HEALTHCARE FINANCE: A KEY BUILDING BLOCK OF HEALTH : A REVIEW

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ABSTRACT

Financial burden of health care and diseases is an important economic and public health concern worldwide. Health-care financing is one of the core components of health systems that attempt to address health financing issues such as mobilization of funds, distribution of financial risks, allocation and utilization of services, and provider payment incentives.

INTRODUCTION

Complex organizations are tasked with utilizing limited resources to create goods and services; a healthcare organization is no exception.[1] Since, the world presents multiple health challenges as the global health burden evolves, and the price of innovation in health treatment continues to rise. An important economic and public health concern worldwide is the financial burden of health care and diseases.[2] Hence, Healthcare financial management plays a pivotal role in the effective functioning of healthcare systems worldwide (Cancarevic, Plichtová, & Malik, 2021; Organization, 2000).[3] The resources that serve as inputs to a healthcare organization include clinical and administrative staff, medical supplies and equipment, and government and private health insurance. The goods and services that serve as outputs of a healthcare organization include patient care outcomes, patient satisfaction, and community and population health.[1] Thereby, Health-care financing is one of the core components of health systems that attempt to address health financing issues such as mobilization of funds, distribution of financial risks, allocation and utilization of services, and provider payment incentives.[4] Financial sector actors, banks and investors from the asset management and insurance worlds have a key role in the ongoing provision of long-term financing.[2]

NEED FOR HEALTHCARE FINANCING

The landscape of healthcare financial management is complex, influenced by factors such as rising medical costs, technological advancements, changing reimbursement models, and the growing demand for healthcare services. Financial resources are an essential input to health systems—at a minimum, these are necessary to purchase medicines and supplies, build health facilities, and pay health workers. However, limited financial resources are a universal constraint faced by all health systems. Hospitals, clinics, and healthcare providers face the perpetual challenge of optimizing financial resources while ensuring the delivery of quality care to patients (English et al., 2023; Landry & Beaulieu, 2013).[5] Thereby, intricate balance between providing high-quality patient care and maintaining financial sustainability has become a critical challenge for healthcare organizations. As we navigate an ever-evolving landscape of medical advancements, changing demographics, and economic fluctuations, the need for robust financial management strategies in healthcare has become increasingly apparent.[6] Government budgets are under increasing pressure, savings rates are challenged and public and private sectors wonder how healthcare costs can be financed going forward especially with expansion of universal health coverage (UHC).[2] The recognized importance of financial protection has led to its inclusion as one of two pillars of UHC, alongside coverage of core health services, as outlined in Sustainable Development Goal 3 (SDG3). Throughout the world, annual spending on the provision of healthcare services continues to grow as a percentage of Gross Domestic Product (GDP). Literature from across the globe is consistent in estimating that one third of the money spent on the delivery of healthcare is waste.[7] The annual funding need for global health is estimated at US$134 billion per year potentially rising to US$274bn - $371bn by 2030 under WHO's scenarios for reaching SDG3.[8,9]

The financial health of healthcare organizations is crucial for their sustainability and the well-being of the communities they serve. Today, millions of people do not access services due to the cost. Many others receive poor quality of services even when they pay out-of-pocket. Carefully designed and implemented health financing policies can help to address these issues. For example, contracting and payment arrangements can incentivize care coordination and improved quality of care; sufficient and timely disbursement of funds to providers can help to ensure adequate staffing and medicines to treat patients.[10]

Hence, Healthcare financing is a core function of health systems that can enable progress towards UHC by improving effective service coverage and financial protection.

RELEVANCE OF HEALTHCARE FINANCE

WHO has identified health financing as one of the six key building blocks of health systems and adequate financing is essential to the other five blocks. Health financing systems are tasked not only with raising sufficient financial resources to fund the health system, but doing so in a way that promotes equity. Health systems funded according to one's ability to pay, such as those based on income taxes, promote both financial equity and better health. Overreliance on out-of-pocket spending diminishes access to care for those who are uninsured or underinsured, and risks exacerbating the burden of ill health and increasing poverty due to the high cost of care. The health financing transition is a theory developed to characterize the gradual shift in the level and source of health financing observed in countries over time. Generally, countries start this transition with a low initial level of health spending per capita that is largely out of pocket or from donors, and progressively transition to higher per capita spending relying more on government financing.[11]
Hence, WHO's approach to health financing focuses on core functions: [10]

1. revenue raising (sources of funds, including government budgets, compulsory or voluntary prepaid insurance schemes, direct out-of-pocket payments by users, and external aid)
2. pooling of funds (the accumulation of prepaid funds on behalf of some or all of the population)
3. purchasing of services (the payment or allocation of resources to health service providers)

In addition, all countries have policies on which services the population is entitled to, even if not explicitly stated by government; by extension those services not covered, are usually paid for by patients , sometimes called co-payments.

HEALTH FINANCING: THE MACROECONOMIC LEVEL

Financing health care has evolved from personal payment at the time of service delivery to financing through health insurance (prepayment) by the employer and employee at the workplace. This has progressed in most industrialized countries towards governmental financing through social security or general taxation, supplemented by private and non-governmental organizations (NGOs), and personal out-of-pocket expenditures. Every nation eventually faces the need for government-funded healthcare, either for the entire population or at least for vulnerable groups like the elderly and the poor. Government support is also required for services that insurance often overlooks or is ineffective in reaching, such as community-based programs and high-risk groups like infants and women. Health financing encompasses not only raising money for healthcare but also distributing those funds effectively. National health spending comes from both government and non-government sources and covers a wide range of programs and services. Within any system, there is competition for resources, and how money is allocated influences not only how services are delivered but also how priorities are set, as outlined in the principles of health economics. [4]

MAJOR CATEGORIES OF HEALTH EXPENDITURES [4]

• *Institutional care* – teaching hospitals, general hospitals, mental and other special hospitals, long-term nursing care, residential care, hospices
• *Pharmaceuticals and vaccines*
• *Ambulatory care* – primary care, family practice, pediatric, prenatal, and medical specialist; medical, diagnostic, and treatment; ambulatory and day hospital clinics; surgical, medical, geriatric, dialysis, mental, oncological, drug and alcohol treatment
• *Home care*
• *Elderly support activity/service centers*
• *Categorical programs* – immunization, maternal and child health, family planning, mental health, sexually transmitted infection, HIV, tuberculosis, screening for birth defects, cancer, diabetes, hypertension
• *Dental health*
• *Community health activities* – healthy communities, health promotion in the community for risk groups; smoking restriction, promotion of physical fitness and healthy diet; environmental and occupational health; nutrition and food safety, safe water supplies, special groups
• *Research*
• *Professional education and training*

WEAKNESSES IN INDIA’S HEALTH FINANCING SYSTEM

Due to insufficient provision and access of good-quality health services and inadequate financial protection against ill health for the Indian people, remains prime weakness in the Indian health sector. The Indian public receives low value for money in terms of the quantity and quality of health-care services in the public and private sectors. Health services in the public sector that can be accessed free or for a nominal fee are grossly inadequate. As a result, most Indians access private health care that is expensive, unaffordable, unreliable, and impoverishing. Good-quality health care in the private sector is also not available, particularly in rural and other remote parts of India. Most private practitioners are not qualified and work in substandard facilities. [12-16] Hence, a major policy challenge will be to find out how best to invest augmented public funding along with pressing a need and opportunity for health reform that helps achieve better access, affordability, and equity.[17]

POLICY RESPONSES NEEDED FOR BETTER HEATHCARE IN INDIA

- Ensure achievement of government's commitment to increase public spending on health from less than 2% to 4% of gross domestic product
- Improve quality, performance, efficiency, and accountability of public and private health systems
- Introduce policy and legislative changes to contain the rising costs of medical care and drugs
- Increase availability of health services through direct expansion of public health services and by enlisting private providers of allopathic and non-allopathic drugs
- Increase insurance and risk pooling to include financial protection
- Introduce a predominantly tax-paid universal medical insurance plan that offers essential coverage to all citizens [12]

HEALTH 4.0 AND FINANCIAL MANAGEMENT

In the rapid development of modern healthcare, convenience and innovation have taken the lead in transforming medical services.[18] A recent study investigated the intersection between innovation, Health 4.0, and financial management in the healthcare industry, emphasizing the importance of operational efficiency and quality of care. The study revealed that Health 4.0 offers significant opportunities for process efficiency and cost reduction without compromising service quality. The study identified strategic advantages in addressing modern healthcare challenges by streamlining processes, enhancing financial projections, and leveraging advanced technologies. When implemented successfully, Health 4.0 can significantly improve service quality, benefit patients, and contribute to local economic growth. [19]

ARTIFICIAL INTELLIGENCE (AI) IN HEALTH FINANCING SYSTEM

In recent years, public health financing has become an increasing concern for policymakers, health managers, and researchers. The complexity of health systems is growing due to the vast array of risk factors affecting patient expenditures, such as demographics, diagnoses, and co-morbidities. This creates unpredictable systems that are difficult to manage. To address this, machine learning algorithms are being applied to handle large volumes of health data. AI in healthcare management can help bridge the gap between available resources and the growing demand for public health services. As AI technology advances, more applications are emerging to improve healthcare management. One key challenge is ensuring the stability of insurance funds and controlling out- of-pocket expenses, where AI can offer valuable support. Many financial systems are nonlinear and unpredictable, requiring solutions for complex, time-dependent problems—areas where AI is increasingly useful. In short, AI is replacing older methods that could only forecast short-term financial flows by calculating variables and predicting future relationships. This underscores the need to understand and integrate new technologies in health financing to move towards UHC. [20]

CONCLUSION

As healthcare costs continue to rise, countries are striving to protect their citizens, especially vulnerable groups, from unaffordable healthcare expenses while ensuring access to comprehensive and equitable healthcare services. Global health financing has grown steadily over the last 20 years and is expected to keep increasing, though at a slower rate, with ongoing disparities in per capita health spending between nations. Healthcare services, both public and private, often remain inadequate, costly, and unreliable, leading to financial hardship for many. Therefore, the focus of governance should be on the financing mechanisms—fund collection, resource pooling, and payment for health services—to achieve the goals of effective and efficient allocation of limited resources and the realization of Health for All.

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