



# HARYANA 2014/15 STATE HEALTH ACCOUNTS: METHODOLOGICAL REPORT







# HARYANA

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# ACRONYMS

<b>CGHS</b>	Central Government Health Scheme
<b>CHC</b>	Community Health Centre
<b>CHE</b>	Current Health Expenditure
<b>CMS</b>	Chief Medical Superintendent
<b>ESIS</b>	Employee State Insurance Services
<b>ESIC</b>	Employee State Insurance Corporation
<b>GDP</b>	Gross Domestic Product
<b>HA</b>	Health Accounts
<b>HAPT</b>	Health Accounts Production Tool
<b>HFG</b>	Health Finance and Governance
<b>HMIS</b>	Health Management Information System
<b>HSHRC</b>	Haryana State Health Resource Centre
<b>IIB</b>	Insurance Information Bureau
<b>MMIY</b>	<i>MukhyaMantri Muft Ilaaj Yojana</i> health insurance scheme
<b>MOHFW</b>	Ministry of Health and Family Welfare
<b>NHSRC</b>	National Health Systems Resource Centre
<b>NSSO</b>	National Sample Survey Office
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>PGIMER</b>	Post Graduate Institute of Medical Education and Research, Chandigarh
<b>PHC</b>	Primary Health Centre
<b>PHFI</b>	Public Health Foundation of India
<b>RSBY</b>	<i>Rashtriya Swasthya Bima Yojana</i> health insurance scheme
<b>SHA</b>	System of Health Accounts
<b>THE</b>	Total Health Expenditure
<b>USAID</b>	United States Agency for International Development
<b>WHO</b>	World Health Organization





# I. INTRODUCTION

This Methodological Report provides an overview of the System of Health Accounts (SHA) 2011 framework as used for Haryana State's 2014/15 Health Accounts (HA) estimation. It documents the data collection approaches and results, analytical steps taken, and assumptions made. It is intended for HA practitioners and researchers who wish to understand how the estimations were generated in Haryana and who need the detailed expenditure flow information for other operational and scientific research.

The purpose of an HA exercise is to estimate the amount and flow of health spending through a health system – in this instance, the Haryana health system, for fiscal 2014/15, April 1, 2014 to March 31, 2015. In addition to estimating general health expenditures, this analysis examined spending on priority diseases, levels of risk pooling (e.g., via government-sponsored insurance schemes), and contributions by the private sector. The HA team worked with the Haryana State Health Resource Centre (HSHRC) to determine the health policy questions of most relevance to Haryana, answers to which HA findings will inform; Table I lists those questions. For more information on the HA findings and their policy implications, please see the main HA report (Ahmed et al. 2015), which complements this Methodological Report.

**Table I. Haryana Health Policy Questions Driving the HA Estimations**

Account	Policy Area	Policy Questions
Current account	Sustainability of health financing	Who pays for health care in Haryana and how much do they contribute?
	Financial risk protection and risk pooling	How are health care funds managed and distributed in Haryana?
	Relative spending on curative care vs. health prevention / promotion	What types of services are provided with health funds?
	Primary vs. secondary care spending	How are health care funds distributed across levels of health care?
	Spending on NCDs and MCH	Which diseases and health conditions does Haryana spend on?
	Government risk protection schemes	Where is government spending health care funds?
Capital account	Health investments	What is capital spending used for?

The Haryana 2014/15 HA process began in earnest in July 2014, when the HSHRC was made the technical secretariat for conducting the HA in the state. In May 2015, the Health Financing and Governance (HFG) project prepared and facilitated an orientation workshop to introduce the SHA 2011 framework and the HA methodology. The orientation was held in Chandigarh. Participants included HSHRC, the Post-Graduate Institute of Medical Education and Research, Chandigarh (PGIMER), the Public Health Foundation of India (PHFI), and representatives from Punjab state, who will soon start that state's HA exercise. Following this orientation, the HA team, whose members were from HSHRC, HFG-India, and HFG-headquarters, began secondary data collection and, in August, a private firm was contracted to collect primary data on behalf of HSHRC from NGOs, health insurance firms, and employers using the standardized HA survey. Collected data was compiled, cleaned, triangulated, and reviewed in November, and imported into the Health Accounts Production Tool (HAPT) and mapped to each of the SHA 2011 classifications in December. Also in December, the results of the analysis were discussed and verified at a validation meeting with

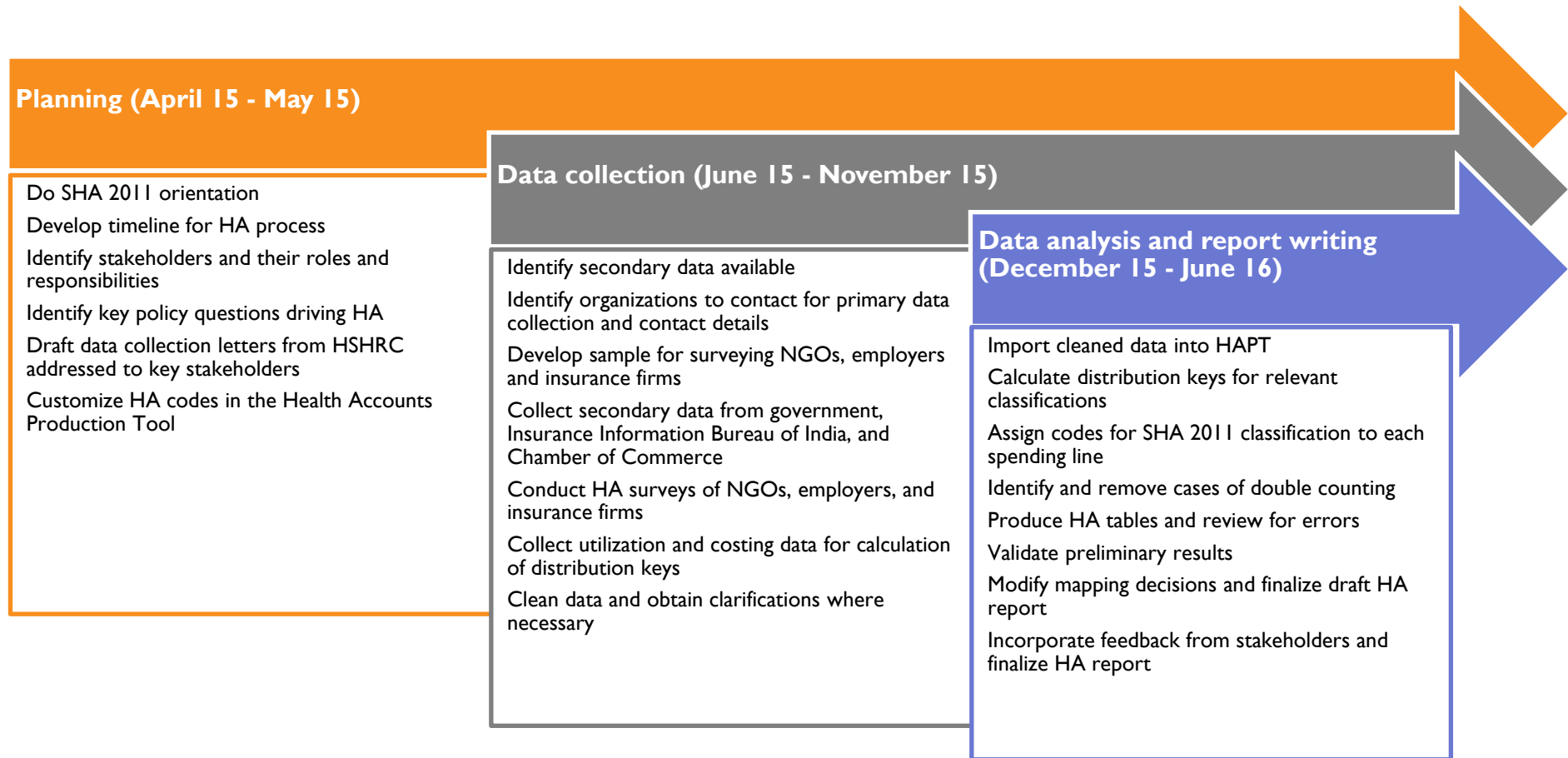


HSHRC and PGIMER. Thereafter, modifications were made to the mapping, using HSHRC's feedback, and the HA team produced draft HA report in December that was distributed to stakeholders for comment. After receiving comments between February and May 2016, the HA team collected some additional data to incorporate comments, mapped the new spending amounts and updated the HA tables and report. Figure 1 summarizes this process.

Throughout the HA process, the HA team were in regular communication with the Ministry of Health and Family Welfare's (MOHFW's) National Health Systems Resource Centre (NHSRC), to ensure consistency with the ongoing, NHSRC-led adoption of the SHA 2011 framework to the Indian context. The HA team used the National Health Accounts training manual, developed for India by the Institute of Health Systems (2009) under the aegis of the NHSRC, as a key reference in conjunction with the internationally standardized SHA 2011 framework as key guidance in driving the HA exercise. The manual contains classifications tailored to the Haryana health system, including 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 team also consulted with PHFI staff, who have conducted national-level data collection for HA, to obtain secondary spending data. Throughout the HA process, HFG provided technical assistance that incorporated best practices for HA estimations in other countries.

This report provides the detailed HA tables showing the magnitude and flow of the resources from the source (such as government, households, and donors) to end-use (defined by type of activity and disease / health condition) as well as methodological details. The report has four chapters. This first chapter provides a brief introduction of the purpose and overall approach of the HA exercise in Haryana. The second chapter provides an overview of the HA conceptual framework and a summary of the methodology namely: data sources, data collection, and assumptions made. Chapter 3 describes the challenges encountered during the HA process and lessons learned for consideration for future exercises. Finally, Chapter 4 provides a series of two-dimensional tables showing the flow of health spending.

Figure 1. The HA Process in Haryana



## 2. HEALTH ACCOUNTS

# CONCEPTUAL FRAMEWORK AND METHODOLOGY

### 2.1 Conceptual Framework

As mentioned in the Introduction, HA is an internationally recognized methodology used to track expenditures in a health system for a specified period. It follows the flow of funding for health from origins to end use, answering questions such as: how are health care goods and services financed? Where are health care goods and services consumed by the population? What goods and services are financed? By breaking down health spending by different classifications, HA provides insight into whether health spending is sufficient relative to need; the sustainability of health financing; the extent to which there is financial risk protection; and whether resources are being allocated to strategic priorities. It provides sound evidence for decision making and is a useful tool in informing health financing reforms. In conjunction with non-financial data, HA can also help countries to track progress toward universal health coverage.

HA is based on the SHA framework, which has been revised by key international stakeholders over the past two decades. First published in 2000 by the Organization for Economic Cooperation and Development (OECD), the framework was updated in 2011 (OECD 2011). The SHA 2011 methodology, whose output is the HA, improves upon the original by strengthening the classifications to provide a more comprehensive look at increasingly complex health expenditure flows. SHA 2011 is now the international standard for national and sub-national level health accounts estimations.

The SHA 2011 methodology was used to complete this HA estimation.

#### 2.1.1 Boundary Definitions

**Health boundary:** The boundary of “health” in the HA is “functional”: It refers to activities whose primary purpose is disease prevention, health promotion, treatment, rehabilitation, and long-term care. It includes services provided directly to individual persons and collective health care services covering traditional tasks of public health. In this exercise, spending on alternative systems of medicine for the purposes of prevention or curative care, and which require profession knowledge – such as AYUSH facilities – were considered within the health boundary. In contrast, spending on general “well-being” was excluded.

Examples of personal health care services include facility-based care (curative, rehabilitative, and preventive treatments); ancillary services to health care such as laboratory tests and imaging services; and medical goods dispensed to patients. Examples of collective health care services are health promotion and disease prevention campaigns as well as government and insurance health administration that target large populations. National standards of accreditation and licensing delineate the boundary of health within SHA – providers and services that are not licensed or accredited are not included in the boundary of health, nor are services that fall outside of the functional definition of health.

Health care-related and capital formation spending is tracked separately in SHA 2011. Health care-related activities are intended to improve the health status of the population, but their primary purpose lies elsewhere. Examples of health care-related activities include costs of patient transportation to facilities, food, hygiene, and drinking water control. Capital formation of health care providers covers investment lasting more than a year, such as infrastructure or machinery

investment as well as education and training of health personnel, and research and development in health. Capital formation contrasts with current health expenditure (CHE), which is completely consumed within the period of analysis.

**Time boundary:** An HA analysis covers a one-year period and estimates the value of the goods and services that were consumed during that period. That is, HA estimates expenditure according to accrual accounting, by which expenditures are classified within the year they create economic value rather than when the cash was received. The year of analysis for the Haryana 2014/15 HA is fiscal 2014/15, April 1, 2014 to March 31, 2015.

**Space (geographical) boundary:** HA “focuses on the consumption of health care goods and services of the resident population irrespective of where this takes place” (OECD et al. 2011). This means that goods and services consumed by residents (citizens and non-citizens) of Haryana are included while those of non-residents (including non-residents who travel to Haryana for health care) are excluded. For example, the Central Government Health Scheme (CGHS) dispensary in Chandigarh serves residents of Punjab, Haryana, Himachal Pradesh, and Delhi. In its estimations, the HA team tried to isolate CGHS spending for Haryana residents from those of other users.

**Imports/ exports:** HA captures international trade to the extent that the spending fits the functional, time, and space boundaries. For example, if a Haryana resident travels abroad for treatment by an overseas provider, that would be included in the HA as an import of health services to Haryana. In contrast, as explained in the preceding paragraph about the space boundary, residents from abroad or neighbouring states travelling to Haryana for treatment (export) would not be included. Pharmaceuticals manufactured in Haryana for export abroad would not be included because the manufacture is not considered final consumption and spending related to the pharmaceuticals is not incurred for the health of Haryana residents.

## 2.1.2 Definitions of the Classifications

The HA exercise involves analysing data on health expenditure according to a set of standard classifications, defined below. For additional details on the SHA 2011, please refer to the SHA 2011 Brief (Cogswell 2013) or the aforementioned SHA 2011 manual (OECD et al. 2011).

**Financing schemes (HF):** the main funding mechanisms by which people obtain health services, answering the question “how are health resources managed and organized?” Financing schemes categorize spending according to criteria such as: mode of participation in the scheme (compulsory vs. voluntary); the basis for entitlements (contributory vs. non-contributory); the method for fund-raising (taxes/ compulsory pre-payments vs. voluntary payments); and the extent of risk pooling. Examples are: RSBY, a government health insurance scheme for families living in poverty<sup>1</sup>; voluntary private insurance; and direct out-of-pocket payments by households for goods and services.

**Revenue of financing schemes (FS):** the types of transactions through which funding schemes mobilize their income. Examples are: transfers from the ministry of finance to governmental agencies; household out-of-pocket spending; and voluntary prepayment from employers.

**Financing agents (FA):** the institutional units that manage one or more health financing schemes. Examples are: the MOHFW, the National Health Mission, commercial insurance companies, and NGOs.

**Health care providers (HP):** organizations and actors that provide medical goods and services as their main activity. Examples are: hospitals, clinics, health centres, and pharmacies. Providers can also be organizations in which the provision of health care is only one activity among many others, for example supermarkets selling drugs.

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<sup>1</sup> [http://rsby.gov.in/about\\_rsby.aspx](http://rsby.gov.in/about_rsby.aspx). Accessed September 3, 2015

**Health care functions (HC):** the goods and services consumed by health end-users. Examples are: curative care; information, education, and counselling programs; medical goods such as supplies and pharmaceuticals; and governance and health system administration.

**Factors of provision (FP):** the inputs to the production of health care goods and services by health care providers. Examples are: compensation of employees, health care goods and services (e.g., pharmaceuticals, syringes, or lab tests used as part of a curative or preventive contact with the health system) and non-health care goods and services (e.g., electricity and training).

**Beneficiary characteristics:** the groups that consume, or benefit from, the health care goods and services. Beneficiaries can be grouped in several ways including disease, gender, and age.

### 2.1.3 HA Aggregates and Indicators

The aggregates and indicators defined below are among those estimated as part of this HA. Some of these aggregates and indicators rely exclusively on HA estimates while others require additional information from other sources. Some are used as part of other indicators – for example, total out-of-pocket spending on health as a percentage of total current health expenditure.

**Total current health expenditure (CHE):** Total CHE quantifies the economic resources spent on health functions and represents final consumption on health goods and services by residents of Haryana within the year of estimation.

**Gross capital formation:** Gross capital formation on health is measured as the total value of assets that providers have acquired during the estimation year (less the value of sales of similar assets) and that are used for longer than one year in the provision of health services.

**Total health expenditure (THE):** The sum of CHE and gross capital formation. This indicator is used for international comparisons and includes the standard HA classifications for health.

**Government spending on health as percentage of general government expenditure:** Health expenditure financed by government agencies as a percentage of total government expenditure. Government spending includes both central and state governments.

**Total current health expenditure as percentage of gross domestic product (GDP):** CHE as a percentage of GDP.

**Total current health expenditure per capita (CHE per capita):** CHE divided by the population. The estimation of population for Haryana for 2014/15 was estimated at 26,776,000, sourced from the India census.<sup>2</sup>

## 2.2 Data Sources

### 2.2.1 Government Data

The HA team obtained the audited budget report for 2014/15 for the Haryana Department of Health and Family Welfare from the Detailed Demand for Grants report (Haryana Department of Finance, 2015). The Detailed Demand for Grants report also provided the HA team with spending by the Department of Railways. Spending by the National Health Mission came from the Financial Management Report from the National Health Mission, Haryana (National Health Mission, 2015). These reports provided expenditure information for these entities, budget codes, and the descriptions of activities. The HA team obtained total spending by Ministry of Health and Family

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<sup>2</sup> Projected Total Population by sex as on 1st March-2001-2026 India, States and Union Territories. [http://censusindia.gov.in/Census\\_Data\\_2001/Projected\\_Population/Projected\\_Population.pdf](http://censusindia.gov.in/Census_Data_2001/Projected_Population/Projected_Population.pdf). Accessed November 2015.

Welfare (MoHFW) for vaccines. However this was not available by state. The team attempted to apportion an amount for Haryana using the proportion of vaccines that were distributed to Haryana but this was also unavailable. Instead, unit costs from UNICEF<sup>3</sup> were multiplied by the number of vaccines distributed to Haryana to obtain an estimate of vaccine spending. This assumes that the central government negotiated the same unit prices for vaccines as published on the UNICEF website. It also assumes that all vaccines received by Haryana state during the 2014-15 period was consumed.

The Employee State Insurance Scheme (ESIS) is a compulsory employer contributory scheme that receives contributions from employees, employers, and state governments. It is administered by the Employee State Insurance Corporation (ESIC). ESIC spending was captured from the ESIC's 2013/14 Annual Report, the most recently published annual report, which contains information on the source of revenues and where health spending took place (ESIS 2014). Expenditure estimates for 2014/15 and the proportion of national spending represented by Haryana in 2013/14 were assumed to be the same as in 2014/15.

The CGHS, implemented by the Haryana Department of Health and Family Welfare, covers government employees and pensioners. Its beneficiaries receive health care services either free of cost at CGHS dispensaries or through reimbursement of medical costs incurred at non-CGHS facilities. As was noted earlier, users of the CGHS dispensary in Chandigarh come from four states (Haryana, but also Punjab, Himachal Pradesh, and Delhi). The Additional Director's Office of the CGHS Regional Office in Haryana provided some information about CGHS members who use the dispensary with the HA team. However, electronic member information was available only for the minority of members who have electronic cards. Information about expenditures made by these members was available electronically, but in a separate database that uses a different set of ID numbers. The HA team attempted to match Haryana residents who used the dispensary to claim payments but the different ID systems made this impossible. The Additional Director's Office also provided the HA team with total drug spending for CGHS facilities in Haryana. Given that drug spending likely represents a significant portion of health spending at facilities and that total claims data was not available elsewhere, the HA team decided it was more appropriate to use this information than to exclude CGHS spending. However, these data also capture drug spending from all four states that the CGHS facility in Chandigarh serves. The CGHS spending in the HA does not include staff costs at CGHS facilities nor general supply costs. It should be noted that drug spending for CGHS members from the four states accounts for less than 1 percent of CHE. Therefore, it is unlikely that this underestimation significantly affects total spending.

The HA team received expenditure reports for all government departments. Medical reimbursements made to staff from each of these departments were included in the HA estimation. In addition, the HA team met with specific departments that had additional health spending. For example, the team visited Chief Medical Superintendent (CMS) of the Northern Railway Divisional Hospital, Ambala Cantt, to collect data on expenditures made by the Department of Railways. Haryana falls within two zones for the Department of Railways: North and North West. Haryana-specific spending for Railways Hospitals was calculated using the "bed strength", i.e. the Railway Hospital beds in Haryana as a share of Railway Hospital beds in the North and North West zones<sup>4</sup>. Spending in North and North West were multiplied by the bed strength. This method assumes that all patients using Railway hospitals in Haryana were also residents of Haryana, and therefore fall within the boundary of Haryana Health Accounts.

The HA team contacted the Director of Postal Services for Haryana but was told that the health spending in the postal department for Haryana was insignificant and data was not available.

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<sup>3</sup> <http://www.unicef.org/supply/>. Accessed June 2016

<sup>4</sup> [http://www.indianrailways.gov.in/railwayboard/uploads/directorate/health/health\\_1.jsp](http://www.indianrailways.gov.in/railwayboard/uploads/directorate/health/health_1.jsp) accessed on 15 Jan 2016

## 2.2.2 Household Data

Household spending data was obtained from the 71<sup>st</sup> round (2014) of the National Sample Survey Office (NSSO) survey (Ministry of Statistics and Programme Implementation 2015). This is a national-level survey that asks households about their use of health services, where they seek care, what type of health services they have used, and their expenditure. The 71<sup>st</sup> round was conducted between January and June 2014. It interviewed 1,424 households in Haryana State, collecting data on 8,040 household members. The health spending data was analysed by the HA team for the ailment, type of care sought, level of care, total spent, and method of payment (out-of-pocket or reimbursement). Spending estimates from the survey were annualized, adjusted to align with the population from the India Census and adjusted for inflation to arrive at total Haryana household spending for 2014/15.

For a complete picture of spending, spending on contraceptives and other medical goods such as glasses and therapeutic appliances were added, using NSSO's Consumer Expenditure Survey (68<sup>th</sup> Round). This survey was conducted between July 2011 and June 2012; spending figures were adjusted to align with the population from the India Census and adjusted for inflation to arrive at spending estimates for the period of analysis.

## 2.2.3 Institutional Data

HA surveys were sent to all health insurance companies and a sample of health sector NGOs and employers. The HA team used a purposive sampling approach to identify and survey the largest spenders across each institutional type. For the HA, this is a more cost-effective approach for calculating total spending than is representative sampling, which assumes organizations are homogenous – not necessarily the case for health spending. A full list of organizations contacted is in Annex A.

The 2013/14 Annual Survey of Industries and Registrar of Companies were used to identify the universe of employers in Haryana. Experience shows that health spending is most often available in medium to large sized enterprises, measured in terms of number of employees. Therefore, the largest firms are most likely to have health spending, not only through schemes such as the ESIC, but also via workplace programs and additional reimbursement schemes. Therefore, the HA team focused its data collection on the largest employers. In Haryana, 14 of the state's 6,134 registered firms have more than 5,000 employees and 27 firms have more than 3,000 employees. These 41 firms formed the "core" sample for the survey: the HA team conducted in-person visits to these firms and followed up regularly to complete the surveys. An additional 1,434 surveys were sent to smaller firms via email, with follow-up by phone call. Surveys for employers are designed to capture information on corporate spending for employees via on-site health services, subsidized health insurance, and reimbursement of health care.

The HA team used the Foreign Contribution Regulation Act to identify 209 NGOs registered in Haryana. The team sent questionnaires to all 103 NGOs that worked in the health sector. The survey addressed NGO capacity as implementers of their organization's scope of work – such as health spending by project, and details on the project implementer and activities – and not as employers.

There are 21 private insurance providers in Haryana, all of which were sent a survey. The survey was designed to capture spending data predominantly about health and car (accident) insurance but it also asked about other types of company policies that have a health spending component.

The organizations mentioned in this section were contacted by email, phone, and/or in-person numerous times. The HA team explained the purpose of the HA exercise and presented an explanatory letter from the HSHRC Executive Director. A meeting was organized to invite the organizations to ask any questions they had about the survey instruments and how their data would be used, to explain the benefits of the exercise, and to assure them of the confidentiality that the HA



exercise maintains. Despite these efforts to improve the response rate from earlier rounds of HA, only four NGOs and one employer responded. The HA team did not use the completed surveys to weight the non-surveyed NGOs, because of the variability in NGO spending and the limited information about health sector NGOs in Haryana. The HA team decided to err on the side of underestimating NGO spending rather than introduce baseless assumptions about NGO spending. No secondary data was available for NGO health spending.

Employer responses to the HA employer survey were also limited. Given the large and active private sector in Haryana, it is likely that many employers have on-site facilities providing health care, subsidize health insurance for employees, or reimburse employees for health costs. Employer spending via health insurance was captured by insurance spending reported in the Insurance Information Bureau's (IIB's) *2013-14 Annual Report (2015)*. The HA team also studied the annual reports of a sample of the largest employers in Haryana, which reported on total benefits paid, in order to identify health benefits. However, because it was not clear that these benefits were all health spending, the HA team decided to not use this information, and thus, employer spending via on-site health services and direct employee reimbursement could not be captured.

Since private insurance firms did not complete the HA surveys, secondary data on commercial insurance spending was obtained from the IIB's *2013-14 Annual Report (2015)*. The report includes spending for health via non-life insurance policies, both from individuals and groups (e.g., corporations). Insurance spending was calculated using the number of claims (adjusted for 2014/15) and average claim payment.

## 2.2.4 Additional Data

Secondary data was collected to calculate distribution keys. Distribution keys help to break down aggregated spending, when that spending applies to more than one SHA 2011 category, for example, a distribution key can be used to break down curative spending at a facility between inpatient and outpatient care. The distribution key specifies the categories to which the spending should be allocated and in what proportions. Further information on calculating distribution keys can be found below in Section 2.3.3, Estimating and Applying Distribution Keys.

Health Management Information System (HMIS) reports were obtained for data on utilization of inpatient and outpatient services, deliveries, surgeries, and prevention services at hospitals, community health centres (CHCs), primary health centres (PHCs), and sub-centres. This was triangulated with utilization data that the HA team collected via the Mukhyamantri Muft Ilaaj Yojana (MMIY) scheme (Haryana Department of Health, 2015) and data compiled from Panchkula Civil Hospital.

Costing information was obtained from the 2015 PGI District Hospital costing study (Prinja, Balasubramanian, Jeet et al. 2015) and the World Health Organization's (WHO) CHOICE database.<sup>5</sup> These were triangulated with the costing report entitled "Cost-effectiveness of Disease Interventions in India" (Resources for the Future 2007). Family planning commodity costs were obtained from the Reproductive Health Interchange.<sup>6</sup>

## 2.3 Data Analysis

Once the collected data was verified and cleaned, the HA team entered the data analysis stage. This required importing all spending data into the HAPT, assigning SHA codes to each classification and removing cases of double counting. Separately, distribution keys were calculated using utilization and costing data, entered into the HAPT and applied to aggregated spending data.

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<sup>5</sup> [http://www.who.int/choice/cost-effectiveness/inputs/health\\_service/en/](http://www.who.int/choice/cost-effectiveness/inputs/health_service/en/). Accessed November 2015.

<sup>6</sup> <https://www.myaccessrh.org/rhi-home>. Accessed December 2015

### 2.3.1 Assigning HA Codes

Over 2,800 lines of data was imported into the HAPT. The HA team assigned SHA 2011 codes to eight SHA 2011 classifications,<sup>7</sup> resulting in over 22,800 codes assigned by. When assigning SHA codes, the general approach used by the team was to identify the primary objective of the spending. To provide the state information that is detailed and useful for understanding how health funds were spent, activities implemented by government agencies were assigned to specific Healthcare Function codes before a decision was made to assign to the general “Administration” category. The codes used include the internationally standardized SHA 2011 codes in the HAPT, with some customized for India per the training manual written by the Institute of Health Systems (2009).

### 2.3.2 Double Counting

The HA analysis includes careful compilation from all data sources, and identification and management of instances when two data sources cover the same spending. For example, spending by insurance companies on health claims was reported by insurance companies in the IIB annual report and by households in the NSSO survey. The data of the organization closest to the spending, in this case the private insurance companies, took precedence and household spending later reimbursed by private health insurance was excluded. The amount reported by households also was excluded because households may not be able to accurately report on amounts reimbursed to them versus amounts they spent out-of-pocket.

### 2.3.3 Estimating and Applying Distribution Keys

In some cases, health spending reported needed to be further broken down in order to allocate spending to all eight SHA classifications. The HA process, therefore, involved estimating “distribution keys” to break down spending for the provider, functional, and disease classifications.

Distribution key calculations were calculated using the “price x quantity” approach, which posits that spending is proportional to utilization weighted for the intensity of resource use. The intensity of resource use in this case is measured by unit costs. Utilization data was obtained from the Haryana HMIS report to the MOHFW<sup>8</sup> and MMIY reports (Haryana Department of Health 2015). More detailed utilization information broken down by disease were not compiled in the HMIS; the HA team obtained this from Panchkula Civil Hospital.

Unit cost data for district hospitals were obtained from PGI’s costing study (Prinja, Balasubramanian, Jeet et al. 2015). This study calculated the unit cost of an average outpatient visit consultation, inpatient bed day of hospitalization, surgical procedure, and the overall per capita cost of providing secondary care through district hospitals. For unit costs at CHCs, PHCs and sub-centres, the HA team adjusted the PGI costing study using proportions from WHO’s CHOICE<sup>9</sup> database. WHO CHOICE calculates average unit costs for inpatient bed day and outpatient episode for different levels of health care. In the absence of additional data, the HA team used the unit costs for district hospitals from PGI’s study and adjusted them for PHCs, CHCs and sub-centre using proportions from WHO CHOICE. Unit cost data was also adjusted for the year of analysis. Unit costs across all facilities of the same type were assumed to be the same. This approach is reasonable, given that the primary objective of the distribution key is to understand *relative* spending between the facility types, and not absolute spending.

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<sup>7</sup> FS.RI – Institutional unit providing revenues to financing schemes; FS – Revenues of health care financing schemes; HF – Financing schemes; FA – Financing Agents; HP – Health care providers; HC – Health care function; FP – Factors of health care provision and DIS – Classification of diseases/ conditions

<sup>8</sup> <https://nrhm-mis.nic.in/SitePages/Home.aspx>. Accessed November 2015.

<sup>9</sup> [http://www.who.int/choice/cost-effectiveness/inputs/health\\_service/en/](http://www.who.int/choice/cost-effectiveness/inputs/health_service/en/). Accessed November 2015.

As indicated earlier, for disease distribution keys, the HA team used utilization data by disease or health condition collected for Panchkula Civil Hospital, CHCs, and PHCs. The disease distribution was assumed to be the same across all facilities *of the same type*. For inpatient care, average number of bed days by different wards was used as a proxy for disease unit costs. For example, utilization for pneumonia and asthma were multiplied by the average length of stay for the Respiratory Medicine ward. WHO studies have shown that bed days are a very close proxy for relative share of spending across 21 ICD 10 codes (WHO 2014).

For outpatient care, utilization was used as a proxy for spending by disease. This approach assumes that the average unit cost for an outpatient service is the same across all diseases. This distribution key is judicious to apply to break down salary cost (i.e., time) and general operating costs (e.g., water and electricity), which likely do not change significantly across the treatment of different diseases/conditions at an outpatient level. Unfortunately, no additional information was available to break down spending for drugs and medical supplies, and so the same distribution key was used to obtain disease breakdowns for all spending at the facility.

Text Box 1 provides more detail on the calculation of disease distribution keys.



## Text Box 1. Steps Taken to Derive Disease Distribution Keys

### Step 1: Compiled utilization breakdown by disease classification

Utilization of health services data was obtained from Panchkula Civil Hospital, which was available by disease or health condition. Each of the disease classifications was also categorized by type of provider (district hospital, CHC, PHC) and by type of care (inpatient curative, outpatient curative, or preventive care).

### Step 2: Convert inpatient admissions to bed days

For each facility type, each inpatient service was assigned to a ward and the utilization for each service was multiplied by the average length of stay for the assigned ward. This ensures that the unit of measurement for calculating disease breakdowns remains consistent for both inpatient and outpatient care.

### Step 3: Assign unit costs to services utilized

The HA team attempted to collect unit costs for services treating different diseases and conditions. The team found one costing study conducted by Resources for the Future (2007) but it did not include unit costs for a significant number of services and it dates back to 2007. However, WHO (2014) has shown that bed days is closely proportional to spending, across 21 ICD 10 codes. Therefore, the calculation in Step 2 was already weighted for cost in this case.

For outpatient services, utilization figures were used to estimate the disease breakdown due to unavailability of unit costs. This computation assumed that unit cost per outpatient visits is equal across diseases.

There was an exception for prevention services in the distribution key. For family planning commodities, unit costs from the Reproductive Health Interchange web-based database (<https://www.myaccessrh.org/rhi-home>) were used. For other prevention services, such as ante- and post-natal services and immunizations, unit costs from the Resources for the Future study were used. Both these sources were adjusted for the same year of analysis as costing information used from the PGI costing study, for consistency.

### Step 4: Calculated the price x quantity

For each facility type, the cost of health services provided for the different disease classifications was calculated using the price information derived in step 3 and the quantity of services determined in steps 1 and 2. A separate distribution key was calculated for each facility type – district hospital, CHC, PHC, and sub-centre.

## 2.4 Use of the Health Accounts Production Tool

Throughout the HA process, the technical team used the HAPT, a software developed by WHO and USAID's Health System 20/20 project. The HAPT is a tool that facilitates HA planning and production. It automates several previously time-consuming procedures, e.g., data collection and repeat mapping, and incorporates automatic quality checks. It facilitates the removal of double counting and weighting for non-surveyed data. Another of its advantages is that it provides a repository for HA data and HA tables which can be easily accessed by team members years after an HA estimation is done. In addition, distribution keys and mapping decisions from previous years can be used to facilitate data analysis in subsequent years.

A list of all institutions to be surveyed was entered into the HAPT, to produce customized HA surveys. All data collected, either via surveys or via secondary data, was imported into the HAPT and was mapped to the SHA 2011's key classifications. The team utilized the Data Validation module in the HAPT to verify the final data and check for any errors, before generating the HA tables.

### 3. CHALLENGES AND LESSONS LEARNED

The HA excludes or underestimates certain elements of spending, due to the availability of data. The response rates for the HA survey from insurance companies, NGOs, and employers were low. This is not uncommon, especially in many countries where the HA process is new and/or when there is a history of limited engagement and accountability with the government. Because of this low response rate, spending by NGOs, and employer spending via workplace programs and on-site facilities could not be included this HA. Going forward, better engagement between the state government and the private sector is needed as a broader strategy that goes beyond the HA. Over time, a greater sense of mutual accountability will incentivize the private sector to share more data with the state government. These actors should also be involved early on in the HA process, for example, by including NGOs, employers, and insurance companies on the HA Steering Committee so they are engaged and informed throughout the process. The HA technical team should explicitly communicate the importance of HA for the private sector and the role that they play in the process.

The structure of the NSSO survey creates some uncertainty about the health spending reported by households. The survey asks households to report on spending for treatment at various facilities. It additionally asks whether treatment occurred on medical advice before the episode being reported. However, the household then responds on *total* spending for doctor's fees, drugs, diagnostic tests, bed charges, and other medical costs; spending is not broken down by episode. Therefore, it is probable that drug spending at private pharmacies is underestimated because (i) private pharmacy was not provided as a response category when households reported where they incurred health spending and (ii) it is not possible to isolate spending that was not on "medical advice" and that could have been auto-medication. Given this uncertainty, all drugs spending via the NSSO survey was assumed to be part of a facility visit and not at private pharmacies. As a result, household health spending on medicine may be underestimated in the NSSO survey. The HA team attempted to collect drug spending data by households through alternative sources, such as state-level household surveys and IMS Health, but did not obtain the data in time for the report. Going forward, national-level stakeholders may want to review the health expenditure module of the NSSO survey so drug spending at private pharmacies is more clearly reported. Alternatively, IMS Health data could be made publicly available to producers of HA at the state level.

For CGHS spending data, the team visited the CGHS Regional Office and CGHS dispensary in Chandigarh to obtain spending data. However, the vast majority of data is still being compiled in a paper format. Only information for residents with a plastic medical card was available electronically. The HA team was informed that this represents the minority of CGHS members. In addition, the claims that were available included residents from Haryana, Punjab, Himachal Pradesh, and Delhi. Claims payment and place of residency were generated via two different reports and could not be matched within the data collection period. CGHS spending accounts for less than 1 percent of total spending and so it is unlikely that total spending has been significantly underestimated as a result of CGHS data. In the future, electronic records for all CGHS members will make it easier for the state to monitor claims by residential status and will help HA teams to include CGHS in HA accurately.

Despite the challenges encountered, this HA exercise captures a significant level of health spending. It provides rich information on how health funds are being used that will be useful for making informed decisions about health sector financing and spending. As more disaggregated data become available and there is increased engagement with private sector stakeholders, future HA exercises will become more accurate over time.



## 4. HEALTH ACCOUNTS TABLES

This chapter summarizes the HA data through a series of two-dimensional tables. Each table cross-tabulates spending for two HA classifications. Unless otherwise specified, the tables contain 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		Transfers by government on behalf of specific groups	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	
				Indian Rupee (INR), Million																	
<b>HF.1</b>				<b>Government schemes and compulsory contributory health care financing schemes</b>	<b>19,381</b>	<b>16,037</b>	<b>4,105</b>	<b>11,932</b>	<b>3,343</b>	<b>363</b>	<b>363</b>									<b>19,744</b>	
	HF.1.1			Government schemes	<b>16,001</b>	16,001	4,069	11,932												16,001	
		HF.1.1.1		Central government schemes	<b>4,908</b>	4,908	3,756	1,152												4,908	
		HF.1.1.2		State/regional/local government schemes	<b>11,094</b>	11,094	313	10,781												11,094	
	HF.1.2			Compulsory contributory health insurance schemes	<b>3,379</b>	36	36		3,343	<b>363</b>	363									3,743	
		HF.1.2.1		Social health insurance schemes	<b>3,379</b>	36	36		3,343	<b>363</b>	363									3,743	
			HF.1.2.1.1	Employee State Insurance (ESI)	<b>3,343</b>				3,343	<b>363</b>	363									3,707	
			HF.1.2.1.2	RSBY	<b>36</b>	36	36													36	
				<b>Voluntary health care payment schemes</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>					<b>3,923</b>	<b>1,687</b>	<b>2,236</b>	<b>0.06</b>		<b>0.06</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>4,049</b>
	HF.2.1			Voluntary health insurance schemes								<b>3,923</b>	1,687	2,236						3,923	
		HF.2.1.1		Primary/substitutory health insurance schemes								<b>3,923</b>	1,687	2,236						3,923	
			HF.2.1.1.1	Employer-based insurance (Other than enterprises schemes)								<b>2,236</b>		2,236						2,236	
			HF.2.1.1.3	Other primary coverage schemes								<b>1,687</b>	1,687							1,687	
	HF.2.2			NPISH financing schemes (including development agencies)	<b>0.02</b>	0.02	0.02								<b>0.06</b>		0.06	<b>125</b>	125	125	125
		HF.2.2.1		NPISH financing schemes (excluding HF.2.2.2)	<b>0.02</b>	0.02	0.02								<b>0.06</b>		0.06	<b>125</b>	125	125	125
				<b>Household out-of-pocket payment</b>											<b>60,840</b>	<b>60,840</b>				<b>60,840</b>	
	HF.3.1			Out-of-pocket excluding cost-sharing											<b>60,840</b>	60,840				60,840	
<b>All HF</b>					<b>19,381</b>	16,037	4,105	11,932	3,343	<b>363</b>	363	<b>3,923</b>	1,687	2,236	<b>60,840</b>	60,840	0.06	<b>125</b>	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				HP.3.5	HP.3.nec	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
				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.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2	HP.2		
HC.1				<b>Curative care</b>	<b>54,621</b>	<b>54,054</b>	<b>9,771</b>	<b>44,282</b>	<b>244</b>	<b>323</b>	<b>0.1</b>	<b>19,053</b>	<b>##</b>	<b>0.02</b>	<b>2,766</b>	<b>2,766</b>	<b>1,430</b>	<b>474</b>	<b>362</b>	<b>501</b>	<b>4</b>	<b>49</b>						<b>8</b>		<b>0.1</b>	73,682
	HC.1.1			Inpatient curative care	<b>33,234</b>	32,892	6,703	26,189	122	220	0.02	<b>539</b>			529	529	275	223	0.4	30		10						<b>4</b>		<b>0.04</b>	33,777
		HC.1.1.1		General inpatient curative care	<b>32,976</b>	32,846	6,669	26,177		130	0.0	<b>539</b>	<b>3,976</b>		529	529	275	223	0	30		10									33,515
		HC.1.1.2		Specialised inpatient curative care	<b>258</b>	46	34	11	122	90																		<b>4</b>		<b>0.04</b>	262
	HC.1.3			Outpatient curative care	<b>21,387</b>	21,162	3,068	18,094	122	103	0.1	<b>18,510</b>	16,234	0.02	2,237	2,237	1,155	250	361	470	39							<b>4</b>		<b>0.04</b>	39,900
		HC.1.3.1		General outpatient curative care	<b>21,172</b>	21,162	3,068	18,094		10	0	<b>17,964</b>	16,234		1,691	1,691	609	250	361	470	39										39,135
		HC.1.3.2		Dental outpatient curative care								<b>546</b>		0	546	546	546														546
		HC.1.3.3		Specialised outpatient curative care	<b>215</b>				122	93																	<b>4</b>		<b>0</b>	219	
	HC.1.4			Home-based curative care								<b>4</b>									4									4	
HC.3				<b>Long-term care (health)</b>	<b>122</b>				<b>122</b>			<b>273</b>																			395
HC.4				<b>Ancillary services (non-specified by function)</b>																		<b>579</b>									579
HC.5				<b>Medical goods (non-specified by function)</b>																			<b>933</b>								933
HC.6				<b>Preventive care</b>	<b>413</b>	<b>412</b>	<b>397</b>	<b>15</b>		<b>0.5</b>	<b>0.01</b>	<b>1,492</b>			<b>1,489</b>	<b>1,489</b>	<b>63</b>	<b>214</b>	<b>1,153</b>	<b>59</b>	<b>3</b>			<b>104</b>	<b>950</b>	<b>45</b>	<b>398</b>				3,401
	HC.6.1			Information, education and counseling (IEC) programmes	<b>19</b>	19	19					<b>1</b>			<b>1</b>	<b>1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.3</b>							<b>274</b>	<b>45</b>	<b>68</b>		407	
	HC.6.2			Immunisation programmes								<b>782</b>			782	782		156	625							<b>185</b>		<b>68</b>		1,035	
	HC.6.3			Early disease detection programmes	<b>245</b>	245	245					<b>28</b>			28	28	4	6	18							<b>314</b>		<b>68</b>		655	
	HC.6.4			Healthy condition monitoring programmes	<b>137</b>	136	121	15		0.5	0.01	<b>631</b>			628	628	59	51	509	10		3		<b>104</b>				<b>68</b>		940	
	HC.6.5			Epidemiological surveillance and risk and disease control programmes	<b>12</b>	12	12					<b>1</b>			<b>1</b>	<b>1</b>	<b>0.2</b>	<b>0.3</b>	<b>1</b>						<b>121</b>		<b>125</b>			260	
	HC.6.nec			Unspecified preventive care (n.e.c.)								<b>49</b>			49	49				49						<b>57</b>				106	
HC.7				<b>Governance, and health system and financing administration</b>																							<b>5,583</b>			5,583	
HC.9				<b>Other health care services not elsewhere classified (n.e.c.)</b>	<b>55</b>	<b>55</b>	<b>55</b>					<b>0.03</b>			<b>0.02</b>	<b>0.02</b>	<b>0.003</b>	<b>0.004</b>	<b>0.01</b>		<b>0.01</b>	<b>0.01</b>						<b>5</b>		60	
All HC					<b>55,211</b>	<b>54,521</b>	<b>10,223</b>	<b>44,298</b>	<b>367</b>	<b>323</b>	<b>0.1</b>	<b>273</b>	<b>20,545</b>	<b>##</b>	<b>0.02</b>	<b>4,255</b>	<b>4,255</b>	<b>1,493</b>	<b>687</b>	<b>1,515</b>	<b>559</b>	<b>4</b>	<b>52</b>	<b>579</b>	<b>1,036</b>	<b>950</b>	<b>5,635</b>	<b>403</b>	<b>0.1</b>	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	All HF	
				Government schemes	HF.1.1.1		HF.1.1.2	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)
Indian Rupee (INR), Million		Government schemes	Central government schemes	State/regional/local government schemes	Compulsory contributory health insurance schemes	Social health insurance schemes	Employee State Insurance (ESI)	RSBY	Voluntary health insurance schemes	Primary/substitutory health insurance schemes	Employer-based insurance (Other than enterprises schemes)	Other primary coverage schemes	NPSH financing schemes (including development agencies)	NPSH financing schemes (excluding HF.2.2.1)	Household out-of-pocket payment	Out-of-pocket excluding cost-sharing	All HF					
HC.1		<b>Curative care</b>	<b>9,955</b>	<b>8,871</b>	<b>2,808</b>	<b>6,063</b>	<b>1,084</b>	<b>1,084</b>	<b>1,048</b>	<b>36</b>	<b>3,923</b>	<b>3,923</b>	<b>3,923</b>	<b>2,236</b>	<b>1,687</b>	<b>0.02</b>	<b>0.02</b>	<b>59,803</b>	<b>59,803</b>	<b>73,682</b>		
	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		<b>Long-term care (health)</b>	<b>395</b>	<b>395</b>		<b>395</b>														<b>395</b>		
HC.4		<b>Ancillary services (non-specified by function)</b>	<b>579</b>	<b>579</b>	<b>282</b>	<b>297</b>														<b>579</b>		
HC.5		<b>Medical goods (non-specified by function)</b>																<b>933</b>	<b>933</b>	<b>933</b>		
HC.6		<b>Preventive care</b>	<b>3,172</b>	<b>3,132</b>	<b>1,190</b>	<b>1,942</b>	<b>40</b>	<b>40</b>	<b>40</b>		<b>125</b>					<b>125</b>	<b>125</b>	<b>104</b>	<b>104</b>	<b>3,401</b>		
	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										<b>104</b>	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		<b>Governance, and health system and financing administration</b>	<b>5,583</b>	<b>2,964</b>	<b>568</b>	<b>2,396</b>	<b>2,619</b>	<b>2,619</b>	<b>2,619</b>											<b>5,583</b>		
HC.9		<b>Other health care services not elsewhere classified (n.e.c.)</b>	<b>60</b>	<b>60</b>	<b>60</b>						<b>0.02</b>					<b>0.02</b>	<b>0.02</b>			<b>60</b>		
<b>All HC</b>			<b>19,744</b>	<b>16,001</b>	<b>4,908</b>	<b>11,094</b>	<b>3,743</b>	<b>3,743</b>	<b>3,707</b>	<b>36</b>	<b>4,049</b>	<b>3,923</b>	<b>3,923</b>	<b>2,236</b>	<b>1,687</b>	<b>125</b>	<b>125</b>	<b>60,840</b>	<b>60,840</b>	<b>84,632</b>		

## 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	FP.3.2 Health care goods	FP.3.2				FP.3.2.2 Other health care goods	FP.3.4 Non-health care goods	FP.3.3					FP.3.nec Other materials and services used (n.e.c.)			
										Pharmaceuticals	FP.3.2.1					Non-health care services	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.)											
			<b>Government schemes and compulsory contributory health care financing schemes</b>	<b>13,753</b>	<b>5,376</b>	<b>3,174</b>	<b>981</b>	<b>636</b>	<b>313</b>		<b>323</b>	<b>345</b>	<b>649</b>	<b>163</b>		<b>2</b>	<b>485</b>	<b>311</b>	<b>260</b>	<b>86</b>	<b>530</b>	19,744		
HF.1			Government schemes	<b>10,726</b>	<b>4,668</b>	2,654	959	636	313		323	323	649	163		2	485	252	154	<b>78</b>	<b>529</b>	16,001		
		HF.1.1.1	Central government schemes	<b>2,790</b>	<b>1,522</b>	465	343	323			323	20	603	163		2	439	111		<b>67</b>	<b>529</b>	4,908		
		HF.1.1.2	State/regional/local government schemes	<b>7,937</b>	<b>3,146</b>	2,189	616	313	313			303	46	1			45	141	154	<b>11</b>			11,094	
		HF.1.2	Compulsory contributory health insurance schemes	<b>3,027</b>	<b>707</b>	520	22					22						59	106	<b>8</b>	<b>0.4</b>		3,743	
		HF.1.2.1	Social health insurance	<b>3,027</b>	<b>707</b>	520	22					22						59	106	<b>8</b>	<b>0.4</b>		3,743	
		HF.1.2.1.1	Employee State Insurance	<b>3,027</b>	<b>672</b>	485	22					22						59	106	<b>8</b>	<b>0.4</b>		3,707	
		HF.1.2.1.2	RSBY		<b>36</b>	36																	36	
HF.2			<b>Voluntary health care payment schemes</b>	<b>0.02</b>	<b>4,049</b>	<b>3,923</b>	<b>0.01</b>	<b>0.01</b>			<b>0.01</b>	<b>0.002</b>	<b>125</b>		<b>125</b>			<b>0.03</b>	<b>0.01</b>				4,049	
		HF.2.1	Voluntary health insurance schemes		<b>3,923</b>	3,923																	3,923	
		HF.2.1.1	Primary/substitutory health insurance schemes		<b>3,923</b>	3,923																		3,923
		HF.2.1.1.1	Employer-based insurance (Other than enterprises)		<b>2,236</b>	2,236																		2,236
		HF.2.1.1.3	Other primary coverage		<b>1,687</b>	1,687																		1,687
		HF.2.2	NPISH financing schemes (including development)	<b>0.02</b>	<b>125</b>		0.01	0.01			0.01	0.002	125		125			0.03	0.01					125
HF.3			<b>Household out-of-pocket payment</b>		<b>60,840</b>	<b>28,661</b>	<b>29,255</b>	<b>28,323</b>		<b>104</b>	<b>28,219</b>	<b>933</b>	<b>2,924</b>										60,840	
		HF.3.1	Out-of-pocket excluding cost-sharing		<b>60,840</b>	28,661	29,255	28,323		104	28,219	933	2,924					2,924						60,840
<b>All HF</b>				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	
					Government	Corporations	Households	NPFIS	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>									
				<b>Hospitals</b>	<b>7,862</b>	<b>2,600</b>	<b>44,749</b>					<b>55,211</b>	
				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	
			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			<b>Residential long-term care facilities</b>	<b>273</b>								<b>273</b>
HP.3				<b>Providers of ambulatory health care</b>	<b>3,804</b>		<b>16,741</b>	<b>0.03</b>				<b>20,545</b>	
	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				<b>Providers of ancillary services</b>	<b>579</b>			<b>0.01</b>				<b>579</b>	
	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			<b>Retailers and Other providers of medical goods</b>			<b>1,036</b>					<b>1,036</b>		
HP.6			<b>Providers of preventive care</b>	<b>950</b>			<b>0.02</b>				<b>950</b>		
HP.7			<b>Providers of health care system administration and financing</b>	<b>5,635</b>							<b>5,635</b>		
HP.8			<b>Rest of economy</b>	<b>277</b>				<b>125</b>	<b>125</b>	<b>125</b>	<b>403</b>		
	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			<b>Unspecified health care providers (n.e.c.)</b>	<b>0.1</b>							<b>0.1</b>		
All HP				<b>19,381</b>	<b>2,600</b>	<b>62,527</b>	<b>0.1</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>84,632</b>		

## FSRI x HC

Health care functions				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	FS.RI.1.5.1.25 United States (USAID)	
HC.1			<b>Curative care</b>	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			<b>Long-term care (health)</b>	395							395	
HC.4			<b>Ancillary services (non-specified by function)</b>	579							579	
HC.5			<b>Medical goods (non-specified by function)</b>			933					933	
HC.6			<b>Preventive care</b>	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			<b>Governance, and health system and financing administration</b>	5,583							5,583	
HC.9			<b>Other health care services not elsewhere classified (n.e.c.)</b>	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	FS.RI.1.5.1.2	
							Bilateral donors	United States (USAD)	
DIS.1	<b>Infectious and parasitic diseases</b>	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 Vaccines 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	<b>Reproductive health</b>	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	<b>Nutritional deficiencies</b>	26		1					27
DIS.4	<b>Noncommunicable diseases</b>	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	<b>Injuries</b>	489	144	2,167					2,800
DIS.6	<b>Non-disease specific</b>	8,894	51	24,117	0.02	125	125	125	33,187
DIS.nec	<b>Other and unspecified diseases/conditions (n.e.c.)</b>	1,289	1,753	3,359					6,401
All DIS		19,381	2,600	62,527	0.1	125	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																				
		<b>Transfers from government domestic revenue (allocated to health purposes)</b>	<b>19,381</b>	<b>650</b>	<b>358</b>	<b>292</b>	<b>15,388</b>	<b>7,555</b>	<b>531</b>	<b>631</b>	<b>6,669</b>	<b>3,343</b>	<b>3,343</b>	<b>3,343</b>		<b>0.02</b>		19,381		
FS.1		Internal transfers and grants	<b>16,037</b>	650	358	292	15,388	7,555	531	631	6,669					<b>0.02</b>		16,037		
		FS.1.1.1 Central government revenues	<b>4,105</b>	650	358	292	3,455				3,455					<b>0.02</b>		4,105		
		FS.1.1.2 State government revenues	<b>11,932</b>				11,932	7,555	531	631	3,214								11,932	
		FS.1.2 Transfers by government on behalf of specific groups	<b>3,343</b>									3,343	3,343	3,343					3,343	
FS.3		<b>Social insurance contributions</b>	<b>363</b>									<b>363</b>	<b>363</b>	<b>363</b>				363		
FS.5		<b>Voluntary prepayment</b>													<b>3,923</b>			3,923		
	FS.5.1	Voluntary prepayment from individuals/households													<b>1,687</b>			1,687		
	FS.5.2	Voluntary prepayment from													<b>2,236</b>			2,236		
FS.6		<b>Other domestic revenues n.e.c.</b>														<b>0.1</b>	<b>60,840</b>	60,840		
	FS.6.1	Other revenues from households n.e.c.															<b>60,840</b>	60,840		
	FS.6.3	Other revenues from NPISH n.e.c.														<b>0.1</b>		0.1		
FS.7		<b>Direct foreign transfers</b>														<b>125</b>		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.I			<b>Gross capital formation</b>	<b>2,193</b>	<b>0.1</b>	2,193	
	HK.I.1		Gross fixed capital formation	<b>1,693</b>	<b>0.1</b>	1,693	
		HK.I.1.1	Infrastructure	<b>1,642</b>		1,642	
			HK.I.1.1.1 Residential and non-residential buildings	<b>1,642</b>		1,642	
		HK.I.1.2	Machinery and equipment	<b>27</b>	<b>0.1</b>	27	
			HK.I.1.2.1 Medical equipment		<b>0.02</b>	0.02	
			HK.I.1.2.2 Transport equipment	<b>24</b>		24	
			HK.I.1.2.3 ICT equipment	<b>1</b>	<b>0.1</b>	1	
			HK.I.1.2.4 Machinery and equipment n.e.c.	<b>2</b>		2	
		HK.I.1.3	Intellectual property products	<b>23</b>		23	
			HK.I.1.3.1 Computer software and databases	<b>23</b>		23	
		HK.I.nec		Unspecified gross capital formation (n.e.c.)	<b>500</b>		500
HK.nec			<b>Unspecified gross fixed capital formation (n.e.c.)</b>	<b>0.4</b>		0.4	
All HK				2,193	0.1	2,193	



## ANNEX A: ORGANIZATIONS CONTACTED FOR HEALTH ACCOUNTS SURVEY

Insurance firms	
APOLLO MUNICH	IFFCO TOKIO
BAJAJ ALLIANZ	LIBERTYVIDEOCON
BHARTI AXA	MAX BUPA
FUTURE GENERALI	RELIGARE
THE NEW INDIA	RELIANCE
ORIENTAL	ROYAL SUNDARAM
UNITED	SBI
L & T	STAR HEALTH
CHOLAMANDALAM	TATA AIG
HDFC ERGO	NATIONAL INSURANCE
ICICI LOMBARD	

Private employers (“Core sample”)	
ALCATEL LUCENT INDIA LTD	ORIENT CRAFTS LTD.
BAJAJ MOTORS P.LTD,	PEARL GLOBAL INDUSTRIES LTD
HCL TECHNOLOGIES	RICHA & CP
DELL	SUZUKI POWERTRAIN INDIA LTD
HONEY WELL	M/S SUZUKI MOTORCYCLE INDIA P LTD
DELPHI INDIA PVT LTD	ESCORTS LTD.TRACTOR DIVISION,
EICHER MOTORS	M/S GUPTA AGSIM INDIA (P)LTD
EMAAR PROPERTIES	M/S GUPTA EXIM INDIA PVT.LTD
TCS	ESCORTS JCB,
ORACLE	GOOD YEAR (I)LTD,
SIEMENS	HINDUSTAN SYRINGES (P)LTD.,
DELOITTE	LAKHANI FOOTWEAR LTD
DLF	M/S ESCORT CONSTRUCTION EQUIPMENT LTD
WIPRO TECHNOLOGIES	M/S LAKHANI INDIA LTD
UNITED HEALTH GROUP	M/S WIRLPOOL(I) LTD.
HERO MOTO CORP LTD.UNIT NO.2,	DCM TEXTILE
HONDA MOTOR CYCLE AND SCOOTER PVT. LTD.	M/S JINDAL STAINLESS LTD
M/S GAURAV INTERNATIONAL	M/S JINDAL STAINLESS LTD
EASTERN MEDIKIT LIMITED (UV) - III	M/S RANGER FOODS PVT. LTD.
ARICENT TECHNOLOGY HOLDINGS LIMITED (PLOT-31)	GRASIM BHIWANITEXTILE LTD(ELIGENT )
M/S RICHA & CO.,	LIBERTY SHOES LIMITED (UNIT-3)

**Private employers (“Core sample”)**

MARUTI SUZUKI INDIA LIMITED	H.M.T.
SUNBEAM AUTO PRIVATE LIMITED	ULTRA TECH CEMENT
MICROTECH FORGING (UNIT OF BAJAJ MOTORS LTD).	

**Non-governmental organizations**

SHIKHAR CHETNA SANGATHAN	S M SHEGAL FOUNDATION
HUMAN RIGHTS AWARENESS ORGANISATION	LOGOS FAITH FOUNDATION
NIROGDHAM MANAV KALYAN NIRMAN SOCIETY	ARPANA RESEARCH & CHARITIES TRUST
BALAJI CHARITABLE EDUCATION INSTITUTE	GENESIS FOUNDATION,C/O K & S PARTNERS,
SARVHITKARI MAHILA AVM BAL KALYAN SAMITI	SATYUG DARSHAN TRUST
URJA SAMITI	ASHA BHAWAN TRUST OF INDIA
MAHATMA GANDHI PRAKRITIK CHIKITSA SAMITI	WORLD BUDDHIST CULTURE TRUST
RURAL INDIA	THE MISSIONARY BROTHERS OF CHARITY
GREEN EARTH	THE ASHA BHAWAN TRUST OF INDIA
RADHA KRISHAN EDUCATION SOCIETY	J K SHANTI CHARITABLE SOCIETY
SANJIVANI EDUCATION SOCIETY	APARNA TRUST
NATIONAL EDUCATION HEALTH ENVIRONMENT AND SOCIAL WELFARE ORGANISATION	INDIAN CHARITABLE FOUNDATION
NALANDA EDUCATION SOCIETY	MODERN EDUCATION SOCIETY
HARYANA SAMAJ SEWA KENDRA	MERA PARIVAR
ADARSH RURAL DEVELOPMENT SOCIETY	NIRAMAYA CHARITABLE TRUST
ALL INDIA SAMAJ SEWA KENDRA	SUCHETANA WELFARE SOCIETY
VISION INDIA SONEPAT	NAGRIK KALYAN PARISHAD
PRERNA	DIVINE LIFE SIVANANDA CHARITABLE HEALTH CENTRE
BANKEBIHARI EDUCATIONAL SOCIETY	SOCIETY FOR UPLIFTMENT OF URBAN AND RURAL HEALTH AND EDUCATION
MEWAT DEVELOPMENT SOCIETY	SHRI KISHAN CHARAN KAMAL WELFARE SOCIETY
BHARTIYA SEWA MISSION	NAVYUG GRAMIN UDYOG MANDAL
A NEW FRIENDS CLUB	DEEPSHIKSHA COMPUTER EDUCATION SOCIETY
RURAL DEVELOPMENT AND RESEARCH CENTER	SAMAJ KALYAN SHIKSHA SAMITI ALEWA
PARYAGWELFARESOCIETY	NIRAMAYA CHARITABLE TRUST
JAN CHETNA AVAM GRAM VIKAS SAMITI	SUCHETANA WELFARE SOCIETY
SARVODYA WELFARE AND EDUCATION SOCIETY	NAGRIK KALYAN PARISHAD
GRAM SWARAJYA SANSTHAN	DIVINE LIFE SIVANANDA CHARITABLE HEALTH CENTRE
MUKTI YUVA MANDAL	SOCIETY FOR UPLIFTMENT OF URBAN AND RURAL HEALTH AND EDUCATION
NGO COMMUNICATION CENTRE	MANAV UTTHAN MISSION
INDIAN JAGRITI MANCH	SHRI KISHAN CHARAN KAMAL WELFARE SOCIETY
MILLENNIUM SOCIETY FOR EDUCATION SOCIAL WELFARE AN	KHUSHBOO WELFARE SOCIETY

Non-governmental organizations	
NAVCHETNA	NAVYUG GRAMIN UDYOG MANDAL
HARYANA COMPUTER WELFARE EDUCATION CENTER	ADHIKAAR THE RIGHTS PATH
M C EDUCATIONAL SOCIETY	ALL INDIA HUMAN SUPPORT ASSOCIATION
UTTHAN INSTITUTE OF DEVELOPMENT AND STUDIES	JAGRITI SWAMSEWI SANSTHA
EDUCATIONAL PROMOTIONAL SOCIETY	DRRAMSINGHAMC
SIS RAM EDUCATIONAL SOCIETY	CHILD WELFARE AND EDUCATIONAL SOCIETY
VIRTUOUS CLUB INDIA	LAKSHAYA GRAMIN VIKAS SANSTHA
CITIZENS WELFARE ASSOCIATION PANCHKULA	GLOBAL WELFARE FOUNDATION
COMPUTER EDUCATION SOFTWARE SOCIETY	AL FLAH EDUCATIONAL SOCIETY
UPKAR MANDAL	GODAWARI SHIKSHA SAMITI
SOCIAL AWARENESS FOR HUMANITARIAN ACTION IN RURAL AREAS	AMAR JYOTI FOUNDATION
SCHOLAR HOME EDUCATION AND WELFARE SOCIETY	JIND DHARMARTH TRUST
NAVYUG EDUCATION SOCIETY	LORD KRISHNA TRUST
AKHIL BHARTIYA SAMUDAYIK ANATH ASHRAM TRUST	ANNANT EDUCATION SOCIETY
ADARSH DALIT KALYAN YUVA SAMITI	LALA KHUSHI RAM GUPTA CHARITABLE SOCIETY
VIVEKANAND EDUCATION SOCIETY	YOUTH IN ACTION
CITIZEN RESEARCH FOUNDATION	NATIONAL INTEGRATED FORUM OF ARTISTS AND ACTIVISTS
ADARSH SARASWATI SHIKSHA SAMITI	BHARTIYA VIKAS SANGATHAN
HARYANA NAV YUVAK KALA SANGAM	BABA SHYAM YOUNG MANDAL
ADARSH YUVA MANDAL	SHIKHAR CHETNA SANGATHAN
HELPING HANDS FOUNDATION	

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