Financing Primary Healthcare: Models from India

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Authors

Oishika Roy
Research Assistant, Center for Healthcare, Indian Institute of Management Udaipur

Vedha Ponnappan
Co-Chair, Center for Healthcare and Faculty, Indian Institute of Management Udaipur

Prakash Satyavageeswaran
Co-Chair, Center for Healthcare and Faculty, Indian Institute of Management Udaipur

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Abstract

This report studies the much-deliberated question of how to finance primary healthcare, contextualizing its scope to the Indian healthcare landscape. The report recognizes some of the concerns with the state of primary healthcare delivery and usage in India, namely, low and delayed utilization, high out of pocket expenditure, lack of comprehensive primary care services, and barriers to the long-term sustainability of providers. Given these realities, the report looks at exemplar primary healthcare providers and their successful financial models to see what works and how can it be replicated. It also analyses the models using the lens of equity in healthcare delivery, and sustainability and scalability of the providers. Based on in-depth and nuanced understanding of these models and their contexts, the report proposes a financial model framework that encapsulates the main types of primary healthcare financing models in India, with succinct suggestions on financing options for private primary healthcare providers.

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Financing Primary Healthcare: Models from India

Introduction

The Indian healthcare system, where free and public primary healthcare is designed to be accessible to its population of 1 billion, is one of the biggest in the world.[1] However, the current Indian healthcare system and infrastructure contain some fundamental gaps and weaknesses.[2] Between often poorly managed public provisions with limited outreach initiatives, and expensive private healthcare providers, the average Indian has limited healthcare options to avail. Navigating such limited and expensive healthcare is significantly more difficult for lower-income groups, who risk severe poverty to access necessary medical services. In fact, gaps and weaknesses lie not only in the healthcare infrastructure, but also in people's approach towards accessing healthcare — both infrastructure and attitude towards infrastructure are inextricably linked. As Nachiket Mor[3] makes evident in his article on financing India's primary healthcare, recipients of healthcare may "under-value and under-consume primary care", delaying care until they are more severely ill, leading to higher expenditure on "higher levels of care".[4] Both, a weak and fractured network of healthcare providers, and perhaps consequently, an 'avoid-until-too-late' consumer mentality, collectively translate to an exorbitant level of out of pocket (OOP) healthcare expenditure (42% of total health expenditure; India "ranked 15th out of 188" for high out of pocket expenditure (OOPE)[5] [6]). Despite this high amount of spending, India has very poor access to primary healthcare (PHC), especially in comparison to other countries that see similar OOP spending.[7] The problem, then, is extreme; people are spending unsustainable amounts for healthcare, while not benefiting from good, effective treatments.

On the supply-side, private PHC providers often struggle with balancing financing service provision viably and making it affordable for lower-income groups. Service-hopping behavior of customers leads to lower footfall and utilization of PHC, resulting in providers seeing inadequate revenue from service provision. Further, in an endeavor to keep prices low and accessible for the underserved, organizations are unable to pass on their operational costs to the consumers, suggesting an inability to cover costs through conventional financing means. The combination of poor footfall and low prices that do not cover costs calls into question the long-term sustainability

[1] "Understanding India's Healthcare System," International Insurance, https://www.internationalinsurance.com/health/systems/india.php
[2] Devi Shetty, "How India can Provide Healthcare for All," *BMJ* (2012): 1.
[3] Nachiket Mor, "Financing for Primary Healthcare in India" (2020): 3.
[4] *Ibid*
[5] TR Dilip and Sunil Nandraj, "Why India's recent report on a fall in out-of-pocket health expenditure may not be accurate". Scroll.in, 2021, https://scroll.in/article/1012059/why-indias-recent-report-on-a-fall-in-out-of-pocket-health-expenditure-may-not-be-accurate
[6] World Health Organization, "Health Expenditure Profile," India, in *Global Health Expenditure Database.*
[7] Mor, "Financing for Primary Healthcare in India," 3.

of these organizations, highlighting the uncertainty that plagues a private PHC providers' financing and service trajectory.

This report recognizes this widespread dilemma concerning both the consumers and providers of PHC. In response, the report explores the different kinds of financial models that have been implemented in various contexts in India that can offer frameworks for other Lower- and Middle-Income Countries (LMIC) facing similar issues of high OOPE, low utilization, and unsustainable financing. In doing so, the article suggests various financial mechanisms and institutional changes that PHC providers can establish to cut down OOPE while maintaining financial sustainability of the organization and making PHC more accessible to the typical underserved patient.

The aim of this paper, then, is to specifically explore and conceptualize the different financial models that can be adopted by PHC providers that are sustainable and can effectively serve the underserved population. The paper looks at various case studies from India to glean the financial models adopted by private healthcare providers, and discusses their strengths, weaknesses, and contexts. As the focus of this report is on financing primary care in India, this report limits its study of how resources were managed and which financial models have been implemented in Indian healthcare context, albeit the scale of implementation, which ranged from small towns to multiple states. The degree of scalability is a primary concern of this report and is discussed in more detail later.

Our collation of data on different organizations and their particular financing techniques provide us with some key findings:

1. No organization implements only one financing technique. They typically implement a combination based on their needs and context. The requirement for multiple financing sources is indicative of the difficulty in choosing and implementing appropriate financing techniques in order to both subsidize care and generate enough revenue to sustain operations. We find that the case-study organizations approach this challenge by using innovative combinations of financing techniques, often resulting in lower OOPE incurred by the target consumers. This is reflected in higher utilization rates as the services are more affordable for the consumers. Consumers are able to access PHC without facing the risk of healthcare induced poverty.
2. The financing models adopted by different organizations are dependent on contextual factors and service scope. We find some organizations effectively run using community generated funds, others cross-subsidize, and others fund it through donors. The ground realities drive the adoption of a suitable financing solution.
3. The financing options selected by the organizations also differ based on the nature of services provided. While these organizations strive to keep the core services affordable,

they may offer ancillary services that can help patients as well as bring revenue to sustain their operations.

Our study and analyses also allow us to build a conceptual framework to understand and effectively categorize different financial models in accordance with (1) the scale of service i.e., group/community vs. individual level financing, (2) the process of financing, i.e. direct vs. indirect, and (3) the relationship between funder and recipient. This framework is explored in more detail later in the report.

Finally, the report critically analyzes the various financing models using the lens of equity in service provision and long-term sustainability and scalability of the provider. It identifies the underlying factors that impact scalability and sustainability of low-cost PHC service delivery. It also presents the important contextual factors that facilitate or inhibit the selection of specific financing models.

Methodology

We use a case-study approach to understand the various financing model. We build the case studies in this report by consulting literature on different financing mechanisms in PHC and their examples; we collate a list of over fifteen organizations in the healthcare sector. We also look at exemplar organizations' websites to learn about different institutions' financial management, outreach strategies, and other priorities, gleaning the overarching financial themes and identifying the largely successful models. In keeping with the aim of this paper, we limit our scope to predominantly not-for-profit PHC providers, with few notable exceptions. According to the overarching patterns of models observed, we select exemplar organizations for case studies and assess their financial mechanisms, management strategies, and overarching health care principles and ideologies. Lastly, through interviews with healthcare professionals associated with the case study organizations, we further our understanding of the use of certain financing mechanisms and specific financial choices, along with their benefits and drawbacks.

Literature Review

The Alma Ata Declaration of 1978[8] formalizes the importance of Primary Health Care in building effective and expansive health-care systems that can provide care in a broader and more comprehensive manner. This importance is reiterated by the Declaration of Astana (2018), which further emphasizes the need for and one's right to equitable health of the highest standard through primary care.[9] The necessity of building sustainable and affordable PHC infrastructure lies in

[8] "Declaration of Alma Ata," World Health Organization, *International Conference on Primary Health Care, Alma Ata*. 1978.
[9] "Declaration of Astana," World Health Organization, *Global Conference on Primary Health Care, Astana*. 2018.

adequately premising higher levels of care and avoiding unnecessary long-term ailments. This need for PHC is more dire in LMICs such as India, which face an acute dearth of effective preventive and early care. Consequent to the realization of the importance of PHC in the healthcare sector, there are concerns regarding the effective delivery of PHC services. The Alma Ata Declaration as well as the Astana Declaration focus on the importance of PHC being universally accessible, regardless of one's socioeconomic status and geographic location. This principle of **equitable and accessible** PHC delivery suggests the need for innovative and progressive funding mechanisms that allow organizations to provide care to those who may not be able to pay substantially, or at all, for it. Many healthcare professionals and much literature attempt a foray into these concerns, aiming to study the effectiveness of different funding mechanisms in a variety of LMIC contexts. The literature also discusses the different parties involved in providing healthcare and their overarching objectives, different strategies involved in adequately meeting PHC goals, and finally, how to achieve the principal goal of equitable universal healthcare in delivering PHC. Among the private primary healthcare providers, **sustainability of operation and scalability** remains a primary driver in their financing needs, especially when delivering equitable and subsidized equitable care.

This section reviews the relevant literature to get a perspective on PHC delivery in LMICs and the successes and failures of different financing mechanisms. Through the literature, one observes that the different financing methods can be summarized into two overarching sources, consumer financed and supply-side financed. Within literature discussing consumer financed models, one encounters organizations financed by user-fees, services financed by insurance packages, and supplementary income-generation as a financing technique. Within supply-side financed models, one encounters financing from third party private organizations and government funds. The various literature propose these financial mechanisms given the variety of community and geographical contexts the organizations may be based in, assesses the effectiveness of said mechanisms, and often, propose solutions to financing challenges faced by organizations, and at a larger scale, by PHC providers in LMICs in general.

Consumer Financed - User Charges

Central to understanding how to finance provision of comprehensive primary healthcare is understanding the goals of primary healthcare delivery. Although different researchers understand these goals slightly differently, some key principles remain consistent across literature. To meet the ideal of universal access, many agree that primary healthcare provisions need to prioritize "coverage and accessibility, efficiency, responsiveness or equity"[10], and simultaneously, also focus on how to maximize service utilization[11]. A closer examination of these ideals suggests that

[10] Blake Angell et al, "Primary Health Care Financing Interventions: a Systematic Review and Stakeholder-driven Research Agenda for the Asia-Pacific Region," *BMJ Global Health* (2019): 2.
[11] Glaucia Maria Bon et al, "Implementation and Evaluation of Primary Healthcare Financing Strategies for Low-Income Communities of Rio De Janeiro, Brazil," *Socio-Economic Planning Sciences, Elsevier* (1987).

fundamental to the adequate realization of PHC goals is the prioritization of the experience, lifestyles, and constraints of the consumers within one's service delivery area. Given that equity is a key principle, the target consumer population would also include those who are typically underserved, suggesting that the service delivery must account for the specific needs, priorities, and challenges of the poor. User-fees as a financing mechanism, in this context, therefore, becomes a challenge when serving the underserved and poor.

Many of the papers considered in this review provide evidence against user charges, which, as fees imposed on consumers in return for the medical services, have a detrimental impact on various primary healthcare goals. Audibert and colleagues[12] find a 36% increase in deliveries in Benin and Mali after the removal of user fees and implementation of free cesarean section (FCS) policy[13]. This positively impacts women from lower-income backgrounds and rural settings, who now have "improve(d) access" to c-section deliveries.[14] The indirect impact of the FCS policy, as understood by the quasi-experimental study, is an increase in general facility birth and a decrease in neonatal mortality.[15] Angell and colleagues[16] support the assertion that the 'user fees' financing mechanism has an inverse relationship with service utilization and affordability, and impacts consumers negatively through increased out of pocket expenditure (OOPE). The review paper finds that the removal of user fees saw an increase in the "use of outpatient care"[17] services, "reduced out-of-pocket health care expenditure"[18], and increased coverage.[19] One therefore finds the user fees mechanism conflicting: while having a clear, consistent financing source such as user charges does help improve quality of healthcare and accountability of healthcare providers to consumers, it also makes PHC that much more inaccessible to those who cannot afford to pay the user charges.

Most organizations that experiment with user fees as a financing mechanism find one critical conflict: how does one maintain a "balance between recovering enough costs for the project to be viable and keep[ing] the costs low enough not to deter potential users".[20] Bon and colleagues[21] further nuance our understanding of paying for PHC services. In an effort to finance larger PHC services, PHC organizations in Rio de Janeiro take up a variety of financing mechanisms, including community health insurance, user charge, philanthropy, and cross-financed subsidy. In practice, this means that some services that were previously free, when made

[12] Martine Audibert et al, "Removing user fees to improve access to caesarean delivery: a quasi-experimental evaluation in western Africa," *BMJ Global Health* (2017).
[13] *Ibid*
[14] Audibert et al, "Removing User Fees," 6.
[15] Audibert et al, "Removing User Fees," 5.
[16] Angell et al, "Primary Health Care Financing Interventions".
[17] Angell et al, "Primary Health Care Financing Interventions," 5.
[18] *Ibid*
[19] Angell et al, "Primary Health Care Financing Interventions," 6.
[20] Patricia Diskett and Patricia Nickson, "Financing Primary Health Care: An NGO Perspective," in *Development in Practice* (1991).
[21] Bon et al, "Implementation and Evaluation of Primary Healthcare Financing Strategies".

chargeable in order to finance other services, see a fall in utilization.[22] This fall can be attributed to the existence of alternative PHC providers, a reluctance to pay for a previously free service, or an inability to afford the service when charged. One gauges, therefore, that user charges, given their effect on utilization and affordability, need to be implemented carefully and creatively. Even if charges are only implemented to make other services more affordable, a form of cross-financing, the technique falls short as a financing mechanism when implemented on the incorrect service, while also compromising the core principle of equity and accessibility.

Consumer Financed – Insurance

Insurance packages, another type of consumer financed funding mechanism, implement fees from users slightly differently. Typically, the financing mechanism takes the form of premiums collected from the target catchment consistently, whether that is a community or the nation-wide population, to offer medical services free or at a highly subsidized rate when the need for the service arises. Insurance is implemented in many ways, with different scales of target populations, and schemes ranging from progressive to regressive. Therefore, the funding mechanism's performance on principles of equity, efficiency, accessibility, and sustainability differ. The nuances of the different versions of insurance schemes and their performance on these key PHC metrics will be discussed in this section.

According to Acharya and colleagues, equity is not only ensured through making services financially accessible to lower-income groups, but also through the specific tailoring of service provision to the needs of the most vulnerable of the target consumer population. They find that the most successful Community Health Insurance (CHI) schemes, i.e. the ones that most effectively actualize PHC goals, are comprehensive in their service delivery, and constantly dynamic so as to adequately meet the needs of the community,[23] suggesting that effective interventions consistently assess and incorporate the needs of its populations in service delivery. Service delivery projects must be premised with a "needs assessment for the area",[24] where community perspectives and priorities are incorporated into the designing of a comprehensive PHC system. CHIs, therefore, are only good financing options when the sense of collaboration, collective mindsets, and community is strong in an area,[25] [26] [27] and there is a sense of local trust.

Insurance is also implemented by PHC providers as a personal health insurance mechanism. This allows the mechanism to be applicable to a more diverse range of localities and

[22] Bon et al, "Implementation and Evaluation of Primary Healthcare Financing Strategies," 96.
[23] Akash Acharya et al, "The landscape of community health insurance in India: An overview based on 10 case studies," *Health Policy* (2006).
[24] *Ibid*
[25] Bon et al, "Implementation and Evaluation of Primary Healthcare Financing Strategies".
[26] Swathi S Balachandra et al "Lessons for the Design of Comprehensive Primary Healthcare in India: A Qualitative Study," *Journal of Health Management* (2022).
[27] Diskett and Nickson, "Financing Primary Health Care," 48.

less money to be invested in non-medical activities, while still having PHC financed by the community and consumers. Diskett and Nickson, and Acharya and colleagues imagine the personal insurance within the not-for-profit organization (NFPO) setting, which can manifest in multiple ways: 1. NFPOs manage their own insurance schemes and collect premiums themselves, suggesting they bear the risk of insuring their consumers themselves[28] 2. NFPOs recruit insurance companies and act as intermediaries between the consumers and the company, and bear insurance risk together.[29] While the personal insurance mechanism might not be premised upon a sense of community, it still benefits from an implicit community cross-subsidization where "the healthy subsidize the sick",[30] more so when the premiums are allotted based on wealth, with the poorest benefiting from most subsidies, and the rich paying full price.[31] Since the financial "risks are shared [amongst the healthy and sick, and poor and rich], the system is progressive rather than regressive".[32]

However, the progressivity of a personal insurance scheme is not always guaranteed, especially in settings outside philanthropic institutions such as the NFPO PHC providers. In fact, empirical evidence suggests that the risk with such personal insurance mechanisms lies in their propensity to be regressive. Asante et al find that private insurance in LMICs in the Asia-Pacific region are often less progressive than community insurances, and that such schemes are usually regressive in LMICs in the Sub-Saharan Africa region. Ally et colleagues[33] find that Tanzania's National Health Insurance Fund (NHIF), a personal insurance involving formal workers, is progressive, while the Community Health Fund (CHF), which insures informal workers, is regressive. The former imposes a progressive premium, where one's contribution is proportional to their wealth, while the latter, insuring typically poorer informal workers, imposes a flat-rate premium. This simple difference between the two premium strategies is the fundamental difference between the schemes' regressivity/progressivity, and therefore, determines how equitable they are as PHC financing schemes. Tanzania's case study, then, allows us insight into the relevance of progressive payment rates as a financing mechanism for PHC organizations.

Consumer Financed – Subsidiary Services

Subsidiary services, as a financing technique, involve receiving funds from consumers that may or may not be directly connected to consuming healthcare services offered by the organization; the financing is raised through paid services that are adjacent to the primary healthcare provision activities of the organization.

[28] Acharya et al, "The landscape of community health insurance in India," 227.
[29] Acharya et al, "The landscape of community health insurance in India," 228.
[30] Diskett and Nickson, "Financing Primary Health Care," 47.
[31] Diskett and Nickson, "Financing Primary Health Care," 48.
[32] *Ibid*
[33] Mariam Ally et al, "Who pays and who benefits from health care? An assessment of equity in health care financing and benefit distribution in Tanzania," *Health Policy and Planning* (2012).

Income generation through subsidiary services invariably includes sale of medical products, such as drug sales and revolving drug funds[34], where certain generally cheap and commonly used drugs are sold at suggested markups to the general population, with the surplus being used to subsidize drug costs to vulnerable populations. It can also take the form of diagnostics services. The more creative version of income-generation, however, includes sale of non-medical services and products. Mor cites this financing mechanism as one of the two broad categories of mechanisms that can be implemented to circumvent the specific challenges of financing PHC: "charge [excess] for scarce non-health services", like self-help group loan premiums[35], or "monetization of other sources of value", like ecotourism ventures[36] to finance welfare PHC programs. This idea of generating funds from alternative sources is reiterated in the techniques discussed by Lokman and Chahine; subsidizing medical costs from revenue generated from "alternative streams",[37] like the sale of self-developed medical management technology to other organizations, or the sale of eyewear to the general population.[38] Such a method does not compromise the core PHC objectives of equity and accessibility and enables the service delivery organizations to sustain their services. However, it is important that the charged services, while adjacent to the main healthcare services provided, should not adversely impact the poor and the vulnerable and make services inaccessible.

The financing mechanisms considered so far require contributions from consumers, whether that is in the form of user charges, insurance premiums, or income from adjacent activities, suggesting that they are consumer-financed. Literature studying these techniques allow exploration of the challenges involved with these techniques and the importance of considering context while implementing said techniques. The literature studied, effectively premising context for the case studies to be explored in this report, also focuses on financing mechanisms where the bulk of the funds are not from the consumers of the services. Instead, they are arranged by PHC providers, 'supply-side financing'. The types of financing encountered in this bracket are from corporates or foundation supplied grants, funding from philanthropic endeavors, or from government through Public-Private Partnership (PPP). The former two financing sources can be summarized as financing from third party private sources.

Supply-side Financed: Third Party Private Financing

Third party private sources of financing manifest in multiple ways, whether that is in the form of philanthropic activities like corporate social responsibility (CSR), charity work, or a for-profit endeavor by a franchise-leading company. The latter type of third-party financing is discussed deeply in the literature studied during this report. Balachandra et al cite such a financing

[34] Asante et al, "Equity in Health Care Financing in Low- and Middle-Income Countries," 46.
[35] Mor, "Financing for Primary Healthcare in India," 6.
[36] Mor, "Financing for Primary Healthcare in India," 7.
[37] Chahine and Lokman, "Business models for primary health care delivery in low- and middle-income countries," 6.
[38] *Ibid*

model, 'Social franchising model',[39] reminiscent of "commercial franchising" where PHC providers "join a franchise network"[40] that is overseen by an organizing institution with resources. Being a part of such a franchise gives organizations access to the overseeing institution's brand, along with the organization's large general consumer base and high-quality training that would have otherwise been expensive. Affiliating with a social franchise, then, offers the organization more revenue generation opportunities, therefore allowing them to effectively cross-subsidize as well as lower costs. Lokman and Chahine, however, caveat this kind of cross-subsidization, claiming that it is only largely effective in "specialized care social enterprises",[41] and would be harder to manage for broader PHC endeavors. Instead, they suggest that such organizations that provide a broader range of PHC services, can cross-subsidize across services like "optometry, diagnostics, and HIT sales to subsidize clinical consultations".[42]

Supply-side Financed: Government Financed

Private PHC providers sometimes enter an arrangement with the government through public-private partnership (PPP) to provide PHC services using government infrastructure and facilities. The partnership involves both parties collectively financing PHC with the private provider managing and providing the healthcare services. A variety of versions of this partnership are implemented and studied in the literature. Acharya's study of CHIs in India offers one such version of PPP: many of the CHI programs that the paper considers required "external subsidies to meet the deficit between income and expenditure", which is often provided to the organization either by external government funds, or external donations.[43] In the case of the former, the government, through basic funding or the availing of schemes, aids PHC providers in covering costs that the organization is not able to through their revenue. In the case of Singapore's recent PHC initiative, the partnership manifests differently, reasserting the value of the PPP in making PHC more accessible for the vulnerable. In an initiative called the 'Community Health Assist Scheme' (CHAS), "Singaporeans (are able to) seek primary care at private clinics and still enjoy government subsidies".[44] This PPP scheme, then, allows consumers to pay only a portion of the market cost of PHC, while the remaining costs are covered by government funds, allowing vulnerable populations access to good quality private healthcare that would have otherwise been unaffordable. Although private organizations, then, are providing the services, the burden of financing falls on the government, not the organization. Singapore's healthcare infrastructure also includes "family medicine clinics, partnerships between public hospitals and private primary care groups",[45] which looks to normalize and make more accessible PHC, and limit unnecessary hospital visits and subsequent health risks from delaying care.

[39] Balachandra et al, "Lessons for the Design of Comprehensive Primary Healthcare," 34.
[40] Balachandra et al, "Lessons for the Design of Comprehensive Primary Healthcare," 35.
[41] Chahine and Lokman, "Business models for primary health care delivery in low- and middle-income countries," 9.
[42] *Ibid.*
[43] Acharya et al, "The landscape of community health insurance in India," 230.
[44] Jeremy Lim, "Sustainable Healthcare Financing: The Singapore Experience," *Global Policy* (2017): 107.
[45] Lim, "The Singapore Experience," 108.

Although there exist many benefits of public-private partnerships in financing, managing, and increasing utilization of PHC, Gupta and Roy's detailed study of PPP in West Bengal, especially in the case of providing diagnostic services, also highlights the drawbacks of such a partnership if not adequately assessed and monitored. The study finds that in the absence of good government diagnostic services, the state government of West Bengal recruits private providers of diagnostic services in a PPP, with the government referring consumers to these providers and covering some of the providers' key costs. A user fee is charged at these clinics. This partnership results in government diagnostic services shutting down, allowing the private providers to monopolize the diagnostic services market in the area. Eventually the private providers are able to effect price hikes,[46] without any policing from the West Bengal state government due to the strength of private providers in the public health system. Any fall in utilization is made up by the increases in prices. This case study allows one to realize the pitfalls of over-privatization, especially when the private organizations in question are not committed to the PHC goals of universal access. The study also suggests the importance of both parties - the private and public - closely monitoring the other for the PPP to be effective.

The popularity of such arrangements and the requirement for external funds and donations, whether government, corporate, or international, suggests the difficulty in financing PHC endeavors that look to provide healthcare to the underserved. As discussed, implementing user charges is often accompanied with the difficult challenge of earning revenue while keeping prices low; this dilemma is also true, to a certain extent, in premium-based insurance programs that require consumers to pay, however little, for PHC services. Mor effectively analyzes these challenges, summarizing the core difficulty of PHC financing in two categories: firstly, primary care is very price-elastic, with every increase in price witnessing a disproportionate decrease in utilization and demand,[47] and secondly, PHC in particular, witnesses high provider switching, where consumers rarely commit to PHC providers, due to inadequate quality, scarce trust, or a mismatch in demand and supply.[48] These challenges in financing and providing PHC are magnified in instances of self-financing as it would imply larger changes of increasing prices, suggesting more frequent falls in demand, and weaker revenue streams, given the high rate of provider shifting. The idea of sustainability, therefore, while widely strived for, is a tenuous one, differing widely across contexts with urban providers finding it more attainable than providers set in rural or tribal areas. This could be attributed to higher purchasing power in urban areas even among the vulnerable,[49] and more opportunities for cross-financing.

Many academics, healthcare professionals, and providers are unconvinced of the net value of this self-sufficiency ideal, given that self-sustaining operations often translate to higher user

[46] Gupta and Roy, "Public-Private Partnership and User Fees in Healthcare," 75.
[47] Mor, "Financing for Primary Healthcare in India," 3.
[48] Mor, "Financing for Primary Healthcare in India," 4.
[49] Balachandra et al, "Lessons for the Design of Comprehensive Primary Healthcare," 39.

costs and therefore, financial burden on vulnerable users. One must therefore be wary of the extent to which striving for self-sustainability is desirable[50] and further, its impact on utilization, long-term sustainability, scalability, and universalization of PHC. As has been suggested by Mor, to be able to adequately finance and sustain PHC provision for the underserved, one must adequately consider the demand of the consumers, for both the service and the type of financing mechanism and perhaps more importantly, the lack of demand for PHC, encouraging providers to innovate creative provision mechanisms that do not necessitate up-front payment for PHC. One must then ensure effective supply mechanisms to meet the demands of the consumers while focusing on financial mechanisms that are sustainable, progressive, and scalable.

Case Studies

Having understood the context of and challenges faced in funding primary healthcare in LMICs through literature, we now consider examples of exceptional primary healthcare organizations in India that manage to provide affordable care to a large segment of population and at the same time successfully and sustainably finance their operations. We collate a list of multiple such organizations in India, analyze their financing methods and performance on the basis of equity, sustainability, and scalability, and select the following seven organizations' financial models for further study. Each model selected adopts and implements a different kind of financing technique, namely the PPP model, cross-subsidy model, community sourced model, user fees model, grant-based model, and CSR funding model. The following table summarizes the key characteristics of the organizations studied, allowing insight into the kind of services they provide, the contexts they operate within, and the model they implement. The table also allows us to understand, at a glance, the degree of their impact in how many people and communities they have served, and the nature of their operations, whether horizontal across only primary healthcare, or vertical across the primary, secondary, and tertiary levels of care.

Organization	Context	Service Type	People Served (Impact)	Price-Model (Consumer)	Framework Position	Nature of service delivery	Area of Operation
Karuna Trust	Rural, Tribal	Preventive, Promotive, Curative, Palliative	1.5 million served, 71 PHCs across 6 states	Premiums for CHIs, free care at PHCs	PPP - Financed by community through government	Horizontal	Karnataka, Orissa, Arunachal Pradesh, Meghalaya, Uttarakhand, Tamil Nadu
Aravind Eye Care System	Urban, Rural	Curative (Primary, Secondary, Tertiary)	7.8 million surgeries, 60 million outpatient visits	Free/ subsidized for 50%, full price for 50%	Cross-Subsidy - Financed by community through organization	Vertical	Tamil Nadu

[50] *Ibid.*

Organization	Context	Service Type	People Served (Impact)	Price-Model (Consumer)	Framework Position	Nature of service delivery	Area of Operation
DHAN Foundation	Rural	Preventive, Promotive, Curative		Premiums for CHIs, free care at clinics, subsidized medicines	Community Sourced - Financed and managed by community	Horizontal	Tamil Nadu
Swasth Foundation	Urban	Preventive, Curative	937,538 visits, 185,454 families registered	Subsidized (50% of market rate) cost for care, low enrolment rate	User Fees - Financed by Individuals	Horizontal	Mumbai, Maharashtra
Karma Healthcare	Semi-urban, Rural	Preventive, Promotive, Curative	Over 73,000 visits	Low but full cost of services, waiver when necessary	User Fees & Grant - Financed by Individuals/ Philanthropic Groups	Horizontal	Rajasthan, Madhya Pradesh, Haryana
Basic Healthcare Services	Rural, Tribal	Preventive, Promotive, Curative	2,75 lakh patients served	Rs. 50 for out-patient care, Rs. 100 for in-patient care	Grant & PPP- Financed by third-party organizations and government organizations	Horizontal	Rajasthan
iKure	Urban, Rural	Preventive, Curative	25 million served	Rs. 50 for General Practitioner	CSR Funding - Financed by Private Corporations	Horizontal	West Bengal, Jharkhand, Karnataka, Assam, Odisha

A case study for Public-Private Partnership: Karuna Trust

Karuna Trust was founded in 1986 in Karnataka. The trust began by working on healthcare infrastructure improvement, specifically in the realm of leprosy eradication, in the tribal parts of Chamarajanagar District in Karnataka. Karuna Trust primarily delivers PHC through PPP mode, with an objective to showcase effective delivery and innovations in public primary healthcare services with a limited budget. Mr. Venkat Chekuri, Secretary of the Trust, says that the original objective of the PPP was to understand the gaps and demonstrate the innovations possible in the PPP model, hoping to encourage and enable other PHC operations to learn and improve. In order to meet this goal, the trust is successfully running over 70 government PHCs across seven Indian states.[51] The depth and breadth of the organization's success in improving rural and tribal primary healthcare systems suggests a sustainable and effective healthcare delivery model. Karuna Trust's financial model consists of funding the core components of service through the PPP and delivering specialized services such as dental or mental health for which government funds are not available, through CSR/Donor funding.

In the PPP model involving Karuna Trust and different state governments, the government funds parts of the costs of running government primary healthcare centers and operations. In the case of Karuna Trust, this support manifests in the form of the state government providing the means for "infrastructure, equipment, drugs, and finance",[52] and HR costs for "HR sanctioned posts", as was made clear by Chekuri. Apart from this, Karuna Trust also utilizes other funds provided for specific programs, such TB or mother-and-child care (*Janani Suraksha Yojana)*, and other untied funds through the National Health Commission. The remaining management and service costs are incurred by the trust itself through long-term partnerships with donors and corporates.

Key to this PPP operation is also a level of trust between the organization and the community it works within, which is developed through community engagement and training programs. Along with these financial models that work together to create a robust system, Karuna Trust lowers its costs by organizing said training programs for local women and girls and employing these trained professionals within their organization.

There lie many specific benefits to be gleaned from the partnership. As Chekuri makes clear, while the government is only concerned with medical treatment, NGOs like Karuna Trust inculcate within the system different medical perspectives, like that of public health. The partnership between the government and Karuna Trust also allows the Trust to explore and develop the healthcare system beyond ad-hoc crisis management and include on-ground learnings consistently in policy. A partnership therefore allows the scope of the government's agenda to be broadened by including multiple different kinds of experts and stakeholders in healthcare dissemination. However, Chekuri insists that such a partnership is only successful when the partnership between the private and public parties are strong, and the private parties have access to the government and agency to administer changes within the system. In the absence of such a relationship, the impact of private insight and action is neither long-lasting nor sustainable. There is therefore a need for "comprehensive planning and thinking"[53] amongst multiple government departments and the private parties concerned. One therefore realizes that fundamental to an effective and functional PPP arrangement is a good, equal relationship between the private organization and the public bodies so as to adequately address the concerns and demands of the private organizations. This is only possible if the government organizations concerned are credible and motivated, and if there exists sufficient scope for a consistent and reliable check-in system and accountability from all stakeholders. Further, in cases where governmental bureaucracy makes access to funds and resources difficult, the private organizations involved in a PPP partnership need reserves to tide over until funds are secured. The requirement for a reliable source of non-

[52] Manisha Dutta et al, "Financing Primary Healthcare for Rural Areas," *Journal of Family Medicine and Primary Care* (2020).
[53] From an interview with Mr. Chekuri

governmental funds, therefore, implies a need to form relationships with other organizations that can provide funds, such as corporates, banks, or philanthropic foundations.

Other healthcare foundations, such as Deepak Foundation and the Merrygold Healthcare Network, also follow the PPP model. In these cases, the PPP model manifests differently, in the form of government grants, or the authorization of government schemes. While PPP can help in demonstrating efficient and effective public healthcare delivery through private players in select places, the ultimate responsibility for public PHC units remains with the government. An increased budgetary allocation can help in making the PHC service delivery more effective.

A case study for Cross-Financing/Subsidization Model: Aravind Eye Care System

Aravind Eye Care System was founded in 1976 under the GOVEL Trust in Tamil Nadu to tackle avoidable blindness.[54] The operation currently spans a network of eye care facilities, a postgraduate institute, a management training and consulting institute, an ophthalmic manufacturing unit, a research institute, and eye banks, with 14 eye hospitals, 6 outpatient eye examination centers, and 80 primary care facilities. The services provided range from vision screening in outreach, to first level of care at the primary vision care centers, to a tertiary and specialized hospital set-up, for which the outreach and primary care arms serve as demand generators. Aravind Eyecare has a 'get one, give one' philosophy, where every fully-paid service is matched with a free or largely subsidized service. In this manner, the surplus earned by the Aravind system itself equips the organization to finance the free wing of the organization.[55] A conversation with Dr. R. Krishnadas, Director of Human Resources at Aravind Eye Hospital, helps us nuance this model further. Krishnadas elaborates that the 'get one, give one' model, or the multi-tiered cross-subsidy model, is effective at Aravind due to two core practice principles, standardization and efficiency. In action, these principles translate in making sure that surgical processes, like sterilization and patient preparation, are broken down to replicable steps that are strictly followed, and that "all the resources, including manpower, equipment, and consumables are optimally utilized to give maximum benefit at the lowest cost." The idea of making best use of resources at the lowest possible cost can be understood as the 'no frills business model', which strives to make the medical and management process of eye care efficient. Likened to a 'fast-food assembly line', Aravind's process technology allows the operation to conduct more procedures and offer services to more people than other eye care organizations in a given time duration.[56] Aravind makes this process most efficient by ensuring that only the most specialized, skill-heavy parts of the procedure are carried out by the surgeons, while the remaining parts of procedures are carried out by nurses. The principles of standardization and efficiency allow Aravind to keep its costs low, and their large volumes allow them to benefit from economies of scale, thereby ensuring that they are able to effectively provide cross-subsidized free services.

[54] "About Us," Aravind Eye Care System, https://aravind.org/our-story/.
[55] "Aravind," Business Model Toolbox, https://bmtoolbox.net/stories/aravind/.
[56] *Ibid*

The principle of low-cost operations permeates down to Aravind's running of its primary care centers, or vision centers. Despite being able to provide highly subsidized, often free primary eye-care, these vision centers are operationally sustainable. While the set up for vision centers uses donor funding for the capital expenditure, the operations themselves are self-sustained through non-core peripheral revenue generation activities, such as sales of spectacles sourced from the in-house "optical dispensing unit in the base hospital".[57] Since Aravind manufactures the spectacles themselves, as well as medical products such as lenses and injections for chronic conditions like diabetic retinopathy, they are able to provide these products at lower costs to patients, which makes their services more affordable.

The Aravind cross-subsidization model works in multiple fields to adequately address both its 'mission' target population and its 'revenue' target population.[58] For example, the organization holds free eye-camps in local communities to encourage the typically underserved, who cannot afford adequate eye care, to get their eyes checked and if required, follow up with the appropriate medical care.[59] In this way, Aravind markets its services to the underserved. The organization also markets itself as a good fit for those that can pay full costs for their services by providing high quality services as well as by offering a more premium stay at their facilities. Their focus on research and use of cutting-edge technology to provide the best possible ophthalmic services to the patients further attracts people who demand and are willing to pay for high-end specialized services. They do not change the quality of the medical service based on payment status of the patients, but provide differential quality of non-medical services, like private rooms, bathrooms, and air conditioning. Aravind finds that the division between its mission and revenue services is nearly 50%, suggesting that their goal of cross-subsidizing is successfully realized. Key to an operation like Aravind, then, is its location. Aravind facilities are situated in diverse settings, both urban and rural, with vision centers in rural areas and secondary and tertiary facilities in urban areas. This allows the organization to attract customers who can pay fully for their services, while also allowing them to reach rural areas and treat the underserved population that struggle to afford healthcare. Krishnadas makes is apparent, it is "very important that (the facilities) are set up in ideal places where it is accessible to large populations". In cases where this accessibility was absent, the "vision centers have not been successful", and have had to shut down.

LV Prasad Eye Institute is another organization that primarily uses the cross-financing business model. In this case, the institute subsidizes primary healthcare costs through the network of secondary and tertiary healthcare services they offer. This implies that the organization uses the revenue generated from its secondary and tertiary services to effectively finance the primary care services for those that are unable to afford it. This model works only for organizations that own

[57] From an interview with Dr. Krishnadas.
[58] C. Gnanasekaran et al, "Spillover Effects of Mission Activities on Revenues in Non-Profit Healthcare: The Care of Aravind Eye Hospitals, India," *Journal of Marketing Research* (2018).
[59] "Aravind," Business Model Toolbox, https://bmtoolbox.net/stories/aravind/.

facilities operating at multiple levels of healthcare. One, however, realizes that both the organizations mentioned as examples of the cross-subsidy model have been eye-care organizations. The question that arises, then, is whether such a model is effective, or even possible, for other forms of healthcare services. Krishnadas believes that not only is such a model possible for other sectors of healthcare services, but also that there's a dire need for it as OOPE steadily increases. Krishnadas cites a few organizations and individuals in India following the cross-subsidy model outside of eye-care. One such organization is the Ganga Hospital in Coimbatore, which provides orthopedic, plastic, and recently, trauma surgery and care at an affordable rate through the cross-subsidy model. Other such examples include Dr. Devi Shetty's cardiac care hospital network "Narayana Health",[60] which has adopted the economies of scale and cross-financing model to provide affordable graft bypass surgeries, and Dr. Ravi Kannan's cancer treatment facility, Cachar Cancer Hospital and Research Center.[61] While Krishnadas agrees that eye-care perhaps lends itself more easily to the cross-subsidy and high volume-low cost model given the nature of eyecare and the high demand for cataract surgeries, he also insists that such endeavors are definitely possible with other forms of healthcare, and therefore, must be pursued to make healthcare more accessible.

Through the cases of both Aravind Eye Care System and LV Prasad Eye Institute, we see that the cross-financing model is an effective sustainable model that ensures affordability and equity in its service delivery. However, the cross-financing model is only possible if the circumstances of service provision allow it, that is if the catchment area of care has enough opportunity to cross-subsidize and maintain the 'give one-get one' model. Organizations considering the cross-subsidy model must also invest in standardization and process efficiency, and must have enough capacity to benefit from economies of scale, to be able to effectively carry out cross-subsidizing their services.

A case study for Public Health Insurance/Subscription Model & Community Based Funding: DHAN Foundation

DHAN Foundation, founded in 1997, targets development and poverty related problems in rural India. In 2007, the foundation began the 'Sustainable Healthcare Advancement (SUHAM)' institution to further "healthcare initiatives".[62] SUHAM works in 3 main areas: Community Health and Nutrition, Sanitation and Water, and Reproductive Care and Child Health.[63] Central to these areas is the idea of community or public health, which manifests in SUHAM's work. Along with community hospitals and healthcare centers that offer primary healthcare services, SUHAM also focuses extensively on community engagement. A few examples include 'Behavioural Change

[60] "About Us," Narayana Health, https://www.narayanahealth.org/about-us
[61] "Cachar Hospital and Research Center," Rural Hospital Network, https://ruralhospitalnetwork.org/?job_listing=cachar-cancer-hospital-and-research-centre.
[62] "Sustainable Healthcare Advancement (SUHAM)," Dhan.org, http://www.dhan.org/people-institutions/suham.php.
[63] *Ibid*

Communication' projects for preventive primary healthcare and setting up of community self-help groups for better discourse around primary healthcare and effective redressal of issues with the healthcare system. SUHAM also prioritizes training and capacity building of local residents, equipping the community to better run the healthcare centers and groups, and facilitating better knowledge flow within the community. From this understanding of SUHAM's operations, one understands that sustainable community-wide healthcare is important to DHAN Foundation's healthcare approach, along with the community's healthcare needs. Therefore, one of DHAN Foundation's key objectives is to develop and implement mechanisms for community institutions to finance themselves in a sustainable and efficient manner.

In line with this, the organization's key financing mechanism to improve health of community members includes a community health insurance subscription model. This model involves community members paying a relatively affordable subscription fee (200-300 INR) in return for free consultation in outpatient (OP) and mobile clinics, 15-20% medicine discount, and 25-30% lab discount. The organization's operations include primary healthcare units at federation level where primary healthcare services are provided at 60% of market price, making the services significantly more affordable. The organization opines that a minimum of 3,000 member households is needed to set up such self-sustaining and affordable primary healthcare units. These units help communities with early diagnosis, timely services, reduced and affordable cost of service, and cashless service. The community level ownership of the primary healthcare units also ensures that the demand is not fragmented, and the quality-of-service delivery is ensured. The organization supplements this cost-effective delivery of services with tie-ups with mainstream secondary and tertiary healthcare organizations within the community that can offer subsidized services for those who cannot afford full-price medical care and integrate community fundraising from philanthropic or government institutions as part of its community financing mechanism.

The subscription-based model, community fundraising endeavors, and relationships with secondary and tertiary healthcare providers, demand trust between all concerned parties. The DHAN Foundation and SUHAM, through its community engagement work and transparent service provision, encourages trust in their work, further allowing them to set up a potentially sustainable healthcare system. Key to setting up this system is also the context of the area in which it is being set up. DHAN Foundation's target communities are those that have significant community engagement and empowerment, allowing a suitable base for developing community social contracts. One must be cognizant of this caveat when attempting to implement such a model.

A case-study for Financing through User Fees in a For-Profit setting: Karma Healthcare

One of the key challenges of India's healthcare system is the non-availability of qualified medical professionals in rural and remote areas. While urban areas are flooded with qualified physicians and corporate hospitals, rural India lacks access to basic primary healthcare facilities.

Karma Healthcare, operating in Rajasthan, Madhya Pradesh, and Haryana, is a for-profit endeavor that aims to provide affordable healthcare to the severely underserved, specifically remote locations where healthcare reach is otherwise sparse. Karma's telemedicine model allows access to these locations through innovative digital interventions, like e-doctor clinics, which involve online consultations with doctors and in-person assistance from nurses. They also provide subsidized diagnostic services, access to specialists such as gynecologists, dermatologists, and pediatricians, and referrals to secondary and tertiary healthcare when required.

One of Karma's primary financing mechanisms is charging user fees. The organization believes that user fees are not only a promising source of revenue, but are also an effective means to convey the value of necessary medical services. Mr. Jagdeep Gambhir, CEO of Karma Healthcare, elaborates that user charges are often perceived as the value of a service or product, a phenomenon that applies both to equitable healthcare endeavors and other sectors. Therefore, he claims that user charges should be "the value that a customer is perceiving to pay" for the medical services, simultaneously acting as a means of revenue as well as a store of value for the service, possibly convincing consumers of the services' utility as proportional to its price. Reinforcing the value of the service through its price (or user charges), then, encourages consumers to consider the product valuable and therefore, worthy of consumption, prompting utilization. This idea of user charges standing for value takes material ground when one considers that good quality input is priced accordingly and therefore, must reflect in the cost of the final services. User charges can communicate to its targeted consumers its product's quality more convincingly than the cost-less nature of free services.

However, the organization recognizes the difficulty that lies in breaking-even, even making margin profits for investment return, through user fees alone. Karma accounts for these additional requirements through many health-care adjacent sources of revenue, such as business-to-business (B2B) technology products, value-added services and products for consumers, where Karma can effectively "monetize value".[64] The use of such revenue mechanisms suggests promising profit-making initiatives that allow the organization to go beyond simply a break-even sustainable model and begin becoming a commercially sustainable enterprise.

Karma's digital innovativeness makes preventive, curative, and specialized services more accessible, and allows services to be provided as well as received at a cheaper rate as patients avoid significant travel costs, time costs, and wage loss. These technological innovations, manifesting in the form of e-clinics and "mobile-linked, assisted care",[65] allow Karma to provide a variety of medical specialized services, and the services of specialized doctors like gynecologists and pediatricians, at a fraction of their typical costs given that doctors provide these services online through more convenient mediums. This allows Karma to achieve its profit goals while still

[64] From an interview with Jagdeep Gambhir, CEO of Karma Healthcare.
[65] From an interview with Mr. Gambhir.

maintaining low user charges, as fewer costs are passed on to the consumers. This fall in input costs, from the organization's perspective, allows it to attempt the balance between revenue earning and maintaining low consumer OOPE.

A conversation with Gambhir further allows insights into the use of user fees to Karma's for-profit model, and its relationship with its partners. Gambhir explains that at the start of their venture, Karma employed grants to lower burden on users; however, they faced pushback from their investors who perceived the use of grants as a sign that the organization's commercial ventures would be compromised. Karma decided then, to "put out a stated position that (the organization) is not going to pursue a grant-led clinic model".[66] However, grants could still be used strategically and innovatively outside clinic operations, to promote primary healthcare and conduct outreach projects. This creative design decision by Karma, to maintain grant funds while also successfully running a sustainable clinic model that attracts investors, allows some insight into the specific use of grant funds as a financing mechanism in its partnership with Smile Foundation, which will be discussed later in the case study for grant-based financing.

While there exists monetary, psychological, and strategic value to user fees as a financing mechanism in primary healthcare ventures, organizations hoping to make healthcare services more accessible to the underserved must recognize that many simply cannot pay regardless of perceiving value and quality in the services they may need. In such cases, there must be a protocol of waiving user charges to allow lower-income groups access to these services, an idea that resonated with all healthcare professionals interviewed for this paper.

A case study for Grant-based Financing: Basic Healthcare Services & Smile Foundation

Another organization that strives to take the primary healthcare services into the remote and rural India is Basic Healthcare Services (BHS). BHS, founded in 2012 in Rajasthan, is a NFPO with the goal of providing good, affordable primary healthcare in rural and tribal underserved communities. BHS' operations include two kinds of service delivery, financed by different methods. The first is a PPP arrangement with the government of Rajasthan[67] in running government PHCs. BHS' operations also include running AMRIT clinics, which provide comprehensive primary care in rural South Rajasthan, where public healthcare has little footprint. The AMRIT model makes use of telemedicine to ensure that physicians are accessible for consultation remotely round the clock. Nurses are present at the clinic to provide in-person primary care and to do outreach work in the target areas. Through social contracts with private hospitals and local self-governance bodies, AMRIT clinics are able to effectively engage with communities and refer patients for further care if required. AMRIT clinics are financed through a combination of nominal user fees from customers who can afford it, and grants from arrangements with

international organizations and foundations like UNICEF. The user fees include "Rs. 50 for out-patient care, Rs. 100 for in-patient care, and Rs. 500 for natural deliveries, which includes consultation, drugs, and supplies."[68]

Another iteration of the grant-based model is illustrated in the partnership between Karma Healthcare and Smile Foundation. Smile Foundation, a NFPO based out of Delhi, works on welfare projects that serve underprivileged children, families, and women through interventions in education, healthcare, skill development, and community engagement.[69] In keeping with Smile's governing ideas, the partner project between Smile and Karma attempts to bridge the disproportionate gap in healthcare provisions for women and children through 'Women and Child Health Focused' e-doctor clinics in Bhilwara, Rajasthan.[70]. The clinics work on both 'medical' and 'non-medical interventions' like malnutrition, anemia, and inadequate nutrition and clean water, problems often faced by women and children in underserved populations. Karma, as lead partner in the partnership, owns and is responsible for the telemedicine clinical operations[71] and technological provisions, while Smile, as secondary partner, manages outreach and community endeavors, and ambulance services. In other words, Karma is the delivery partner, while Smile works on on-ground awareness and engagement. The primary financing mechanism for this partnership is grant-based funding.[72] Smile Foundation received a grant from the Department of Foreign Affairs and Trade, Australia to implement women and children healthcare initiatives.

The BHS case study and the example of the Smile Foundation-Karma Healthcare partnership portray to us the value of such a grant-based financing arrangement. However, as was illustrated in the case study of Karma Healthcare, one must acknowledge the limitations of such a financing mechanism. For example, the model might not be suitable for for-profit organizations looking to attract investors, and might be a better fit for NFPOs. One must also consider whether the arrangement for procuring grants promises longevity and therefore, whether it is a sustainable financing source, and further, whether the other costs of procuring grants, like the labor and time involved in applying for grants, is worth the reward.

A case study for Financing through User Fees/ Subscription in a Not-for-Profit setting: Swasth Foundation

While remote and rural India faces accessibility issues in getting primary healthcare services, urban India, which houses 1/3rd of its population in slums, faces affordability problem in using primary healthcare services. People living in overcrowded urban slums that typically lack hygiene and sanitation, often find private player provided primary healthcare services out of their

[68] Dutta et al, "Financing Primary Healthcare for Rural Areas".
[69] "About Smile Foundation," Smile Foundation, https://www.smilefoundationindia.org/.
[70] "Business Plan," Karma Healthcare, Smile Foundation.

reach. Swasth Foundation came into existence to provide high quality primary healthcare services that is conveniently accessible and affordable.

Many of the organizations previously mentioned have a fee model for users incorporated in their financing. The kind and amount of fees taken by organizations wary. While many organizations take very small amounts of money that are insufficient to significantly contribute to financing the organization's service provision and operations, other organizations might take amounts that can sustain their services, at least partly. Swasth Foundation is part of the latter cohort, and in this case study we attempt to understand how their version of the 'user-fees' model and subscription model operates as financial model. However, it is equally important to understand other iterations of this model, in what capacity they might be implemented, and what purpose they serve.

Swasth Foundation was founded in 2009 in Mumbai to offer subsidized affordable primary and preventive healthcare to the urban poor. In 2011, the organization built its first health-care clinics, Swasth India Medical Centers, akin to neighborhood clinics, where they provided services at half the market price. Over the years, the Foundation has expanded to 17 clinics in Mumbai, and 2 in Ahmedabad. The organization has also launched new initiatives like Swasth Yog Institute, which aims to provide subsidized health-based courses for chronic diseases and disease prevention, and Aanand Aalaya, which is a community-based healthcare initiative aiming to spread awareness of chronic diseases, and create more preventive insight within the community.[73] Along with this, Swasth also provides subsidized dental care and cheap diagnostic services through centers linked to the NABL certified central Swasth diagnostic laboratory.[74] Swasth also has an efficient IT infrastructure- Swasth Live[75]- that allows it to efficiently keep track of medical records and administer treatment and streamline inventory and resource management.

Swasth Foundation aims for all its operations, as previously mentioned, to be self-sustaining. Currently 5 of the 17 clinics in Mumbai can fund themselves adequately and break-even, suggesting that the organization has begun realizing this goal, even though they do depend on significant portions of corporate and individual donations, trusts, and grants from foundations (70% of funding is through donations, 30% is through user fees).[76] Nevertheless, Swasth's innovative cost reduction mechanisms, which involves in-house drug warehouses, in-house pathology labs, reduced costs of employment through training of community members, and a centralized operational support model, allows them to expect break-even on a replicable unit within 2-4 years of its launch.[77] This significant streamlining of processes to reduce costs is aided by the user fees the organization charges for its services; while it is subsidized to half and therefore

[73] "About," Swasth.org, https://www.swasth.org/about.html.
[74] Anushka Kalita, Sundeep Kapila, and Michael R. Reich, "Delivering Primary Healthcare with Quality and Accountability in India: the case of Swasth," *Harvard T.H. Chan, School of Public Health* (2020): 11.
[75] Kalita, Kapila, and Reich, "The case of Swasth," 15.
[76] Kalita, Kapila, and Reich, "The case of Swasth," 16.
[77] "Our Initiatives," Swasth.org, https://www.swasth.org/our-initiatives.html#simc.

made more affordable for the patients, the organization is still able to cover at least half of the cost of its services through fees. The user-fees are as low as Rs. 30 for consultation, but medicines and diagnostics are charged at MRP. Swasth also offers an innovative and affordable pre-paid health card plan starting from Rs. 50 / card / year for free consultation to Rs. 200 / card / year for unlimited visits.

For Swasth Foundation, then, a combination of innovative supply side cost-efficiency, user fees, and health card plans allow them to run healthcare facilities sustainably a few years after the facility's launch due to a steady inflow of patients. One must examine the specificities of Swasth's context that allows it to effectively develop a user-fees model, especially in comparison to the other organizations considered in this report that do implement a user fee, but one that's largely ineffective for financing. One could speculate that Swasth's urban context allows for slightly higher purchasing power, allowing them to charge fees that, while subsidized, allow the organization to finance itself. It is also possible that the dense population in urban slums allow for greater footfall compared to far flung hamlets in rural areas. Such models of sustainable healthcare provision can go a long way in ensuring access and availability of subsidized primary healthcare for many people currently without any access to healthcare.

A case-study for CSR Financing: iKure

iKure, founded in 2009 and since served 25 million, achieves its goals of healthcare provision through technological innovations and research. The organization's core method of providing healthcare services is through clinics within a hub-and-spoke model of "3 hub clinics and 28 rural health centers".[78] Essential to the success of the model at iKure is the cloud-based 'Wireless Health Incident Monitoring System' (WHIMS), which allows the systematic monitoring and recording of key metrics, as well as allows rural health centers to communicate effectively and efficiently with hub clinics as well as partner secondary and tertiary hospitals.[79] iKure suggests that the WHIMS has immense potential to also manage diagnostic services on top of its current aid to curative services.[80] The organization manages its relationships in these rural communities through partnerships with local NFPOs to facilitate on-ground mobilization, garner trust in rural areas, and ensure resource-based help for logistical and infrastructural concerns.

Given the success of WHIMS and its value within the healthcare system, iKure has seen some CSR propositions from states beyond West Bengal, seeking implementation of the iKure healthcare framework in those states as well. One could then perhaps understand iKure's relationship with external corporate bodies as not simply donations or support, but perhaps as

[78] Atanu Chaudhuri, Venkatramanaiah Saddikutti, and Thim Prætorius, "iKure Techsoft: Providing Technology Enabled Affordable Healthcare in Rural India," *Asian Case Research Journal* (2018).
[79] *Ibid*
[80] "Technology," iKure, https://www.ikuretechsoft.com/technology/.

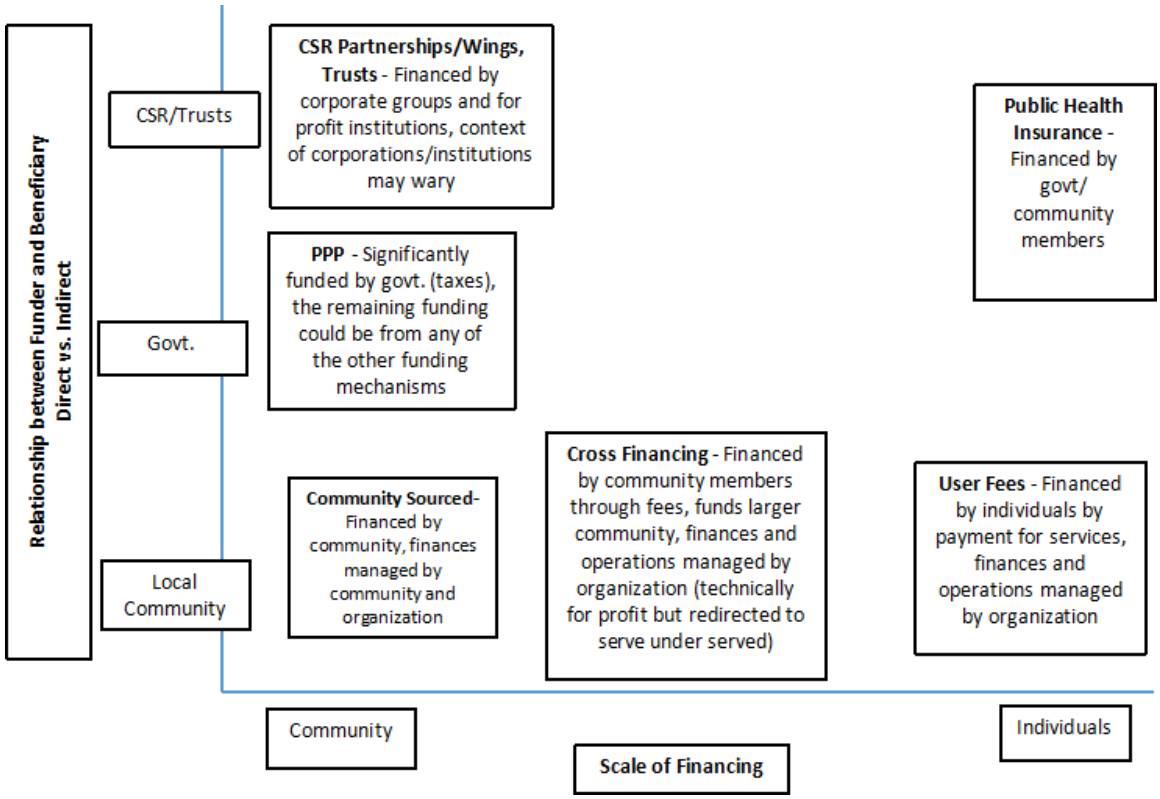
partnerships. This idea of CSR partnerships is reiterated in iKure's description of their CSR projects. They state that companies in CSR collaboration with iKure also have access to iKure's "experienced management team, skilled operational team, and strong infrastructure."[81] Apart from this form of funding, iKure implements a combination of other financing methods, including user fees, investor funds, as well as revenue from the sale of their technological and medical products.

Having considered iKure's implementation of the CSR model, one must reckon with some key caveats and conditions of the financing technique. While CSR can be a good source of large one-time funds, one must ensure that the arrangement between the healthcare provider and its CSR partner is one that allows longevity. To establish such a relationship, perhaps it is important to provide certain services to the CSR funder as well, as is illustrated by iKure's partnerships with its CSR funders. As is the case with any partnership, one must also ensure that the relationship with the corporate body is robust and reliable, with sufficient check-in mechanisms.

[81] "Healthcare Intervention on Mother and Child Care in Haveri Districts of North Karnataka," iKure, https://www.ikuretechsoft.com/casestudy/healthcare-intervention-on-mother-and-child-care-in-haveri-districts-of-north-karnataka/.

Financing Models for Primary Healthcare in India: An Emergent Framework

Through a close reading of these case studies, we realize that healthcare organizations rarely use a single financial model to fund its operations. Instead, organizations use a combination of funding mechanisms, where each mechanism serves a different purpose and is tailored to a specific interest of the organization, its philosophies, and their context. It might also be necessary to use a combination of funding mechanisms as only one source of funding could be insufficient in meeting the organization's requirements.



The above model portrays a 2-dimensional scale plotting the different kinds of financial models frequently implemented by private healthcare providers. The horizontal axis of the scale ranges from individual, personal sources of financing to collective, group, or community-wide financiers. On the 'individuals' end of the axis is the 'user fees' model, which involves taking payments from individual patients and recipients of healthcare services in the form of subsidized fees. The amount of user fees administered differs by organization — while the cost of the user fees model is borne by the patients, the magnitude of this cost varies significantly from

organization to organization. Consequently, the degree to which organizations depend on user fees varies as well, ranging from nearly no amount of the financial needs being met by user fees to 30-60% financial support from user fees. These key decisions on how much user fees to administer depend on the physical and social context of the organization and its beneficiaries' ability to pay. However, the user fees model also serves purposes beyond only financing operations — it is also a mechanism to motivate payers, regardless of the amount, to avail the services they are entitled to. Thus the "user fees" can serve as a signal of "quality of the service".

The center of the horizontal axis represents the cross-financing/cross-subsidizing model, which includes redirecting profits from one wing of services to another. This suggests that the organization runs two types of operations: one catering to the typically underserved, where services are available free of cost or at a subsidized rate, and the other targeting wealthier customers who can afford to pay full price for services. The revenue from the latter would fund the functioning of the former. The cost of services is borne by individuals within this model as well; however, a certain group of individuals are paying for the services they avail, as well as the treatment of others in their community, mediated by the organization. In this manner, the cross-financing model strikes a fine balance between individual and community funding. Further, the cross-financing model can also be ploughing in finance from one set of services to another. For instance, in a vision related primary healthcare setting, the institution can price the core services (e.g., vision checkup) at an affordable rate and price the peripheral services (e.g., spectacles) at market rate, thereby allowing the peripheral services to subsidize the core service recipients.

On the 'collective' end of the horizontal spectrum lies community based financial models. As seen through the case studies, this model manifests in a variety of ways, such as subscription-based models, collective pots, or through local elected community representatives. However, the underlying principle remains consistent — healthcare financing and engagement *by* the community *for* the community. Community members partake in allocating their own money as funds to healthcare providers to ensure their own access to healthcare, their fellow community members' access to healthcare, and further, to safeguard the state of community public health at large. Therefore, the cost of running such operations is borne by individuals within communities and communities at large.

All the models on the vertical axis fall on the left of the horizontal axis, which we discussed represents community-level financing models. This placement suggests that each model on this axis follows group-level financing provisions. On one end of this axis is the 'Community sourced' model discussed above. Evident from the description, the link between the funders and the beneficiaries is explicit, transparent, and direct: the group that funds is the group that receives.

Further up this spectrum lies government financed models. This category includes the 'public-private partnership' (PPP), in which a portion of the cost of running the practice and the

services is covered by government funding, while the rest is covered by the private organization. This kind of government financing support can manifest in many ways, including direct financing from the state/central government, government grants, or availing of government schemes. As government funding suggests an allocation of taxpayers' money to private healthcare initiatives, one can articulate the PPP as a 'by the people, for the people' funding mechanism as well, suggesting that the cost of running the organization and conducting its services is borne by individual taxpayers, and collated by state-affiliated bodies. However, since this funding mechanism is mediated by the government and the process of conversion from taxpayers' income to healthcare funding isn't easily accessible, one could understand this relationship between the funders and the beneficiaries as indirect.

At the furthest end of this spectrum is the 'CSR/Grants' category, where funding is received from 3rd party private bodies that may have little connection with the beneficiaries of their funding. Since the source of this funding includes private corporate bodies or foundations, often international donors, one can imagine the relationship between the funders and the beneficiaries as indirect and distant — there is likely little to no overlap between the funders and beneficiaries. The cost of this funding is borne by the private parties themselves, allowing the transparency of the relationship to differ case-by-case.

Discussion

The report so far has documented the different financial mechanisms implemented in various private PHC organizations in India and premised this understanding with literature experimenting and analyzing financial techniques and infrastructure in different LMIC contexts. Much of this documentation and analysis has been on the performance of financial models and techniques. Equally important, however, is to consider the effectiveness and sustainability of PHC mechanisms beyond the present moment, speculating to what extent the financing model will remain effective in providing good, equitable primary healthcare over a longer horizon. In other words, one must assess how sustainable and scalable these techniques are, and to what extent they embody equity in both promotion and practice.

The performance of user fees against these criteria depends largely on the context of the organization's set up and PHC delivery. Literature on user fees, however, supports the idea that user fees severely compromise affordability and affect utilization, suggesting that user fees may perform poorly as an equitable financing mechanism in certain low-income settings, like smaller rural communities. Given that lower income groups are more likely to switch providers often, resulting in the associated uncertainty of revenue from poorer consumers, user fees cannot provide a long-term revenue generating financing mechanism in catchments that are largely lower income. This suggests that user fees, as a mechanism, cannot guarantee sustainability across contexts. However, one can remain optimistic about the technique's performance with regards to scalability. Swasth Foundation, one of the few urban-based organizations studied in this report, found that they were able to sustainably implement user fees and health cards to finance at least 30% of their project. One speculates the success of the user fees project, both in its longevity and magnitude, could be attributed to the urban context, where the purchasing power is higher, there is sufficient volume of patient walk-ins, or there is a possibility of a long-term relationship between the patient and the care-provider due to a subscription model. Further, the urban setting of Swasth Foundation's operation suggests that the services can be made available to the wealthy as well, who can subsidize the poor. Through this idea of cross-financing, one can hypothesize that the user fees mechanism would likely perform better when scaled across contexts, where service provision at full user fees to the healthy can subsidize the poor from other areas. Not only, then, can user fees be scaled in this specific manner, but that the method would benefit from scaling. Further, the idea that "user fee signals quality" highlights the need to fix a user fee that can generate demand while remaining affordable.

Cross-financing, which is next on the spectrum of techniques ranging from 'individually financed' to 'community financed', performs relatively well on the equity and sustainability metrics. As witnessed from both the case study of Aravind Eyecare as well as literature discussing community financing, the technique is effective in reducing costs for the poor by creating a system in which the wealthy can shoulder a larger portion of the cost, perhaps in return for some non-

medical benefits. The simple transfer of burden of some of the costs suggests that the technique works towards making PHC more equitable. The technique is also geared towards sustainability, as is evident from Aravind Eyecare successfully implementing and scaling their operations using the financial method since 1976. The empirical evidence provided by the organization suggests that the financial technique has the potential to be sustainable, given that the organization implementing the technique strikes a balance between revenue forward and equity forward service provision, regardless of whether this is done by providing different types of services, or serving different demographics. Aravind Eyecare also simultaneously invested in cost reduction mechanisms, which other organizations considering the cross-financing technique must consider. Similarly, scalability too can be achieved through cross-financing, keeping in mind the caveat of balance: a source of financing can be promised, provided that there are enough consumers to shoulder the full price. This logic would apply to organizations operating at larger scales as well. Therefore, scalability might be easier in areas that see a large variation in incomes, whereas it might be harder in areas with homogenous and chronic poverty. In considering scalability, one must also consider the effort and dexterity involved in scaling operations and service practice. Since Aravind implements the assembly line method, they were able to effectively manage a scaled up practice. The literature, however, speculates whether this kind of cross-subsidizing will be as effective, scalable, and sustainable in the provision of a broader range of PHC services or specialized services. Krishnadas's response highlights the answer to this: "Most of our [Arvind Eye Hospital] leaders believe that, with the kind of leadership mindset, it [providing affordable care through cross-subsidizing] is probably feasible in most medical specialties."

The above assessment is difficult to conduct for the broad category of public-private partnerships as the financing mechanism can manifest in multiple ways, like the use of subsidy schemes, government insurance, government grants, or a financing-management arrangement between government parties and the private organization. Regardless of which kind of PPP is implemented, a key component of the partnership is mutual trust between the private and public bodies, and credible government bodies. If public covering of costs or provision of funds is passed onto the lower-income consumers through subsidized or free PHC, one can consider the service provision to be equitable. In the case of public insurances used by private organizations, how equitable the financing mechanism is can be determined by how progressive it is, and what portion of the cost is being incurred by the poor. Therefore, the equitability of the PPP financing mechanisms relies heavily on the management and use of finances and how they affect the underserved consumers. This is especially true of government grants as a financing mechanism, but is also applicable to non-governmental grants, like funds from organizations. As literature on Bolivia shows, grants and similar external funding require institutional infrastructure to implement checks on organization processes and operations to ensure that the objective of the funding is met, and that the financing is implemented to promote and practice equitable PHC delivery. Therefore, in such an analysis of external funding, especially international funding and CSR funding, one must consider whether there exists too much distance between the funders and recipients of care,

and how this distance might impact the quality of care delivered, and the process of receiving care. Specifically, it is important to consider whether the funders and service providers can adequately be held accountable to each other and to consumers of the services, and the impact of this kind of funding on efficiency of delivery. Answering this question would allow further work to understand the impact of indirect financing on PHC.

The dilemma with such funding is concerned also with the non-iterative nature of these financing techniques, unless one invests these funds in establishing revenue-generating mechanisms. One therefore realizes that the financing mechanisms aren't self-sustaining, and therefore, have a reduced propensity for sustainability. To access funding through these techniques regularly, one might have to repeatedly apply for grants, which could be tedious and not entirely sustainable in the long run. This absence of self-sustainability is also true for CSR funding; however, as can be seen in the case of iKure, one can establish a creative arrangement, like a prolonged partnership, where one offers services to corporations for CSR funding in return. As long as service provision is viable or required by the corporation, the funding mechanism can be understood as consistent and sustainable. The partnership may also promote the corporation's engagement and interest in the PHC provider they are donating funds to, encouraging review and corrective checks. Further, one must acknowledge that sustainability might not be the aim of certain versions of these financing methods. Instead, they could be beneficial as one-time funding to carry-out a new project, or kick-start a new branch or operation, suggesting that these financing mechanisms could be beneficial in scaling operations, if not as a primary funding mechanism.

Community-based funding, just like PPP, is difficult to assess in broad terms due to the breadth of its interpretation. However, since the community is central to this financing mechanism as decision makers and fund providers, the people's interests will be safeguarded, suggesting that the funding mechanism performs well on equity. This is supported by DHAN Foundation's case study and their use of medicine discounts, lab discounts, and subsidies on services. In the specific case of community insurance, equity is achieved through progressive premiums, which, as literature asserts, furthers utilization of PHC services by the poorest. However, as has frequently been reiterated, community-based funding mechanisms require a strong sense of belonging, collaboration, engagement, empowerment, and responsibility, or the methods to inculcate these principles within the community. Without this collective mindset, the long-term effectiveness of the financing mechanism cannot be certain.

Conclusion

This report discusses the different financial mechanisms that can be adopted by primary health care providers to cut out-of-pocket costs and decrease health care prompted poverty, along with the different non-financial strategies that need to be implemented by organizations adjacent to financial techniques in order to meet goals of primary health care service and use. The financial mechanisms identified include the 'User Fees' model, 'Public-Private Partnership', 'Cross-Subsidizing' model, 'Community Financing' mechanisms and 'Community Insurance Schemes', 'CSR Partnerships', and 'Grant-based Financing'. These financing mechanisms are conceptualized into a model to better understand their relationship with delivery and reception of care. By analyzing our case studies, we identify some key concerns and priorities, that of equity, sustainability, and scalability, and assess how different models perform on these metrics. This analytical exercise also implores the questions of efficiency and accountability - are indirect financing mechanisms, which may not have immediate stakes in the problem, efficient in their delivery of funds? Further, can they be held adequately accountable for their financial responsibilities by individual recipients and communities? One must also ask how direct financing performs in comparison. Further work in this area must deeply consider these questions, while also gauging the effectiveness of these financing mechanisms and the validity of the model conceptualized in other LMIC contexts.