

# Health Financing- Innovation is the Key

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## Abstract

To provide and finance health care for more than 1.22 billion population is one of the greatest challenges that India is facing. This paper presents the evidence based experience of Rwanda, Mexico, Singapore and also India on implementing cost effective innovations in health care financing which has been very successful in improving effectiveness and sustainability of health services in these countries. It also includes some recent innovation in health financing and some recommendation given by experts in improving India's health care system.

**The objective** of the study is to examine the benefits of the programs implemented in the aforesaid countries and the scope of implementing that kind of innovative method of financing in India which would help our country to face the challenges of health inequality, inadequate availability, unequal access, poor quality and costly health care services.

**The methodology** used in this study is descriptive positive study. Thorough literature review has been done to analyze the success stories of the selected countries in having implemented the innovative method of financing in health. Again some of the successful schemes implemented in India have also been examined to view the future prospects of strengthening our health care by introducing more innovative method of financing.

**The study concludes** that India though has introduced innovation in health care financing yet it needs a major boost from the government. Governments can contribute to the effectiveness and sustainability of community health financing schemes for rural, informal sector and poor populations through key policies involving the following: increased and well-targeted subsidies boosting the health insurance contributions of low- income populations; insurance for protection against fluctuations in expenditure; technical support to strengthen the management capacity of local schemes; and the establishment and strengthening public private partnership in providing better health facility to the poorer section of the society.

**Key words:** Health financing, innovation in health expenditure

## I. INTRODUCTION

Innovation in health care is about how to pay for the provision of healthcare services-usually through some form of insurance that can pool the risk and cost of illness across a large group of people. In poorer countries, however, not only is insurance more expensive relative to incomes, but many people work in the informal sector and so are not covered by employee health insurance laws.

Health financing is concerned with how financial resources are generated, allocated and used in health systems. Health financing policy focuses on how to move closer to universal coverage with issues related to: (i) how and from where to raise sufficient funds for health; (ii) how to overcome financial barriers that exclude many poor from accessing health services; or (iii) how to provide an equitable and efficient mix of health services. (*World Health Organization*) Innovative financing can be defined as "Any financing approach that helps to generate additional development funds...enhance the efficiency of financial flows...[or] make financial flows more results-oriented." -*The World Bank*

The health care financing in India can be considered almost unique in several respects. India's total expenditure in healthcare as a percentage of GDP is still one of the lowest in the world i.e, 4.1 % of GDP compared to global average 10.4% (*The World Bank-2012*). The share of public financing in total health care financing in the country is considerably low--just around 1.5% of GDP which is proposed to be 2.5% by

twelfth planning commission. The beneficiaries of this limited public health financing are not only the poor as one would expect in a limited public spending to be, but also the well-off section of the society. The proportion of public expenditure is around 26% which is comparatively low than worldwide average of 64% and even in low income countries it is 38%. Over 73% of the total health financing is private financing, much of which takes the form of out-of-pocket payments, which is not only inefficient and less accountable than other methods of financing, but also iniquitous to the poor. The World Bank (2002) estimates that one-quarter of all Indians fall into poverty as a direct result of medical expenses which they incur by borrowing money or selling assets to pay for hospitalisation.

So it can be easily understood that India is facing considerable challenges. An examination of healthcare systems in other countries underscores the importance of achieving a value-based, affordable, sustainable healthcare system in India.

## II Evidence from different countries

This study examines the experience of different countries which have initiated in health care financing innovatively and proved to be successful in eradicating the challenges that the countries were facing.

### 1) Rwanda

Rwanda has progressively moved toward a modern health system design, including full autonomy of facilities, decentralization, third-party payment, and strategic purchasing through performance-based financing. To improve financial access, the government pioneered a micro-insurance scheme and supported its expansion and subsidization. It then introduced a mechanism of performance based financing to provide incentives to health facilities to deliver high-impact interventions and ensure quality of services.

Rwanda has implemented three innovative method of financing in health care to reach the Millennium Development Goals (MDGs). *Firstly*, community-based health insurance, *secondly*, performance based financing and *finally*, fiscal decentralization.

### Community-Based Health Insurance

Rwanda's health system reforms started in 1999 when the Ministry of Health implemented a pilot program of 54 community-based health insurance (CBHI) schemes across three districts within the country. Each scheme partnered with a health center and local populations began to enroll. Management of each scheme was placed in the hands of its members, who elected a five person executive committee. Each district had a District Federation of Prepayment Schemes (DFPS) with responsibility over district policies. The schemes covered a basic package that included all services and drugs provided by the health center as well as ambulance transport to the district hospital where limited services were included. In 2002, a strategy to scale-up and build technical

capacity was implemented by the Ministry of Health, Ministry of Local Affairs, and external partners. By 2005, CBHI schemes covered the entire country. Premiums and co-payments vary from scheme to scheme.

There are two facets to the benefits package. The Minimum Package of Activities (MPA) covers all services and drugs provided at the health centers including pre- and post-natal care, vaccinations, family planning, minor surgical operations, and essential and generic drugs. The Complementary Package of Activities (CPA) covers a limited number of services at the district hospitals, including the cost of hospitalization, caesarian operations, minor and major surgical operations, medical imaging, and all diseases afflicting children ages 0 to 5 years.

There are currently several health insurance programmes in Rwanda targeting specific groups of the population. However, the biggest in terms of membership is the *mutuelles* scheme, participation in which is organized on a per household basis, with an annual payment of 1000 Rwandan francs (US\$ 2) per family member. Coverage has increased from 1% in 2000 to 90% in 2009. The *mutuelles* system is partly financed by external aid, from partners such as the Global Fund to fight AIDS, Tuberculosis and Malaria, which covers insurance premiums for about 1.5 million vulnerable Rwandans.

### **Performance-based financing and reforms of human resources management**

Performance-based financing is currently implemented at three levels: health centers, hospitals, and community levels. The performance-based financing model is based on the principle of separating purchaser and provider functions in health service delivery. By distinguishing between and maintaining a split between bodies purchasing services and bodies providing services, this model promotes accountability and avoids conflicts of interest. In the national model for health centers, payments for performance are based on the quantity of outputs achieved conditional on the quality of services delivered. At the hospital level, performance is assessed through a peer-evaluation mechanism. As a result of the pilots' scheme success, which was implemented in 2001-2005, performance-based financing became a major pillar within the Ministry of Health strategic plan and was implemented nationally.

As of 2006 the government transferred about \$1.80 per capita from the Treasury directly to health facilities at the basic health service level on the basis of a performance-based formula. The program channels funds directly from Treasury to the bank accounts of the more than 400 health clinics in Rwanda on the basis of performance agreements. In 2008 Rwanda decentralized wages. As a result, financing and payments for health personnel are increasingly linked to performance in which block grants from the government and donors can be used as salary which has increased the quality of services.

### **Fiscal decentralization**

Fiscal decentralization (adopted as policy in 2001 and enacted into law in 2006) served as an essential component of Rwanda's decentralization agenda to devolve authority to the district level. The decentralization

of authority across sectors was planned in three-phased approach. The *first phase* (2001–05) focused on administrative and political decentralization; it aimed to institutionalize decentralized governance by establishing democratic and community development structures, establishing legal frameworks, and strengthening institutional capacity at local levels. *Phase two*, which began in 2006 and ran through 2008, focused on making local governments responsible for bringing health services closer to beneficiaries. It aimed to reorganize roles and responsibilities within local government under the decentralization framework and further strengthen district authority while allowing for greater community participation and facilitating resource allocation to local government. Finally, *phase three*, which began in 2008, granted autonomy to health facilities and transferred fiscal responsibilities and financial resources from the central and local government to facilities. Fiscal decentralization in Rwanda was government owned and driven, with strong support and collaboration of development partners.

Rwanda chose to develop a mixed health care financing model, combining decentralization and performance-based financing with a strategy to pool private spending through the building of grassroots, community-based micro insurance. Lessons learned from the Rwandan experience provide other countries a strong base to apply the innovative method of financing which can improve the quality of health and sustainability.

## 2) Mexico

In the mid-1990s, Mexico developed a system of national health accounts. This system showed, quite surprisingly, that more than half of the total national health expenditure was out-of-pocket because approximately half of the country's population lacked health insurance which was exposing Mexican households to catastrophic financial events.

Mexico's poor results led policy-makers from the Ministry of Health (MoH) to focus on health system financing so in 2003, a reform to the *General Health Law* establishing the *System of Social Protection in Health*, was approved, whereby public funding is being increased by 1% of gross domestic product (GDP) over a phase-in period of seven years to provide access to formal social insurance, to the 45 million Mexicans who had been excluded from it in the past. Poor families enroll in the *People's Insurance*, a new public insurance scheme that assures legislated access to comprehensive health care. This scheme guarantees access to a package of 255 health interventions targeting more than 90% of the causes leading to service demand in public outpatient units and general hospitals. Most interventions are provided by the service networks of the state ministries of health, which have their own outpatient units and hospitals, and hire their own salaried health staff, including physicians and nurses. These same networks provide services to the uninsured population. However, for those affiliated with the People's Insurance, services are free of charge at the time of delivery and include the drugs prescribed. By the end of 2007, 20 million people in Mexico were People's Insurance beneficiaries.

The financial innovation in Mexico's recent health reform is the separation of funding for personal or clinical health services and health related public goods. Such separation is intended to protect public health interventions within a reform framework in which subsidies are granted in response to the demand for health care, to the potential neglect of public health services.

System of Social Protection in Health, funds are allocated into four components: (i) stewardship, information, research and development; (ii) community health services; (iii) non-catastrophic, personal health services; and (iv) high-cost personal health services. Stewardship functions, health research, the generation and dissemination of information, and human resource development are financed through the regular budget of the MoH, while the Fund for Community Health Services is used to finance public health services (health promotion, immunization and epidemiological surveillance and the control of diseases, including communicable ones such as HIV/AIDS, tuberculosis and malaria).

In contrast, funding for personal services is based on an insurance logic, which deals with uncertainty. The People's Insurance is the insurance instrument devised to finance these services under the reform which is derive from two sources: a package of essential interventions provided in outpatient settings and general hospitals which is financed through a fund for personal health services, and a package of high cost, specialized interventions financed through the Fund for Protection against Catastrophic Expenditures, [FPGC]. These packages were developed because of three reasons. *First*, the intervention package serves as a blueprint to estimate the resources required to strengthen health service. *Second*, the package is used as a quality assurance tool designed to ensure that all necessary services are offered in accordance with standardized protocols. *Finally*, the package is used to empower people by making them aware of their entitlements.

The new general law clearly states that people's insurance beneficiaries will have access to all health interventions included in both packages and to the drugs required. In fact, upon becoming affiliated, families receive a Charter of Rights and Duties that lists the health interventions to which they are entitled. This scheme also offer coverage to all Mexicans not protected by any other public insurance scheme: the self-employed, those who are out of the labour market and those in the informal sector of the economy. Though affiliation to the scheme is voluntary, yet the reform includes incentives for expanding coverage.

The substantial increase in public funding is closing the gap between public and private financing of the national health system. Public health expenditure as a percentage of total health expenditure increased from 43.8% in 2002 to 46.4% in 2006. Given the anticipated increase in funding linked to the expansion of the people insurance scheme, public health expenditure is expected to continue to increase at a higher rate than private expenditure.

### 3) Singapore

To solve the problem of inflationary health care cost and its high unstable demand, the Singapore government adopted "shared responsibility" as its guiding philosophy when it unveiled its National Health

Plan in 1983: ‘Government will subsidize health care to make it affordable but Singaporeans able to do so must fork out their share too’. A compulsory medical savings scheme would provide the needed mechanism to mobilize private financial resources. Thus, the government introduced Medisave, the world’s first medical savings account, in 1984. Medisave was introduced as an extension of a larger, national scheme called the Central Provident Fund (CPF). The latter is a compulsory, tax-exempt, interest-yielding savings scheme started in 1955 to provide financial protection for workers in their old age. Medisave can be used for outpatient treatments like day-surgery, radiotherapy, chemotherapy, renal dialysis and even hepatitis B vaccination. Singaporeans presently contribute 36% of their gross salaries to the CPF, half of which comes from their employers. Any unspent balance in Medisave is passed on to the account holder’s beneficiaries upon his or her death. Medisave is complemented by Medishield, a low-cost catastrophic illnesses insurance (with premiums payable from Medisave) introduced in 1990 and Medifund, a means-tested public safety net of last resort for the needy, introduced in 1993.

In 2001, 262,000 Singaporeans (or 85% of the total number hospitalized that year) used Medisave to help pay their hospital bills. On average, each patient withdrew about \$ 1500. In 2001, the government paid 2 years’ worth of MediShield premiums for all Singaporeans aged 61 and above and additionally set up an Eldercare Fund to finance long term care of the elderly. Eldercare was followed in 2002 by Eldersield, a severe disability insurance scheme for elderly Singaporeans, with premiums payable from Medisave. Eldersield provides lifetime coverage of US\$ 300 per month, up to a maximum of 60 months to cover a substantial portion of patient’s out-of-pocket share of subsidized nursing home care.

By treating the majority who can afford as co-paying partners and targeting special provisions at the minority who cannot afford to pay, better distributional outcomes are achieved. A further re-distributional element is embedded in Singapore’s graded public hospital ward system, which ranges from one-bedded rooms to open dormitories with eight or more beds. Patients pay more for higher levels of service and better amenities but there is no difference in the standard of clinical care. The resulting price discrimination allows full costs to be recovered from patients in A class beds compared to patients in C class who enjoy 80% subsidy. Those unable to provide for themselves through Medisave and other means such as employee benefits or private insurance, can turn to MediShield, and finally, to Medifund.

Singapore’s experience demonstrates how a hardheaded approach to health policy, tapping on public and private resources to finance health care, can achieve national health goals on a sustainable basis while balancing efficiency and equity concerns. Its experimental model of public–private partnership may even hold lessons for others. However, Singapore’s small and manageable size, high per capita level of income, high degree of public trust in government, and conspicuous absence of an urban-rural divide, are conditions not easily found in combination elsewhere. This means that any applicable policies must be carefully adapted to suit local conditions.

### III Recent Health Financing Innovations

#### International Health Funds

GAVI (Global Alliance for Vaccines and Immunisation) and the Global Fund is a public-private global health partnership which facilitate access to existing treatments by raising funds or pooling money for health programs in low- and middle-income countries. Revenues come primarily from governments and philanthropies but also from innovative financing mechanisms. Since 2001, the Global Fund has received US\$ 20 billion in donor commitments, US\$ 39 million of which is from UNITAID (see next page) and US\$ 132 million from (PRODUCT) RED, a two-year-old business partnership that licenses the (PRODUCT) RED brand to companies and donates partial proceeds to the Global Fund. GAVI has received nearly US\$ 4 billion since 2001, US\$ 1.2 billion of which is from the International Finance Facility for Immunisation, described below.

#### International Finance Facility for Immunisation (IFFIm)

IFFIm issues government-backed bonds in international capital markets to fund GAVI-sponsored programs and to support health system improvements in 70 low- and middle-income countries. By borrowing on capital markets and disbursing funds to GAVI, IFFIm generates immediate revenue to accelerate access to vaccinations in low-income countries, and donors make payments over a longer period of time.

Front-loading resources for immunization may minimize future assistance dedicated to disease prevention and treatment. In 2007, GAVI disbursed more than US\$ 630 million of IFFIm funds to combat measles, yellow fever, tetanus and polio; improve health systems and immunization services; and support new and underused vaccines (IFFIm, 2009).

#### Advance Market Commitments (AMCs)

Under an AMC, donors commit to paying for a vaccine at a fixed price for a given period to defray development costs and to subsidize procurement by low-income countries. These commitments can create a viable future market and incentivize private industry to invest in developing new vaccines for neglected diseases. An AMC also enables donors to pay only when a product is brought successfully to market.

In 2007, the first AMC was created for vaccines against the most common strains of *Streptococcus pneumoniae*. It has secured US\$ 1.5 billion in donor commitments and is expected to save 5.8 million lives by 2030 (GAVI, World Bank, 2009).

#### UNITAID

Established in 2006, UNITAID is an international drug purchase facility using price negotiations and pooled procurement to increase access to treatments for AIDS, TB and malaria in developing countries. More than

70% of UNITAID's funding comes from a levy on airline tickets imposed by seven of its 35 member countries, with the remainder coming through direct donor funds.

#### **IV India's Innovative Financing**

The example of Dr Shetty illustrates a great line of attack in the battle to finance healthcare for the poor. Faced with financial constraints, why not focus instead on reducing the cost of treatments by developing new medical technology and new forms of healthcare delivery?

In Bangalore, Devi Shetty, a cardiac surgeon, has built a 25-acre health city called Narayana Hrudayalaya that houses numerous hospitals catering to heart surgery, cancer treatment, organ transplant, eye-care and other conditions. The principle behind all of the hospitals is to employ economies of scale and specialization to slash the costs of providing healthcare. The heart hospital, for example, has 1,000 beds (compared with 160 in an average American hospital) where Dr Shetty and a team of 40 cardiologists perform 600 operations every week. (The cancer hospital has 1,400) beds. Dr Shetty has performed more than 15,000 heart operations. The scale of the operation drives down the cost, especially as the heart hospital shares central facilities such as administrative services, laboratories and a blood bank with the other hospitals. The facility charges around US\$2,000 for open heart surgery, against prices of at least ten times as much at a hospital in the US, and with success rates that are as good, if not better.

Nonetheless, even US\$2,000 is too much for most Indians, and so Dr Shetty has also devised innovative insurance programmes for the poor in Karnataka state that enable them to use his hospitals. Starting eight years ago, he teamed up with a local cooperative of dairy farmers, selling micro insurance to its members for 11 US cents per person per month, with the premiums deducted every time a farmer sold his milk.

Today, the scheme has several million insured members, and 400 hospitals across the state where those on the scheme can access health services, with no cash payments required. The funding arrangement has changed slightly, as the initial scheme proved too expensive for the government. Policyholders now pay 22 cents per head and the government acts as a reinsurer if claims go above a certain threshold. Dr Shetty is in the process of rolling out similar insurance schemes in other states such as Andhra Pradesh and Tamil Nadu.

#### **V Conclusion**

It is imperative for the central government to embark on a major expansion of health infrastructure in both rural and urban areas of the country in its 12th Plan (2012-13 to 2016-17). This calls for a significant increase in expenditure as already proposed by the government. An additional one percent of GDP would be necessary in the medium term to provide basic health care services as per the norms. The government should also give emphasize on the public private partnership more to improve the efficiency and sustainability in health care.



On the basis of evidence from different countries, experts have recommended the following steps so that our country would be able to face the challenges of health inequality, inadequate availability, unequal access, poor quality and costly health care services.

### **Recommendations:**

*First*, attention needs to be paid to centre–state financial flows. Under the National Rural Health Mission, the central and state governments are expected to share the additional health expenditures in the ratio of 85:15 during 2007–12. After 2012, the ratio has changed to change to 75:25. This arrangement needs to be assessed on a state by- state basis.

*Second*, Taxation is also a better financing option, because of the large recurrent expenses, which can only be expected to rise with population aging and the shift towards chronic diseases. The state could specifically consider raising taxes on products that harm public health such as all tobacco products, alcohol, high calorie foods of little or no nutritional value, and energy inefficient and polluting vehicles. This increase in taxes will give additional health benefits through reduced consumption of these products.

*Third*, increased spending on health alone is insufficient to improve the health status of Indian people. Simultaneous steps are needed to improve performance, efficiency, and accountability in the public and private sectors. Introduction and reinforcement of health management information systems, third-party assessments of service guarantee and quality, community supervision, public disclosure, social audits, and accreditation of facilities could help to improve effectiveness and accountability.

*Fourth*, policy and legislative changes will be needed to contain the rising costs of medical care and to ensure quality of care. The government would need to fill gaps and deficiencies in drug policies, registration of health practitioners, and guidelines for health-care interventions including use of pharmaceutical drugs and biotechnologies.

*Fifth*, risk pooling would need to be greatly increased as a prerequisite for the introduction of any viable system of financial protection and also be improved by an increase in the duration of the coverage, preferably to lifelong insurance. Risk pooling for different types of illness will be beneficial. Insurance should cover low-cost and frequent outpatient illnesses, medium-cost and low-occurrence illnesses requiring treatment in hospital, and the expensive but infrequent life threatening illnesses.

*Sixth*, universal financial protection is necessary to guarantee health as a right of all citizens. Financial protection should be offered to all citizens, not just those who are poor, against inpatient and outpatient care. Further it is recommended to have a ‘single payer system’ for India. In such a system, the government would collect and pool revenues to purchase health-care services for the entire population from the public and private sectors. The state would enlist public and private providers of allopathic and non-allopathic systems of medicine, establish uniform national standards for payment, and regulate quality and cost by use of appropriate information technologies. This would be able to manage competition, decrease costs, negotiate

reduced prices with private providers, ensure adequate funding for preventive and primary care and improve quality of health.

## REFERENCES:

- [1] Stephen M Sammut and Lawton R Burns, Meeting the Challenges of Healthcare Needs in India: Paths to Innovation, ISB Insight, Volume 9, Issue 2, India's health care hurdles,7-11.
- [2] Healthcare in Asia-The innovation imperative, Economist Intelligence Unit, The Economist, 2011.
- [3] M. Govinda Rao and Mita Choudhury, Health Care Financing Reforms in India, Working Paper, March 2012, National Institute of Public Finance and Policy.
- [4] Peter Berman, Rajeev Ahuja, Ajay Tandon, Susan Sparkes and Pablo Gottret, Health Financing In India: Challenges In Achieving Ambitious Goals,HNP discussion paper, 2010.
- [5] C. Sekabaraga, A. Soucat, F. Diop, and G. Martin, Innovative Financing for Health in Rwanda:A Report of Successful Reforms, Yes, Africa Can: Success Stories from a Dynamic Continent, World Bank Publications, 2011.
- [6] Julio Frenk, Octavio Gómez-Dantés & Felicia Marie Knaul, The democratization of health in Mexico: financial innovations for universal coverage, *Bull World Health Organ* 2009.
- [7] Meng-Kin Lim, Shifting the burden of health care finance: a case study of public-private partnership in Singapore, *Health Policy* 69, December 2003.
- [8] Gina Lagomarsino, Alice Garabrant, Atikah Adyas, Richard Muga, *Nathaniel Otoo*, Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia, online journal, Vol 380 September 8, 2012, [www.thelancet.com](http://www.thelancet.com).
- [9] C.K. George, Health Financing in India: Taking Stock and Moving Forward, Report of the Expert Group Meeting,2007
- [10] A K Shiva Kumar, Lincoln C Chen, Mita Choudhury, Shiban Ganju, Vijay Mahajan, Amarjeet Sinha, Abhijit Sen, India: Towards Universal Health Coverage, Series1, Published online January 12, 2011, [www.thelancet.com](http://www.thelancet.com).