



HOUSEHOLD HEALTH EXPENDITURES IN INDIA (2013-14)

DECEMBER | 2016

National Health Accounts Technical Secretariat National Health Systems Resource Centre Ministry of Health and Family Welfare, Government of India

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DETAILS RELATED TO PUBLICATION

This report is one among three individual reports on health expenditure estimates developed by NHSRC. Overall health expenditures are presented in the National Health Accounts Estimates 2013-14 report. The estimates presented in this report are only a subset of all the financing schemes presented in the NHA 2013-14 report.

This report provides household health expenditures in India based on System of Health Accounts 2011 (SHA 2011) and National Health Accounts Guidelines for India. The estimates presented here are based on currently available information. Improvements will be made as and when additional information is available.

Policy implications of household health expenditures are not discussed in this report. However commentators, researchers and policy makers can draw inferences from this report within the preview of NHA methodology described here, NHA Guidelines for India 2016 and System of Health Accounts 2011 (SHA 2011).

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Preface

Several countries have been producing and using National health Accounts(NHA) as a resource tracking tool to track the flow of health care resources from various sources to the users of these resources in a specified framework, for a given period of time. NHA provides answers to questions like "who is financing health care?"; "who is receiving it?" and "for what purpose it is being utilised?" In India Out Of Pocket Expenditure (OOPE) is a significant component of total health expenditures and therefore, tracking the trend and magnitude of OOPE becomes important.

Guidelines for estimating NHA, India (NHSRC, 2016) has already been published to provide practical guidance for producing NHA in Indian context. Further National Health Accounts Estimates (2013-14) have also been released. This report provides the current approach to estimate household expenditures on health. The estimates presented here adhere to NHA Guidelines for India, 2016 and the System of Health Accounts 2011 (SHA 2011) definitions and methods and enables international comparability.

This report is expected to facilitate detailed analysis of OOPE in India and to meet the increasing demand for such information by researchers and policy makers. It presents healthcare expenditures financed through households (OOP or household prepayments), the type of healthcare providers and healthcare services purchased through direct payments.

The National Health Accounts Technical Secretariat ,National Health Systems Resource Centre , arrived at the estimates through several technical consultations. It is believed that these estimates will be widely used by policy makers, administrators, program managers and researchers at the Union and State level in arriving at evidence based policies in financing and planning of health programs. I congratulate the NHA team and Director, Shri J Rajesh Kumar, Bureau of Planning , Ministry of Health & Family Welfare, for their efforts in deriving these detailed estimates and completing the second of the three reports on detailed national level expenditures, based on NHA data.

Kasad

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Healthy Village, Healthy Nation

एड्स - जानकारी ही बचाव है Talking about AIDS is taking care of each other

Message

Health care financing is predominantly Out-Of-Pocket (OOP) payments in many developing and low income countries. These out of pocket expenditures may push households/individuals towards poverty. It is widely acknowledged that increased government spending on health and strong insurance mechanisms can reduce the proportion of households facing catastrophic health expenditures from high OOP expenses. Indian health system in the last decade has witnessed tremendous growth in both public and private sector. Union and State Governments introduced several interventions to make health services accessible and affordable to all segments of the population with a focus to reduce out of pocket expenditures in India. This has resulted in a reduction of OOPE from 69.4% in 2004-05 to 64.2% in 2013-14 and an increase in household prepayments from 1.6% in 2004-05 to 3.5% in 2013-14.

This report sheds light on these areas and allow policy makers, commentators, researchers and program managers to use this information in moving towards developing a comprehensive health financing system that not only guarantees 'better financial outcomes' for households but also 'better health outcomes'. I appreciate the efforts of National Health Accounts team at NHSRC led by Dr. Charu C. Garg.

Dr. Sanjiv Kumar, Executive Director, NHSRC, Member Secretary, Steering Committee-NHA

Acknowledgement

This report on detailed Household Health Expenditure estimates is one of the 3 individual reports that have been developed to describe the detailed health expenditures in India using NHA framework for 2013-14. Overall estimates are presented in the National Health Accounts estimates 2013-14 report (National Health Systems Resource Centre, Ministry of Health and Family Welfare, Government of India, 2016).

We are grateful to National Health Accounts Steering Committee, Expert Group, Dr. Sheela Prasad, Economic Advisor - MoHFW and Dr. Sanjiv Kumar, Executive Director - NHSRC for their guidance and encouragement to publish this report. We are grateful to Ministry of Statistics and Programme Implementation (MoSPI) for not only providing NSSO data, but also the clarifications required, especially from Dr. Bandana Sen (NSSO, MOSPI).

We are grateful for the support from the NHSRC technical team especially Dr. Rahul Reddy, Dr. Pratheeba J and Dr. Keerthi Addala. The initial work by Dr. Roopali Goyanka (Delhi University) for estimating Out of Pocket Expenditures (OOPE) for NHA and providing the preliminary report is highly appreciated. We are grateful for painstaking effort of Mr. J Rajesh (MoHFW) to go through the final report before the approval and provide valuable inputs.

We take this opportunity to thank the esteemed members of the Sub Group on OOPE and all those who attended several meetings, particularly, Dr. Bandana Sen (NSSO, MOSPI), Ms. Kanchana Ghosh (CSO, MOSPI), Mr. S.I.S. Naqvi (NAS, MOSPI), Dr. Anup Karan (PHFI), Dr. Indrani Gupta (IEG), and Dr. Priyanka Saksena (WHO) for providing valuable suggestions and insights at all times for resolving tricky estimation issues during the course of this task. We are also grateful to our colleagues at NHSRC, especially Dr. Sandhya Ahuja for providing invaluable inputs to develop these estimates.

We acknowledge the support and guidance received from everyone we consulted to enrich the estimates in this report. All shortcomings are solely our responsibility and we hope to address these in our future work.

Dr. Charu C. Garg Advisor, Health Care Financing, NHSRC Member Secretary, NHA expert group. **Jyotsna Negi** Consultant Health Care Financing, NHSRC

List of Abbreviations

ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy
AWW	Aanganwadi Worker
CES	Consumer Expenditure Survey
CGHS	Central Government Health Scheme
CHC	Community Health Centre
CHE	Current Health Expenditure
CSO	Central Statistical Office
ECHS	Ex-servicemen Contributory Health Scheme
DH	District Hospital
ESIC	Employee State Insurance Corporation
GDP	Gross Domestic Product
HHE	Household Health Expenditure
IMS	Intercontinental Marketing Services
n.e.c	Not Elsewhere Classified
MoHFW	Ministry of Health and Family Welfare
NHA	National Health Accounts
NHSRC	National Health Systems Resource Centre
NPISH	Not for Profit Institutions Serving Households
NSSO	National Sample Survey Office
NSS-CES 68	National Sample Survey: Consumer Expenditure Survey 2011
NSS-HS 71	National Sample Survey: Social consumption on health , 2014
OECD	Organisation for Economic Co-operation and Development
OOPE	Out of Pocket Expenditure
OTC	Over The Counter
РНС	Primary Health Centre
PNC	Post Natal Care
SHA	System of Health Accounts
TCAM	Traditional Complementary and Alternative Medicine
THE	Total Health Expenditure
TDE	Total Diagnostics Expenditure
TPE	Total Pharmaceuticals Expenditure
WHO	World Health Organisation

Executive Summary

This report presents Household Health Expenditure (HHE) estimates for National Health Accounts India for fiscal year 2013-14 based on the "System of Health Accounts (SHA 2011)" framework and "National Health Accounts Guidelines for India, 2016." It provides detailed estimates of the schemes financed, the type of providers, and health care services purchased by households from their own resources and is summarised in Figure 1.

In 2013-14, HHE in India is estimated at Rs. 3,06,938 crores which equates to 2.72% of GDP and 72.87% of Current Health Expenditure (CHE). This is 67.74% of Total Health Expenditure (THE). It includes household prepayments (social and voluntary health insurance contributions) of Rs. 16,006 Crore and Out of pocket expenditures (OOPE) of Rs. 2,90,932 crores (94.79% of total HHE, 2.58% of GDP, 64.21% of THE and 69.1% of CHE and Rs. 2336 per capita).

Out of pocket expenditures disaggregated by type of providers indicate that 51.67% was spent at pharmacies (Rs. 150329 Cr), 25.03% was spent at hospitals 22.21% of which was spent at private general hospitals (Rs. 64628 cr) and 2.82% was spent at government hospital (Rs. 8193 Cr), 9.61% at medical and diagnostic laboratories (Rs. 27966 Cr), 6.24% was incurred on patient's transportation (Rs. 18149 Cr),4.93% was spent on private general medical practitioners (Rs. 14350 Cr) and the remaining 2.52% was spent on other health care practitioners like ASHA /ANM/AWW (Rs. 268 Cr), government ambulatory health care centres (Rs. 152 Cr), retail sellers and other suppliers of durable medical goods and medical appliances (Rs. 444 Cr), providers of preventive care (Rs. 3414 Cr) and other health care providers not elsewhere classified (n.e.c.) (Rs. 3038 Cr).

Of the total OOPE on healthcare, 54.84 % was spent on outpatient care (Rs. 1,59,543) and 31.96% was on inpatient care (Rs. 92,992 Crore), 6.24% of the expenditure was incurred on patient's transportation (Rs. 18,149 Crore), 4.26% on preventive care (Rs. 12,388 Crore), 2.46% on purchase of all pharmaceuticals and other medical non-durable goods (Rs. 7143 Crore) which was not a part of inpatient or outpatient care (self-medication) and rest 0.25% was spent on diagnostics other than those captured under inpatient or outpatient care (Rs. 273 Cr) and all therapeutic appliances and other medical goods (Rs. 444 Cr).

Of the total OOPE, 53.46% was spent on medicines and 9.95% was spent on diagnostics (including medicines and diagnostics as a part of package component). 82.29% of the total OOP medicines expenditure and 67% of total OOP diagnostic expenditure was for outpatient treatment. Of the total OOPE, 15.96% (Rs. 46444 crores) was on traditional medicines/ AYUSH, of which equal proportion were spent on outpatient and inpatient care.

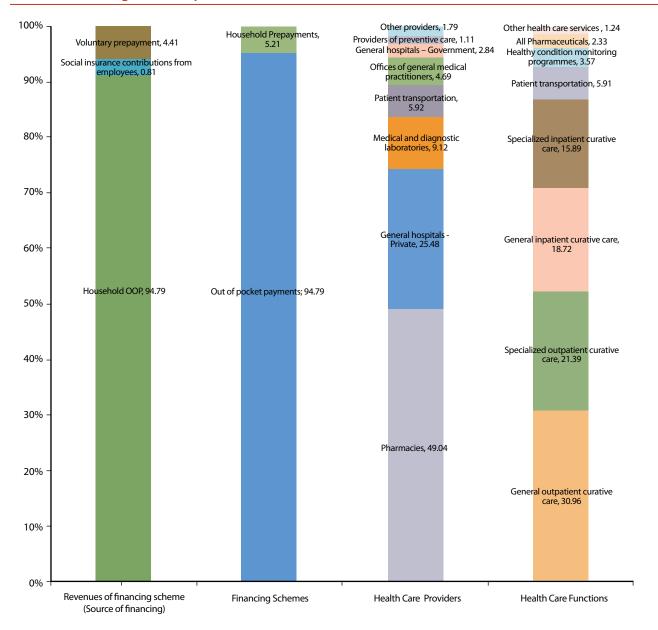


Figure 1: Distribution of current household health expenditures according to sources of financing, financing schemes, providers and functions (2013-14) (in %)

Note:

- 1. Household voluntary prepayment includes Employer-based insurance (Other than enterprises schemes), Government-based voluntary insurance, other primary coverage schemes and community-based insurance.
- 2. Other providers comprise of 1.8% of total household health expenditures. It includes all other ambulatory centres, providers of health care system administration and financing, retail sellers and other suppliers of durable medical goods and medical appliances, other health care practitioners and other health care providers not elsewhere classified (n.e.c).
- 3. Other services comprise of 1.2% of total household health expenditures. It includes immunization programmes, dental outpatient curative care, administration of health financing, all therapeutic appliances and other medical goods, laboratory and imaging services and other health care services not elsewhere classified (n.e.c.).

1 Introduction

Household health expenditures are the expenditures incurred by households on health care and includes out of pocket expenditures and prepayments. OOPE are the payments made directly by individuals at the point of service where the entire cost of the health good or service is not covered under any financial protection scheme. When an individual/household has to bear the expenditures for health care out of pocket, most of the times expenditures tend to be high in relation to their income thereby leading to low living standards (reduction in expenditure on basic necessities like food and clothing). OOPE becomes a burden for the poor especially when they have to spend huge amounts from their disposable income.

Households, as an institutional entity is the financing agent for household's OOPE or otherwise known as financing scheme as defined by SHA 2011. The fund flows directly and indirectly from households to providers¹ of health care services and goods. In a typical health systems scenario, the indirect flow of funds occurs where there is an involvement of insurers who then pay providers for services². **Figure 2** depicts flow of funds for household's health expenditures through direct OOPE and prepayments.

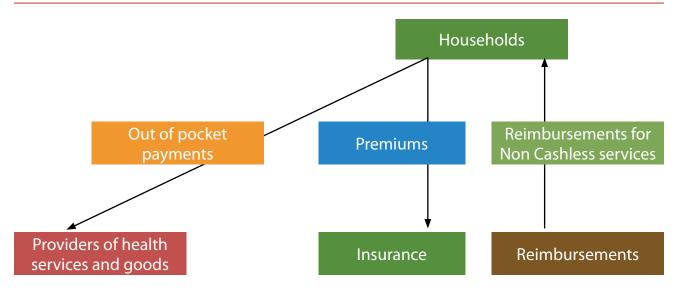


Figure 2: Flow of funds for household health expenditures

2 Premium is the cash payment from households to insurer for covering a set of services. When the household utilizes the services covered under the insurance, the insurer reimburses the provider for services if it is a cashless service, or the insurer reimburses the households for non-cashless type services.

¹ Providers include sub centers(HSC)/Auxiliary Nurse Midwifery(ANM)/Accredited Social Health Activist (ASHA) /Anganwadi Worker (AWW), Private doctor/clinic, primary health centre (PHC)/dispensary/Community Health Center(CHC)/mobile medical unit, private hospital, public hospitals, NGO's own facilities and enterprises own facilities.

India has a very large proportion of out of pocket expenditures on health care. This includes expenditure on inpatient care, outpatient care, family planning devices, immunization, drugs, diagnostics, medical nondurables, therapeutic appliances etc purchased from various health care institutions. Among the various sources of health care financing, households finance 67.74% of the total health expenditure in India (NHA 2013-14).

Household health expenditures are compiled by aggregating the different financing scheme using the SHA 2011 classification. These expenditures comprise of HF.1.2.1 Social health insurance schemes + HF.2.1.1.1 Employer-based insurance (Other than enterprises schemes) + HF.2.1.1.2 Government-based voluntary insurance + HF.2.1.1.3 Other primary coverage schemes + HF.2.1.2.1 Community based insurance + HF.3.3 All Household's Out of pocket payments³. The schemes related to insurance are explained in depth in the individual report of insurance. This report mainly deals with the detailed breakup of OOP payments.

The annual per capita spending of households on health expenditure was Rs. 2465 and the annual per capita OOP spending for health care was Rs. 2336. The out of pocket spending was 2.58% of the GDP in 2013-14.

2 Data Sources, Boundaries, Classification and Methodology

NHA Guidelines for India provides detailed classifications, boundaries, formulas and methodology to understand the estimates for NHA⁴. This section highlights relevant aspects to arrive at the estimates for out of pocket expenditures.

2.1 Data Sources

The primary sources of data used in this report for estimating household out of pocket expenditures are the National Sample Survey: Social Consumption on Health, 2014 (NSS-HS 71) and the Consumer Expenditure Survey (CES) conducted by the National Sample Survey in 2011 (NSS-CES 68). NSS-HS 71 was used for estimating inpatient and outpatient OOPE, OOPE on medicines, doctors' fee, diagnostics, bed charges, surgeries, patient's transportation, ambulance and other therapies. CES was used for estimating expenditures on therapeutic appliances not covered in NSS - HS 71 and for estimating expenditures on family planning devices. Intercontinental Marketing Services (IMS) health data was used for deriving estimates for vaccines, vitamins and minerals; family planning, etc⁵. To arrive at population based estimates, mid-year population (January 2014-June 2014) from Office of the Registrar General and Census Commissioner, India was used. Therefore, all estimates were first derived for population as on 1st April 2014 and then extrapolated backwards by 6 months by using Consumer Price Index released by Central Statistical Office separate for rural and urban sectors to arrive at the OOPE for 2013-14.

2.2 Boundaries

The boundaries for OOPE have been identified using the SHA 2011 framework and on the basis of the detailed list of expenditures incurred by households for health purposes from NSS-HS 71. OOPE on inpatient and outpatient health care, OOPE on medicines, doctors' fee, diagnostics, bed charges, surgeries, patient's transportation and ambulance and other therapies were included within the boundaries of health care expenditures. Medicines/Ancillary services that are purchased/ availed independently without prescription from health professional in case of self-prescriptions/self-diagnosis such as over the counter medicines, were also included as health expenditures. System of Health Accounts, SHA 1.0 considered all medical goods

⁴ NHA guidelines for India 2016

⁵ IMS is a global information and technology company that provides health care industry with the solutions to measure and improve their performance. It has a large database as their customers include pharmaceutical, consumer health and medical device manufacturers and distributors, providers, payers, government agencies, policymakers, researchers and the financial community.

as intermediate products⁶. Loss of household income due to the ill health of the individual was considered outside the boundary of health expenditures. Other miscellaneous expenditures incurred by relatives or friends of the patient like transport cost, food expenditures, lodging charges, loss of wage/labour, etc. were not considered as household health expenditures⁷. The boundaries for household prepayments are discussed in depth in a separate report on health insurance expenditures.

2.3 Classification

As mentioned earlier in this report, the revenues of household health expenditures come from two major sources - the household contribution or premium made by the individual/ household on health care and household out of pocket payments. Household payments for OOP are classified as FS.6.1. The financing scheme for all OOPE is HF.3.3. **Table 1** describes the classification of OOPE by revenues of financing schemes, financing schemes, providers and functions in accordance with the SHA 2011 classification. The providers of healthcare include government and private hospitals, ambulatory care centres, health care practitioners like ASHA, providers of preventive care, pharmacies etc. The functional classification mainly includes inpatient care, outpatient care, over the counter medicines, diagnostics etc. The NHA Guidelines provides a broader understanding of these classifications.

experiordares				
Expenditure Line items	FS	HF	HP	НС
Inpatient care ⁸	FS.6.1	HF.3.3	HP.1.1.1, HP.1.1.2, HP.3.4.9 ⁹ , HP.4.2, HP.5.1	HC.1.1.1, HC.1.1.2, HC.RI.1, HC.RI.2,
Outpatient care	FS.6.1	HF.3.3	HP.1.1.1, HP.1.1.2, HP.3.1.1, HP.3.3, HP.3.4.9, HP.4.2, HP.5.1, HP.10	HC 1.3.1, HC.1.3.2, HC.1.3.3, HC.1.3.nec, HC.RI.1, HC.RI.2
Over the counter medicines (not as a part of inpatient or outpatient care)	FS.6.1	HF.3.3	HP.5.1	HC.5.1.4, HC.RI.1, HC.RI.2
Laboratory and Imaging services (Diagnostics not as a part of inpatient or outpatient care)	FS.6.1	HF.3.3	HP.4.2	HC.4.4
Patient's transportation	FS.6.1	HF.3.3	HP.4.1	HC.4.3
Prenatal Care	FS.6.1	HF.3.3	HP.4.2, HP.5.1, HP.6	HC.6.4, HC.RI.1, HC.RI.2
Postnatal Care	FS.6.1	HF.3.3	HP.4.2, HP.5.1, HP.6	HC.6.4, HC.RI.1, HC.RI.2
Family Planning devices	FS.6.1	HF.3.3	HP.5.2	HC.5.2.4
Therapeutic appliances and Other medical goods	FS.6.1	HF.3.3	HP.5.2	HC.5.2.4
Immunization ¹⁰	FS.6.1	HF.3.3	HP.6	HC.6.2

Table 1: Mapping expenditure line items to SHA 2011 classification for estimating out of pocket health expenditures

9 HP.3.4.9 includes providers of ambulatory care (i.e primary health centre) for pregnancy and delivery care.

10 OOPE on Sale of Vaccines

⁶ SHA1.0 defined medical goods as those dispensed, prescribed or bought by private households at their own initiative for the purpose of home care could be interpreted as intermediate products to household production of health care services. All these goods are, however, reported under final consumption in the SHA. These goods can cover a widerange from incontinence material to home dialysis kit. Refer to System of Health Accounts, page 44 at http://www.oecd.ortiong/els/health-systems/1841456.pdf

⁷ Refer SHA 2011, p. 58.

⁸ Inpatient care includes package component, diagnostics, doctor's fee and sometimes also those inpatient getting medicines or laboratory and imaging services not as a part of the package treatment component but separately.

2.4 Methodology

The methodology used to arrive at the estimates for household out of pocket payments was obtained by aggregating expenditure line items (such as expenditures for inpatient, outpatient, child birth etc.) derived from data collected from surveys. STATA SE version 14 (statistical package) was used for statistical analysis. Separate estimates were obtained for the categories of inpatient expenditure (HC.1.1), outpatient expenditure (HC.1.2), Antenatal Care (ANC) and Post-Natal Care (PNC) expenditure (HC.6.4) from NSS-HS 71 and for urban and rural sector separately. These estimates were obtained as per capita expenditures for all ailments and all episodes during the reference period for inpatient care, outpatient care, ANC and PNC. Missing values for any expenditure item were treated as zero. Weighted aggregate expenditures for the various functional categories were estimated, using the combined sample weights¹¹. While calculating OOPE from inpatient and outpatient care, in few cases, it was observed that the reimbursements were more than the total medical expenditures, for such cases, medical expenditure was considered to be equal to total reimbursements. Aggregate medical OOPE was calculated by deducting the reimbursements from total medical expenditures for inpatient and outpatient care separately.

The OOPE for outpatient care was reported for a reference (recall) period for last 15 days and therefore adjustment was needed for obtaining annual estimates. Annual estimates for outpatient expenditures were obtained by multiplying the 15 day estimates by 365/15. Mean per capita OOPE was obtained by dividing the aggregate OOPE in each functional category by the total number of persons estimated from the sample. Aggregate OOPE for the country was obtained by multiplying the per capita OOPE derived from NSSO survey with the population as on 1st April 2014 separately for rural and urban. Then using consumer price indices-health for rural (i.e CPI-Rural) and urban (i.e CPI-urban) separately, OOPE was adjusted for the year 2013-14. For calculating aggregate expenditure on therapeutic appliances and family planning devices, the per capita estimates from NSS-CES 68 round were multiplied by the population of the country as on January 1, 2012 (midpoint of NSS-CES 68 whose survey period is July 2011-June 2012) and then extrapolated using relevant price indices for the year 2013-14. Data on sale of vaccines was obtained from IMS data and added to total OOPE.

Certain reporting items important from the policy perspective have been presented in this report. HC.RI.1 Total Pharmaceuticals Expenditure (TPE) includes expenses on medicines incurred for treatment of members as inpatient, outpatient and expenses incurred on over the counter medicines. Similarly, HC.RI.4 Total Diagnostic Expenditure (TDE) includes expenses on diagnostics incurred for treatment of members as inpatient, outpatient and expenses incurred by self on diagnostics. Inpatient expenditure incurred on medicines and diagnostics are captured in NSS-HS 71 under three headings: 1. Package component, 2. Non-package component that includes doctor's fee, bed charges, diagnostics, drugs and others (blood, physiotherapy and allied etc), 3. Package component along with the additional expenditures on doctor's fee, medicines, diagnostics etc. Hence, to arrive at the total expenditure on medicines/diagnostics from the inpatient block, expenditure incurred on medicines/diagnostics under non-package components are added to the estimated expenditures for the package component.¹²

¹¹ These weights are used from the weights given in NSS-HS 71 raw data set.

¹² Pharmaceutical and diagnostics expenditure for package component is estimated using the ratios of expenditure on pharmaceuticals and diagnostics from the insurance claims data procured from Insurance Regulatory Development Authority of India (IRDAI). (30% of total inpatient care was package component of which 28% and 11% were considered to be incurred on drugs and diagnostics).

HC.RI.2 Traditional, Complementary and Alternative Medicines (TCAM) Medical expenses on Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homoeopathy (AYUSH) includes the total medical expenditures when the nature of treatment was AYUSH from the inpatient, outpatient, ANC and PNC block from NSS-HS 71.

For detailed methodology, please refer to "National Health Accounts Guidelines for India 2016", National Health Systems Resource Centre, Ministry of Health and Family Welfare and Annexure 3.

3 Estimates for Household Health Expenditure 2013-14

This chapter presents the estimates of household health expenditures in India by revenues of financing schemes and out of pocket expenditures by health care providers and health care functions. It addresses the questions of what are the sources of financing for household health expenditures; where does the money go in terms of OOPE on providers and what services are purchased with OOPE.

3.1 Key Findings

Table 2 presents the summary of key findings of the household health expenditure estimates and OOPE for2013-14.

Sr. No	Indicator	Linked Classification code (Numerator)	Ratio Indicator	Numerator (InRs. crores)	Denominator (InRs. crores)	Indicator Value (%)	Per Capita ¹³ : (In Rs.)
1	Total Health Expenditure (THE)		Total Health Expenditure (THE) as a % of Gross Domestic Product (GDP) ¹⁴	4,53,106	1,12,72,764	4.02	3638.30
2	Current Health Expenditure (CHE)		Current Health Expenditure (CHE) as % of Gross Domestic Product (GDP)	4,21,194	1,12,72,764	3.74	2 3638.30
3	Household Health Expenditures (Including prepayments for insurance)	FS 3.1+ FS.5.1+ FS.6.1	(OOP + Prepayment for SHI + Prepayment for Private Insurance) as % of THE	3,06,938	4,53,106	67.74	2464.62
3.1	Out-of-Pocket Expenditure	HF.3.3	OOPE as % of GDP	2,90,932	1,12,72,764	2.58	
3.2	Out-of-Pocket Expenditure	HF.3.3	OOPE as % of THE	2,90,932	4,53,106	64.21	2336.09
3.3	Out-of-Pocket Expenditure	HF.3.3	OOPE as % of Current Health Expenditure	2,90,932	4,21,194	69.07	

Table 2: Key Indicators: household health expenditure and out of pocket expenditures 2013-14

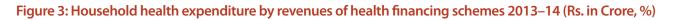
¹³ Mid-year population for year 2013-14 has been estimated using Census 2011 and population growth rate estimates from Registrar General of India.

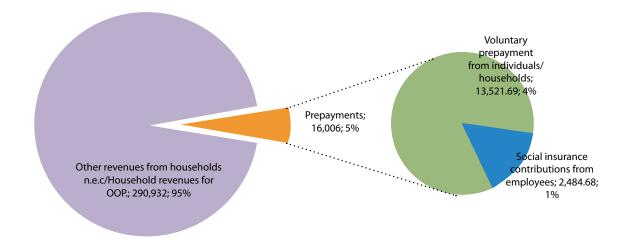
¹⁴ Source: Press note on advance estimates of national income 2015-16 and quarterly estimates of gross domestic product for the third quarter (q3) of 2015-16, statement 2: Advance Estimates of National Income and Expenditures of GDP at current prices, 2015-16 (At Current Prices), page no. 9.

Sr. No	Indicator	Linked Classification code (Numerator)	Ratio Indicator	Numerator (InRs. crores)	Denominator (InRs. crores)	Indicator Value (%)	Per Capita ¹³ : (In Rs.)
4	OOPE on Inpatient care	HC.1.1	OOPE on Inpatient care as % of Out-of-Pocket Spending	92,992	2,90,932	31.96	746.69
5	OOPE on Outpatient care	HC.1.3	OOPE on Outpatient care as % of Out-of-Pocket Spending	1,59,543	2,90,932	54.84	1281.08
6	Expenditure on Preventive care	HC.6	OOPE on Preventive care as % of Out-of-Pocket Spending	12,388	2,90,932	4.26	99.47
7	Expenditure on Hospitals	HP.1	OOPE on Hospitals as % of Out-of- Pocket Spending	72,821	2,90,932	25.03	584.73
8	Pharmacies (Retailers and Other providers of medical goods)	HP.5.1	OOPE on Pharmacies as % of Out- of-Pocket Spending	1,50,329	2,90,932	51.67	1207.09
9	Providers of Patients Transportation	HP.4.1	OOPE on transportation as % of Out-of-Pocket Spending	18,149	2,90,932	6.24	145.73

3.2 What are the sources of financing (revenues of the financing schemes)?

Of the total household health expenditures, households constitute the single largest source of financing health services. 94.79% (Rs. 2,90,932 Crores) was spent by households out of pocket from their own resources. The remaining 5.21% comes as pre-payments either in the form of social health insurance contributions from employees and/or voluntary prepayments from individuals/households. Social health insurance contributions from employees was very marginal (0.81%) and households pre-payments for risk protection was also very low at 4.41% **(Figure 3)**.





Note: Social Insurance contribution from employees (FS.3.1) includes employees' contributions to Central Government Health Scheme (CGHS), Employees' State Insurance Scheme (ESIC), Ex-servicemen Contributory Health Scheme (ECHS). Voluntary prepayments from individual/ households (FS.5.1) includes individuals/households contributions to Rashtriya Swasthya Bima Yojna, Handloom Weavers and artisans Health Insurance Scheme, Yeshasvini Cooperative Farmers Health Insurance Employer based and Individual voluntary health insurance , Community based voluntary health insurance. Other revenues from households n.e.c (FS.6.1) includes out of pocket payments. Out of pocket payments are net of reimbursements which include expenditure on inpatient care, outpatient care, child birth, antenatal care (ANC), postnatal care (PNC), family planning devices, therapeutic appliances, expenditure on patients transport and other medical expenditures.

3.3 Where does the money go?

The distribution of OOPE among different type of providers is shown in **Table 3** and **Figure 4** below. Pharmacies are major providers of health care goods and services for households as 51.67% of all out of pocket payments were incurred for purchase of medicines and other medical goods. 25.03% of the total OOPE was spent at hospitals¹⁵, 15.85% of OOPE was spent to purchase care from providers of ancillary services¹⁶, 5.08 % on seeking care from ambulatory health care providers¹⁷, 1.17% spent on providers of preventive care and rest 1.04% on health care providers not elsewhere classified (n.e.c.). Out of the total 25.03% of OOPE incurred on hospitals, private hospitals accounted for 88.75% of the out of pocket health expenditure incurred (Rs. 64,628 out of Rs. 72,821 spent on hospitals). Similarly out of the total 5.08% of OOPE incurred on ambulatory care –almost 97.16% is on private clinics (Rs. 14350 out of Rs. 14770 spent on ambulatory care) (**Table 3**). The low OOPE incurred in government facilities was mainly due to health care being provided either free or at low/subsidized prices at primary, secondary and tertiary care facilities.

Providers	Household out-of-pocket expenditure (Rs. in Crore)	%
General hospitals – Government (CHC/DH)	8,193	2.82
General hospitals - Private (Private hospitals/NPISH hospitals/Enterprises hospitals)	64,628	22.21
Offices of general medical practitioners (Private clinics/Dental clinics/ NPISH Clinics/Enterprises clinics)	14,350	4.93
Other health care practitioners Government (AHSA/ANM/AWW)	268	0.09
All Other ambulatory centres Government (PHC/ Sub centres)	152	0.05
Providers of patient transportation and emergency rescue	18,149	6.24
Medical and diagnostic laboratories	27,966	9.61
Pharmacies	1,50,329	51.67
Retail sellers and Other suppliers of durable medical goods and medical appliances	444	0.15
Providers of preventive care	3,414	1.17
Other health care providers not elsewhere classified (n.e.c)	3,038	1.04
Total OOPE	2,90,932	100.0

Table 3: Out of pocket expenditure on health care by providers¹⁸ for 2013-14 (Rs. In Crore) [HFxHP]

Note: May not sum to total (Rs. 290932 Crores) due to rounding errors

¹⁵ Rs. 64,628 Crore (22.21%) and Rs. 8,193 Crore (2.82 %) was spent on general hospitals- private and public respectively

¹⁶ Rs. 18,149 Crore (6.24%) was spent on providers of patient transportation and emergency rescue and Rs. 27,966 Crore (9.61%) was spent on medical and diagnostic laboratories

¹⁷ Rs. 14,350 Crore (4.93%) was spent on offices of general medical practitioners (private clinics, dental clinics etc), Rs. 268 Crore (0.09%) was spent when the provider was other health care practitioners like Accredited Social Health Activists, Auxiliary Nurse Midwives, Anganwadi workers etc and Rs. 152 Crore (0.05%) was spent when the provider was all other ambulatory centers that includes primary health centers.

¹⁸ Apart from private hospitals, households seeks health care from not for profit hospitals and enterprises own facilities. The expenditures under all these providers are included as one category of private hospitals in NSS- HS 71. From the NPISH data, it is shown that 2.1% of expenditure on General hospitals-private and 1.5% of expenditure on offices of general medical practitioners is household spending at NPISH facilities.

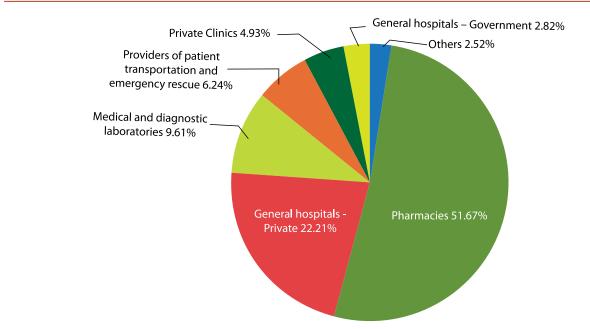


Figure 4: Out-of-pocket expenditure on health care by providers 2013–14 (in %)

Note: Others includes providers of preventive care, retail sellers and other suppliers of durable medical goods and medical appliances like family planning devices and sale of vaccines, other health care practitioners like ASHA/ANM/AWW, all other ambulatory centres Government like PHC/ Sub centres and other health care providers not elsewhere classified (n.e.c).

3.4 What kind of services are purchased?

Of the total OOPE on health care (Rs. 2,90,932 Crore) in 2013-14, about 86.80% was spent on curative care, 6.24% on ancillary services, 2.61% on medical goods¹⁹ and 4.26% on preventive care. Further break up of these expenditures by different components shows that about 54.84% was spent on outpatient care (Rs. 1,59,543) of which 32.10% was on generalized outpatient care, 0.31% on dental outpatient care and 22.43% on specialized outpatient care. OOPE on inpatient care constituted 31.96% (Rs. 92,992 Crore) in the total health expenditure incurred by the households of which 16.96% was for generalized inpatient care²⁰. 6.24% of total OOPE was spent on patient's transportation (Rs. 18,149 Crore), 4.26% on preventive care²¹ (Rs. 12,388 Crore), 2.46% on all pharmaceuticals and other medical non-durable goods (Rs. 7,143 Crore) and rest 0.25% on diagnostics other than inpatient or outpatient care and all therapeutic appliances and other medical goods.

Further Total Pharmaceuticals Expenditure (TPE) was 53.46% (Rs. 1,55,526) of total OOPE on health of which 17.71% of expenditure was on inpatient care²² and remaining 82.29% was on outpatient care. Traditional, Complementary and Alternative Medicines (TCAM) constituted 15.96% of the total OOPE on health

¹⁹ Expenditure on ancillary services or medical goods is not specified by function i.e when these services are not linked specifically to outpatient care or inpatient care functions.

²⁰ The OOPE was classified into generalized and specialized care on the basis of nature of ailment. For details, refer to NHA guidelines for India, 2016.

²¹ Expenditure on preventive care includes expenditure on healthy condition monitoring program and immunization.

²² Inpatient medical expenditure are captured in NSS-HS 71 as package component and non-package component that includes doctor's fee, bed charges, diagnostics, drugs and others (blood, physiotherapy and allied etc). The expenditure on pharmaceuticals and diagnostics from package component is estimated using the ratios of their expenditure from the insurance claims data procured from Insurance Regulatory Development Authority of India (IRDAI). Expenditure incurred on pharmaceuticals and diagnostics under non-package components are added to the estimated expenditures for the package component to obtain total pharmaceutical and diagnostic expenditures for IP care.

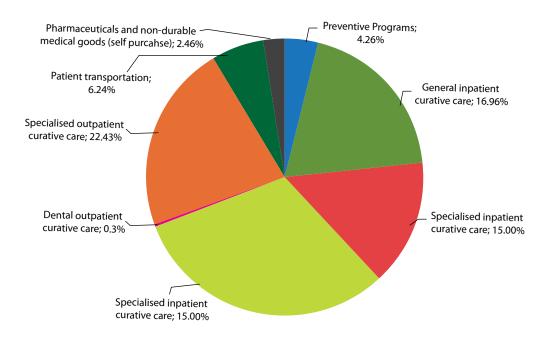
whereby the proportion of this expenditure was equally distributed between inpatient and outpatient care. 9.85% of total OOPE on health was total diagnostic expenditure of which 32.98% was part of inpatient care diagnostics and remaining 67.02% of expenditure is incurred as part of outpatient care diagnostics. **Table 4** and **Figure 5** present the distribution of OOPE by healthcare functions.

Health care functions	Expenditure (Rs. in Crore)	%
General inpatient curative care	49,352	16.96
Specialized inpatient curative care	43,639	15.00
General outpatient curative care	93,378	32.10
Dental outpatient curative care	913	0.31
Specialized outpatient curative care	65,252	22.43
Patient transportation	18,149	6.24
Laboratory and Imaging services	273	0.09
Pharmaceuticals and Other medical non-durable goods (not under IP or OP care)	7,143	2.46
All Therapeutic appliances and Other medical goods (not under IP or OP care)	444	0.15
Preventive Care	12,388	4.26
Total	290,932	100.00
HC.RI Total Pharmaceuticals expenditure(TPE)	1,55,526	53.46
of which Inpatient	27,538	17.71
of which Outpatient	1,27,988	82.29
HC.RI.2 Traditional, complementary and alternative Medicines (TCAM)	46,444	15.96
of which Inpatient	23,419	50.42
of which Outpatient	23,025	49.58
HC.RI.4 Total Diagnostic Expenditure (TDE)	28,646	9.85
Of which Inpatient	9,448	32.98
Of which Outpatient care	19,199	67.02

Table 4: Out of pocket expenditureby health care functions for 2013-14 (Rs. In Crore) [HF x HC]

Note: May not sum to total (Rs. 290932 Crores) due to rounding errors

Figure 5: Out of pocket expenditure on health care by functions 2013–14 (%)



The distribution of OOPE across different providers and health care functions are presented in **Annexure Tables A1 and A2**.

Key findings that emerge from the analysis are highlighted below:

- Households spent 53.46% of OOPE on medicines and medical goods, out of which 51.67% were direct purchases at pharmacies. While 17.71% of pharmaceutical expenditures were incurred on inpatient care episodes, 82.29% were incurred on outpatient episodes (**Table 4**).
- Of the total inpatient care expenditures (Rs. 92,992 Cr) incurred by households (which was 31.96% of total OOPE), 60.18% was spent on purchasing health services from private hospitals, 24.02% health services were purchased from pharmacies, 9.43% was spent on diagnostics services and only 6.36% was spent on purchasing from government health facilities. This may be due to both lower utilization of government facilities as compared to private facilities, but more importantly the care at public facilities are free or partially or fully subsidized (Annexure Table A2).
- Of the total inpatient expenditures (Rs. 92,992 Cr) incurred at private hospitals and at the pharmacies about 53.52% were for general inpatient curative care and 46.48% on specialized inpatient curative care. This involves treatment of various diseases/conditions that range from less complex procedures to highly sophisticated surgeries requiring use of high end technology and skills. Examples include general surgeries, complicated obstetric and gynaecological conditions, accident and trauma care services neurosurgery etc. Similarly, 51.52% of expenditures incurred at government hospitals were spent for general inpatient curative care and the remaining 48.48% were spent on specialized inpatient curative care and the remaining 48.48% were spent on specialized inpatient curative care and the remaining 48.48% were spent on specialized inpatient curative care and the remaining 48.48% were spent on specialized inpatient curative care and the remaining 48.48% were spent on specialized inpatient curative care and the remaining 48.48% were spent on specialized inpatient curative care [Annexure Table A2].
- Of the total expenditure on outpatient care (Rs. 159543 Cr) about 14.43% was on private providers and 1.69% on public health care providers for consultation and registration fees. 70.88% of house-hold spending for outpatient care was on services from retail pharmacies indicating that huge amounts were incurred by patients for purchase of medicines which tend to be costly. 58.77% of the medicines purchased were spent for general outpatient curative care and 40.67% on specialized outpatient curative care. Households spent 11.10% of their outpatient care expenditures on providers of diagnostic services wherein close to 57.76% of the expenditures for diagnostics was for general outpatient care services (Annexure Table A2).

4 Comparative Household Health Expenditures: 2004-05 and 2013-14

Some of the key indicators on OOPE for the NHA 2013-14 are compared with the NHA 2004-05. The key comparative indicators in **Table 5** shows that household health expenditure as a percentage of total health expenditure has decreased from 71.1% in 2004-05 to 67.74% in 2013-14 and OOPE as % Gross Domestic Product (GDP) has declined from 2.95% to 2004-05 to 2.58% in 2013-14. Also, Out-of-Pocket spending as % of THE has declined from 69.4% in 2004-05 to 64.21% in 2013-14.

Table 5: Comparative indicators from NHA 2004-05 & NHA 2013-14

Indicator	2004-05	2013-14
Out-of-Pocket Spending (Rs. In '000) at current prices	93,000,3177	2,909,316,829
Household Health Expenditures as % of THE	71.1%	67.74%
Out of Pocket Expenditure (OOPE) as % of Private Health Expenditure (Pvt HE)	89.07%	89.97%
Out-of-Pocket Expenditures % GDP ²³	2.95%	2.58%
Out-of-Pocket Expenditure as % THE	69.4%	64.21%
Household OOP spending per capita (in Rs.) at current prices	854	2336

The comparison of NHA estimates 2004-05²⁴ with 2013-14 shows that percentage distribution of expenditure spent on outpatient care²⁵ reduced from 66% in 2004-05 to 58% in 2013-14. Percentage distribution of expenditure incurred on inpatient care increased from 27% in 2004-05 to 32% in 2013-14. However, share of expenditure on antenatal care had increased by 2% in 2013-14. There was no change in the expenditure on postnatal care over the decade. **Figure 6** presents the comparison of composition of OOPE estimates between 2004-05 and 2013-14.

²³ Advance Estimates of National Income and Expenditures of GDP at current prices, 2015-16 (At Current Prices), page no. 9.

²⁴ NHA estimates for the year 2004-05 are from NHA report, page no 29. Inpatient care includes expenditure on child birth.

²⁵ For comparison, outpatient care includes expenditures on pharmacies and lab & imaging services apart from outpatient care. Others include expenditure on patient transportation, therapeutic appliance and sale of vaccines. Expenditures for 2013-14 were deflated using CPI separately for rural and urban and then added.

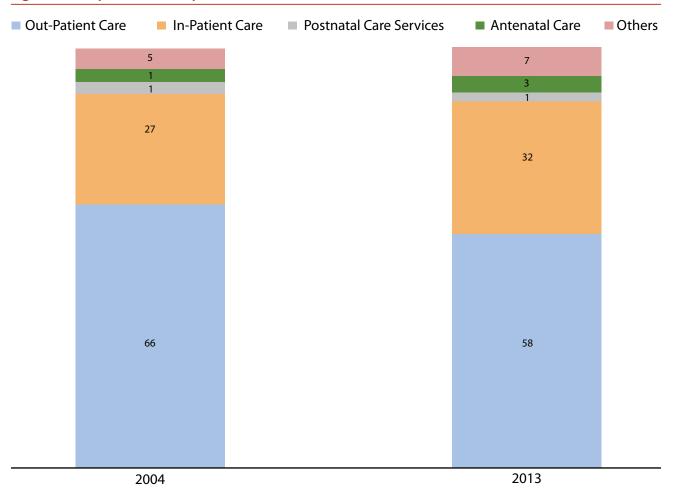


Figure 6: Comparison of composition of OOPE estimates between 2004-05 and 2013-14 (in %)

Annexure 1

		пк. ।	HP.1.1.2	HP.3.1.1	HP.3.3	HP.3.4.9	HP.4.1	HP.4.2	HP.5.1	HP.5.2	HP.6	HP.10	All HP
	snoitonuî eiso dileeH	General hospitals – Government	General hospitals - Private	Offices of general medical practitioners	Other health care practitioners	All Other ambulatory centres	Providers of patient transportation and emergency rescue	Medical and diagnostic laboratories	səisemısdA	Retail sellers and Other suppliers of durable medical goods and medical appliances	Providers of preventive care	Other health care providers not elsewhere classified (n.e.c)	
HC.1.1	Inpatient Care	5,910	55,960			13		8,767	22,341				92,992
HC.1.1.1	General inpatient curative care	3,045	29,950			13			11,825				49,352
HC.1.1.2	Specialized inpatient curative care	2,865	26,010					4,248	10,516				43,639
HC.1.3	Outpatient Care	2,283	8,668	14,350	268	139		17,711	113,086			3,038	159,543
HC.1.3.1	General outpatient curative care	1,136	4,503	8,505	178	66		10,230	66,461			2,265	93,378
HC.1.3.2	Dental outpatient curative care			182				97	633				913
HC.1.3.3	Specialized outpatient curative care	1,146	4,165	5,662	90	40		7,384	45,992			773	65,252
HC.4.3	Patient transportation						18,149						18,149
HC.4.4	Laboratory and Imaging services							273					273
HC.5.1.4	All Pharmaceuticals and Other medical non-durable goods								7,143				7,143
HC.5.2.4	All Therapeutic appliances and Other medical goods									444			444
HC.6.2	Immunization programmes										1,442		1,442
HC.6.4	Healthy condition monitoring programmes							1,215	7,759		1,972		10,946
AILHC		8,193	64,628	14,350	268	152	18,149	27,966	150,329	444	3,414	3,038	290,932

Annexure 2

Out of pocket expenditure estimates & their ratios by providers and functions

Detailed classifications of OOPE line items estimated from NSS-HS 71 are divided in ratios by providers and functions and presented in the **Annexure Table A2** below. Estimates are presented in a tabular format and are mapped to the relevant system of health accounts 2011 classifications and codes. Names for each of the codes are available in **Annexure Table A1** and also explained in detail in NHA guidelines for India, 2016. For instance, Rs. 92,992 crore estimated to be spent on spent on inpatient care was divided in the ratios 6.36% for general hospitals–government; 60.18% for general hospitals–private, 9.43% at diagnostic labs and 24% at pharmacies respectively. Each provider was then further divided into general and specialised care.

	and fur	ictions				
Code	Expenditure Line	Expenditure	HP	Providers'	HC	Functions'
(1)	items	(Rs. in Crore)	(4)	Ratio	(6)	Ratio (%)
	(2)	(3)		(5)		(7)
HH01	Inpatient care	92991.59	HP.1.1.1	6.36	HC.1.1.1	51.52
					HC.1.1.2	48.48
			HP.1.1.2	60.18	HC.1.1.1	53.27
					HC.1.1.2	46.73
			HP.3.4.9	0.01	HC.1.1.1	100
			HP.4.2	9.43	HC.1.1.1	51.55
					HC.1.1.2	48.45
			HP.5.1	24.02	HC.1.1.1	52.93
					HC.1.1.2	47.07
HH02	Outpatient care	159542.70	HP.1.1.1	1.43	HC.1.3.1	49.77
					HC.1.3.3	50.23
			HP.1.1.2	5.43	HC.1.3.1	51.95
					HC.1.3.3	48.05
			HP.3.1.1	8.99	HC.1.3.1	59.27
					HC.1.3.2	1.27
					HC.1.3.3	39.46
			HP.3.3	0.17	HC 1.3.1	66.50
					HC.1.3.3	33.50
			HP.3.4.9	0.09	HC 1.3.1	71.42
					HC.1.3.3	28.58
			HP.4.2	11.10	HC 1.3.1	57.76
					HC.1.3.3	41.69
			HP05.1	70.88	HC 1.3.1	58.77
					HC.1.3.3	40.67
			HP.10	1.90	HC 1.3.1	74.56
					HC.1.3.3	25.44

Annexure Table A2: Classification of out of pocket expenditure estimates and their ratios by providers and functions

Code (1)	Expenditure Line items (2)	Expenditure (Rs. in Crore) (3)	HP (4)	Providers' Ratio (5)	HC (6)	Functions' Ratio (%) (7)
HH03	Over the counter medicines	7142.60	HP.5.1	100	HC.5.1.4	100
HH04	Laboratory & imaging services ²⁶	272.59	HP.4.2	100	HC.4.4	100
HH05	Patient's transport	18149.37	HP.4.1	100	HC.4.3	100
HH06	Prenatal Care	7712.82	HP.4.2	11.10	HC.6.4	100
			HP.5.1	70.88		
			HP.6	18.02		
HH07	Postnatal Care	3233.41	HP.4.2	11.10	HC.6.4	100
			HP.5.1	70.88		
			HP.6	18.02		
HH08	Family Planning devices	426.35	HP.5.2	100	HC.5.2.4	100
HH09	Therapeutic appliances and Other medical goods	18.15	HP.5.2	100	HC.5.2.4	100
HH10	Immunization	1442.10	HP.6	100	HC.6.2	100

²⁶ Pharmaceutical expenditures and Laboratory and imaging services include all those expenditures on laboratory and imaging services which are not a part of outpatient or inpatient care.

Annexure 3

Methodology to derive estimates for OOPE as presented in the guidelines

The expenditure line items for household health expenditures are derived from various data sources, which are predominantly data collected from surveys. The exact expenditures for these are derived using STATA statistical package version 14. Important steps for estimations from surveys are given below:

- Separate estimates are obtained for the categories of inpatient expenditure (HC.1.1), outpatient expenditure (HC.1.2), Ante Natal Care (ANC) and Post-Natal Care (PNC) expenditure (HC.6.4) from NSS- HS 71 and for Urban and Rural Sector separately. These estimates are obtained as per capita expenditures for all ailments and all episodes during the reference period for inpatient care, outpatient care, ANC & PNC.
- 2. Missing values for any expenditure item were treated as zero.
- 3. Weighted aggregate expenditures for the various functional categories were estimated, using the combined sample weights.
- 4. Weighted aggregate reimbursements of medical expenditures by employers or insurance firms were estimated. Total medical reimbursements were subtracted for those individuals who had medical expenditures reimbursed. It was found that in some case, total reimbursement exceeds medical expenditure. This was possibly due to the reimbursements for transport which are not included as part of the medical expenditure or for incentives given for child birth. In all such cases reimbursement was imputed to be equal to medical expenditure.
- 5. For obtaining annualized values of OOP, inpatient care is taken as is, as it has been reported for a reference (recall) period for last 365 days and therefore no adjustment is needed for obtaining annual estimates. The OOPE for outpatient care has been reported for a reference (recall) period for last 15 days and therefore adjustment is needed for obtaining annual estimates. Annual estimates for outpatient expenditures are obtained by multiplying the 15 day estimates by 365/15.
- 6. Mean per capita OOP was obtained by dividing the aggregate OOP in each functional category, by the total number of persons estimated from the sample. Aggregate OOP for the country was obtained by multiplying the per capita OOP estimates derived from NSSO survey with the population as on 1st April 2014 separately for rural and urban. Then using consumer price indices-health for rural (i.e CPI-Rural Labourers) and urban (i.e CPI-Industrial workers) separately OOPE was adjusted for the year 2013-14.
- 7. For calculating aggregate expenditure on therapeutic appliances and family planning, the per capita estimates from CES 68th round were multiplied by the population of the country as on January 1,

2012 (midpoint of CES 68 whose survey period is July 2011-June 2012) and then extrapolated using relevant price indices for the year 2013-14.

- 8. For filling up NHA matrices, outpatient expenditure was to be cross tabulated with the providers; the detailed information of this was not available for outpatient expenditures from NSS-HS 71.Provider Classification of Outpatient Health Expenditures: NSS-HS 71 is designed in such a way that one block where the information is provided for level of care and another block where information is provided for level of care and another block where information is provided for expenditures incurred can be merged only for those individuals who are suffering from one ailment²⁷. In order to obtain outpatient expenditure by level of care for all ailments, ratios of expenditures incurred by different types of health care providers are estimated by using data of only those persons who had single episode of treatment or single ailment. The total expenditure for each category of provider was then multiplied by the ratio of expenditure on all ailments to expenditure on one ailment, to reflect expenditure on all ailments.
- 9. For the cases where outpatient expenditure who had taken medical consultation, provider classification was missing, it was decided to classify it as HP.10 other health care providers not elsewhere classified.
- 10. Expenditure on Prescribed drugs and OTC drugs: Similarly the prescribed and OTC expenditure on drugs can be obtained only for one ailment for outpatient expenditure. So all ailment OTC expenditure is estimated by multiplying one ailment OTC expenditure by the ratio of all ailment total outpatient expenditure to one ailment total outpatient expenditure. To evaluate this, ratios of expenditures incurred by different types of health care providers are estimated by using data of only those persons who had single episode of treatment or single ailment. These ratios are used to apportion the total outpatient health expenditures obtained above into different health care providers.
- 11. Immunization estimates are obtained from IMS data and added to total OOP expenditures obtained above.

²⁷ Block 9 in NSS-HS 71 records expenditures for treatment person wise while Block 8 records the other details of the treatment spell wise. Hence, it cannot be merged for all ailments. For inpatient expenditures, there were no such limitations.

List of Sub Group Members

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1	Dr. Bandana Sen	Director, SDRD, NSSO, MoSPI
2	Ms. Kanchana Ghosh	Director, CSO, MOSPI
3	Mr. G.L. Gupta	SRO (Health), NITI Aayog
5	Dr. Indrani Gupta	Professor, Institute of Economic Growth
6	Dr. Anup Karan	Associate Professor, IIPHG
7	Dr. Roopali Goyanka	External Consultant for OOP estimation, NHSRC and Associate Professor, Delhi University
8	Ms. Priyanka Saksena	Technical officer, WHO Country office for India
9	Dr. Charu C. Garg	Advisor, HCF, NHSRC, Member Secretary NHATS

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NATIONAL HEALTH ACCOUNTS TECHNICAL SECRETARIAT NATIONAL HEALTH SYSTEMS RESOURCE CENTRE MINISTRY OF HEALTH AND FAMILY WELFARE, GOVERNMENT OF INDIA