

Financing primary healthcare for rural areas

Manisha Dutta¹, Pavitra Mohan², Sanjana Brahmawar Mohan², Vedha Ponnappan³, Prakash Satyavageeswaran³

¹Primary Healthcare Initiative (A Joint Partnership of IIM Udaipur and Basic Healthcare Services), ²Basic Healthcare Services, ³Indian Institute of Management Udaipur, Rajasthan, India

Abstract

Context: Primary healthcare in India is provided by both public and private providers. However, access to good quality primary healthcare is lacking in underserved populations such as communities in rural and remote areas and families in low income quartiles. While there are government programs on comprehensive primary healthcare, stagnant investments restrict their reach and quality. At the same time, there are several for-profit and not-for-profit primary healthcare providers that fill the gap, but are limited in scale and geographical reach. They also often find it challenging to provide affordable comprehensive primary healthcare. **Aims:** The Consultation on Financing Primary Healthcare was organized to draw lessons for financial sustenance of comprehensive and equitable primary healthcare initiatives. Eighteen academicians and practitioners, representing different institutions from across India, presented and engaged in discussions around the theme of financing primary healthcare. **Methods and Material:** The Consultation drew insights from the experiences and evidence shared by the participants on the ways to finance primary healthcare services sustainably, especially for underserved populations. The financing models discussed include public-private partnership, user fees, community financing, subscription and cross-subsidy. Cost-reduction strategies such as task-shifting and use of appropriate technology were also identified as key to improving efficiency in service delivery.

Keywords: Affordable, financing, non-governmental, primary healthcare

Introduction

Evidence from several countries shows that a strong primary healthcare system contributes to better health outcomes.^[1-3] However low investments in primary healthcare remains a challenge for Low- and Middle- Income Countries (LMICs). As a result, underserved communities such as those in rural areas and tribal hinterlands, with higher disease burden, are deprived of access to basic healthcare. The Consultation on Financing Primary Healthcare was organized on November 16, 2019 by the Primary Healthcare Initiative, a joint program of the Indian

> Address for correspondence: Ms. Manisha Dutta, Indian Institute of Management, Udaipur, Rajasthan, India. E-mail: manisha.dutta@iimu.ac.in

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Institute of Management Udaipur and Basic Healthcare Services. The Consultation aimed at exploring financing mechanisms adopted by non-governmental organizations in India in order to draw out what works and what does not in delivering affordable and quality primary healthcare.

Context

Primary healthcare in India

In India, the total health expenditure of the country is about 3.8% of the GDP, of which 59% is borne by consumers as out of pocket expenditure (OOPE).^[4] The government spends 52% of its health expenditure on primary healthcare (52%).^[4] However, care seeking at government run primary healthcare facilities remains low across rural (32%) and urban (20%).^[5]

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In view of a low and stagnant budgetary allocation on health in India, there is a need to leverage non-governmental initiatives and private providers for delivering high-quality and affordable care, alone or in partnership with the government. Moreover, several resource optimization measures need to be implemented to improve resource allocation, reduce wasteful spending, and improve efficiency in service delivery.

Financing of primary healthcare: Non-governmental initiatives

Several non-governmental primary healthcare initiatives in the country provide affordable and quality primary healthcare services, with a focus on improving access for underserved communities. A total of 25% of non-governmental healthcare organizations provide health services exclusively in rural areas and 50% cater to both rural and urban.^[6] However, these initiatives are limited in scale and financial sustainability. Several financing mechanisms have been adopted to improve access to affordable primary healthcare. Within the non-governmental healthcare initiatives, grants and donations have formed a key part of the financing. There is mixed evidence on the impact of user fee as a financing mechanism on healthcare utilization. WHO emphasizes abolishing user fee as a strategy to reduce OOPE^[7] as several studies demonstrate that user fees have negative impact on utilization of health services,^[8,9] especially among vulnerable populations. Several non-governmental organizations (NGOs) have also leveraged public health insurance and entitlements under risk protection schemes instead of fees for service, or have picked up costs themselves, but studies show^[10,11] little or no impact on reduction of OOPE.

Methods

The Consultation brought together eighteen primary healthcare practitioners, academicians, and public health experts to discuss primary healthcare financing. Through a scoping exercise, we identified organizations that provide primary healthcare in rural areas. Based on available information we shortlisted organizations that use different ways of financing their primary healthcare services, such as (1) User fee, (2) Public funding and partnership, (3) Cross subsidies of primary healthcare from secondary and tertiary operations, and (4) Community financing. Consultation discussions were recorded, transcribed, analyzed and the key insights were synthesized

Results

The financing models discussed in the Consultation were drawn from eight unique primary healthcare models. Brief profile of the organizations and their models is given below in Table 1.

Ways of financing primary healthcare for rural areas

Our Consultation elicited the following financing mechanisms:

User payment supplemented with other sources

Most organizations finance primary healthcare using a combination of user payment and grants. User contribution includes user fees and margins on drugs or other healthcare products. This contribution can cover 12–90% of the operational expenses. The following forms of user fee models were presented:

iKure

iKure is a for-profit social enterprise that delivers primary healthcare in areas that are rural (60% of the total catchment), semi-urban, and urban pockets with poor income and literacy levels. It delivers primary healthcare services through a hub-and- spoke/camp model.

Services include doctor's consultation (diagnosis, treatment, and medicine prescription), ECG, blood tests, eye check-up, supply of medicines and healthcare products, and video consultation.

Table 1: Primary Healthcare delivery (Profile of participating organisations in the Consultation)								
Organizations	iKure	Karma	BHS-AMRIT Clinics	BHS - PHC	Karuna Trust	DHAN Foundation	ARTH	LVPEI
Context	60% rural, 20% semi-urban, 20% urban (targeted at low-income informal workers)	58% rural, 35% semi-urban, 7% tribal	Rural, tribal areas	Rural, tribal areas	Rural areas with some PHCs in tribal areas	Rural, urban (BPL families), coastal, tribal	Rural, tribal areas	Rural, urban areas
Vertical/Horizontal primary healthcare	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Vertical	Vertical
Proportion of expenditure on services (%curative, %preventive and promotive)	60% curative, 40% preventive and promotive	90% curative, 10% preventive and promotive	75% curative, 25% preventive, promotive	60% curative, 40% preventive, promotive	NA	70% curative, 30% preventive, promotive	NA	NA
Nurse-led model			Yes				Yes	
Referral connections	Yes		Yes	Yes	Yes		Yes	Yes
Telemedicine	Yes	Yes		Yes				
Outreach	Yes	Yes	Yes	Yes	Yes	Yes	Yes	In some centers, home-based care offered

The organization has its presence across six states in India, covering 3940 villages.

iKure has a financially sustainable business model that combines user fee with licensing and sale of technology (iKure's Population Health Management Platform) and medical products (such as medicines, spectacles, and sanitary pads). A total of 60% of the revenue is generated from user fees. They also partner with investors/Corporate Social Responsibility arms of companies/corporates for organizing camps. Further, they involve investors as business partners in setting up clinics. Use of disruptive technology and task-shifting strategies of using community health workers play a key role in reducing iKure's cost of services.

Karma Healthcare

Karma Healthcare provides primary healthcare through telemedicine (26 nurse assisted GP and specialist e-doctor clinics) in rural and semi-urban areas across the three Indian states of Rajasthan, Madhya Pradesh, and Haryana.

The organization has a user paid model combined with viability gap funding, with 24 out of 26 clinics being self-sustainable based on patient fees. 40% of their revenues come from medicines, 30% from specialist fees, 20% from diagnostics, and the rest from GP fees. Karma's experience demonstrates that patients have a greater willingness to pay for specialists than GP [Table 2]:

Equity financing, philanthropy seeding, and grants have played a key role in the initial setting up of services and in gap funding.

AMRIT clinics

In the underserved, rural, predominantly tribal and urban migration prone areas of south Rajasthan, Basic Healthcare Services (BHS), an NGO, provides comprehensive care through a network of primary healthcare clinics called AMRIT. AMRIT Clinics have a user fee model supplemented largely with grants. Patients are charged INR 50 (US\$ 0.66) for out-patient care, INR 100 (US\$ 1.32) for in-patient care and INR 500 (US\$ 6.62) for natural deliveries, which includes consultation, drugs, and supplies. Annual expenditure of a clinic is approximately INR 24.8 lakhs (US\$ 32,828) of which 37% is operational cost. Social contracts with community members and partnerships with community and tertiary care institutions enable greater ownership, continuum of care, and reduction in costs. A major strategy adopted by BHS for delivering services is task-shifting: skilling and empowering primary healthcare nurses to provide

Table 2: Fee charged on different components of service at Karma Healthcare (in INR¹) (Source: Based on participant's presentation)

participant's presentation)						
Specialist fees	General physician	Medicines	Diagnostics			
INR 140 (US\$ 1.85) per visit	INR 80 (US\$ 1.06) per visit	On actuals (30% Discount on printed price)	On actuals (40% discount on printed price)			

care that is supported by a physician through tele-consultation and weekly visits, standardized protocols and checklists, and regular handholding and mentoring.

Community financing for primary healthcare DHAN foundation

DHAN Foundation, a community-based organization in India, has demonstrated the use of community financing model in setting up and managing primary health centers across different parts of India. Together, members of community collectives contribute to the health fund, which finances the health services, run by DHAN Foundation.

DHAN Foundation's primary healthcare financing relies on a subscription-based model derived through strong community participation. Due to the large scale of SHG participation, DHAN's model has evolved to have separate verticals to manage healthcare delivery (through "Suham" hospitals) and health insurance through "Nalam" insurance product [Figure 1]

Mutual sharing of risk coverage and greater community ownership make the model viable and successful.

The challenge in this model lies in mobilizing self-help groups and inducing voluntary memberships in large enough numbers in areas which are marginalized, impoverished, have low population density, or are remote.

Public-private partnerships

Organizations such as Karuna Trust and Basic Healthcare Services manage government Primary Health Centers under the public-private partnership (PPP) mode. In such cases, depending on the contract with the government, 25–100% of operational costs are borne by the government.

Karuna trust

Karuna Trust is a not-for-profit organization that had initiated public private partnerships in 1996 when it took charge of the management of a Primary Health Centre (PHC) in Gumballi in Karnataka, South India. Under the partnership, the government provided the infrastructure, equipment, drugs, and finance, while management, administration, service delivery, and community engagement were under the purview of Karuna Trust. The organization has its presence across five states in India with 66 PHCs managed under partnership with the Governments.

Nalam primary care mutual product

- Term product
- · Managed by the hospital/ clinics
- Premium: Rs. 200-300
- · Five members' family
- Benefits:
- Free consultation for multiple visits in OP and mobile clinics
- Medicine discount: 12–15%
- Lab discount: 25–30%

Figure 1: Specifics of Nalam primary care mutual product (Source: Based on participant's presentation)

Karuna Trust has introduced several process innovations such as tele-consultation, drones for medicine delivery, effective governance, and strengthening of community participation. Karuna Trust also uses local skills of the young tribal girls (7th and 10th grade pass) by training them as ANMs through programs accredited by the Nursing Council. The partnership has been critical in improving outcomes such as reduction in IMR, MMR and increase in institutional deliveries.

In terms of financing, initially Government used to bear only 25–75% of the operational costs. With the increasing trust between the parties, the Government now reimburses up to 100% of the operational costs. Karuna Trust sources the management cost, which is 10% of the total cost of operations, from external funders such as CSR arms of companies.

Basic Healthcare Services

Basic Healthcare Services (BHS) manages a PHC under a public-private partnership with the Government of Rajasthan since 2015, serving 25,000 people, predominantly tribal, in Dungarpur district.

Under the PPP, the government provides the existing infrastructure, communication materials, basic medicines, vaccines, and consumables, and incentives of health workers and beneficiaries. BHS manages human resources and quality standards in care giving. The Government contributes to 27% of the expenditure while BHS incurs the remaining expenditure by raising funds through donations.

The partnership has enabled BHS to provide comprehensive and high-quality primary healthcare, over and above the government mandate, including 24×7 emergency management, continuous drug availability, inclusion of male health workers, and surveillance activities. All this has led to a steep increase in the uptake of services in the community. The overall cost of managing the PHC has also reduced.

In PHC Gumballi (Karuna Trust) and PHC Nithauwa (BHS), PPP has been an effective mechanism for ensuring efficient and effective provisioning of primary healthcare. The political will, nature of contract emphasizing mutual trust and shared responsibility between the government and private player, responsiveness of the government payments and renewal of contracts, and ability of the non-governmental partner to maintain quality and raise deficit funds for operations, are key factors affecting success.

Financing through cross-subsidizing of primary care from tertiary care

Organizations that manage an integrated network of primary, secondary, and tertiary care services have the potential to cross-subsidize services at primary healthcare level.

LV Prasad Eye Institute (LVPEI)

LVPEI is a not-for-profit premier eye care institution that runs a network of vision centers (primary care), secondary care hospitals, tertiary care hospitals, as well as a center of excellence for eye care (quaternary care) [Figure 2].

This structure enables equitable pricing and access to integrated care as all levels of healthcare are owned by the organization. Patients at the primary care are not charged for services and the cost is subsidized by pricing at the secondary, tertiary, and quaternary level. In the year 2018–2019, across the levels, nearly 50% services were delivered free of cost and 115% of the operational costs were recovered.

Optimizing resources for delivering primary health care efficiently

Apart from financing mechanisms, optimization of existing and available resources was seen as critical for efficient service delivery. Task shifting and multi-skilling the primary healthcare providers emerged as effective and common approaches being used by many primary healthcare initiatives to improve coverage of services and to reduce cost.

Action Research and Training for Health (ARTH)

ARTH is a not-for-profit public health organization specializing in three program verticals: i. sexual and reproductive health, neonatal and child health, ii. mental health, and iii. care of elderly, as well as health systems research and policy. ARTH's model of primary healthcare is premised on skilling nurse midwives to provide a range of preventive, promotive, curative, and referral services in the vertical domains.

High quality training of the healthcare providers for delivering good quality care is critical and adds to the costs initially, but contributes to improved services and outcomes such as rise in institutional deliveries. A helpline in Udaipur enables smooth referrals of deliveries to tertiary care hospitals.

As an alternative to the model of incentivizing community volunteers, ARTH has a social marketing model where community health entrepreneurs are trained to sell basic primary healthcare products such as rapid pregnancy tests and contraceptives at a low cost in the community.

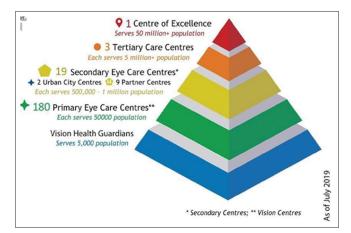


Figure 2: A pyramidal service delivery model of LVPEI (Source: https:// www.lvpei.org/about-us)

Financing primary healthcare: What works and what does not work?

The Consultation also focused on a discussion on different primary healthcare financing mechanisms and their impact on coverage, efficiency, equity, and quality. Key findings were drawn from a systematic review^[12] of 31 peer-reviewed articles and 10 grey literature reports on financing of primary healthcare systems in LMIC of the Asia-Pacific region. The key findings of the review and subsequent discussions were as follows:

- 1. Contextual factors and governance had an overarching impact on the outcomes, irrespective of the financing mechanism.
- 2. Availability of public insurance and removal of user fee had a strong positive effect on utilization of primary healthcare, reduction in out-of-pocket expenditure, and equitable access. However, operational challenges in implementing and scaling up such reforms were also observed in some studies.
- 3. Public private partnerships in providing healthcare, such as contracting-out of government health services to non-governmental players showed mixed results: while it had a positive effect on utilization, equity, and efficiency, quality was seen as a potential negative outcome.
- 4. Studies related to pay for performance showed mixed results in terms of its impact on coverage and equity.

Discussion

The different financing models discussed that came to fore in the Consultation have been summarized below [Table 3]:

The discussions elicited ways of making non-governmental primary care initiatives for low income and underserved populations sustainable while being equitable:

Leveraging resources

User Contribution

User contribution emerged as the most common form of financing among non-governmental primary healthcare initiatives. Population context and scope of services appear to determine the role of user contribution to finance health services:

Population context

In highly impoverished areas, the fee is likely to be lower due to low ability to pay. Such areas often also have a spread-out terrain that does not lend itself to significant volumes to compensate for lower fees.

Scope of services

Where the scope of services is primarily curative, user contribution as a proportion of total expenses is larger. In those where preventive services are more, the user fee contribution forms a smaller proportion.

Margins on health products

Margins on health products can offset low consultation fees and contribute to revenue. Some organizations undertake additional sale of health products such as spectacles, contraceptives, and healthcare technology.

Public Private Partnerships

PPP is an effective way of sharing resources and capabilities, especially in resource constrained settings. Evidence from BHS and Karuna Trust demonstrates how PPPs in primary healthcare have improved access and health outcomes in rural and tribal communities. Able governance, strong and credible partners, and political will are important parameters that enable the partnership.

Subscription model of financing

Subscription model of financing, as demonstrated by DHAN Foundation, shows a greater community ownership and access to

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	iKure	Karma	BHS- AMRIT	BHS -		DHAN	ARTH	LVPE
			Clinics	PHC	Trust	Foundation		
			I. Revenue source	ces				
User Fees - Fixed	Yes		Yes			Yes - Non members	Yes	
User Fees - Different for GP vs Specialist		Yes						
Charging for medicines	Yes					Yes- Non members		
Charging for other medical products	Yes						Yes	Yes
Subscription fees						Yes - Members		
Free service				Yes	Yes	Yes - Members		Yes
		II. C	Other sources of a	evenue				
Funds from Government			Govt. insurance	Yes	Yes		Govt. insurance	
			schemes for				schemes for	
			maternal health				maternal health	
			services				services	
Funds from donations	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Revenue from technology outsourcing	Yes							Yes
Capitation (funds from equity/venture	Under	Yes						
capitalists)	exploration							

services among rural and semi-urban communities. Building social capital by investing in community participation was acknowledged as critical for sustenance and scale up of the services.

Cross-subsidies

Cross subsidies from secondary and tertiary levels to primary level have shown to improve sustainability and access to health services through equitable pricing. However, this requires ownership of the entire integrated system of healthcare.

Deficit financing

Donations and grants in the form of philanthropic seed funding are commonly used to finance deficit and appear to be more amenable to serve marginalized populations. They also appear to be the preferred options among healthcare entrepreneurs.

Cost-reduction strategies

While it is desirable to improve revenues, it is equally, if not more, important to reduce cost of operations. Participant organizations used different ways to reduce costs:

- 1. By entering into social contracts (as opposed to commercial contracts), organizations such as BHS leveraged resources from communities (for the clinic infrastructure) and from referral hospitals (subsidized or free of cost referral care).
- 2. By shifting tasks, not only were scarce human resources optimized, but the cost of delivering services was also reduced. When coupled with appropriate technology and protocols, the quality remained high.

Increasing public health spending

The participants unequivocally agreed and iterated that private spending can complement but cannot replace the need for enhanced and adequate public spending, especially for the low income and underserved populations.

Distribution of expenditure in primary healthcare

A larger proportion of primary healthcare expenditure, across organizations, has been on curative services, reflecting the skew in provisioning as well. The group conceded the need for a greater emphasis on preventive and promotive services as well as on addressing social determinants of health.

Conclusion

Discussions in the consultation reaffirmed the value of increasing government expenditure in primary healthcare for improving population health. In view of government's inability to extend the reach in more rural areas, the consultation also reaffirmed the value of non-governmental initiatives in delivering primary healthcare. The Consultation generated learnings on how these initiatives can sustain the services at scale, while minimizing expenditure and improving efficiency.

Learning from the consultation has some clear policy implications. First, in view of the known impact of government primary healthcare expenditure on population health, it is critical that central and state government substantially increase budgetary allocations to primary healthcare. Second, public-private-partnerships have a huge potential to sustainably provide as well as finance primary healthcare in rural areas; and national and state governments should create robust and accountable frameworks for engaging non-governmental initiatives in delivering primary healthcare, especially in remote and rural areas. Third, non-government organizations need to identify and implement innovative mechanisms to sustainably finance and provide primary healthcare, through a combination of improving efficiency of operations, shifting tasks, cross-subsidising primary healthcare across levels of care or products, partnering with governments and enhancing community contributions.

Deliberations from the consultation advance knowledge around primary healthcare financing and build a dialogue around ways of sustainable financing of primary healthcare for achieving Universal Health Coverage, especially for underserved populations living in rural areas of India.

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Conflicts of interest

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