"EXPLORING HEALTH FINANCING MODELS FOR IMPROVED HEALTHCARE ACCESS IN INDIA: A COMPARATIVE STUDY"

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Master of Business Administration
(MBA) in
Pharmaceutical Management by

Divyansh Chauhan

Under the Supervision and Guidance of

Mr. Rahul Sharma

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DECLARATION BY STUDENT

I hereby declare that this dissertation title “Exploring Health Financing Models for Improved Healthcare Access in India: A Comparative Study” is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature)
Name of Student
Date

CERTIFICATE

This is to certify that Divyansh Chauhan in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management)/MBA (Pharmaceutical Management)/MBA (Development Management) from the IIHMR University, Jaipur has successfully completed her/his internship at (name of the organization) during February 20May 19, 2023.

Place:
Date:

Preceptor/Head of the Organization
Name of the organization

CERTIFICATE

This is to certify that dissertation titled "Exploring Health Financing Models For Improved Healthcare Access In India: A Comparative Study" is a record of the research work undertaken by (Name of Student) in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management)/MBA (Pharmaceutical Management)/MBA (Development Management) from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide
IIHMR University, Jaipur
Date

School Dean
IIHMR University, Jaipur
Date

Abstract

The Indian healthcare system is very complex as it receives both private and public funding. Health financing is a central element for the system of healthcare; it regulates how the outset of healthcare are financed, structured, and accessed. This paper explores the health financing models across the world that are implemented by a country or used worldwide and evaluates their relevance to the Indian context.

Health financing models can be divided into funding-based models, intellectual-based models, performance-based models, etc.; examples include episodes of care, discounts, rebates, and pay for performance. These exist in a country or are used worldwide by low-income countries.

There are healthcare challenges and a diverse population in India, which require extensive health financing models. Out-of-pocket payments are where India relies, which causes them financial burdens and decreases access to healthcare for low-income people or those below the poverty line. To address these, India needs a mix of financial models, such as funding-based, which will see the government providing subsidies and the private sector giving discounts, increasing accessibility, and paying for performance for the implementation of the schemes in India and regulating private health insurance.

There are various challenges and barriers to the implementation of health financial models in India due to the large population and diversification, which make it difficult to suit the model for everyone. The infrastructure has to be strengthened. Also, the financial constraints are there because of poor budget allocation and funding. Rules and regulation also play a vital role as states implement their own rules. Inefficiencies in the healthcare system and corruption are also challenges. So, the planning, monitoring, and evaluation of works with strong governance frameworks and also the process should be transparent with public participation for overcoming the challenges and making efficient implementation of the health financing model.

In conclusion, India needs to implement a health financing model that matches the specific needs and requirements for the system of healthcare and meet the challenge of a large population . While learning from other countries and rewriting the models with the

Indian health care system will be needed without repeating the mistakes, finding the model to address the challenges will require the policymakers' commitment and allocation of resources, and the health authority and government should work on accessing quality healthcare in India. but there are not specific blueprints that indicate whether the models that are found out can be successful or fail on implementation.

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Acronyms

AB-NHPMC	**Ayushman Bharat National Health Protection Mission Council**
ACO	**Affordable Care Organisation**
BPL	**below the poverty line**
CED	**coverage evidence development**
CGRS	**central complaint and grievance redressal system**
CMS	**Centres for Medicare and Medicaid Services**
EOC	**episode of care**
GDP	**gross domestic product**
GHE	**government health expenditure**
GHED	**Global Health Expenditure Database**
HCF	**Health Care Financing Office**
HCL	**healthcare loans**
HHS	**Health and Human Services**
HWC	**Health and Wellness Centre**
ICER	**incremental cost-effectiveness ratio**
IP	**intellectual property**
IT	**Information Technology**
LMIC	**Low Middle-Income Country**
NGOs	**non-government organisations**
NHA	**national health authority**
NHATS	**National Health Accounts Technical Secretariat**
NHM	**National Urban Health Mission**

NHP	**national health policy**
NHSRC	**national health systems resource centre**
NICE	**National Institute for Health and Care Excellence**
OCM	**Oncology Model of Care**
OOP	**out of pocket**
P4P	**Pay-for-Performance**
PMJAY	**Pradhan Mantri Jan Arogya Yojana**
ROR	**Rate of Return**
RSBY	**Rashtriya Swasthya Bima Yojana**
SECC	**socio economic caste census**
SHA	**State Health Agency**
SNA	**state nodal agency**
THE	**Total Medical Expenses**
UHC	**universal health coverage**
UK	**United Kingdom**
USA	**United States**
VBP	**value based performance**
WHO	**World Health Organisation's**
WW	**worldwide**

Introduction

Today in India, the total value of the health sector is over Rs 1500 billion, which is 6% of the GDP. Of this, 15% comes from public funds, 4% from social security, 1% from private insurance, and the remaining 80% from user fees (of which 85% goes to the private sector). His two-thirds of users are fully self-paying, 90% of whom are from the poorest parts of the population. Over the years, the Indian government has made great efforts to improve the accessibility, affordability, and quality of healthcare across the country. Although challenges remain, India's healthcare system is evolving and adapting to the needs of its population.

Launched in 2005, the NRHM is strengthening health infrastructure and improving rural health indicators in 18 provinces with a focus on maternal and child health to achieve the Millennium Development Goals. For those who choose agency shipping, we have a payment system. This system has increased its delivery volume. Due to the success of this programme, India established the National Municipal Health Mission as part of her Health Mission (NHM) in 2013. • Certain government-funded health insurance programs have been in place since 2007. One of the largest is Rashtriya Swasthya Bima Yojana (RSBY). RSBY was established in 2008 to serve people living below the poverty line. RSBY covers hospital costs and enables cheaper second line treatment.

Important roles are played by the communal and independent sectors in the system of health care of India. The government takes care primarily of the public healthcare system and provides medical assistance through a network of primary health centres, state hospitals, etc. The goal of these facilities is to make health services affordable and accessible to the BPL people and Rural areas. There are various national health schemes and initiatives to address health issues specifically.

The private healthcare sector, on the other hand, has experienced significant growth, addressing the large population of urban areas. The expensiveness of private healthcare leads to differences in access and affordability.

The government of India has made several efforts to strengthen and vastly expand the healthcare system. In 2018, the launch of Ayushman Bharat by the Indian government

The threat in the system of health care in India are not overpowered by these many efforts. The challenges, such as a lack of funding, a lack of infrastructure, and a lack of qualified health workers, can only be addressed by continuous government efforts, private sector involvement, and negotiations between the communal and independent sectors. We can say that the healthcare system of India is complex, with a mix of public and private sectors aiming to provide healthcare services to a diverse population.

The past two years have brought vast changes to the healthcare industry. The individuals take responsibility for their wellbeing and keep themselves healthy. The new digital

solutions are taking place in healthcare, reforming and reshaping it. This new beginning, which has collaborations backed by scientific advancement and driven by data, results in making healthcare cost-effective and accessible to everyone. Due to the pandemic, the health system leaves the middle- and lower-income countries fragile and doesn't get the medication of the healthcare benefits. The need in this phase is to focus on public health and make it a national priority. So, there are several programmes, policies, and infrastructures to be built so that everyone gets the benefit, can access medication, and is healthy. for example, health financing.

What is HEALTH FINANCING?

Financing health is the core element of the healthcare system that deals with the collection, organization, and allocation of funds for specific purposes to meet the health needs of people individually and collectively within the healthcare system. The purpose of health care financing is to make funds available and use them appropriately.

The allocation, generation, and use of funds in the system is the essence of health finance. Globally, it is increasingly recognized as an important policy area for the realization of UHC.

Understanding a country's health financing system can help identify opportunities to raise current and additional funding for health care and to allocate funds to ensure equitable, quality health care for all. It also helps us understand the mechanisms by which funds can be efficiently and equitably allocated, purchased, and used to improve access to health services and reduce out-of-pocket costs that lead to disasters and poverty.

In addition, the 2017 National Health Policy will increase public funding for health care, make better use of existing resources to achieve better health outcomes, improve financial protection, and increase access to the non-profit and private sectors. It aims to encourage strategic investment in Give purchase impulse. He also emphasized the establishment and institutionalization of robust health accounting systems so that policymakers can allocate funds appropriately.

In this area, HCF advances evidence-based policymaking and supports federal and state healthcare funding. This division of the NHSRC is NHATS and is responsible for institutionalizing medical accounts in India. The ministry has prepared national health statements for 2013-2014 based on SHA 2011 guidelines, allowing India's estimates to be compared with other countries in the world. His NHA estimates for India are also used by WHO-GHED. This estimate is also used in important government documents such as the Ministry of Finance's Economic Survey and the Reserve Bank of India's National Finance Survey. The HCF Division is also involved in reporting and monitoring health financing indicators set out in the 2017 National Health Policy, Sustainable Development Goals and UHC. The HCF team also conducts research studies on healthcare financing issues in the country.

Financing health by WHO (World Health Organization)

The core element of system of healthcare is health care financing, and enhancing productive scope and money insurance can lead to the health coverage of the world. Today, millions of people cannot access services because of cost. Many people get poor service even if they pay for it out of their own pockets. Carefully outlined and actualized wellbeing financing approaches can help unravel these issues. For illustration, contracts and instalment courses of action can give motivating forces for care coordination and progressed quality of care. Fitting and opportune payment of stores to wellbeing care suppliers makes a difference guarantee that satisfactory staff and drugs are accessible to treat patients. The key work of wellbeing financing is where the WHO's approach is centred:

Expanded pay (financed by government budgets, obligatory or deliberate forthright protections plans, coordinate self-payment by clients, outside help, etc.)

Pooling reserves (amassing forthright reserves on sake of portion or all of the populace)

Acquiring administrations (paying suppliers or designating assets)

Additionally, all countries have guidelines about what services their citizens are entitled to, even if the government does not explicitly state them. In addition, fees for services not covered by insurance are typically paid by the patient (sometimes called co-payments).

Health financing models in India

AYUSHMAN BHARAT

It is a national health protection scheme that provides coverage up to Rs 500,000 per family for secondary and tertiary care in licensed private hospitals and all public institute. This program will support more than 10 million poor and families which are at risk. The Rastriya Swastika Bima Yojana (RSBY) central scheme will also be included in this mission.

Salient features

- The coverage of Rs. 500000 will be provided to the family in a year under the NHPM.
- The recipients of the plot will be authorised to take benefits without cash, and it is flexible across the country in the enlisted hospitals.
- This is a permission-based scheme; this permission is decided based on the poverty standard in the Socio-economic caste census index.
- Listed private hospitals and all public hospitals facilities can be accessed by the beneficiaries.
- Payments for treatment will be made on a one-time basis to control costs.
- The relationship between the federal and state governments, in which both work together on a variety of issues and programmes and are flexible, is the core principle of this mission.
- To direct policies and encourage regulation between centre and states, AB-NHPMC was established.
- A state health agency is to be established in the states for the implementation of the scheme.

- The transfer of funds is done directly to the insurance account from the central government through Ayushman Bharat to guarantee the funds reach SHA.
- To demand paperless, cashless transactions, an IT platform is to be made operational in partnership with NITI Aayog.

IMPLEMENTATION STRATEGY

To govern at the federal level, AB-NHPMA is created. The SHA, specialised organisation, we will be advising the UT and states on the operation of the program. To implement this plan, you can use a current trust, corporation, charitable corporation, SNA, or start a new business. States and UTs can choose to administer the program directly through a trust or corporation, via an insurance company, or using a unified model.

Major Impact

Because of its increased benefit coverage for approximately 40% society (the bpl and most vulnerable), this mission will significantly reduce OOP. It also covers virtually all secondary admissions and many tertiary admissions. Coverage from 500,000 per family, with no limit on family size.

This will make quality health care and medicines more widely available.

In addition, the needs of people who live in secret because they cannot afford it are taken into consideration. This results in timely treatment, improved health outcomes, patient satisfaction, increased productivity and efficiency, and job creation, thereby improving people's quality of life.

EXPENDITURE INVOLVED

Expenditures related to the payment of insurance premiums is going to exchange with central and state government in stated proportions in accordance with applicable Treasury guidelines. Total cost will depend on certain merchandise-regulate prime compensated in state and UT this scheme is carried out by insurers, state or UT that implement this system

on a trust or corporate basis, a core portion of the fund will be allocated at a predetermined percentage based on actual costs or premium limits. (Whichever is less).

NUMBER OF BENEFICIARIES

As stated by the latest SECC, including provincial and metropolitan areas, it will include 10.74 million working poor families, provincial and metropolitan. This scheme is designed to accumulate future changes in SECC data easily and take them into consideration.

STATES/DISTRICTS COVERED

This mission will cover all the states and districts. The mission is to target all the beneficiaries.

RSBY

About 93% of the workers in the incoherent sector constitute the total work force in the country. Some measures are taken by the government for the social security of the workers in some groups, but the majority is without the social security measure, as the extent is dwarfed or little. The workers in the incoherent sectors have a major concern about frequently getting ill and needing medical assistance and hospitalisation for themselves as well as their families. Even though health care is widely available in India, illness is the leading cause of death.

The health insurance can be acknowledged as the measure to decrease the risk of getting the poor people spending their money on health and making them financially broke. The cost of the health insurance and the lack of the benefits which are coming along with the insurance, makes the government to manage and administer the health insurance in the rural areas, as some are unable to take and some forcibly don’t take it. The national government developed this scheme to response these employees' demands for social security. 34,285,737 IC cards and 5,097,128 hospitalisations had been recorded as of March 25, 2013.

- GENSIS OF RSBY
- RSBY- THE SCHEME
- ENROLLMENT PROCESS
- SMART CARD
- SERVICE DELIVERY
- UNIQUE FEATURES OF RSBY
- CENTRAL COMPLAINT & GRIEVANCE REDRESSAL SYSTEM

GENSIS OF RSBY

Earlier, the authority has attempted selection of recipients at the states or government civic equivalent to allow health insurance, but the design or implementation of the scheme was a problem, and that's why they were not able to achieve their focused goals.

The government has decided to make a scheme of health insurance with an upgrade of the previous and a better model for the country. The previous models are studied, as are the new models, and then the mistakes are taken as lessons and learning that are useful for the goals of the study. Keeping this background in mind, the result of the study of the health insurance models was the RSBY. It came into existence on April 1, 2008.

RSBY- THE SCHEME

RSBY's goal is to protect Below poverty line people against commercial crisis obtained from therapeutic care and hospitalization.

Eligibility

- The beneficiaries of the schemes are the workers who live below the poverty line and their families (with 5 members) in the unorganised sector.
- The verification of the unorganised sector workers and families who will be benefited by the schemes is the responsibility of the implementing agencies.

- A smart card will be given for the identification of the beneficiaries.

Benefits

Beneficiaries are permitted to receive inpatient medical insurance benefits as determined by each state government based on demographic and geographical requirements. However, government of state are prompted to include some of these administrations to their packages or systems:

• The family's and the labours in the segment which is not organized (in groups of five) are insured.

• The total insured amount is Rs. 30,000 per year per family (the entire family).

• Cashless treatment for all insured diseases

• Hospital costs and treatment of the most common ailments, with exceptions where possible.

• It must cover all existing diseases.

• Transportation expenses (an overall limit of 1000 and 100 Rs per visit will be the maximum limit)

Pattern of funding

• Commitment by Government of India:

75 percent of the assessed yearly premium of Rs. 750, subject to a greatest of Rs. 565 per family per annum. The fetched of smart card will be borne by the Central Government.

• Commitment by particular State Governments:

25% of the yearly premium, as well as any extra premium.

• The recipient would pay Rs. 30 per annum as registration/renewal charge.

• The authoritative and other related taken a toll of regulating the conspire would be borne by the particular State Governments

Process of enrolment

To the insurer, the eligible BPL households electronic list will be provided in a prescribed data format. The insurance company will work with district-level officials to develop a registration plan for each village. According to the schedule, the BPL list will be posted at the registration venue and prominent places in each village prior to registration, and the registration date and registration location within the village will be announced in advance. A mobile registration station is set up at each village's regional centre (such as a public school). These stations are beneath the protection's companies with the vital equipment to gather biometrics and photos of backup plan family individuals, as well as a printer to print smart cards with photos. It is attached with an data leaflet of detailed program and a account of infirmary will be issued immediately after the beneficiary pays the fee of Rs 30 and it is attested by the related authority officer. After 10 minutes of processing, the card will be returned to you in a bag.

Card issued.

Many things can be done by them, including identifying beneficiaries and collecting patient information based on photos and fingerprints. The main importance of this card is to enable cashless transactions at partner hospitals and the mobility of services in entire nation. The verified smart card will be given directly to the authorized person at the check-in counter. The owner's photo recorded on IC card can be used for identity verification when biometric information is not authenticated.

Delivery of service

- A list of clinics (open and private) (outside site, opens in a modern window) will be given at enrolment. A hotline number is additionally included with the keen card. Based on qualification criteria, both open and private clinics contract with protections companies. Recipients can select which clinic to visit.
- Medical expenses up to Rs. 30,000 in hospitals will not be taken.
- However, in Online services, patients do not have to pay for treatment or hospitalisation. It is the responsibility of the hospital to bill the insurance company.

UNIQUE FEATURES OF RSBY

To give low-income workers health insurance. RSBY was not the first attempt by the Indian government. However, RSBY charts differ from them in many forms-

Beneficiaries' empowerment

- It gives participating Below poverty lines households the right to choose the individual or the government hospital and prepare them worthy leads because of the substantial revenue that hospitals can be generated by the programme.

Model for the stakeholder of business

- All the stakeholders will get the incentives as a part of the social programmes this the basic layout of this business model The model layout benefits programme scalability as well as long-term sustainability.

Insurers

- The RSBY will give the dividend to the companies providing insurance for every house registering. Therefore, the insurance companies are working to remove

families as much as possible from her Below poverty line list. This makes us to improver to cover our intended beneficials.

Hospitals

- Healing centers have an motivating force to treat expansive numbers of recipients since repayment is paid for each recipient who gets treatment. Indeed, open clinics have an motivating force to treat recipients beneath the RSBY since protections company stores go straightforwardly to influenced open clinics and can be utilized by healing centers for their possess purposes. Safeguards, by differentiate, screen taking part healing centers to anticipate pointless methods and extortion that lead to overcharges.

Intermediaries

- There is the involvement of organisations like NGOs and MFIs that have an interest in helping the BPL households. Intermediaries are compensated the advantages provided in our communications with our recipient.

Authority

- Just pay an amount up to Rs. With an annual subsidy of US$750 per family, the authority can give approach to better health care to those below the poverty line. this leads to active clash between individual and open healthcare providers, which in turn improves the working open providers of health care services.

IT(INFORMATION TECHNOLOGY)

- Each beneficials will receive a card having fingerprint and photo. The clinics served by this scheme are connected to the district level servers and enabled with the IT. This ensures a regular, smooth flow of data about your use of the service.

Fool proof and protected.

- The cards which are used with the fingerprint and the management system lets this to secure and fully authenticated. RSBY's system makes sure that cards reach the correct recipient and that responsibility for smart card issuance and use is maintained. the beneficial who have the card can only use it.

Movability

- it includes of RSBY is that recipients enrolled in certain locale can utilize their shrewd cards in RSBY-managed healing centers over India. This makes the program genuinely interesting and useful to destitute families moving from one put to another. The card can moreover be part to permit vagrant specialists to pay portion of their remuneration independently.

Online transfers

- The beneficiaries receive non-cash benefits at each partner hospital. All the users must do is carry their Smart Girlfriend card and authenticate with their fingerprint. It is a paperless system for participating providers, as they do not have to send all treatment-related documentation to insurance companies. They submit claims online to insurance companies and without cash.

Vigorous Checking and Assessment

- "Opens an external page in a new window". RSBY develops a Vigorous Checking and Assessment system. A sophisticated back-end data management system is set up to track every payment in nation providing regular detailed data. the knowledge that governments collect and publish should enable medium-term system improvements. By disseminating data and reports, you can also add to the clash of the negotiation processing with the insurance companies.

- It ("External website opens in a new window") makes sure that complaints related to RSBY are handled using ICT that automatically tracks and traces status. increase. All interested parties can file an online complaint about the programme. Quality of tracking complaints online is also available. For details on CGRS, please refer to the manual (the external site will open in a new window).

Types of health financing models

EOC and payment in bundles

An Episode of Care (EOC) is a one-time payment for all the care a patient needs during a defined medical condition. It features an event that has a start and end date. A bundle payment is a single, consolidated payment that covers all medical services related to a particular treatment or procedure. The goal is to encourage providers to control drug spending while maintaining the quality of care monitored through predefined quality indicators. It is also the principle of an integrated health care system, in which medical professionals form a common organisation to provide comprehensive care to patients with specific medical conditions. In the United States (USA), the integrated system is driven by Obamacare (the Patient Protection and Affordability Act) and is called the Affordable Care Organisation (ACO). A new ACO model, the Oncology Model of Care (OCM), was developed by the Centres for Medicare and Medicaid Services (CMS) for cancer care. This model includes an outcome-based payment for each episode of oncology treatment plus two additional payments per month (PBPM) per beneficiary, a fee for each episode of chemotherapy, and an outcome-based payment. and the latter depending on satisfaction. Chemotherapy episode metrics and spending below pre-defined targets.

Rebates model

In this model the fraction of amount is returned to the customer by the manufacture after they have purchased, and the payment is done to the manufacturer. This can be called as incentive. Or maybe the negotiation is done between them for buying the medicines from them in large volume. This commercial arrangement, which is typically confidential, is gaining popularity across several nations

Discounts can be offered in various.

1. Quick payment
2. Quantity purchased
3. Buy Loyalty
4. Increase buying breadth in a portfolio

Price cap and volume cap

Price caps and volume caps are methods used to control and limit drug prices and manufacturer sales. At the patient level, we aim to limit the annual fee or number of treatment cycles reimbursed per year. If additional courses are required, they must be provided free of charge by the manufacturer. These strategies are aimed at limiting annual spending at the population level, i.e., the amount a manufacturer can sell. If the limit is exceeded, the manufacturer may be required to refund the full retail price, the full factory price, or a partial refund of the price, depending on the contract. Levi et al. We proposed a model that provides a rationale for price caps to counter the monopoly power of pharmaceutical companies. Softer price regulation (20% increase) was seen as the 'golden way' to improve patient health without stifling incentives for innovation.

Price-volume agreements

In this model, the drug price is reduced according to the quantity sold (for example, from the next sale of 10,000 units, a 10% discount will be given), the larger the sales volume, the larger the discount. This is an important model.

Cost-plus price

This model is for the orphan drugs which are very expensive, and the price is determined by the cost of development and production they are generally considered to be cost effective due to their high cost. Price depends on development and production costs. It generates a predetermined fixed amount of the total revenue. The “rate of return” approach provides “fair and reasonable price” of an orphan drug. People and associates. offers to split the cost of drugs in Sweden between two payers. value-based estimating at the national level with cost-plus estimating at the territorial level is the combination.

Mortgages of drug and HCL

These models don’t decrease the price of medication which are high but gives time to pay the money and spread it for years either by giving the loans or by getting something as assurance that they will pay back the money. Pharmaceutical mortgages spread treatment costs over the years. Similarly, credit loans and loans on health are pursuing similar goal. Allocated to payers or patients can overcome commercial constraints, thereby making affordable and improve it

Reinsurance risk pool

This model is like that the multiple payers pool their money for the treatment of individual patient. They can ensure the insurance which have the treatment cost higher than the insurance to be covered. Such insurance is applicable to public-private partnerships aimed at recovering the cost of services in a specified period through the cooperation of public and private payers. 3Rs. 1) method of risk adjustment: proceeds from all payers for the purpose of offsetting high costs to the payers; 2) reinsurance: insurance taken by insurance companies to protect against excessive financial risk. Contract, 3) Risk corridor: US Practises the Department of Health and Human Services collects funds from plans with lower-than-expected benefits and pays plans with higher-than-expected benefits.

National silo funds

National funds for specific conditions or diseases are given by the government. National resources for specific diseases and illnesses: For example, the UK Cancer Medicines Fund, which funds new cancer medicines rejected by NICE, and Australia's complex mandates for highly specialised medicines that fund and supply specialty medicines. The drug is procured and then supply to the other country. They can directly invest the funds to the front.

Debt reduction

Debt relief, in which creditor nations pledge to invest in domestic treatment and prevention programs to cancel the debt of low- and middle-income countries, is a one-time transaction that provides stable financing.

Intellectual-based payment

In this model the public payers buy the rights to the medication like distribution and production and the manufacture just take care of its IPR. This approach includes setting patent prices. This means public payers will be able to purchase remedies from manufacturers and control their production and distribution. This approach may involve licencing out manufacturing and sales to payers while the manufacturer retains intellectual property (IP) rights. Moreover, as with orphan drugs, increased market exclusivity rewards innovation. Fund-based payments and intellectual payments were made by Carret et al. I suggested. Fund gene therapy.

Agreements bases health outcomes

In this method, an agreement is formed between the producer and the people who are paying based on the efficacy of the drug. That he is split into two parts-

• Performance-Based Payments at the Individual Level – This payment can be made in instalments or in one lump sum.

• Conditional redemption at collective level. Often referred to as CED.

P4P, a solution proposed by 15 studies to fund innovative and costly treatments. According to Tous' definition, an outcome-based contract is a contract between payers and producers, "price levels and/or revenues received are related to the future performance of products in research or real-world settings. It have many contracts-

Rewards for non-compliance, rewards for administration of occasions that drugs fall flat to anticipate, rewards for administration of side impacts, rewards for accomplished comes about, etc. Within the last-mentioned contract, each treatment is considered. Either victory or disappointment based on a predefined result degree (e.g., illness movement) and predefined result timing Assessment (e.g., 6 months). P4P contracts guarantee showcase get to. For imaginative and promising treatments, we illustrate included esteem, permit hazard sharing between payers and producers, and cap add up to volume budget affect.

Another proposed strategy was to interface costs to signs, known as indication-specific estimating. An illustration of indication-specific estimating is from Italy, where costs per understanding beneath controlled section understandings shift by sign. Another strategy is to utilize a volume-weighted normal of differential costs by sign. In this case, the weights are at first theoretical and require payers to affirm them through genuine inquire about, such as database examination. Indication-specific estimating approaches compensate producers for moved forward medicate adequacy. This liberates producers from centering solely on high-impact signs to preserve tall costs.

Chance broadening of discounts is proposed by Kleinke et al. comprising of repayment for patients paying tall out-of-pocket costs at the completion of

breakthroughs or courses of treatment. This approach can progress persistent adherence to treatment since adherence to treatment is remunerated with rebates.

A limit price approach similar to the NICE threshold was proposed by Fuller & Goldfield. Paying for outcomes such as hospitalisation avoidance and mortality reduction is included in the calculations in this model, but it is not easy to assign a monetary value to these outcomes. If performance milestones are not met, the price will be lowered. "Annuity payments," "risk-sharing annuities," "technology lease reimbursement schemes," and "high-value pharmaceutical mortgages" are terms used in several articles.

We describe an agreement between manufacturers and payers aimed at replacing high upfront costs with a series of patient-level payments triggered by the achievement of clinical milestones. A major challenge, however, is defining clinical milestones and endpoints that may be important.

CED is a performance-based funding method in four essays. It's a conditional refund Linked to actual post-launch data collection. If the product does not meet expectations, renegotiation will occur.

Health coins

He (Basuet al) proposed a new tradable currency, 'Health Coin', as a funding mechanism for breakthrough treatments. Convert incremental results achieved through curative treatments into a common currency, such as life-year equivalents. Health coin can be exchanged for US dollars on the market. For example, Medicare will pay the private payer for a beneficiary who transitions to Medicare at age 65 if the private payer previously paid for that beneficiary's diabetes treatment. Health Coin provides private payers with incentives to invest in breakthrough therapies, especially curative therapies that are in high demand among non-elderly populations. A limitation of the model is the assumption that healing is permanent and applies equally to all age groups.

Characteristics of the funding models

Table 1

Models	Advantage	Limits	outlook	At present use
Bundles of payment	Core tool of advancing value-based healthcare. transfer financial risk. Patient care benefits for health care providers make household spending more predictable. Can bring savings to payers	Providers can limit the adoption of innovative treatments to maximize profits. Therefore, in addition to funding constraints, quality indicators should also be integrated.	**United States**	**1**
Episode of care	Increased predictability of household spending through improves the condition of health and reduce the money constraint	Paying for one episode may not affect the whole number of scenes and may result in more scenes of care. Possibility Concerns and Usage Challenges	**United States**	**1**

Rebate	It can be sensitive. Secure their savings	Can distort external reference prices	**World Wide**	**1**
Discount	suitable method for the payer could be easy, subject to tariff regulations	It is not easy to be kept it private	**World wide**	**1**
Credit Level of payers	Recover price of service or care by purchasing the drug by not transferring the full price in advance	Pharmaceutical companies may want immediate revenue to increase return on investment.	**United States**	**0**
HCL	Improving the price of drug	Open information on understudy advances and other buyer fund may not completely capture the dangers of HCL. For case, extra	**World wide**	**0**

		components to progress the reasonability of third-party borrowing by the patient's family individuals. Will decrease future wage and diminish future reasonableness for people paying.		
Cost-based priced	scale: the clash between companies, encouraging companies to reduce costs. MMR: Set a reasonable price.		**World wide**	(in some countries, usually price adjusted, i.e., in Japan)

Table 2 (continuation)

Models	**Advantage**	**Limits**	**outlook**	**At present use**
Value bases pricing	to make it affordable by spreading costs	The authoritative burden influences two distinctive payers, and the method includes	Sweden	**0**

	across various parties	setting two diverse sorts of costs. Indeed, in case distinctive open bodies share the fetched, the burden on society will not be diminished.		
Price cap	the gain in the people excess patient numbers has only a small impact on a company's bottom line. Improve patient health. Don't stifle economic incentives for drug discovery.	Direct agreement can result in decreasing the cost of the beneficials paying.	**United States**	**1**
Price volume	Boost sustainability	Complexity for classifying costs into different types	**Europe**	**1**
Fund based system	It is attractive because financing is guaranteed for covered conditions.	The country's wellbeing care suppliers and guarantees are impossible to chance making such colossal ventures for questionable drugs.	**Worldwide**	national silo (CDF)only

Intellectual based payment	Remunerate and energize advancement. Producers not ought to target costly medicines.	Uncertainty is not reduced. The innovation over a period can be affected if there is monopoly, it is less attractive to both manufacturers and payers as the stakes are reversed (especially payers becoming responsible for production). is not.	**Worldwide**	**0**
Pooled fundings	Spread costs over all individuals of the protections pool instead of forcing an undue budgetary burden on patients. Enables follow-on insurers to fund and share costs of interventions with long-term outcomes	Lack of integrated monitoring structures across donor initiatives Execution is complicated since wellbeing can have different cause, and the result of a specific mediation may be affected by other occasions and conditions.	**United States**	**0**
Levies	Providing sustainable financing. Limited to low and medium GDP countries by solidarity		**Worldwide**	**1 For immunization programme**

Debt reduction	Secure for a less period of financing to contribute in unused administrations and intercessions	The affect will be restricted in low- and middle-income nations with low outside obligation. Long-term, steady subsidizing isn't repeatable because it is frequently a one-time bargain		
3 Rs	Protect insurers from negative selection and consumers from insurance market destabilization and discriminatory medical insurance practices. Risk corridor limits the risk of loss and excess income for health insurers	Issues like political and legal can be there	**United States**	**1**
Cancer drug fund	Paying for new drugs for the cancer denied by NICE	Only for cancer, no effect, no discount Bend the rule and create special status for cancer products	**United Kingdom**	**1**

1: YES

2: NO

What are the requirements needs in the health financing model to be adapt in India?

To improve access to healthcare services for the people, India has looked at various health financing models. For the health financing models worldwide to be implemented in India, there are various requirements that are decisive. These demands are:

Global insurance:

The model's goal is to provide health services to all individuals without any financial constraint so that all people can access the healthcare services that are needed.

Solvency:

The model should be pocket-friendly for individuals and families, mainly low-income people. This will ensure the reduction of out-of-pocket expenses and defend against healthcare, whose costs are high. The different needs of the individuals should be taken care of, as should the full range of health care services that are available.

Financial protection:

The model should protect people from financial constraints and defend them from healthcare whose cost is high.

Sustainable funding:

The model needs to ensure a capable and rational flow of capital by having a feasible mechanism for funding.

Effective governance and regulation:

The models need to have transparency; the capital management should be efficient; and for that, strong governance is required. Governance will keep an eye on the system, payers, and providers.

Health care primarily be the focus.

The enhancement should be the first priority of model. The promotion of health care should be done to reduce the secondary and tertiary care burden by doing early mediation.

Equity and accessibility:

The model should ensure access to healthcare services is equal across the nation and that religion is free and popular.

Medical information system:

There should be a robust information system for health to keep an eye on the evidence and make decisions based on evaluations.

Public private partnership

The partnership of the communal and individual sectors is required in the model for the resources and getting insights from both sectors. This will improve healthcare services and access to them and expand the coverage.

Features of the models which are identified.

Table 2

Funding Models	Attract (manufacture)	Attract (payers)	Financial Appeal	Accountability	Feasibility	acceptability
Payment in bundle/ EOC	**	***	**	*	***	***
Credits for patients	***	*	***	**	*	#
Price-volume agreements	**	***	***	#	***	***
Rebates/discounts	**	***	***	#	***	***
Price cap or volume caps	*	***	***	#	***	***
HCL	***	*	***	**	**	**
Cost-plus prices	#	*	*	**	**	#

Table 2 (continuation)

International funds	***	**	***	**	**	*
National silo funds	***	***	***	*	***	**
Pooled funding	***	***	***	**	*	*
Intellectual based payment	#	*	*	***	*	#
3Rs	***	***	***	**	**	*
P4P	**	***	***	***	***	***
Payment done annually through performance	**	***	***	***	***	***
Health coin	*	*	**	***	*	#

***: Less Important**

****: important**

*****: more Important**

#: nil

The models which can be considered best to be used in India on the basis of the feasibility of models, acceptability of the model, accountability of the model, financial appeal of the model, attractiveness of model towards payers and attractiveness of the model towards manufacturers are -

Discounts / rebates

The discount and rebate model can help make health services more cost-effective for people. There are various healthcare services on which these discounts or rebates can be offered, like diagnostic tests, medications, therapies, etc.

This will reduce the financial burden on the people as this will make them take medical help timely, promoting health practises that are preventive, as this model can offer several benefits and schemes.

There are various ways for the implementation of this model in India, like the insurance company and health care provider can negotiate for the discount, and the benefit will be given to the payers. The government can also offer discounts on various services for people who have low incomes; subsidies on medical services can be provided by them.

Discounts can be given directly by the person who is providing the healthcare to the payer by forming partnerships with NGOs and employers or by giving offers to patients who are loyal to them.

The local health system, rules and regulations, and policies of India will play a vital role in the successful implementation and success of the discount and debate model. This model is being used worldwide and could be adapted and used in India to improve affordability and access to health care services.

Price volume agreements

This model's aim is to decrease the risk of finance and balancing between the payers and the suppliers, which makes health care services accessible and affordable.

The diverse healthcare system of India has both public and private providers, which plays an important role. The government of India is trying to expand access to healthcare services through schemes like Ayushman Bharat. The price-volume

agreement can be used potentially in the framework of these schemes, which will ensure access to critical health care services and favour pricing.

This model is feasible and acceptable in the Indian healthcare system. This model also has less burden and can absorb the burden that will be there. Also, the appeal to the payers and the manufacturers will be there, as the government and suppliers can take in the bulk amount with discounts so that the payers will get the medication at a lower price and can access the healthcare medication.

With the healthcare system of India and the specific context, the price-volume agreement model can be used in India. This model is used to facilitate access to medicines and health care services.

Pay for performance.

Limited resources, unstructured quality care, variations in accessing health care, and different outcomes in different regions are the challenges faced in the Indian healthcare system. These challenges can be taken care of through the pay-for-performance model's implementation by making the healthcare providers achieve their targets and improving their quality of care.As the Indian healthcare system is a mix of private and public providers, which makes it complex, we have to consider the diversification of the landscapes for delivering healthcare and the arrangements for the money in India.

With this model, the feasibility and accessibility are also there, as the people will have to pay only on the basis of the performance, and all people can accept this model, including the low-income public, but with this, the burden also increases for providing good quality and performance of the medication, and it also appeals to the manufacturers to provide better medication and will only be paid if the performance and quality of the medication are good. The government of India can implement this in their schemes, which will make people more attracted to the schemes and will show the performance of the schemes.

For implementing this model, India needs to do careful planning, monitoring, and checking to ensure the advantages and success and avoid the circumstances for which it was not intended. This model can be used in India**.**

Annuity payments based on performance.

There are several factors, like the healthcare infrastructure in existence, rules and regulations, and the financial structure of the country, on which the implementation and success of the model depend. These challenges have to be addressed before implementation of the model, and for that, the planning, monitoring, health authority, collaborations and investments, and negotiations and relations between the stakeholders should be addressed as the private sector in India still provides the majority of the health care services.

This model involves the government or a health authority, which will make the time-to-time payments to the health care providers on the basis of the fixed scale for performance, like the quality of the care and achieving the goals of the defined outcomes of health. This will enable the health providers to provide high-quality and systematic care.

This model is less feasible than pay for performance as it has various challenges in quality assurance and the scales are fixed for the performance of the health care providers. but it is acceptable as the government will be keeping an eye on it, the healthcare services are provided in a structured manner, and the quality will also be high. There will be a burden on the government as well as the providers to take care of the quality and maintain it, and performance will be measured and have to be attained.

This model can be used in India if these factors are taken care of by the government.

What are the challenges and barriers to the health financing model?

The major changes in India's open wellbeing framework over the past few decades have been not as it were dynamic but excellent for country which is in development phase. India's health system can be isolated into two parts, urban and rustic, both of which have expansive aberrations in treatment, not due to uncommon infections but due to need of satisfactory framework and wellbeing experts, due to a few other challenges. Be that as it may, the reason of this article is to highlight the challenges as of now confronting open and private healthcare frameworks.

Ideal insurance services a challenge.

The country's insurance market remains underserved as the concept of insurance and its benefits are still not understood in India. Like Ayushman Bharat and employment insurance are the awareness campaigns and authority programs It has made significant contributions in establishing insurance integrity and making financial health care cost protection available to a large population of India. However, the vast numbers of centers and country-specific insurance schemes pose challenges to the public health system in the fields of health care and childbirth.

No focus on preventive care

Similar to insurance, there is little or no focus in India on prevention. Prevention can actually solve many of the patient's problems in the form of misery and financial loss. Lack of awareness is the main cause of the current situation. Adequate screening can save patients enormous costs and help reduce the strain on the country's limited healthcare infrastructure system. In the current era of COVID-19, despite government campaigns to prevent the virus, many people are breaking lockdown rules and doing basic things like wearing masks and gloves. You can see that they don't even follow the rules. General health consultations may not address the underlying cause of the disease, which inevitably leads to increased costs due to longer treatment times. What is needed now is to increase the number of specialized medical professionals in the country.

Delay in diagnosing illness

As the old saying goes, "One stitch saves nine." The next step after screening is diagnosis. If done in a timely manner, it not only saves money, but in some cases saves lives. We often hear of cases diagnosed at an advanced stage where there is little that can be done to save a life. The importance of diagnosis is mostly questioned in India.

Allocation of the money and infrastructure

the amount of money to be allocated in healthcare sector is not defined or is uneven. Government fund management gaps need to be understood and filled. Public health care is underfunded in India, and inequalities between urban and rural facilities are well known. People generally prefer private health care due to the lack of modern, quality health care in the public sector, but most of the rural population is unable to obtain private health care due to low incomes and lack of basic insurance. Private healthcare in India is high quality and expensive healthcare for large segments of society. Purchasing medical equipment is particularly expensive, while the public health system lacks basic infrastructure.

Funding

the funds to the healthcare sector are not enough to cover the out of pocket spent of all patients.

Difference in healthcare services of states

the different states provide different health services for same amount of money and having the different rules and regulation and differ states to states. Also states have their own policies and norms for the medical health care services.

cost and transparency

Perhaps the most important aspect that impresses many about the price of the treatment and it should be transparent. Ideally, it should be something like a restaurant menu. Here, the components and prices of the service are presented in advance so that patients are not surprised when they receive their bill. In addition, patients can choose whether or not to use these services. Look at his budget. Also, the patient has the right to choose the service or not. Keep an eye on their budget.

India's healthcare financing system causes and exacerbates challenges such as inequality in healthcare, lack of availability and coverage, unequal access, and substandard and expensive healthcare services. Individual OOP rates are the most in the world due to low per capita health care costs and inadequate public spending. Citizens get very little value for money, either in the public or private sector. Financial protection from medical costs is far from universal, with as it were 10% of the populace having wellbeing protections. The Indian government has sworn to extend open wellbeing investing from less than 1% to 3% of net residential item over the another few a long time. The combination of expanded open subsidizing and adaptability in exchanging reserves from base camp to the state can altogether move forward the execution of state-run open frameworks. Expanded open investing can be utilized to present widespread wellbeing care, which can help altogether decrease the burden of private investing on wellbeing care. Expanded open investing too makes a difference guarantee the quality of the open and private divisions through viable direction and oversight. However, in addition to increasing spending of communal healthcare, the authority of India needs to adopt specific measures to contain costs, improve spending efficiency, strengthen accountability, and monitor the health impact of spending.

Implication of research

On the basis of the different characteristics and features of the health financing model which are found out across the world the four models are considered which matches the Indian healthcare system and can be introduced with the schemes of India and also on the basis of demographics of India as well as the incomes of the people of India. These models will help in improving the quality of care and the accessibility of the services of the healthcare and decreases the financial constraints for the public. If the proper planning and monitoring done by the health authorities and addressing the challenges properly after implementation. The implementation of any health financing model will require careful consideration of the local conditions, the rules and regulations, infrastructure of health care, budget mechanisms. Without that, it will worth nothing.

The models are –

- **Discounts / rebates**
- **Price volume agreement**
- **Pay for performance.**

- **Annuity payment based on performance.**

But there are not any blueprints for the successful implementation of the health financing models or after implementation it will be giving 100% success rate and will improve the accessibility and quality of care in India. So, without blueprint we can't say that these four models which are selected to implement in India will be successful or will be a failure.

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