
Health Financing- What is the Way Forward? An Analytical Perspective

Arun K Aggarwal*

Department of Community Medicine and School of Public Health, Postgraduate Institute of Medical Education and Research, Chandigarh, India

***Corresponding author:** Dr. Arun K Aggarwal, Department of Community Medicine and School of Public Health, Postgraduate Institute of Medical Education and Research, Chandigarh, India, E-mail: aggak63@gmail.com

Abstract

Financial Protection, as measured by Catastrophic Health Expenditure (CHE), is an important arm of Universal Health Care Coverage (UHC) and is an important outcome parameter of Health systems. Global discourse revolves around increasing the share of government spending as percentage of Gross Domestic Product (GDP) to avert CHE and Out of Pocket Health Expenditure (OOPE). Fundamental questions for health financing are: a) can the funding from donor agencies solve this problem? b) where is the gap; less % Total Health Expenditure (THE) or less spending by government as % GDP? c) How valid is the claim of the national governments for increased spending on health? d) What are the contributors to health spending? What level of care? What expenditure heads? Which clinical department? Through the analysis of various case studies and secondary data, we have discussed all such issues in this article. We have done comparative analysis of India (Tamil Nadu) and Srilanka and shown that at both these places significantly high UHC coverage was obtained at less % GDP expenditure compared to other nations. Comparison of Tamil Nadu data of 2004 with National Health Account (NHA) data of 2014 shows that during ten years period, there has been increase in THE by Rs. 100/- per capita per year, increase in Government Health Expenditure (GHE) by Rs. 61/- per capita per year and decrease in OOPE by Rs. 9/- per capita per year. Substantial Health Expense occurs on Pharmacy. Renal Transplant Department, Cardiology and Orthopedic departments were found to be top three departments with huge OOPE. Article gives insight to better design future financial protection schemes.

Keywords: Financial protection; Catastrophic health expense; Health insurance; Rashtriya Swasthya Bima Yojana (RSBY); Pradhan Mantri Jan Arogya Yojana (PMJAY); Out of Pocket (OOP) Expense

Introduction

Bhore committee report in 1946, laid the foundation of Primary Health Care approach that was endorsed at Alma Atta declaration in 1978. It gave the vision that basic essential care services should be universally accessible to all, at costs that country and community can afford, at all levels of development, for all the problems prevailing in the community. Government policies and national programs were designed to meet the challenges of the priority problems existing during that period of time; that were mainly related to reproductive and child health issues and some communicable diseases like malaria, tuberculosis etc. Since then, burden of non-communicable diseases including mental health problems have increased tremendously. Newer communicable diseases like HIV/AIDS have emerged. Private market has become stronger. Pharmaceutical industry is now dominating the global health market. Cost of care has increased and as a result health care is becoming out of reach for not only the poor but also the middle class community. Necessity to use the healthcare make people impoverish. Thus it has been recommended to implement new primary health care approach after learning from past experiences [1-3]. However, global discourse has

now got shifted to Universal Health Coverage (UHC). Financial protection is an important arm of UHC [4]. Same principles are being echoed in Universal Health Coverage approach as were there in PHC approach. What has changed since Primary Care Approach? Basic principles remain the same; however we have now better measures to benchmark financial protection, and equity. The country is slowly marching towards managed care with increasing role of private sectors and insurance. Public sector is projected to be reduced to purchaser of services. Is privatization right answer to strengthen the ailing health systems, is a question that needs deeper introspection [5].

Efforts were initiated in 1990s to bring about health systems reforms through structural adjustment programs and introduction of user fees, so that funds generated at local level can be used to provide some financial protection through systems strengthening that can improve quality of care and bring down Out of Pocket Expenditure (OOPE) on health care. However, these reforms including user fees failed [3,6]. These reforms were followed by the concept of prepayments and insurance schemes. It also did not yield desired outcome in terms of reduction of OOPE [7]. There are huge challenges for the achievement of equity in service provision, and equity in financing and financial risk protection in India [8]. Therefore, there is need to have a relook at what contributes to OOPE and what is being offered in various financial protection schemes to understand the mismatch if any and guide the policy makers for better informed decisions.

The fundamental question is how to provide financial protections for health care during prevention and cure? How funds required for health care should be collected and how these should be used so that financial protection is achieved maintaining principle of equity and sustainability.

Can Funding from Donor Agencies Solve the Problem?

Whether donor agencies can play some role in providing financial assistance? Since long donor agencies have been supporting the poor nations so that World's poor can get package of essential basic services. However, such support is always provided under the assumptions that recipient countries will improve a) governance, b) macroeconomic and budgetary management capacity, and c) reduce corruption. These countries also need to ensure functional health systems supported by long term sustainable financing, effective partnerships with non – governmental organizations and achieve results in improving human development indicators [9].

Even a simple look at these assumptions shows how impossible these are! If these poor nations were able to achieve all this, then these would not have been poor at all! If donor agencies help to build capacity of the nations within the existing resources, then countries can be benefited. Otherwise such funding puts breaks on natural growth and development and self – sustainability. Countries become dependent on external funds, to an extent that they start achieving small results with overspending. Thus for self-sustainability, it is important to look into various financing and payment options within the countries itself, that can be used to enhance financial protection with equity.

We propose rule of 'Three'. There are three health financing functions, three outcomes and three principles of financing.

Three basic health financing functions are: a) Collection of revenues b) Pooling of resources and c) Purchasing of services. Three outcomes of this health financing functions are: a) Improved health indicators, b) Financial Protection and c) Consumers satisfaction [9].

Three basic principles of public financing [9] are:

- Raise enough revenues for basic package of essential services and financial protection,

against catastrophic medical expenses, in an equitable, efficient and sustainable manner.

- Ensure equity and efficiency while pooling health risks.
- Ensure allocated and technical efficiency while purchasing the health services.

Following steps may be followed to put above principles into action:

1. Identify the package of basic essential services. This package may differ by countries/regions/states and districts. In India, district is considered an independent unit at which planning takes place. Thus, each district should identify its basic package of essential services.
2. Identify the common conditions that lead to catastrophic expense. These common conditions should be part of the essential package.
3. Identify the population at risk of catastrophic expense.
4. Calculate the revenue collection needed to meet the expense for management of these catastrophic conditions and for basic essential package.
5. Pool the risk; generate revenues through premiums distributed equitably and with substantial contribution from funding agencies that can be government, social organizations or community based organizations.
6. Decide the service purchase options based on availability of service in government sector, charitable sector and private for profit sectors. Adopt strategic purchase options, with least fragmentation based on burden of diseases and cost effectiveness of available interventions so as to achieve high allocated and technical efficiency and at lowest administrative costs.

Where is the Gap? – Less % Total Health Expenditure (THE) of GDP or Less allocation of Government Spending on Health?

Developing countries have 84% Global Population and contribute to 90% Global Disease. Yet these countries have only 12% Global Health Spending [9]. There is tremendous gap between rich and poor countries with respect to health spending and health needs. High income countries spend a lot on health on per capita basis than low income countries. More worrisome is the fact that substantial spending on health in poor countries comes from Out of Pocket (OOP) spending by consumers [9]. It not only become catastrophic for the poor families, but also impoverishes those families who were otherwise above the poverty line.

It can be argued that higher spending does not mean better health indicators. As per GHLC report, [10] average income (GDP) of the countries was found to be strongly associated with improvement in life expectancy for the poorest countries, till a level of around \$7000 GDP per capita, after which the relationship flattened out. It also showed that countries like Kyrgyzstan, Thailand, India (Tamil Nadu State), Bangladesh and Ethiopia performed better in life expectancy than many other countries at same or better level of GDP. Thus it generates the hypothesis that more GDP is not directly proportional to the better health indicators.

From the GHLC report [10], data was extracted and a comparison of Tamil Nadu (India) and Thailand was done as both have achieved substantially in terms of health indicators. Tamil Nadu is the role model for all the Indian states and indicates what can be achieved within Indian setup. Thailand has become global success story for UHC and reduction of OOP. Comparison of key coverage indicators of both the places shows that they almost match each other (Table 1). Both have achieved very high coverage for antenatal care, intra-natal care, childhood immunization, and under-five treatment of pneumonia. Both remained low for coverage of diarrhea treatment. For impact indicators, life expectancy is

almost similar at both places. For maternal and under-five mortality, although Thailand has overall lower rates than Tamil Nadu, but in terms of reduction in the rates during the same period, from 1980 to 2008, Tamil Nadu showed greater reductions than Thailand [10].

Tamil Nadu achieved such good results with lesser health workforce density, lesser hospital beds, and less Total Health Expenditure (THE). Per capita health expenditure was about one-sixth of Thailand; Government Health Expenditure was less than 1/4th of Thailand. However, OOPE was five times that of Thailand. Both Tamil Nadu and Thailand achieved nearly 100% coverage of the population. This shows that to make the OOPE comparable to Thailand, Tamil Nadu should increase the per capita health expenditure to six times and should increase the government contribution to at least 75%.

Has Health Expenditure increased in India since 2004? What is the evidence available from National Health Accounts 2014 of India [11]?

As per National Health accounts report for year 2014-15 for India, total health expenditure (THE) per capita was Rs. 3826/- for one year. As per GHLC report HE for Tamil Nadu in 2004 was of Rs. 1255/- (27.9 USD) per capita [10]. Considering the annual inflation rates in the country, an amount of Rs.1255/- in 2004 is equivalent to Rs. 2813/- in the year 2014. Thus, HE of Rs. 3826/- in 2014 denotes an actual increase by only Rs. 1012/- per capita in ten years' time, after adjusting for inflation, which amounts to increase of about Rs. 100/- per capita per year. This conclusion drawn for all India is based on 2004 data of Tamil Nadu. This is despite the fact, that period of 2004-2014 has seen tremendous reforms and inputs from National Rural Health Mission.

Of Rs.3826/-, 93.4% is spent as current health expenditure, as operational expenses. Government Health Expenditure (GHE) is only 29% of T.H.E. Per capita GHE comes out to be Rs.1108/- only [11] This has increased marginally from 17.7% in 2004 [10]; an increase of 11.1% in 10 years. After adjusting for inflation, in absolute terms, there is increase of GHE of Rs.611/- per capita in 10 years' time or Rs. 61/- per capita per year. In 2014, OOPE as % Total Health Expenditure (THE) was 62.6%. In 2004, this was 82%. Thus, there is about 20 percent decrease in OOPE in 10 years. After adjusting for inflation this difference comes out to be only Rs. 90/- per capita in ten years or Rs. 9/- per capita per year. Role of social security/private health insurance/donor agencies is restricted to <10% of THE. It remains almost the same since 2004. Government Health Expenditure is restricted to 1.1% of GDP and 3.9% of Government General Expenses.

In summary, comparison of Tamil Nadu data of 2004 with NHA data of 2014 shows that during ten years period, there has been increase in THE by Rs. 100/- per capita per year, increase in GHE by Rs. 61/- per capita per year and decrease in OOPE by Rs. 9/- per capita per year. Is this sufficient to achieve financial protection? It is important to answer further questions.

Where is Health Expenditure being done?

Analysis of National Health Account 2014 shows, that 67% of Current HE is by OOPE. Treatment from private providers (25.9%) and Pharmacy (28.9%), together constitute more than half of Current Health Expenditure (HE). Expense on Inpatient care is 35.1% and that on outpatient care is 16.2%. Prescribed medicines consume 28.6% of the expense. Overall pharmacy expenses alone are 37.9% of Current Health Expenditure HE [11] (Tables 2 and 3).

Of the total current health expenditure, 45% is spent on primary care. Government expense on primary care is almost half of it. Current HE was 35.6% for secondary care with Government expense only 21.9% of it, and for tertiary care Current HE was only 15.6%

with Government expense merely 14% of it [11] (Table 4).

As per NSS social consumption survey data (2011-12) total OOP payment was 6.77% of total consumption expenditure. It was 11.46% of non- food expenditure. OOP for medicines was 4.49%. Total OOP payments and OOP payments for medicines were catastrophic for 17.9% (95% and 11.2% households, respectively at the 10% of total consumption expenditure threshold). These OOP payments have increased substantially since 1993-94. Medicines OOP payments pushed 3.09% persons into poverty in the year 2011-2012 [12].

Thus contribution of Government Expense is less at all levels of care. Although percent HE decreased with increasing level of care but individual expense load actually increased manifold. Thus, lesser financial protection from Government may put patient at increased risk of financial catastrophe.

Further evidence was compiled to understand the major expenditure heads. As per National Health Account report 2014, about 85% of expenses occur on Pharmacy, inpatient treatment in general hospitals in government and private sectors and medical and diagnostic laboratories. Pharmacy consumes about half of the above expense [11] (Tables 5 and 6).

In another study conducted in a tertiary care institute among general ward patients, it was observed that patients who had to dispose assets incurred substantial expense on medicines and supplies than those who did not need to dispose assets [13] (Table 7). Expense on user fees and diagnostics was very less and was not different in two groups. Further analysis from this table shows that those who had BPL cards, had to incur less expense on diagnostics, supplies and user fees. However, expense on medicines still remain high, as many medicines need to be purchased [13] and the financial protection mechanisms for local purchase of drugs need to be more robust. This shows that in this public sector tertiary care hospital, if budgetary allocations are increased for medicines and supplies, and if pharmaceutical reforms of using generic medicines and regulations to restrict the cost of expensive appliances and implants are implemented and government ensures quality of these alternative drugs and supplies, then the financial protection can increase to a large extent.

National health account reports, NSS report and all other literature on the subject has documented that most of the OOPE occurs on medicines, and supplies. To take specific action for reducing the expenses, it is important to go further deep and understand what are the clinical departments and clinical conditions where majority of the expense occurs. As shown in the Table 8, evidence from public sector tertiary care hospital shows that huge expense is incurred in renal transplant department, cardiology and orthopedics followed by others. Patients undergoing renal transplant, hip replacement, coronary bypass or coronary stents have to incur huge expense [13] (Table 9).

NSS (71/25.0) report gave disease condition wise average medical expenditure (AME) per hospitalization case [14] AME in public hospitals was 1/4th (Rs.6120/-) of that in the private hospitals (Rs.25850/-). However there was huge variation in the AME, disease condition wise. Top eight conditions, with AME of >Rs. 5000/- in public sector hospitals are given in Table 10. NSS (2011-12) data also showed that leading cause of diseases that caused significant OOP payments are cancers, injuries, cardiovascular diseases, genitourinary conditions and mental disorders [12].

From the above analysis it is clear that country is facing huge burden of OOPE. This has not reduced much since 2004, as per the data given in this paper, despite huge influx of funds through NRHM and various vertical disease specific programs. Proponents of pre-payment

and insurance schemes consider these mechanisms as panacea. Following review was done to understand how much these risk pooling mechanisms are effective?

Brief Overview of Issues related to various Risk Pooling Schemes [9]

All the risk pooling mechanisms should target to achieve equity, efficiency and sustainability. Major risk pooling mechanisms are given below:

- State funding systems
- Social Health Insurance
- Voluntary Health Insurance
- Community Based Health Insurance

Brief issues linked to these risk pooling mechanisms are given below:

State Funding Systems are influenced by underlying delivery structure and incentives facing providers and consumers. These are also subject to Annual Budget discussion and change in political priorities. It is observed that under these systems poor patients use less expensive local primary care and rich patients use expensive hospital services [9].

Social Health Insurance is based on mandatory earmarked pay roll contributions. This is nonprofit and supervised by government. SHI has more viable funding but may require infusion from general tax revenues, aids and taxes. Equity of S.H.I depends on presence or absence of contribution ceilings and other features. Social contributions may have deleterious effect on employment and economic growth if they increase labor costs. SHI works better in higher income countries. There is dominance of formal sector as this is mandatory payroll based contributed, it generally works for formal sector. It works better in urban areas with high population density. It can lead to increase in labor costs. It required strong administrative capacity and good quality health care infrastructure so that good quality services are available and wealthier population do not opt out [9].

Community based H.I. is not for profit prepayment plans with voluntary membership. These have potential to reduce O.O.P.E. and lead to greater use of health resources. Protection and sustainability is questionable as these have small pool, less income, difficult to cover broad risk spread and provide financial protection. Limited management skills, poor negotiation with providers on quality or price are the limitations. Government can support through subsidies, technical assistance and links to formal financing mechanisms. C.B.H.I. should be viewed as complement rather than substitute [9].

Private/Voluntary H.I. supplements especially in high income countries. These are voluntary contributions, except Switzerland and Uruguay, where purchase of private coverage is mandatory. Private HI can provide a) Primary coverage, b) Duplicate the services with difference in providers, time of access, quality and amenities c) Complement the services with cost sharing and can be d) Supplementary. Market failures are threat in low income countries due to poor a) Regulations b) resources c) Political backing and d) Financial and Insurance market [9].

What is the Evidence? Is Risk Pooling Equitable and Lead to Financial Protection?

According to one analysis by TV Sekher, based on IIPS (2011), study on Global AGEing and adult health (SAGE-India) [15], it was argued that impoverishment effect of catastrophic health payments was eight percent among uninsured households while it is only one percent with at least one uninsured member [16]. However, it is important to have complete picture that can be constructed from the given data (Table 11).

Above table shows inconsistency in relationship of insurance with impoverishment. With 2 persons insured, there is no much difference in the impoverishment. Furthermore, Those without insurance, have very less mean household monthly expenditure, and therefore, after meeting their subsistence needs, mean OOP health payment as proportion of household's non-subsistence expenditure is much more in this group. Thus, it is difficult to draw a conclusion from this data that insurance is protective.

Following table on the sources of funding will help to understand it further. Borrowing and selling assets is a surrogate of catastrophe. If insurance is protective then proportion of these catastrophic measures should be less among insured compared to noninsured. However, as per the given data, uninsured do not perform worse than the insured. In fact, insured borrow more from friends and others and also dispose of the assets almost equivalent to the uninsured. Distribution of sources of funding with respect to the wealth quintiles, unmask the inequity in distribution. Poorest, poor and middle class have much less insurance coverage than the richer classes. This means that government sponsored national and state insurance schemes that were earmarked for the poorest and poor have not reached them. Benefits are being reaped by the richer classes. Still they perform equally for financial catastrophic measures except the richest class who have fewer catastrophes [16].

Finally, analysis of catastrophic health expenditure with various sources of funding clearly shows that insurance plays very less role and is equally used by both groups of patients who have CHE or not. However, those who have CHE, they borrow and sell much more than those who do not have CHE. Another message that comes out is that even if families do not come under the definitions of CHE, but still 6-13% of them do borrow money or sell assets to avail the health care (Table 12).

Thus, as per the reinterpretation of this data, insurance seems to be inequitable and not protective for CHE.

Same conclusion was drawn by another group of researchers, who analyzed the NSS Social consumption on Health data of 71st round, from all India, and used propensity score matching [17]. Their analysis was restricted to the inpatient hospitalized population. They observed that Public Funded Health Insurance (PFHI) schemes cover 12.8% of the population and coverage is higher in upper income quintiles and in urban areas. With propensity score matching they showed that PFHI contributes to marginal reduction (1%) in CHE incidence at 25% threshold of CHE, for the richer three quintiles. This was despite the fact that utilization of public services was more in poorer quintiles. They concluded that even with tax funded public services, average OOPE is lower than the care purchased through PFHIs. Both strategies are not able to address the issue CHE and impoverishment and therefore, an effective synergy is needed in both [17].

In China, OOP expense out of total health expenditure had increased from 20% in late 1970s to 55% in 1998, after the economic reforms. Reforms in 2003, in form of New Cooperative Medical Scheme could reduce the OOP to only 40% (in the year 2008). In 2009, China introduced another reform to reduce the financial burden and OOP expense in form of New Health Care Reform. Universal health insurance was introduced in rural and urban areas. In addition to UHI, specific chronic disease subsidies were introduced and reforms were done to establish national essential medicine system such that basic prescription drugs were made available at zero markup prices at primary care facilities. Despite 95% enrolment by 2013, OOP expense could come down to 31% only by 2014. It was observed that reforms helped to reduce financial risk in rural areas. In urban areas impact was very limited. Even in rural areas, impact on poorer households was very limited [18-23]. China has done lots of reforms for financial protection ranging from instituting different types of insurance schemes, strengthening of the health systems and pharmacy

reforms. Some success was achieved. However, they failed to achieve equity in protection. Pharmacy reformed performed relatively better than the insurance reforms [24-28].

In India also many insurance schemes were launched at national level and state levels with varying success and lessons learnt [17]. There are some evidences from India, that efforts in pharmacy sector are yielding results. With additional per capita investment of Rs. 43/- per year, Rajasthan was able to improve the pharmacy service substantially [29]. Tamil Nadu has shown the way to entire country through its smart procurement procedures that ensures availability of quality drugs that can lead to substantial reduction in OOPE [30].

Recently, Government of India has taken initiatives to control the prices of drugs and supplies through promotion of generic drugs, improving the access to such medicines through chain of Jan Aushadi stores, and by regulating the prices of costly implants and stents. These actions are in alignment to the factors that contribute to high OOPE. However, much needs to be done. Government should learn from the failures of RSBY, to make Ayushman Bharat more useful and accessible to the poorest of the poor.

Conclusion

There should be stringent regulatory measures to ensure the quality of medicines and supplies and there should be check on all service providers be it in public sector or private sector. All efforts should be done to revitalize the tax funded public sectors, because that is the only panacea for the poorest of the poor.

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Particulars	Tamil Nadu	Thailand
% Births with Skilled Attendant at delivery	91	97
% Births with antenatal care (1 or more visit)	99	99
% Children (12-24 months) vaccinated against Measles	93	96
% Children under 5 years with suspected pneumonia taken to health provider	75	84
% Children under 5 years with Diarrhoea receiving appropriate treatment	47	46
Life Expectancy (years)	~67	~68
Decline in Mortality from 1980 to 2008		
Maternal Mortality	60 Points (150--90)	60 Points (110-50)
Under 5 Mortality	120 Points (160-40)	75 Points (85-10)
Density of health care workers/10000/population	12	17
Hospital beds/10000 population	10	22
TOTAL HEALTH EXPENDITURE(THE) (%GDP)	4.0	4.3
Health Expenditure per capita (Current) [in US \$, 2004-05, 1USD=45INR]	27.9 (Rs 1255/-)	167.7

Govt.Health Expenditure (%THE)	17.7	75.9
Out Of Pocket Expenditure (OOPE) (%THE)	82.0	16.5
Formal Population coverage (% covered by Insurance or tax based arrangements)	100.0	97.7

Table 1: Showing Health Coverage, Health Outcome and Financial Indicators of Tamil Nadu (India) and Thailand (GHLS report) [10].

Total Health Expense (T.H.E) per capita	Rs. 3826/-
Current Health Expenditure (C.H.E) per capita	Rs. 3573/-
O.O.P.E PER CAPITAA	Rs. 2394/-
Pharmacy expense per capita	Rs. 1354/-
Government Health Expense (GHE) per capital (29% of THE)	Rs. 1108/-
Current Health Expense (CHE) as % G.H.E	Rs.855/(77.2%)
Union Government 37% of G.H.E	Rs. 409/-

Table 2: Showing Distribution of Per capita Expense, NHA 2014.

Current Health Expenditure					
Who Contributes		Who provides		What services	
Union Govern-ment	8.20%	Government Hospital	14.30%	Inpatient	35.10%
State Govern-ment	13.30%	PRIVATE HOS-PITAL	25.90%	OPD	16.20%
Local Body	0.70%	Other Govern-ment providers	6.20%	Transport	4.60%
O.O.P.E.	67%	Other Private providers	5.30%	Las/Image	4.70%
Other H.H.	4%	Transport	4.60%	Medicines(pre-scribed)	28.60%
Enterprises	4.40%	Labs	4.70%	Other countries medicines	0.30%
NGOs	1.60%	Pharmacy	28.90%	Preventive care	6.70%

Ext. donor	0.70%	Retailers	0.10%	Others	1.20%
		Preventive	5.30%	Medical goods	0.10%
		Other Providers	2.20%	Admin	2.60%
		Admin	2.60%		

Table 3: Showing Distribution of Current Health Expenditure by Who contributes? Who Provides? and for What Services? National Health Accounts India, 2014 [11].

Level Of Care	% Current He	% Govt. Expense
Primary Care	45.1%	51.3%
Secondary Care	35.6%	21.9%
Tertiary Care	15.6%	14%
Governance	2.6%	

Table 4: Showing Current HE as per Level of health care and contribution of Government Expense.

Source	Expense In Crores	% Expense
Total	302424	100
Pharmacy	130451	43.1
General Hospital Private	86189	28.5
General Hospital Government	22429	7.4
Medical And Diagnostic Laboratories	20610	6.8
Patient Transportation And Emergency Rescue	18934	6.3
Offices Of General Medical Practitioners	15760	5.2
Preventive Care	4225	1.4
Other Ambulatory Centers	1645	0.5
Other Hcp Not Classified	1210	0.4
Medical Goods And Appliances	559	0.2
Other HCP	412	0.1

Table 5: Showing Health Expenditure by Different Source categories, NHA 2014-15.

Expense Categories	Expense in Crores	% Expense
Prescribed Medicine	128887	42.6
General in Patient	53267	17.6
Specialized in patient	43693	14.4
Labs and Imaging	20610	6.8
Transportation	18934	6.3
Specialized Out Patient	17742	5.9
General Out patient	12747	4.2
Healthy Condition monitoring	2450	0.8
Immunization	1775	0.6
Over Counter Medicines	1564	0.5
Therapeutic Appliance and Other medical goods	559	0.2
Dental Out patient	196	0.1
Total	302424	

Table 6: Showing Health Expenditure by Different Expense categories, NHA 2014-15.

Assets Disposed vs. Expenses in INR	Assets Not Disposed	Assets Disposed	p-value
Expense of Medicines	10385	35727	<0.001
Expense on Diagnostics	2199	2486	0.8
Expense on Supplies	8480	21000	0.23
Expense on User fees	2141	2675	0.8
Poor Free status vs. Expenses	Not Poor Free	Poor Free	p-value
Expense of Medicines	12231	11758	0.88
Expense on Diagnostics	2662	431	0.005
Expense on Supplies	11447	315	0.06
Expense on User fees	2657	229	0.05

Table 7: Showing Mean Expense on Medicines/supplies/Diagnostics and User fees with Asset disposal status and Poor free status, in tertiary care public hospital.

Sr.No.	Department	Medical Expense
1	Renal Transplant Department	133917
2	Cardiology	60900
3	Orthopaedics	42770
4	Paediatric Medicine	29630
5	General Surgery	26670
6	Psychiatry	25973
7	Urology	19244
8	Gastroenterology	18673
9	Plastic Surgery	16576
10	Nephrology	16255

Table 8: Department wise Total Medical Treatment Expense: Top 10 Departments in Descending Order.

Sr.No.	Disease Condition	Medical Expense
1	Renal Transplant	133917
2	OA with hip replacement	72368
3	Bypass/Stenting	70379
4	RHD/heart Attack	48561
5	Schizophrenia/Dementia	45028
6	Renal Infection	40000
7	Leg Amputation	35800
8	Pneumonia/Cellulitis/Diphtheria/Encephalitis/Sepsis	35014
9	Gluteal Abscess/Malaria	34430
10	Liver damage/Chronic Pancreatitis/Iliac stricture	28233

Table 9: Total Medical Expenditure for Top 10 Disease Conditions in descending order.

Ailment Category	Expense in Public Sector	Expense in Private Sector	Overall Expense
Cancers	24526	78050	56712
Cardiovascular	11549	43262	31647

Musculo Skeletal	8165	28396	21862
Psychiatric and Neurological	7482	34561	23984
Injuries	6729	36255	23491
Ear	6626	19158	15285
Gastro intestinal	5281	23933	17687

Table 10: Top 10 disease conditions with High Average Medical Expenditure, in Public Sector Hospitals.

	MHMSE (INR)	% Poor	I_dtOOPHP	% CHE	MOOP_NSE
Health Insurance of Household Members					
No Insurance	6349	32.3	7.5	24.5	22
1 Person Insured	10380	7.6	0.9	14.8	16.1
2 persons insured	11424	12.6	6.4	17.4	16.6
3 or more persons insured	13484	6.4	1.5	10.6	12.4
MHMSE-MEAN HOUSEHOLD MONTHLY CONSUMPTION EXPENDITURE					
I_dtOOPHP- IMPOVERISHMENT DUE TO OUT OF POCKET HEALTH PAYMENTS					
MOOP_NSE- MEAN OOP HEALTH PAYMENT AS PROPORTION OF HOUSEHOLD'S NON-SUBSISTENCE EXPENDITURE					

Table 11: Showing Insurance status and various indicators of Financial Protection.

	Selling HH Assets	Borrow from Friends	Borrow from Others	Other Sources	Insurance
Health Insurance of Household Members					
No Insurance	7.7	19.8	5.7	9.5	0.6
1 Person Insured	8	17.4	9.5	13.5	10.4
2 persons insured	16.3	22.4	12.9	16.4	10.1
3 or more persons insured	6	13.8	12.7	10.4	14.3
Wealth Quintiles					
Poorest	8.7	25	3.4	9	0.2

Poor	6.2	22.7	4.8	10	0.3
Middle	9.5	20.8	7.6	10.9	1.3
Rich	10	19.8	7.9	11.9	2.6
Richest	5.7	9.5	7.8	7.5	2.8
Catastrophic Health Expenditure					
No	6.2	13.7	5.7	9.3	1.4
Yes	11.8	33.7	7.2	11	1.4

Table 12: Showing Sources of Funding with Insurance status.