Health Economics & Outcome Research: Open Access

Kumar and Sohal, Health Econ Outcome Res Open Access 2018, 4:2
DOI: 10.4172/2471-268X/1000154

Short Communication Open Access

Overview of Health Care Expenditure & Healthcare Payment Methods in India

Dhasarathi Kumar[1*] and Shiny Sohal[2]

[1]Department of Public Health, SRM University, Chennai, Tamilnadu, India
[2]Indian Institute of Public Health, SCTIMST, Trivandrum, Kerala, India

Background

Any expenditure which is spend over the health and health care is defined as health care, expenditure [1]. Catastrophic Health Expenditure (CHE) is described as when family spent large amount which is equal to 40% or more than 40% of the household's income to the health care services, which may end in poverty [2-8]. Globally, around 150 million people face financial catastrophe in every year and due to Out Of Pocket payments made for health care about 100 million suffer impoverishment [9]. Worldwide one of the major aims of the health care system is not only providing the preventive and curative care it also includes the proper funding mechanism to an individuals to acquire health care [10]. Increasing catastrophic health expenditure among households may lead to the financial risk and financial insecurity. There are eight basic health care payment methods available in the world, these methods are more specific [11].

The availability of health services requiring payment, the lack of prepayment or health insurance, and low capacity to pay are the three key preconditions for catastrophic payments [2]. By increasing health care prices will not decrease the total health care demand, due to this the income-depressing effect may take place [12], and because of high medical fees many households not able to use medical services and without getting proper advice from the professional also they tend to take self-medication's which may lead to the drug resistance [13]. In previous studies, it has been found that client with different types of health insurance differs in their access to health services [14]. There is a strong relationship between increased pooled resources and improved Universal Health Coverage performance [15].

Types of Health Insurance Schemes in India

There are various types of health insurance schemes existent in India includes Taxed based funding, Private health insurance, donors, Medical saving accounts. Community health insurance, commercial insurance and social insurance [9]. The coverage under various community health insurance schemes is 30-50 million (Table 1) [16].

Rashtriya swasthya beema yojna

India recently introduced national social insurance programme which is called Rashtriya Swasthya Beema Yojna (RSBY), it helps to protect the poor/ Below Poverty Line household from health care catastrophic expenditure.

Fee for service model

Under this open-ended fee-for-service model, the agents determine the nature and quality of health services (i.e., the patients and the physicians) and face little in the way of financial consequences. The Prospective or contract approach involves agreement between purchaser and provider regarding the terms and conditions of payment and provides more explicit specifications of the volume and quality of care. There is also an integrated approach combining the roles of purchaser and provider under a single institutional umbrella (e.g., a local or central government). These approaches reduce the catastrophic expenditure will provide patients benefit, payers benefit and health providers benefit [17]. In prospective payment method, the rate for defined set of services is determined before the treatment takes place and in retrospective the rate is determined during and after the services are provided. In prospective method healthcare provider carries some degree of financial risk of exceeding cost than anticipated amount, thus consequences are borne by provider. To reduce cost incentive is provided to provider but this may risk on quality while contrary in retrospective payments the financial risk rests with the payer, tends to be cost enhancer and may promote over servicing. There is no marked incentive to reduce costs. The common provider payment mechanisms are budget, capitation, and fee-for -service, pay for performance, salary, and diagnosis-related groups [18]. In line item budget the provider is paid an amount per given period (usually a year) for a defined responsibility of service provision [19]. The total amount is broken down into items such as salaries, drugs, equipment, maintenance etc. Line item budgets are typically provided by governments for publicly run facilities with no purchaser-provider split. A Capitation is a form of budgeting in which the budget is based on a fixed fee for each enrolled person to cover a specified level of health care, regardless of the amount of service actually provided [17]. Capitation is a prospective method, is favorable to the provider because it guarantees revenue of defined period and also facilitates cost control. To monitor utilization and to curb under servicing each beneficiary should enroll with a provider. The per-diem payment methods includes inpatient services, the fixed amount is provided to the patient the day in a hospital, without keeping into account hospital's charges or costs acquired for care given to that patient. This method of payments has accounted for administrative standardization, with supporting software for coding and billing. The weakness lies in that, hospitals are provided with no incentive to avoid unnecessary days during hospitalization. Much transparency is not provided about hospitals' actual clinical activities in this system of payment [20].

In fee for service method payment is done per unit of service and provider is paid according to number of service items delivered. The three primary methods of fee-for-service reimbursement are cost based, charge based, and prospective payment. The provider gets reimbursed by the payer in cost-based method of reimbursement, for the costs that occurred in providing services to the insured beneficiaries. There is

***Corresponding author:** Dhasarathi Kumar, Department of Public Health, SRM University, Chennai, Tamilnadu, India, E-mail: dhasarathykumar@gmail.com

Received May 28, 2018; **Accepted** June 25, 2018; **Published** June 29, 2018

Citation: Kumar D, Sohal S (2018) Overview of Health Care Expenditure & Healthcare Payment Methods in India. Health Econ Outcome Res Open Access 4: 154. doi: 10.4172/2471-268x/1000154

S. No	States	Rsby & State Scheme	Insurance Scheme	Launched Date	Covered Population	Benefit Package
1	Andaman And Nicobar Islands (Union Territory)	No	Andaman & Nicobar Islands Scheme For Health Insurance (Anishi)	26.01.2015	The Health Insurance Scheme will provide coverage to those **people belonging to BPL category of A&N Islands**, Pensioner settled in A&N Islands after retirement and their dependent family members & Permanent residents with family income of less than Rs. 3.00 Lakhs per annum.	ANISHI is to provide better treatment for the needy Islanders.
2	Andhra Pradesh	No	Ntr Aarogya Raksha Scheme	01.01.2017	The BPL families and families coming under employees and pensioners health scheme and working journalist health scheme are already covered with quality health care	End-to-end cashless services for identified 1044 diseases under secondary and tertiary care through 400 Government and Corporate Network Hospitals.
3	Arunachal Pradesh	No	Arunachal Pradesh Chief Minister's Universal Health Insurance Scheme (Apcmuhis)	16 September 2014	The scheme is unique in nature by providing cashless treatment to the resident families of Arunachal Pradesh and first of its kind among the **north eastern states**.	Scheme is to provide free Medical and Surgical treatment (except Outdoor Patients facility) in government and Private hospitals.
4	Assam	Yes	Atal Amrit Abhiyan	25.12.2016 2008(RSBY)	BPL and APL families The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government	The Atal Amril Abhiyan health insurance scheme would cover treatment for cancer, kidney disease, brain and heart-related ailments and burn injuries. People suffering from these diseases would be able to get treatment at all govt and CGHS empaneled hospitals for up to Rs. 2 Lakh
5	Bihar	Yes	National Health Insurance Scheme (NHIS)	20.08.2018	NHIS for the laborers in the unorganized sector living below the poverty line in eight districts of the state	Over 95% of disease conditions that afflict us are covered by the NHIS
6	Chandigarh (Union Territory)	No	Mukhyamantri Mufat Ilaj Yojna	1-Jan-14	Coverage to all the citizens	Mukhyamantri Muft Ilaaj Yojana, the scheme would cover surgery, drugs, investigations or diagnostic services, ambulance or referral transport services, indoor services and dental treatment. It would benefit 2 crore persons visiting various Government hospitals in the state and about 1 lakh surgery patients.
7	Chhattisgarh	Yes		2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
8	Dadra And Nagar Haveli (Union Territory)	No	Sanjeevani Swasthya Bima Yojana			
9	Daman And Diu(Union Territory)	No	Sanjeevani Swasthya Bima Yojana			
10	National Capital Territory Of Delhi (Union Territory)	No	Aam Aadmi Swasthya Bima Yojana			
11	Goa	No	Deen Dayal Swasthya Seva Yojana	13-Jun-17	Deen Dayal Swasthya Seva Yojana is a scheme to provide health insurance coverage for the entire resident population of the State of Goa, Who are residing in Goa for five years and more.	Quality medical care and treatment of diseases, hospitalization and surgery through Government and private hospitals.
12	Gujarat	Yes	Mukhyamantri Amrutum (MA) Yojana	20- Dec-17	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.

13	Haryana	No	Mukhyamantri Mufat Ilaj Yojna	1-Jan-14	Coverage to all the citizens	A new health scheme will be launched in Haryana in the New Year to provide essential health care services free of cost in its all health institutions from primary to tertiary level
14	Himachal Pradesh	Yes	RSBY Mukhya Mantri State Health Care Scheme (Himachal Pradesh Universal Health Protection Scheme).	Mar 19, 2016 –MMS 2008-RSBY	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
15	Jammu And Kashmir	Yes		Jun-05	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
16	Jharkhand	No	Mukhya Mantri Swasthya Bima Yojana (Chief Minister Health Insurance Scheme)	15th November 2017	Cover the entire state	The government would provide health cards to the beneficiaries and the whole system would be cashless.
17	Karnataka	Yes	Suvarna Arogya Suraksha Trust (Sast), Universal Health Care In Karnataka	1/4/2017	SAST provide Health protection to families living below poverty line	Government of Karnataka has taken the initiative to provide Health protection to families living below poverty line for the treatment of major ailments, requiring hospitalization and surgery. In order to bridge the gap in provision of Tertiary care facility and the specialist pool of doctors to meet the statewide requirement
18	Kerala(Rsby-Chis)	Yes	Comprehensive Health Insurance Agency Of Kerala (Chiak), The Chief Minister's Distress Relief Fund, Kerala.	11/1/2017 2008(RSBY)	The Applicant must be a permanent resident of Kerala. Candidate should be government employees and pensioners. The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government	Kerala Health Insurance Yojana is to provide cashless health services to the employees and retired employees at designated hospitals. A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
19	Lakshadweep(Union Territory)	No	Insurance Scheme For Lakshadweep Families			
20	Madhya Pradesh	No	Deendayal Antyodaya Upchar Yojana The Scheme	September 2004	BPL families	All medical treatment
21	Maharashtra	No		2 July 2012	Below Poverty Line and marginally Above Poverty Line families	It provides free access to medical care in government empanelled 488 hospitals for 971 types of diseases, surgeries and therapies costing up to Rs.1,50,000 per year per family
22	Manipur	Yes	Manipur Health Insurance Scheme	Jul 13 2017	BPL families	Treatment like cancer, cardiac diseases, kidney ailments, neurological issues, etc could be the diseases that may be widely covered under this insurance scheme.
23	Meghalaya	Yes	Megha Health Insurance Scheme (MHIS)	15th December, 2012	Health insurance to all persons that are resident in the State excluding state and central government employees.	To provide financial aid to all the citizens of the state at the time hospitalization and reduce the out-of-pocket expenses of the residents of the State.

24	Mizoram	Yes		2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
25	Nagaland	Yes		2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
26	Odisha	Yes		2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
27	Puducherry (Union Territory)	No	CMCHS		citizens	A package includes all the expenses related to health care.
28	Punjab	No	Punjab Government Employees And Pensioners Health Insurance Scheme (Pgephis) Care Companion Programme	2017-2018	Punjab's citizens	Care companion program is a free in – hospital educational -cum - training program for patent's family members. This program is being developed for the direct response to the needs of patient and recognizes patient family members as an untapped existing patients.
29	Rajasthan	Yes	Rajasthan's Chief Minister's Relief Fund.	2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
30	Sikkim	No	Comprehensive Annual And Total Check-Up For Healthy Sikkim (Catch)	26-Aug-10	90 percent of the population in Sikkim has been covered under CATCH to compile their health profile.	This is path-breaking initiative provides comprehensive care with focus on health promotions and prevention by doing annual and periodical head to toe health checkup free of cost for all citizens of Sikkim
31	Tamil Nadu	No	CMCHS		Family income less than Rs.72000 Per annum	A package includes all the expenses related to health care.
32	Telangana	No	Aarogyasri Health Care		The scheme provides financial protection to families living below poverty line.	The scheme provides coverage for the systems like Heart, Lung, Liver, Pancreas, Kidney, Neuro-Surgery, Pediatric Congenital Malformations, Burns, Post -Burn Contracture Surgeries for Functional Improvement, Prostheses (Artificial limbs), Cancer treatment (Surgery, Chemo Therapy, Radio Therapy), Polytrauma (including cases covered under MV Act) and Cochlear Implant Surgery with Auditory-Verbal Therapy for Children below 2 years. All the pre-existing cases of the above mentioned diseases are covered under the scheme.

33	Tripura	Yes	Tripura Health Assurance Scheme for Poor (THASP)	2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	THASP covers cancer, cardiovascular surgeries, neurosurgeries, kidney-related diseases, poly-trauma, neo-natal diseases, and ophthalmic disorder. THASP will not cover accident cases.
34	Uttar Pradesh	No	Sachi-RSBY	2008	Only registered BPL families are eligible for RSBY Smart Card	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
35	Uttarakhand	Yes	MSBY	2008	The beneficiary is any Below Poverty Line (BPL) family, whose information is included in the district BPL list prepared by the State government.	A package charge means that all the expenses related to the treatment like medicine, tests, bed charges, other materials, food etc. will be part of package and hospital will not charge anything from the patient for these.
36	West Bengal	Yes	Swasthya Sathi Scheme	2016 2008(RSBY)	The West Bengal Government has extended the coverage of its Swasthya Sathi health insurance scheme, to include several more categories of the State Government employees. The health security scheme would now cover 55.5 lakh more government employees.	Basic health covers for secondary and tertiary care. All pre-existing diseases are covered.

Table 1: Types of Health Insurance Schemes in India.

certainly a limitation in reimbursement to allowable costs, the payer makes periodic interim payments (PIPs) to the provider, and a final reconciliation is made after the contract period expires and all costs have been processed through the provider's managerial (cost) accounting system [18]. The payment of billed charges, or simply charges by payers are paid according to a rate schedule established by the provider, called a charge master. To a certain extent, in this reimbursement system payers are often placed at the mercy of providers in regard to the cost of healthcare services, especially in markets with limited competition. The prospective payments consist of per deim, per procedure, bundled, per diagnosis. In fee for service financial risk rests with the payer and low risk with the provider. This may encourage over servicing and unnecessary interventions. For the providers, billing procedures are costly and for the insurer, the cost of processing claims is high. The payer/insurer must establish expensive monitoring procedures to minimize false claims [19].

In pay for performance administrative burden is on providers and insurers, is costly and require substantial additional investment in information technology to monitor performance. Providers may Increase the number of services that lead to improved performance indicator thus gaining acceptance from providers [18].

Per-diem payment method

Per-diem payment method is being used more for hospitals as compared to capitation methods probably due to length of stay so that health insurance plans prefer to "rent beds" on required basis. Information is missing regarding frequency of use of budget approaches. Hence, it is important to note, however, that most healthcare providers receive payment from a variety of payers that may rely on different methods. Thus, any given provider faces a mix of incentives and rewards, rather than a consistent set of expectations. A well-designed payment mechanism should be able to meet objectives of quality, efficiency and accessibility. It must also take into consideration the management capacity and systems of both the financier and health providers. Competition among providers tends to promote quality and consumer satisfaction and no single provider payment method provides all the right incentives, a combination of payment methods may be necessary. The typical payment for the physician is through fee-for-service methods and hospitals through billed (discounted) charges, per diem or per case. Some surveys suggest increase in capitation for physicians nevertheless, other sources suggest its use may be flat or decreasing [21].

Conclusion

To reduce out of pocket expenditure there is an urgent need for significant reforms, and to contribute to this are payment methods such as prospective and retrospective. In reimbursement approach funding is retrospective to providers for services delivered. In worldwide the primary and essential role of the health care system is not only providing the preventive and curative care it also includes protect the people from catastrophic health expenditure by the proper funding mechanism to an individual to acquire health care [22].

References

1. Accounts HK (2004) Estimates of Domestic Health Expenditure. Hong Kong's: Domestic Health Accounts.
2. Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, et al. (2003) Household catastrophic health expenditure: a multicountry analysis. 111-117.
3. Xu K, Evans DB, Carrin G, Aguilar-Rivera AM, Musgrove P, et al. (2007) Protecting households from catastrophic health spending 26: 972-983.
4. Timothy (2007) Protecting households from catastrophic health Spending. Health Systems and Policy Research pp: 1-3.
5. Wagstaff A, van Doorslaer E (2003) Catastrophe and impoverishment in paying for health care: with applications to Vietnam. Health Econ 12: 921-934.
6. Organization WH (2003) The world health report 2003 - shaping the future.
7. Su TT, Kouyaté B, Flessa S (2006) Catastrophic household expenditure for health care in a low income society: a study from Nouna District. Burkina Faso. Bull World Health Organ 84: 21-27.

8. Van Doorslaer E, O'Donnell O, Rannan-Eliya RP, Somanathan A, Adhikari SR, et al. (2006) Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. Lancet 368: 1357-1364.

9. Shahrawat R, Rao KD (2012). Insured yet vulnerable: out-of-pocket payments and India's poor. Health Policy Plan 27: 213-221.

10. Dalal K, Aremu O, Ussatayeva G, Biswas A (2017) Out-of-pocket health expenditure and fairness in utilization of health care facilities in Cambodia in 2005 and 2010. F1000 Res 6: 2066.

11. Quinn K (2015) The 8 Basic Payment Methods in Health Care. Annals of Internal Medicine.

12. Arhin-Tenkorang D (2000) Mobilizing Resources for Health: The Case for User Fees Revisited. Center for International Development at Harvard University pp: 3-20.

13. Arhin-Tenkorang D (2001) Mobilizing resources for health: the case for user fees revisited. Center for International Development at Harvard University pp: 1-17.

14. Drew B, Angeli F, Dave K, Pavlova M (2016) Impact of patients' healthcare payment methods on hospital discharge process:evidence from India. Int J Health Plann Mgmt 31: 158-174

15. Dieleman DJ (2018) Trends in future health financing and coverage: future health spending and universal health coverage in 188 countries, 2016-40. Global Burden of Disease Health Financing Collaborator Network 391: 1783-1798.

16. Health Insurance in India (2012) Retrieved from shodhganga.inflibnet.ac.in.

17. Langenbrunner JC, Liu X (2004) How To Pay? Understanding and Using Incentives. World bank.

18. Rukwaro DE (2012) Provider payment mechanisms.

19. Gapenski LC (2012) Healthcare Finance: An Introduction to Accounting and Financial Management Hardcover.

20. Berenson RA, Delbanco SF, Upadhyay DK, Roslyn Murray (2016) Payment Methods and Benefit Designs: How They Work and How They Work Together to Improve Health Care. Urban Institute and catalyst for payment reforms.

21. Richardson WC (2001) Crossing the Quality Chasm: A New Health System. Washington, D.C. National Academy Press.

22. Fazaeli AA, Hadian M, Rezapour A, Fazaeli AA (2016) Assessing the Distribution of Household Financial Contribution to Health System: A Case Study of Iran. Global J Health Sci 8: 223-236.