-of-pocket excluding cost-sharing		60,840	28,661	29,255	28,323		104	28,219	933	2,924				2,924								60,840
All HF				13,753	70,264	35,758	30,236	28,958	313	104	28,542	1,278	3,698	163	125	2	3,408	311	260	86	530			84,632	

FS.RI x HP

Health care providers				Institutional units providing revenues to financing schemes	FS.RI.1.1	FS.RI.1.2	FS.RI.1.3	FS.RI.1.4	FS.RI.1.5			All FS.RI	
				Indian Rupee (INR), Million	Government	Corporations	Households	NPISH	Rest of the world	FS.RI.1.5.1			United States (USAID)
					Bilateral donors	FS.RI.1.5.1.25							
Hospitals				7,862	2,600	44,749					55,211		
General hospitals				7,172	2,600	44,749					54,521		
HP.1	HP.1.1	HP.1.1.1	Government owned hospitals	5,394	19	4,810					10,223		
		HP.1.1.4	Private hospital	1,778	2,581	39,939					44,298		
	HP.1.2		Mental health hospitals	367							367		
	HP.1.3		Specialised hospitals (Other than mental health hospitals)	323							323		
	HP.1.4		Hospital in Indian System of Medicine	0.1							0.1		
	HP.2			Residential long-term care facilities	273							273	
HP.3			Providers of ambulatory health care	3,804		16,741	0.03				20,545		
	HP.3.1		Medical practices			16,234					16,234		
	HP.3.2		Dental practice				0.02				0.02		
	HP.3.4		Ambulatory health care centres	3,747		508					4,255		
		HP.3.4.5		Non-specialised ambulatory health care centres	3,747		508				4,255		
			HP.3.4.5.1	PHC	1,368		125				1,493		
			HP.3.4.5.2	CHC	563		125				687		
			HP.3.4.5.3	Sub-center	1,257		259				1,515		
			HP.3.4.5.nec	Other Non-specialised ambulatory health care centres	559						559		
	HP.3.5			Providers of home health care services	4						4		
HP.3.nec			Unspecified providers of ambulatory health care (n.e.c.)	52			0.01			52			
HP.4			Providers of ancillary services	579			0.01				579		
	HP.4.1		Providers of patient transportation and emergency rescue	282							282		
	HP.4.2		Medical and diagnostic laboratories				0.01				0.01		
	HP.4.9		Other providers of ancillary services	297							297		
HP.5			Retailers and Other providers of medical goods			1,036					1,036		
HP.6			Providers of preventive care	950			0.02				950		
HP.7			Providers of health care system administration and financing	5,635							5,635		
HP.8			Rest of economy	277				125	125	125	403		
	HP.8.2		All Other industries as secondary providers of health care	273				125	125	125	398		
	HP.8.4		Research and education institutions	5							5		
HP.nec			Unspecified health care providers (n.e.c.)	0.1							0.1		
All HP				19,381	2,600	62,527	0.1	125	125	125	84,632		

FSRI x HC

Health care functions				Institutional units providing revenues to financing schemes		FS.RI.1.1	FS.RI.1.2	FS.RI.1.3	FS.RI.1.4	FS.RI.1.5			All FS.RI
				Government	Corporations	Households	NPISH	Rest of the world	FS.RI.1.5.1				
									Bilateral donors	FS.RI.1.5.1.25 United States (USAID)			
				<i>Indian Rupee (INR), Million</i>									
HC.1			Curative care	9,591	2,600	61,490	0.02					73,682	
	HC.1.1		Inpatient curative care	5,747	2,540	25,490						33,777	
	HC.1.3		Outpatient curative care	3,840	60	36,000	0.02					39,900	
	HC.1.4		Home-based curative care	4								4	
HC.3			Long-term care (health)	395								395	
HC.4			Ancillary services (non-specified by function)	579								579	
HC.5			Medical goods (non-specified by function)			933						933	
HC.6			Preventive care	3,172		104	0.02	125	125	125		3,401	
	HC.6.1		Information, education and counseling (IEC) programmes	407								407	
	HC.6.2		Immunisation programmes	1,035			0.01					1,035	
	HC.6.3		Early disease detection programmes	655			0.01					655	
	HC.6.4		Healthy condition monitoring programmes	836		104						940	
	HC.6.5		Epidemiological surveillance and risk and disease control programmes	134				125	125	125		260	
	HC.6.nec		Unspecified preventive care (n.e.c.)	106								106	
HC.7			Governance, and health system and financing administration	5,583								5,583	
HC.9			Other health care services not elsewhere classified (n.e.c.)	60			0.02					60	
All HC				19,381	2,600	62,527	0.1	125	125	125		84,632	

DIS x FS.RI

Classification of diseases / conditions		Institutional units providing revenues to financing schemes <i>Indian Rupee (INR), Million</i>	FS.RI.1.1	FS.RI.1.2	FS.RI.1.3	FS.RI.1.4	FS.RI.1.5		All FS.RI
			Government	Corporations	Households	NPISH	Rest of the world	FS.RI.1.5.1	
								Bilateral donors	
DIS.1		Infectious and parasitic diseases	2,527	84	4,948	0.02			7,560
	DIS.1.1	HIV/AIDS and Other Sexually Transmitted Diseases (STDs)	28	0.2		0.01			28
	DIS.1.2	Tuberculosis (TB)	359		709				1,067
	DIS.1.3	Malaria	548						548
	DIS.1.4	Respiratory infections	11		2,499				2,511
	DIS.1.5	Diarrheal diseases	406	7	326				739
	DIS.1.6	Neglected tropical diseases	8						8
	DIS.1.7	Vaccine preventable diseases	1,153	1	1,014	0.01			2,168
DIS.1.nec	Other and unspecified infectious and parasitic diseases (n.e.c.)	13	76	400				490	
DIS.2		Reproductive health	3,073	76	8,908				12,058
	DIS.2.1	Maternal conditions	2,269	76	4,851				7,197
	DIS.2.2	Perinatal conditions	32	0.2	3,953				3,985
	DIS.2.3	Contraceptive management (family planning)	766		104				870
	DIS.2.nec	Unspecified reproductive health conditions (n.e.c.)	6						6
DIS.3		Nutritional deficiencies	26		1				27
DIS.4		Noncommunicable diseases	3,082	491	19,027	0.02			22,600
	DIS.4.1	Neoplasms	122	81	3,532				3,735
	DIS.4.2	Endocrine and metabolic disorders	401	3	3,856				4,260
	DIS.4.3	Cardiovascular diseases	267	110	7,766				8,143
	DIS.4.4	Mental & behavioural disorders, and Neurological conditions	731	3	1,211				1,945
	DIS.4.5	Respiratory diseases	882	64	34				980
	DIS.4.6	Diseases of the digestive system	4	76	51				131
	DIS.4.7	Diseases of the genito-urinary system	4	76	962				1,042
	DIS.4.8	Sense organ disorders	28	51	1,599				1,678
	DIS.4.9	Oral diseases	546			0.02			546
DIS.4.nec	Other and unspecified noncommunicable diseases (n.e.c.)	96	27	17				140	
DIS.5		Injuries	489	144	2,167				2,800
DIS.6		Non-disease specific	8,894	51	24,117	0.02	125	125	33,187
DIS.nec		Other and unspecified diseases/conditions (n.e.c.)	1,289	1,753	3,359				6,401
All DIS			19,381	2,600	62,527	0.1	125	125	84,632

FS x FA

Revenues of health care financing schemes			Financing agents		FA.1										FA.2	FA.4	FA.5	All FA		
					FA.1.1				FA.1.2				FA.1.3							
					General government	Central government	FA.1.1.1	FA.1.1.2	State/Regional/Local government	FA.1.2.1	FA.1.2.2	FA.1.2.3	FA.1.2.nec	Social security agency					FA.1.3.1	
							Ministry of Health Other ministries and public units (belonging to central government)			DHS-Health	MER-Medical Education and Research	AYUSH	Other State/Regional/Local government						Social Health Insurance Agency	Employee State Insurance Corporation
Indian Rupee (INR), Million																				
		Transfers from government domestic revenue (allocated to health purposes)	19,381	650	358	292	15,388	7,555	531	631	6,669	3,343	3,343	3,343		0.02		19,381		
FS.1		Internal transfers and grants	16,037	650	358	292	15,388	7,555	531	631	6,669					0.02		16,037		
		FS.1.1.1 Central government revenues	4,105	650	358	292	3,455				3,455					0.02		4,105		
		FS.1.1.2 State government revenues	11,932				11,932	7,555	531	631	3,214							11,932		
		FS.1.2 Transfers by government on behalf of specific groups	3,343									3,343	3,343	3,343				3,343		
FS.3		Social insurance contributions	363									363	363	363				363		
FS.5		Voluntary prepayment													3,923			3,923		
	FS.5.1	Voluntary prepayment from individuals/households													1,687			1,687		
	FS.5.2	Voluntary prepayment from													2,236			2,236		
FS.6		Other domestic revenues n.e.c.														0.1	60,840	60,840		
	FS.6.1	Other revenues from households n.e.c.															60,840	60,840		
	FS.6.3	Other revenues from NPISH n.e.c.														0.1		0.1		
FS.7		Direct foreign transfers														125		125		
All FS			19,744	650	358	292	15,388	7,555	531	631	6,669	3,707	3,707	3,707	3,923	125	60,840	84,632		

HK x FS.RI

Capital Account				Institutional units providing revenues to financing schemes	FS.RI.1.1	FS.RI.1.4	All FS.RI
				<i>Indian Rupee (INR), Million</i>	Government	NPISH	
HK.1			Gross capital formation	2,193	0.1	2,193	
	HK.1.1		Gross fixed capital formation	1,693	0.1	1,693	
		HK.1.1.1	Infrastructure	1,642		1,642	
			HK.1.1.1.1 Residential and non-residential buildings	1,642		1,642	
		HK.1.1.2	Machinery and equipment	27	0.1	27	
			HK.1.1.2.1 Medical equipment		0.02	0.02	
			HK.1.1.2.2 Transport equipment	24		24	
			HK.1.1.2.3 ICT equipment	1	0.1	1	
			HK.1.1.2.4 Machinery and equipment n.e.c.	2		2	
		HK.1.1.3	Intellectual property products	23		23	
			HK.1.1.3.1 Computer software and databases	23		23	
		HK.1.nec		Unspecified gross capital formation (n.e.c.)	500		500
HK.nec			Unspecified gross fixed capital formation (n.e.c.)	0.4		0.4	
All HK				2,193	0.1	2,193	

ANNEX B: REFERENCES

- Ahmed, Afaq, Karishmah Bhuwane, Heather Cosgwell, Tesfaye Dereje, and Yann Derriennic. 2015. *Haryana 2014-15 State Health Accounts: Methodological Report*. Bethesda, MD: Health Finance and Governance Project, Abt Associates Inc.
- Employee State Insurance Corporation. 2014. *2013-14 Annual Report*. India.
- Garg, Charu. 1998. *National Health Accounts for India: A case study for Karnataka*. India.
- Institute for Health Metrics and Evaluation (IHME). *Global Burden of Disease: India*.
<http://vizhub.healthdata.org/gbd-compare/>
- Institute of Health Systems. 2009. *National Health Accounts Training Manual for Implementing NHA in India*. India.
- Insurance Information Bureau of India. 2015. *Health Insurance (Non-Life Commercial) Data Analysis Report: 2013-14*. India
- Ministry of Health and Family Welfare. 2009. *2004-05 National Health Accounts: India*. India.
- Ministry of Railways, India 2015. Demand for Grants (Demand no 11, 12 and 13)
- Ministry of Statistics and Programme Implementation. 2015. *India - Social Consumption: Health, National Sample Survey (NSS) 71st Round: Jan-June 2014*. India.
- Ministry of Statistics and Programme Implementation. 2013. *Key Indicators of Household Consumer Expenditure in India, National Sample Survey (NSS) 68th Round: July 2011-June 2012*. India.
- United Nations Population Fund. 2015. *RHInterchange database*. Denmark
- Organization for Economic Cooperation and Development (OECD), World Health Organization (WHO), and Eurostat. 2011. *A System of Health Accounts: 2011 Edition*. Paris: OECD Publishing.
- Prinja, Shankar, Deepak Balasubramanian, Gursimer Jeet et al. 2015. *Cost of Delivering Secondary Level Health Care Services through Public Sector District Hospitals in India*. India.
- Resources for the Future. 2007. *Cost-effectiveness of Disease Interventions in India*. India.
- UNFPA. *RH Interchange*. <https://www.myaccessrh.org/rhi-home>. Accessed November 2015
- The World Health Organization. 2009. *Global Health Risks: Mortality and burden of disease attributable to selected major risks*. World Health Organization
- Xu, Ke, Priyanka Saksena, Matthew Jowett, Chandika Indikadahena, Joe Kutzin, and David B. Evans. 2010. *Exploring the thresholds of health expenditure for protection against financial risk*. World Health Report Background Paper, No. 19. Geneva: WHO.
- Xu, Ke, David B. Evans, Guy Carrin, and Ana Mylena Aguilar-Rivera. 2005. *Designing Health Financing Systems to Reduce Catastrophic Health Expenditure*. Technical brief for policy-makers, Number 2/2005. Geneva: WHO. WHO reference number: WHO/EIP/HSF/PB/05.02,

