

Health Expenditure and Financing Provisions in the New Era

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I. INTRODUCTION

It was defined by World Health Organisation that human health as a state of complete physical, mental and spiritual well-being and not merely the absence of disease and/or infirmity. In general we are assuming that Good health is a condition of human body, mind and the absence of any disease. Human life is materially and socially productive and culturally meaningful if one is endowed with physical and mental well being. The coping processes adopted by human being with their environment are both biological and of health, disease, illness and sickness are inextricably intertwined with social, cultural and economic factors, which are influenced by the well being of family members and on their access to resources. The socio-cultural factors more or less determine beliefs and practices related to health, disease and treatment (Van Bolen and Van Dormael, 1999; Behura, 2003).

Financial burden of health care has significant 'impoverishing' effects on households in a developing country like India. Low public spending on health and exorbitant out of pocket expenditure by households characterize Indian health care system. Poor quality of preventive care, epidemiological changes, demographic transition, and increased awareness has implications for higher demand for health care in coming years. This coupled with medical inflation may pose higher financial burden on households. Some stylized facts about contemporary scenario of health expenditure in India are bothersome. India's rank is 143 among 190 countries in terms of per capita expenditure on health (\$146 PPP in 2011). It has 157th position according to per capita government spending on health which is just about \$44 PPP. India's per capita health spending is 35 per cent and about one-third of China and Thailand respectively. India's per capita government spending is one of the lowest in the World. It is less than one fifth of China and about 15 per cent of Thailand (WHO 2014). Basing on this unprotected budgetary danger of social insurance postures concern which the medicinal services framework must address. Far reaching and steady confirmation on money related part of a medicinal services framework is an essential for evaluating the circumstance and to achieve fundamental changes. Intermittent evaluation of standard markers of wellbeing use and fund helps in long haul arranging

II. STUDY OBJECTIVE

This paper focuses on major indicators of health expenditure and finance. It presents current evidence regarding the situation in India. The chapter is organized in the following manner. First section of the chapter discusses how the boundaries of health care are delineated from the perspective of expenditure and finance. Major indicators of health expenditure and finance are discussed in the second section. Public-Private Partnership in health is the subject matter of the third section. Finally, concluding observations are made.

III. REVIEW OF LITERATURE

Health sector is one of the crucial sectors in any economy and has remained in focus for many researchers. There are various studies which were conducted on the different aspects of Health Services and related areas. The present study examines the health insurance market in India with specific focus on the insurers, hospitals (hereafter called as providers) and their interlinkages. This paper reviews the literature of such important studies in order to identify the gaps that exist in literature.

This review covers the literature on health insurance, literature on healthcare provider etc. The literature on health insurance would help identify the existing work done and gaps in the area of health insurance, insurer and provider relationship. The literature on healthcare providers would help identify research undertaken and existing gaps in the area of healthcare services, effect of good health, healthcare financing, provider behavior and learning's from managed healthcare models. In both the sections the literature review of studies specific to India had been presented separately. A schematic diagram of the literature reviewed is given in Figure: 1

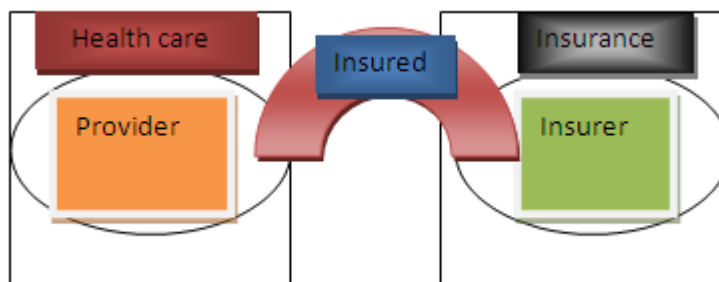


Fig: 1

Kelly (1951) in his paper says that in no line of human endeavor does the interdependence of men manifest itself more clearly than in insurance. Although the insurance principle is centuries old, planned achievement of security through transfer or sharing of risk has developed only with modern society. When man lived alone or in primitive family groups, insurance in a formal sense was unnecessary. Each family cared for its own as best it could. When community living became more complex, men recognized the need for a system by which they could help each other in times of adversity. From this need to have the assurance of help in the event of misfortune grew the earliest insurance plans.

Cutler (1996, p.230) in his study focused almost all health insurance systems where individuals are allowed choice of insurance have experienced adverse selection. Medicare enrollees who choose managed care are healthier than those who do not. The federal employee health benefits program has adverse selection between more and less generous policies. The spread in premiums between more and less generous policies is sixty eight percent greater than benefits alone would dictate and almost every large firm that has encouraged employees choice has found the cost of most generous policies increases sufficiently rapidly that these policies are no longer viable. This last phenomenon is named in the literature as price death spiral and refers to the increase in the price of more generous insurance plans vis-à-vis moderate plans.

Grossman (1979) in his paper tested the hypothesis of “dissembling” behavior by high-risk individuals. According to Grossman, all potential health insurance customers know that in equilibrium any loss making contract will be withdrawn from the market. Therefore, when high-risk individual submit their application for insurance they self-restrain their choice between the set of contracts chosen by low-risk and those which would not entail losses even if chosen only by high-risk individuals.

Rothschild and Stiglitz (1976) in his article investigate and focused the “Effect of Adverse selection on health insurance” They assumed that individuals are risk averse and that there is no moral hazard. The amounts of the loss, as well as the probability are not influenced by the presence of insurance coverage. They also assumed that individuals can buy at most one insurance contract, thus recognizing that insurance companies are able to ration the degree of insurance coverage offered to individual. In their results the single price equilibrium of conventional competitive analysis was shown to be no longer viable; market equilibrium, when it existed, consisted of contracts which specified both price and quantities; the high-risk individuals exerted a dissipative externality on the low risk individuals. Their model show that in a situation of information asymmetry, insurance companies can limit the amount of insurance guaranteed (also called sum-insured) in order to improve available information on customer’s risk.

IV. HEALTH AND HEALTH RELATED EXPENDITURE

There is a distinction made between health and health related expenditure. Apart from core health services, expenditure on water, sanitation, and nutrition is considered to have direct impact on health outcome. Hence, a broad definition considers expenditure on these components apart from the expenditure on core health to get a sense of total expenditure commitment towards health care.

The boundary of health care was defined by various institutions in various ways. WHO defines total health expenditure as all expenditure whose main purpose is to restore, improve and maintain health for nation and for individuals during a defined time period (WHO, World Bank, and USAID 2003) As per the above definition, health expenditure comprises expenditure incurred towards curative health care services, disease prevention, reproductive and child health programmes, health promotion, administration of health services, medical education, training and research, and capital investment for health purpose. National Health Accounts (NHA) of India adopts the above definition and accordingly, expenditure on water supply and sanitation; Integrated Child Development Schemes, drug abuse etc are kept outside the boundary of health accounts (NHA, 2001-02).

The Concept of “health care” according to the System of Health Accounts (OECD) generally includes the sum of activities performed either by institutions or individuals pursuing, through the application of medical, paramedical and

nursing knowledge and technology, the goals of promoting health and preventing disease; curing illness and reducing premature mortality; caring for persons affected by chronic illness who require nursing care; caring for persons with health-related impairment, disability, and handicaps who require nursing care providing and administering public health which provides and administering health programmes, health insurance and other funding arrangements. As per the above definition, goods and services purchased from illegal health care providers are included in the accounting. Providers who they are not even medically qualified are possibly included. Similarly, purchases from providers do not using western or allopathic medical technology, may also be included.

In India, NHA provides comprehensive information on financial aspects of the health system since 2005. It is a well known methodology for representing the financial aspects of the national health systems with all its intricacies and inter-linkages. Some of the critical aspects of the health expenditure and financing, which hitherto remained invisible and opaque, become apparent and comprehensible with NHA. While methodological issues pertaining to NHA continue to be clarified and further refined, adoption of this system renders answers to many basic but critical questions on financial aspects of health. A well developed NHA aids not only in figuring out the current status of resources and actors in the health system but also supports prospective planning and reform of the health system.

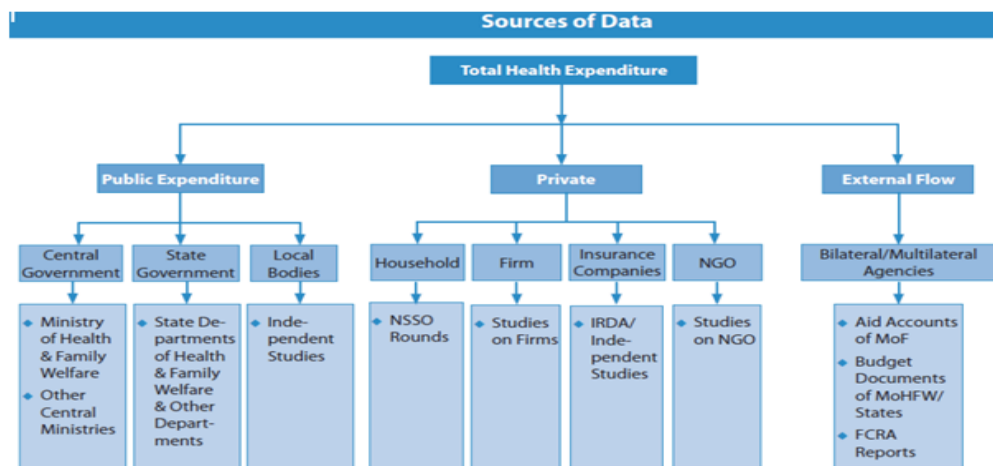
Health accounting procedures of NHA has its roots in the System of Health Accounts (SHA) of the Organization for Economic Cooperation and Development (OECD). It introduced the International Classification for Health Accounts (ICHA) which gives guidelines for the classification system of health care entities and type of expenditure. Subsequently, the United States Agency for International Development (USAID), the World Bank (WB), and the World Health Organisation (WHO) jointly developed a manual, 'A Guide to Producing National Health Accounts: with an Applications for Low and Middle Income Countries' literally known as the Producers Guide. The Producers Guide takes low and middle income countries and brings out an expanded system of SHA classification with further level of disaggregation. National Health Policy (NHP), 2002 acknowledged the significance of adopting NHA framework for India and it provides a roadmap for introducing it by 2005.

In Indian context, budget classification basing on health expenditure do not permit adherence to ICHA format in toto. NHA, India shows necessary modifications in the international template to adapt to Indian realities. It has introduced refinements in conceptual, methodological and estimation procedures to represent Indian situation and collates information from various sources to obtain the total health expenditure in the country. It takes proxies in some cases where health expenditure is not directly available. NHA 2004-05 brings some improvements like refinement in existing classification and classification of non classified items, collection of information hitherto not available. However, there are certain issues which affect the estimation. Lack of reliable data and methodological challenges are many in the preparation of NHA. First, information on fiscal aspects of local bodies is either not available or the existing data not reliable. Information on expenditure on health by local bodies is collected through sample surveys.

V. HEALTH EXPENDITURE AND SOURCE OF DATA

The health expenditure is classified under two main heads: public and private. Apart from these two sources, there are external sources of funding. Public sector expenditure includes expenditure incurred by government and social security funds. In Indian federation the total public expenditure was included health expenditure by the Central and State governments. Private sector expenditure includes expenditure by households, NGOs, firms and insurance programs excluding social security. Budgets and government documents are the sources of information for public expenditure. Data provided in Budgets, Aid accounts of ministry of Finance and Foreign Contribution (Regulation) Act (FCRA) reports are compiled to obtain the total external sources of health expenditure.

There is no direct evidence available to obtain the precise estimate of total private health expenditure. Conducted by National Sample Survey Organisation (NSSO) conducted Macro level household surveys in the consumption expenditure are relied upon to estimate out-of-pocket expenditure of the households on health. Separate surveys are devised for firms and NGOs to find out their health expenditure or findings of other research studies are used as proxy estimates. IRDA reports or findings of independent studies are the sources of information regarding the insurance sector.



Source: NHA 2004-2005

Indicators:

Major indicators of health expenditure and finance are as follows

(i) Health Expenditure Per Capita

Health expenditure per capita is the average health expenditure, incurred from all sources, per person in a country or a specific region.

$$\text{Health expenditure per capita} = \frac{\text{Total Health Expenditure}}{\text{Population}}$$

Total expenditure on health includes final consumption of health goods and services (i.e. revenue expenditure on health) and capital investment in health sector. Expenditure incurred by both public and private entities is accounted for to obtain at the total expenditure on health. Expenditure by public entities in India includes expenditure incurred by central, state and local level governments. Apart from the expenditure incurred by the Ministry of Health and Family Welfare (MoHFW), expenditure on health incurred by other Departments and Public Sector Units (PSUs) are also included in total health expenditure of the public sector. The comparisons of health expenditure in international level are presented in Table 1. In which Statistics shows India's per capital health expenditure is \$146 PPP, which is negligible in comparison to OECD nations. Which was lower than that of China, Malaysia, Thailand and Sri Lanka? Share of government expenditure in total health expenditure of India is just 30 per cent, which is the lowest among these 16 countries.

Table 1: International Comparison of Health Expenditure, 2011

Country	Per Capita		Share of Government Expenditure in Total (%)
	Government Expenditure (PPPS)	Total Expenditure (PPPS)	
USA	4047	8467	47.8
Germany	3420	4474	76.4
France	3169	4128	76.8
Canada 3197		4541	70.4
U.K	2728	3364	81.1
Brazil	474	1035	45.8
Mexico 505		1004	50.3
China	236	423	55.8
Malaysia	341	619	55.1
Indonesia	50	132	37.9
Thailand	289	372	77.7
Pakistan	26	83	31.3
Srilanka 77		183	42.1
Bangladesh	26	67	38.8
Nepal	39	85	45.9
India	44	146	30.1

Source: WHO, 2014

A Statistical analysis on per capita health expenditure for general and special category states for 2000-01 and 2004-05 shows that average per capita expenditure on health for the India as a whole is Rs. 1201 in 2004-05. In the same year, relatively higher per capita expenditure on health is shown for Kerala (Rs. 2950) and Goa (Rs. 2298) among the general category states. Punjab (Rs. 1359), West Bengal (Rs. 1259), Tamil Nadu (Rs. 1256), and Maharashtra (Rs. 1212) also have health expenditure higher than all-India average for 2004-05. The lower expenditure states which includes Jharkhand (Rs. 500), Bihar (Rs. 513), Madhya Pradesh (Rs. 789), and Rajasthan (Rs. 761). Highest per capita expenditure (Kerala) among the states is almost 6 times that of the lowest per capita expenditure (Jharkhand). Many states such as Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, Bihar, Nagaland, and Jammu & Kashmir have shown a decline in per capita health expenditure in between 2001-02 to 2004-05. Among the special category states, Himachal (Rs. 1511), Sikkim (Rs. 1507), Tripura (Rs. 1486), and Arunachal Pradesh (Rs. 1454) are better than other states in 2004-05 in terms of per capita health spending.

Health Expenditure in Relation to GDP:

The expenditure on health in relation to GDP indicates that what fraction of country's resources is spent on health. It analyses how the change in health expenditure compares with the growth in the economy as a whole. Health expenditure as a percentage of GDP is the standard measure for such comparison.

$$\text{Health expenditure in relation to GDP} = \frac{\text{Total Health Expenditure}}{\text{GDP}} \times 100$$

Gross Domestic Product (GDP) is the value of all goods and services produced in an economy during a given time period. Which includes final consumption, gross capital formation and net exports? Final consumption expenditure comprises of consumption of final goods and services by individuals and communities. Consumption expenditure is incurred by households. It is also incurred by government and by non-profit institutions, which serve the needs of the households.

In India the total health expenditure was 4.25 percent of GDP during 2004-05. Here Share of government expenditure on health was less than 1 per cent. There is an urgent need to increase this share to 2- 3 per cent of GDP. Statistics says that, Bihar (1.12%), Goa (1.07%), Odisha (0.98%), Rajasthan (0.98%), Uttar Pradesh (0.92%) and Kerala (0.88%) are states demonstrating better health expenditure. States like Haryana (0.49%), Maharashtra (0.55%) Gujarat (0.57%) is worst performing states. Among special category states, Sikkim (3.82%), Arunachal Pradesh (3.46%), Mizoram (3.28%) and Nagaland (2.49%) have better shares.

By analyzing the Financing of health care we can understand the flow of funds to the health sector with reference to the sources of funding (institutions or entities who provide funds) and financial agents (institution or entities that channel funds provided by the financing sources and use those funds to pay for or purchase the activities in the health accounts boundary). Financing sources mobilize and financing agents manage and organize funds for health care. Classification of financing sources are as follows: central, state and local (urban and rural) governments, households (out of pocket expenditure), firms (public and private), non-profit institutions serving households/NGOs, external flow. The Financing agents in NHA India are the Ministry of Health and Family Welfare, other central government Ministries, state department of health and family welfare, other state departments, local governments, social security funds, insurance providers (public and private), NGOs, public/private firms, households.(as per NHA India). Thus we can broadly classify public financing consists of expenditure by government and social security funds. Private financing includes households' out of pocket payments, private health insurance and other private funds (NGOs and private firms).

The health expenditure by financing sources for 2000-01 and 2004-05 shows three-fourth of the total health expenditure is raised by households out of pocket. The situation remained similar in 2001-02 and 2004-05. State governments spend around one-eighth followed by central government and firms (6-7%). Other entities have relatively small contribution. There seems to be no significant change in the major sources of health care expenses and their relative contribution during these two time periods. The health expenditure by financing agent's shows that in 2004-05, large chunk of expenditure on health is managed and organized by the households (69.4%) followed by state department of health (10.73%), firms (5.73%), MoHFW, Union government (5.36%), CGHS/ Medical benefits (2.5%), and GIC companies (1.46%). Again, the situation is similar as that of in 2001-02 and 2004-05.

Health Expenditure by Public and Private Entities:

Health care is considered as a merit good. Evaluating its merit and demerits "derives not simply from the norm of consumer sovereignty but involves an alternative norm" (Musgrave, 1988, p. 452). In the context of health it implies, irrespective of the desire of the consumers regarding the use of health care goods and services, government has a responsibility to ensure their provision. It is important, therefore, to assess the relative role of the public sector in health care provision. There are four indicators in which we can analyze the share of public expenditure in total health

expenditure, share of government expenditure on health in total government expenditure, relative shares of various levels of government, out of pocket expenditure by services.

The Share of Public Expenditure on Health can be calculated as

$$\text{Share of Public Expenditure on Health} = \frac{\text{Public Expenditure on Health}}{\text{Total Expenditure on Health}} \times 100$$

Approximately one-fifth of the total health expenditure is contributed by the public sector in India which is very low by all standards. Data on share of public expenditure for general and special category states is presented in Fig 14 and Fig 15. Among the general category states, Goa (37%), Jharkhand (31%), Karnataka (28.1%), Rajasthan (24.4%), Gujarat (20.8%) and Odisha (20.3%) demonstrated high public expenditure as a share of total expenditure in 2004-05. States like Kerala (9.7%), Uttar Pradesh (13.1%), and West Bengal (13.7%) show lower shares of public expenditure. If we take the special category states, Nagaland (78%), Mizoram (76.5%), Sikkim (71.8%), Arunachal (57.8%) and Jammu & Kashmir (51.1%) show higher shares of public expenditure in 2004-05. States such Goa, Rajasthan, Tamil Nadu, West Bengal, Kerala, Mizoram, Sikkim, and Meghalaya show a major decline in this share since 2001-02. The Share of Health in Government Expenditure is another approach to gauge the significance that Government assigns to health sector is to decipher the magnitude of health budget in overall budget of the government. Thus,

$$\text{Share of Government Expenditure on Health in Total Government Expenditure} = \frac{\text{Government Expenditure on Health}}{\text{Total Government Expenditure}} \times 100$$

Health expenditure as a share of total expenditure by states in 2004-05 says States such as Goa (4.84%), Kerala (4.65%), Odisha (4.4%), West Bengal (4.32%), Bihar (4.12%) and Rajasthan (3.9%) have better health expenditure as per this indicator. In contrast, Maharashtra (2.88%), Punjab (3.01%), Gujarat (3.06%) and Madhya Pradesh (3.19%) have spent relative lower share of government expenditure on health. Percentage of total government expenditure spend to health in Goa is twice that of Maharashtra. Generally some of the underdeveloped states have increased their allocations for health sector in the new millennium. Among the special category states, the share of health expenditure in total government expenditure is much higher for states like Nagaland (5.85%), Meghalaya (5.04%) and Himachal Pradesh (4.98%). States like Manipur (2.57%) and Sikkim (2.83%) have lower shares which need improvement in the new millennium.

When we come to the Out of Pocket Expenditure of Households by Services major burden of health expenditure falls on the households, more than 90 per cent of private funding for health is generated by households. Hence, it is important to periodically analyse the out of pocket expenditure of households by the kind of health care services. Such information is provided in Figs 18-20 for combined, rural and urban areas. Outpatient care imposes a large burden on the households. Statistics says 60 per cent and 70 per cent of the total out of pocket expenditure of urban and rural households respectively are spent on outpatient care. In-patient care involves around 30 per cent and 20 per cent of the total in urban and rural segments respectively. Family planning services and delivery care take away around 6 per cent of the total in both rural and urban areas.

Health Expenditure by Providers:

Providers are entities that receive money in exchange for or in anticipation of producing activities inside the health accounts boundary. NHA India adopts the following classification of providers: hospitals and dispensaries under MoHFW and state governments, specialty hospitals, PHC/sub-centre/ family welfare centers, ambulatory health care including blood banks and ambulances, provision and administration of public health and RCH programmes, health administration and health insurance, medical education, research and training institutions, hospitals and dispensaries under local bodies, private hospitals, private dispensaries and doctors, drug outlets/shops, diagnostic centers, hospitals and dispensaries under charitable institutions/ NGOs, and hospitals and dispensaries under institutions run by corporate sector. Information on health expenditure by health care provider Study that Private sector is the highest health care provider which provides goods and services worth 77 per cent of the total health spending in the nation. Public hospitals (5.82%) and dispensaries /PHCs/sub centers (5.21%) were other important providers in 2004-05. Not much variation is observed in this scenario during 2001-02 to 2004-05.

Health Expenditure in Real Terms:

Health expenditure in real terms represents health expenditure in constant prices of a base year. This gives comparison of health expenditure over time and place. Changes in prices of health goods and services shall impact the health expenditure. Expenditure figures in real terms controls for such impact. Hence, it suggests actual increase/ decrease in health goods and services available in a society. Health expenditure in real terms is also known as health expenditure in constant prices. Nominal figures are in current prices. Unless otherwise indicated, expenditure figures reported in various documents are nominal figures, i.e. they are in current prices. Appropriate deflation factors must be used for arriving at the real values. GDP implicit deflator may be used to arrive at health expenditure in constant prices if a well

developed health price index is not available. If there is an increase in general price level, the growth rate of health expenditure in real terms would be lower than that in nominal terms.

$$\text{Health Expenditure real} = \text{Health expenditure nominal} \times \frac{\text{GDP Real}}{\text{GDP Nominal}}$$

Concluding Remarks: Basing on the above fact and data we can conclude that there is a need to develop price index for the health sector. Hence, strengthening and standardization of the database on health is one of the foremost requirements at the new millennium.

VI. RECOMMENDATION

1. NHA India provides information on health expenditure and finance in the new millennium. It fulfills the gap in information on this important aspect of the health system to some extent. However, there are issues to be addressed. NHA uses proxies for various entities which are not completely reliable so due care to be taken.

2. An important gap in health expenditure in India is the lack of State level Health Accounts as state level decision making is crucial in shaping the health sector performance as currently, more than 80 % of public expenditure on medical, public health, water supply and sanitation is incurred by the state governments (Rath, 2013).

3. Information on disease specific and age specific expenditure is not available. Differential access to public health facilities by various socio-economic groups is highlighted by some studies. In this context, disaggregated information on expenditure by socio-economic groups is important. Government expenditure to some extent is available at disaggregated level for certain groups. Gender budgets or tribal and scheduled caste sub-plans for specific Ministries and Departments offer some information. However, there are several issues with this data as well. Again, there is absence of reliable information on medical inflation to be reviewed.

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