

# Desk-based review of Roles and Practices of Health Care Provider Aggregators

Takeaways for the design of Tunza Platinum NMO on provider accreditation & empanelment, claims processing, community engagement, and health care microinsurance.

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## List of acronyms

ACO	Accountable Care Organization	IP	In-patient medical services
AHME	African Health Markets for Equity	IT / ICT	Information & Communication Technology
ARY	Arogya Raksha Yojana, India	KWFT	Kenya Women Microfinance Bank (formerly Kenya Women Finance Trust)
BMGF	Bill & Melinda Gates Foundation	MCO	Managed Care Organization
BYJ	Bima ya Jamii, Kenya	MFI	Microfinance Institution(s)
CHAM	Christian Health Association of Malawi	MSI	Marie Stopes International
CIC	Cooperative Insurance Company, Kenya	MSK	Marie Stopes Kenya
CSR	Corporate Social Responsibility	NGO	Non-Governmental Organization
DOH	Department of Health, Philippines	NHIC	National Health Insurance Corporation, South Korea
ERGO	ERGO International AG of Munich Re Group	NHIF	National Hospital Insurance Fund, Kenya
GE	General Electric Company	NJHQ	Naya Jeevan Health Quest, Pakistan
HDFC	HDFC Bank Ltd., India	NMO	Network Management Organization
HIRA	Health Insurance Review & Assessment Service, South Korea	OP	Out-patient medical services
HIS	Health Information System	PHC	Primary Health Care
HMI	Health care Microinsurance	PHI	Private Health Insurance
HMO	Health Maintenance Organization	PS Kenya	Population Services Kenya
ICICI	ICICI Lombard Insurance Agency, India	VMA	Voucher Management Agency
ILO	International Labor Organization		

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Photo: Tunza provider explains family planning choices available  
Credit: © PS Kenya

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# Contents

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<b>02</b>	<b>List of acronyms</b>
<b>04</b>	<b>Executive summary</b>
<b>06</b>	<b>Brief 1: Accreditation and empanelment of NMO providers for NHIF and PHIs</b>
<b>10</b>	<b>Brief 2: Instituting an e-claims system to manage, process, and pay claims</b>
<b>14</b>	<b>Brief 3: Using technology to enhance community-level efforts</b>
<b>18</b>	<b>Brief 4: Implementing private sector health microinsurance (HMI) schemes</b>
<b>25</b>	<b>References</b>

### Background

Population Services Kenya (PS Kenya) is advancing plans to establish a “network management organization” (NMO) to serve as an aggregator of private health care providers, partner with public and private payers at scale, and efficiently deliver quality services to communities. With support from the African Health Markets for Equity (AHME) program<sup>1</sup>, the NMO initiative builds upon earlier work to organize providers in PS Kenya’s Tunza social franchise network under a sustainable social enterprise model. The “Tunza Platinum NMO” will facilitate payers like Kenya’s National Hospital Insurance Fund (NHIF) as well as private insurers in efficiently transacting with private facilities by easing provider accreditation, contracting, claims processing, and monitoring functions. For providers, it also aims to implement modalities for pooled procurement, support training and quality assurance activities, introduce electronic information systems, and carry out community-level demand generation. The PS Kenya team is currently developing these value propositions for payers, providers, and communities; sensitizing and obtaining commitments from insurers and facilities; and researching and testing technologies for procurement, payment, and community engagement.

Results for Development (R4D) partnered with Population Services International (PSI) under AHME to research global practice and evidence around key components of the NMO initiative for the information of PS Kenya managers. This deliverable is the first among a set of informational products to be produced in support of the PS Kenya team and for the consideration of a Technical Working Group (TWG) set up under AHME to—among other responsibilities—guide the Tunza Platinum NMO initiative.

### Approach and structure:

This document contains four discrete briefs summarizing takeaways on the role of (comparable) provider aggregators in the areas of (1) accreditation and empanelment of health facilities, (2) claims processing and payment, (3) use of technology in community engagement activities, and (4) the implementation of commercial health care microinsurance programs. In discussions with the PS Kenya team, these topics emerged as key areas of focus for developing the NMO value proposition. These briefs synthesize key takeaways from a high-level, desk-based review of published material in each topic to provide just-in-time advice and general perspective to NMO managers at PS Kenya. The R4D team further unpacked salient learning questions around each topic by administering a questionnaire with the PS Kenya team, and validated an outline for documenting relevant practices, takeaways, and recommendations around the role of aggregators vis-à-vis providers, payers, and users of health care services. Check-in’s and briefings for—and review of earlier drafts by—the PS Kenya-NMO and AHME teams preceded the finalization of this set of briefs. This document is laid out as follows:

#### **Brief 1: Accreditation and Empanelment of NMO providers for payers:**

The brief reports how provider aggregators support facilities in accreditation, from assistance in learning about and meeting accreditation criteria to processes for formal empanelment and contracting with payer(s). It provides key definitions, highlights examples from Kenya, Philippines, and the United States for the PS Kenya NMO team, and captures salient takeaways, challenges, and recommendations.

#### **Brief 2: Instituting an e-claims system for provider payments:**

The Tunza Platinum NMO plans to introduce its own e-claims management system, interoperable with the NHIF and other payers, to help enhance processing and operational efficiency, minimize fraud, promote provider satisfaction, and support implementation. This brief explores roles played by other comparable organizations and discusses challenges, risks, and lessons learned for the PS Kenya team to consider as it develops the NMO functions.

**Brief 3: Using technology to enhance community-level efforts:** To enhance the value of the NMO to providers and payers, the PS Kenya team is interested in innovative and effective technology-enabled solutions for generating demand and driving users to health facilities, assisting with client enrolment and registration, and monitoring client flow and regular data collection. The brief considers eHealth and mHealth initiatives—often used to facilitate service delivery via frontline health workers—from Kenya and other contexts for their focus, use of technology, and effectiveness.

**Brief 4: Implementing private sector health microinsurance (HMI) schemes:** PS Kenya is also exploring solutions to advance commercial goals of the Tunza Platinum NMO, including working with (voluntary, commercial) HMI products. This brief considers relevant HMI models, practices, and lessons from within Kenya and the wider industry, while noting the particular challenges commercial HMI schemes can face regarding sustainability and compatibility with UHC goals.

To inform the design of the PS Kenya NMO, the takeaways and recommendations contained in the briefs:

- **Capture and describe diversity** in all four topic areas across national settings, network models, and aggregator roles and practices. For example, Brief 1 reviews the functions of four different actors (franchisors and others) vis-à-vis providers and payers in three settings across four types of responsibilities (provider accreditation and empanelment as well as contract negotiation and management). Similarly, Brief 3 documents how five different technology-enabled community health interventions deliver value to health workers and users of services in five country settings. All briefs demonstrate that provider aggregators may or may not already support the envisioned NMO functions; play varying roles in relation to providers, payers, and communities when they do; and look different based on the context and function (e.g. be a franchisor, a managed or accountable care organization, a voucher management agency, or a faith-based not-for-profit provider network).

- **Delve into important assumptions** underlying planning for key components of the NMO value proposition. For instance, Brief 4 notes that provider aggregators do not in fact typically mediate or implement commercial HMI models, pointing to the need for developing entirely new types of competencies and partnerships for the NMO to integrate such financing mechanisms into its network. Similarly, briefs 1 and 2 outline the costliness, time intensive nature, and need for in-house capacity for developing accreditation/empanelment infrastructure or claims processing systems under NMO plans. These takeaways enable PS Kenya managers to consider and incorporate new details into proposals.
- **Note salient prerequisites** in capacity, scale, and enabling environment for the NMO to successfully deliver its value proposition to providers, payers, and communities. For the NMO to implement a claims processing system between providers and the NHIF, launch a technology-enabled community engagement intervention, or co-design and market an HMI product, it would need to ensure specific technical and human capacities, require regulatory and policy enablers, and, potentially, build upon existing structures and interventions. The briefs note key actors, important partnerships, and specific policies for each topic area to be incorporated into planning for the NMO.
- **Identify early implementation steps** for developing and delivering the NMO value proposition in each topic area. For instance, the NMO can open communications with providers and payers to establish parameters for empanelment and contracting arrangements; develop a financial strategy to fund the time and resource intensive provider accreditation initiative at scale; establish an advisory group to unpack specific questions around the marketing, management, and monitoring of HMI schemes in Kenya's context; and carry out market research to assess in detail the operational aspects of implementing community-oriented, technology-enabled interventions. The briefs note these initial next steps in each focus area to incrementally advance planning and development of the NMO role and value proposition.

# Brief 1: Accreditation and empanelment of NMO providers for NHIF and PHIs

## Envisioned role of the NMO:

- Support network providers to meet the accreditation requirements for empanelment as outlined by the payer
- Track and follow-up on the application status on behalf of the provider
- Support contract processes/ negotiations, and manage provider contracts

## Introduction

The accreditation and empanelment process for health facilities to qualify for Kenya's National Hospital Insurance Fund (NHIF) scheme is complex as well as time and resource intensive. The Tunza Platinum Network Management Organization (NMO) aims to ease operational and administrative burdens faced by the NHIF and providers by supporting and facilitating these processes.

This brief explores what similar roles other intermediary organizations have played and discusses challenges, risks, and lessons learned for the NMO to consider as it develops its functions.

## Background

In some national health insurance schemes, like in the Philippines and Kenya, accreditation<sup>2</sup> and empanelment<sup>3</sup> criteria are primarily set and managed by the payer. Providers are typically independently responsible for acquiring and maintaining accreditation/empanelment status and meeting contractual obligations.<sup>4,5,6</sup> But these systems and processes are complex, requiring providers to have a comprehensive understanding of the terms and conditions, and time and resources available to meet the minimum standards. For payers, the administrative burdens to support and implement application processing, verification, and contract management functions are equally time consuming and resource intensive.

A few examples exist of aggregator-like organizations supporting providers through these processes and providing contract negotiation and management support to streamline operations for the payer.

Image  
Tunza provider  
takes client blood  
pressure.  
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## Aggregator roles and practices—Examples from Kenya, Philippines, and USA

In Kenya, NHIF empanelment is a 12-step process. Marie Stopes Kenya (MSK) supported 89 of its low-tier health providers in the AMUA social franchise network to attain NHIF empanelment.<sup>7</sup> Before embarking on the process, MSK organized regional sensitization meetings with NHIF branches and providers to work through current practices and protocols. MSK facilitated the exchange to ensure both parties could contribute their insights openly and respectfully, and managed expectations on both sides. This allowed the NHIF and providers to build trust and develop open and clear lines of communication. MSK also supported providers by explaining and walking through the application and submission process, tracking and following-up on applications, and pre-inspecting

facilities to ensure accreditation standards were met. To enhance operational efficiencies in the accreditation process on behalf of the NHIF, MSK helped to submit empanelment applications for pre-accredited facilities as a block to reduce transaction and inspection related costs. Likewise, the Tunza Family Health Network social franchise also supported 179 providers within its network with NHIF empanelment. Tunza also ensured providers continued to deliver high-quality care and maintained their accreditation status by regularly performing quality assurance checks. Both MSK and Tunza also played a role in negotiating and managing provider contracts. In particular, MSK worked with the NHIF and negotiated a contract that ultimately eliminated a fee to be paid by providers for in-patient accreditation.

Similarly, in the Philippines, the (no longer active) BlueStar social franchise demystified the accreditation process for

its franchisees and became an expert at navigating the PhilHealth process<sup>8</sup>. BlueStar also invited representatives from PhilHealth, the DOH and other technical experts to assist in training franchisees on accreditation and licensing requirements; additionally, the franchise provided direct assistance to franchisees in filling out and processing paperwork for achieving accreditation status. Finally, accountable care organizations (ACOs) and managed care organizations (MCOs) in the United States also play a comparable quality assurance role for continuous maintenance of standards.<sup>9</sup> For example, MCOs develop and manage audit care plans for their providers to ensure consistency across their networks.<sup>10</sup> Similarly, MCOs in the state of Maryland participating in the US government's Medicaid scheme have also directly negotiated and managed provider contracts.

Summary Table 1 – Roles played by aggregator on behalf of the payer and provider

Role		MSK – AMUA SF	PS Kenya–Tunza Healthy Family Network	MSI Phil – BlueStar SF (inactive)	ACOs/MCOs – USA
<b>Accreditation</b>					
Payer	Conducts pre inspection/ accreditation of facilities	X	X	X	-
	Provides facility inspection	-	X	-	-
	Coordinates and submits accreditation paperwork for process	-	-	X	-
	Ensures providers meet minimum quality standards to maintain accreditation	-	-	-	X
<b>Empanelment</b>					
Payer	Submits applications in block-groups	X	-	-	-
Provider	Tracks and follows up on application	X	X	-	-
<b>Contract Negotiation</b>					
Payer	Negotiates contracts	X	X	-	X
Provider	Ensures providers receive fair rates	X	X	-	X
	Facilitates contract processes	-	-	X	-
<b>Contract Management</b>					
Payer	Ensures service delivery quality	X	X	X	X
	Ensures contract is being properly executed	X	X	X	X
Provider	Ensures service delivery quality	X	X	X	X
	Manages contracts	X	X	X	X

## Key Challenges

- Accreditation/empanelment is time and resource intensive
- Contract negotiation may prove to be difficult – potential for payer and provider dissatisfaction
- Lack of transparent and regular communication

## Salient takeaways and challenges

Playing a role in the accreditation and empanelment process requires sufficient time, funds, and resources to build the right systems and processes to support the function and ensure sustainability.

### **First, accreditation and empanelment are tedious, time-consuming, and costly processes for both parties.**

PhilHealth Corporation staff noted that a significant amount of training and better coordination are required to efficiently accredit providers.<sup>11</sup> Similarly, health management organizations in Nigeria do not directly support their providers through the accreditation process because of the substantial time and resource investment needed to institute the right systems.<sup>12</sup> Because MSK, Tunza, and BlueStar were donor-funded, they were able to build the appropriate mechanisms and capacities to support providers through the accreditation and/or empanelment processes. Still, continuing to support this function will require more strategic financial planning, especially if the NMO intends on supporting these processes for providers with multiple payers. BlueStar Philippines used a portion of its member fees to support this function, yet it was still largely supplemented by donor contributions.

**Moreover, there is often a lack of understanding between providers and payers.** Creating an environment where providers and payers can build trust is vital. MSK designed sensitization workshops for NHIF officials and providers with this purpose, which eased subsequent contract negotiations. Similarly, BlueStar Philippines invited experts from PhilHealth and DOH to participate in accreditation training programs. ACOs and MCOs also follow comparable processes—conducting network wide surveys and forums with providers to inform negotiations with the payer.

Lastly, the NMO may risk damaging the provider and payer relationship and level of continued interest if **clear systems and channels for communication are not established and utilized.** Providers, for example, often note the lack of clarity and transparency around rules and regulations, contract processes, and other necessary information can lead to dissatisfaction. MSK tried to mitigate these issues by creating clear communication channels (e.g., regular surveys and check-ins) with its providers to source feedback on reimbursement rates, meeting quality standards, and performing administrative duties. ACOs/MCOs have established similar mechanisms for providers to continually provide feedback—allowing them to measure and monitor provider satisfaction, pinpoint challenges, and access information to better represent providers in contract negotiations.

Payers, on the other hand, need continuous dialogue to ensure that providers are delivering high-quality care and meeting contractual obligations. The NHIF, in particular, has limited capacity to effectively oversee and manage all of its empaneled providers and assure quality. If the NMO assumes the role of managing provider contracts and behavior, it will need to develop strong communication systems (e.g., online provider portal, NMO “agents” to liaise with networked providers, email, etc.) to effectively monitor and supervise providers, and ensure that information reaches the payer.



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## Moving forward – Recommendations for the Tunza Platinum NMO

The NMO envisions supporting the accreditation and empanelment processes for both the payer and provider by taking providers through the process, pre-accrediting facilities, tracking and following-up on applications, negotiating and managing provider contracts, facilitating and managing provider-payer relationships, and streamlining overall operations.

Looking ahead, the NMO could strengthen its proposed role by:

- 1. Opening channels of communication and creating an environment where the payer(s) and providers can build trust and freely communicate.**  
Payers and providers each have their reservations and lack mutual understanding. The NMO can play an important role in convening and facilitating interactions between these parties to build a trusting, long-lasting, and fruitful relationship. For example, MS Kenya facilitated sensitization meetings between its providers and NHIF branch managers to build trust, establish rapport, and discuss the differences between private and public provision of services; this led to a mutual understanding that private providers require different rates from their public sector counterparts.<sup>13</sup> Additionally, the NMO should institute mechanisms for continual feedback and gauging provider satisfaction (e.g., surveys, provider portal, annual meetings, etc.) to better address the needs of its providers. For example, MCOs in the state of Maryland conduct regular surveys with their providers and use the information to push the state to set fair rates.
- 2. Integrating quality assurance activities to increase the NMO value proposition.** ACOs/MCOs develop annual audit plans to ensure their providers meet quality standards. While, the NHIF's accreditation and empanelment requirements lack service delivery quality indicators, quality is an integral measure to assess and improve health system performance. The NMO can leverage its substantial experience in QA – PS Kenya recently combined its approach with SafeCare standards to create a single, integrated QA system<sup>14</sup> – to advise the NHIF on instituting basic QA systems to measure and improve service delivery quality and health outcomes.
- 3. Developing a financial strategy for the NMO to support playing this role:**  
The membership fee for providers to be a part of the NMO includes charges for the proposed accreditation services. Yet, fees from the providers will likely be insufficient.<sup>15</sup> The NMO will need to detail exactly how its role will result in cost-savings and improved efficiency to receive buy-in directly from the payer (for instance, empaneling providers in blocks reduces transaction and administration costs for the NHIF); a detailed investigation into the MSK and BlueStar budgets is one step the NMO can take to evaluate baseline costs followed by a pilot to test and assess different strategies to enhance operations.

## Brief 2: Instituting an e-claims system to manage, process, and pay claims

### Envisioned role of the NMO:

- Enhance claims processing and operational efficiency
- Minimize fraudulent claims submission
  - institute stronger vetting and verification processes
- Improve provider understanding of e-claims processes and systems
- Support provider e-claims implementation

### Introduction

The Kenyan National Hospital Insurance Fund (NHIF) houses its own claims processing and payment system. However, it has faced several challenges including efficiently vetting and verifying claims, avoiding fraudulent submissions, delivering timely payments to providers, and establishing fair payments rates. The Tunza Platinum Network Management Organization (NMO) aims to introduce an e-claims management system, interoperable with the NHIF to help enhance processing and operational efficiency, minimize fraud, promote provider satisfaction, and support implementation.

This brief explores what similar roles other aggregator-like organizations have played and discusses challenges, risks, and lessons learned for the NMO to consider as it develops these functions.

### Background

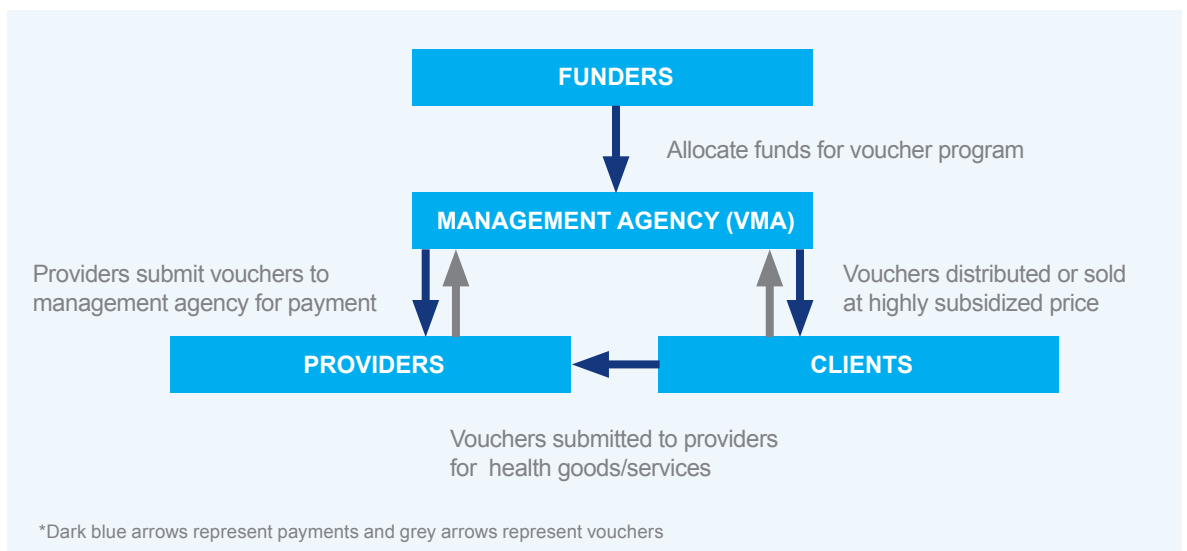
A claims management system can serve as a data source to evaluate and improve health care spending, provider behavior, and service utilization. With the proper mechanisms and protocols in place, it can also help to mitigate fraud and abuse, and ensure cost-containment and long-term financial sustainability. In many high-income countries, processing and reviewing medical claims as a part of national health insurance is often outsourced to highly specialized independent reviewers which streamlines operations, minimizes errors, and contains costs. For example, in South Korea, the Health Insurance Review & Assessment Service (HIRA)

plays a third-party administrator function by providing claims processing services for providers submitting claims to the National Health Insurance Corporation (NHIC); the NHIC reviews and approves the claims for payment.<sup>16</sup> In lower- and middle-income countries, however, this function is commonly centrally housed. For instance, in the Philippines, PhilHealth assumes the claims processing, validation and reimbursement function.<sup>17</sup> The National Health Insurance Authority in Ghana also plays an analogous role.<sup>18</sup> These systems, however, face several inefficiencies in processing and vetting claims, and delivering timely payments.

### Aggregator roles and practices

Intermediaries can help to minimize the burden and costs of claims systems for national health insurance schemes by instituting and overseeing their own systems or taking over functions of existing systems. Voucher management agencies (VMA<sup>19</sup>) serve as one specific example of instituting and managing a claims system (see Figure 1). In Kenya, the Reproductive Health Output-Based Aid voucher project piloted a claims processing system that tracked technical and financial information from claims, and linked claims data with reimbursements and voucher distribution data.<sup>20</sup> The entire e-claims system was also connected to a fraud monitoring system which aided staff in detecting and eliminating fraud. The successful implementation and management of the system allowed voucher beneficiaries to receive high-quality care, enabled providers to receive timely payments, and minimized administrative burdens for the voucher financiers.

Figure 1: Voucher Program Pathways



Other intermediaries play more minor roles in the process. For example, the Christian Health Association of Malawi (CHAM) only disburses payments on verified claims to its providers.<sup>21</sup> Prior to disbursement, claims are submitted, reviewed, and verified by the Department of Health. After validation, claims are sent to the CHAM secretariat which consolidates and submits batch invoices to the MOH, that then releases the funds to CHAM to disburse against claims. CHAM provides minimal support to providers in claims submissions. In the Philippines, the BlueStar Social Franchise instituted a program to mitigate the impact of delayed payments to its franchisees participating in PhilHealth. The program provided a loan advance to the franchisee until reimbursements were

processed and paid. However, the program ended due to lack of timely repayment and uncertain loan funding.<sup>22</sup>

In addition to overseeing a robust claims processing and payment system, accountable and managed care organizations (ACOs/MCOs) in the United States effectively use claims data to negotiate reimbursement rates, manage care and still profit from it; ACOs/MCOs receive a capitated amount from the payer and are incentivized to keep their population healthy to maximize profits.<sup>23</sup> Claims information serves as a valuable source of data to review provider and patient behavior and financials, which helps to better coordinate care within the network and improve operations.

Summary Table 1 – Roles played by aggregator on behalf of the payer and provider

Role		Voucher Management Agencies – Reproductive Health Output-Based Aid project (Kenya and Uganda)	Christian Health Association of Malawi	BlueStar Social Franchise – Philippines	Accountable and Managed Care Organizations – United States
<b>Claims Processing</b>					
Payer	Processes, reviews, and validates claims – identifies and resolves fraud issues	X	-	-	X
Provider	Supports implementation and provides training	X	-	-	X
	Mitigates claim disputes	X			X
<b>Claims Payment</b>					
Payer	Tracks financial information based on payments disbursed	X	X	-	X
	Loan advances to providers	-	-	X	
Provider	Reimburses providers – financial risk on funder	X	X	-	X
<b>Claims Management</b>					
Payer	Monitors and analyzes claims data – performs quality checks, regular audits	X	-	-	X
Provider	Conducts facility assessments, quality checks, provides claims support	X	-	-	X

## Key Challenges

- Covering set-up, operational, and maintenance costs
- Building technical and financial capacities and expertise
- Adequately supporting implementers
- Establishing and maintaining open lines of communication

## Salient takeaways and challenges

Establishing and managing robust claims systems is an arduous task and it requires specific technical and financial capacities and expertise to effectively manage systems and enhance operational efficiencies.

**First, there are significant costs associated with developing well-functioning, interoperable claims systems.** In Uganda, setting up the claims systems alone accounted for 21 percent of the Reproductive Health Output-Based Aid project voucher pilot budget.<sup>24</sup> The VMA had to secure partnerships to develop and implement appropriate e-claims systems and build technical capacity. After implementation, the system required regular monitoring and maintenance. Both voucher programs in Kenya and Uganda noted that managing claims and working with the right set of partners (e.g., the claims software company, local implementing partners) were the most challenging parts. For the NMO, identifying strategic partnerships and adequately budgeting for this function is critical to building proper systems and infrastructure for a successful venture.

**Having in-house technical and financial expertise and capacity is also essential to fulfilling the claims management role and mitigating issues with providers and payers.** The VMA in Uganda faced several challenges early on in tracking claims, identifying and addressing fraudulent claims, and monitoring quality. The VMA built a more comprehensive claims processing system to track technical and financial information from claims and link the data to reimbursement and voucher distribution data; the database additionally served as a tool for monitoring fraud. To fortify its verification process, the VMA also hired medical professionals to help review claims and hired a care manager to conduct random client exit interviews and field visits. ACOs/MCOs also ensure that they are staffed with the right personnel (e.g., medical claims investigator, claims examiner, etc.) to detect fraud, especially since they bear the financial risk. Nevertheless, having trained personnel in-house to review and manage the claims database will increase efficiency and promote sustainability.

**While having the in-house expertise and capacity is vital to ensure the system functions well, it is just as important to support providers on the ground to appropriately and efficiently use the system.** In India, a pilot project led by the ICICI Lombard Insurance Agency in partnership with the national Rashtriya Swasthya Bima Yojana health insurance program developed a robust, interoperable e-claims systems.<sup>25</sup> Yet, many of its providers lacked the basic technological skills and general IT infrastructure to use the system. The agency had to offer regular trainings, support implementation, and reimagine some functionalities of its e-claims system – such as supporting offline capabilities, simplifying the e-claims submission process, and tracking claims. The NMO will need to be ready to anticipate and respond to the needs of providers to successfully deploy the new system and ensure uptake.

**Establishing trust and maintaining transparent lines of communication between providers and payers – especially when disputing claims and disbursing payments – is enormously important. Yet for this function to be successful, it requires explicit funding.** For example, CHAM's primary function<sup>26</sup> is to disburse payments to its providers; it is not to review or validate claims. CHAM providers have been noted to over-invoice, but CHAM is unable to proactively manage and mitigate fraud because it lacks a proper contract management and review mechanism and funding to support this role. As such, the government's trust in CHAM has steadily declined as it has encountered many instances of fraudulent claims. Conversely, vouchers schemes in Kenya and Uganda both instituted strong contract management and facility monitoring processes to minimize fraudulent activity and maintain the trust of the payer. But, these mechanisms are well supported by donor resources, which lends to its success.

**Finally, securing financial commitment from a public payer will be critical to the sustainability of this function.** Although the Malawian MOH realizes the cost benefit of having the CHAM secretariat play a vital role in the claims process, it has yet to commit finances to support it. As a result, CHAM must use a percentage of its member fees in combination with other third-party sources to fund its role. These political challenges will likely be similar to what the NMO will face as it engages in discussions and contract negotiations with the NHIF and other payers. Therefore, the NMO should strategize about a response to address these potential roadblocks.

## Moving Forward – Recommendations for the Tunza Platinum NMO

The NMO envisions creating, implementing, and managing an interoperable e-claims system for its network. Doing so will require enough time, resources, capacity, and expertise to develop robust systems that will contain costs, increase operational efficiency, and serve as a source of data for decision making. The NMO should consider the following:

**1. Co-develop and implement a pilot with the NHIF:** The NMO should try to collaborate with the NHIF, or include it in discussions early on, to ensure the e-claims system first meets minimum NHIF requirements, but also to establish a working relationship to help identify and resolve potential process/system challenges that may arise before full implementation. For example, RSBY wanted to pilot a new outpatient insurance complement to RSBY. Initially

the plan was to only include public providers in the insurance system. However, RSBY realized that public providers alone could not meet the needs of the population. A collaboration with the ICIC Lombard Corporation enabled the project to expand the scope and supported new technologies for claims processing that would satisfy and address discrete needs of public and private sector providers.

**2. Claims data can be used to make strategic decisions about care coordination:** ACOs/MCOs in the US bear and manage the financial risk. In doing so, these organizations rely on using claims data to make better service delivery decisions and manage their providers profitably (e.g., best payment approach). The NMO's investment in an e-claims system should have attached with it a clear strategy for how the data will be used to evolve into a more effective intermediary and achieve sustainability.

Image  
Tunza provider  
talking to client.  
© PS Kenya



# Brief 3: Using technology to enhance community-level efforts

## Introduction

In recent years, innovators have tested new technologies in Kenya's health market to improve systems and processes, such as the very successful M-Pesa mobile money transfer and financing service. As the country expands its mobile and internet network, it is continuing to feature new innovations. In 2016, Kenya set forth an eHealth policy that outlines its commitment to and strategy for eHealth and invites innovators to pilot and promote new technologies. The Tunza Platinum Network Management Organization (NMO) aims to employ technology specifically to enhance the effectiveness and efficiency of its community-level activities, such as demand generation and client enrollment.

This brief explores what technologies have been used to advance these types of efforts, and discusses challenges and lessons learned for the NMO's consideration to deliver value for providers and payers.

### Envisioned role of the NMO:

- Generate and drive demand to health facilities
- Assist with client enrolment and registration
- Monitor client flow & regularly collect data

## Background

Community driven initiatives encourages community participation in identifying and advocating for key health priorities, promotion of essential health services, connecting communities with the larger health infrastructure (e.g. establishing strong referral systems), and influencing health care delivery to effectively serve the community needs. Linking technology to these initiatives can push them further by expanding reach, increasing efficiency, and improving governance (see Figure 2 for several applications of eHealth technologies).<sup>27</sup>

Figure 2: Common applications of eHealth technologies



## Practices and results in key community engagement models

There are several examples of eHealth initiatives that help to advance community-level activities. In lower- and middle-income countries, many of these activities leverage mobile networks because their reach is far wider and more reliable than internet-based networks. Table 3 briefly catalogs some relevant (standalone) eHealth programs targeted at frontline health workers/providers to showcase a range of potential uses and outcomes.

Summary Table 3 – Examples of technology-enabled models to support community-level activities

Key Features	Selected eHealth Technologies				
	mSehat/mSakhi, India <sup>28</sup>	RapidSMS, Rwanda <sup>29</sup>	ZiDi, Kenya <sup>30</sup>	ZiDi, Kenya <sup>31</sup>	K4Health, Malawi <sup>32</sup>
Product description	A mobile SMS platform for frontline health workers to: 1) access on-demand training and information – MNCH focused – that enables workers to conduct community mobilization activities; 2) register, screen, track, and refer patients (integrated patient management system); 3) collect service delivery information; 4) monitor demand and supply of medicines and supplies.	SMS based platform funded by a UNICEF/GE partnership to help community health workers and facilities track the continuum of care (e.g., antenatal, postnatal, growth monitoring, mortality indicators, etc.) for mothers and children, and generate reminders for upcoming appointments.	A cloud-based health management system that allows health providers – regardless of connectivity – to register and manage client data, track and follow-up scheduled appointments, tracks service delivery, tracks inventory, disease and health monitoring.	A cloud-based health management system that allows health providers – regardless of connectivity – to register and manage client data, track and follow-up scheduled appointments, tracks service delivery, tracks inventory, disease and health monitoring.	Pilot project that used SMS technology to share RH and HIV/AIDS related information (e.g., health education information, clinical standards/protocol updates, service coverage information etc.). Health workers share the information received through the app with community members and encourage them to seek services at their local facilities.
Generate and drive demand	X			X	X
Enable client enrolment and registration	X	X	X	X	
Routine M&E/ data collection (e.g., monitor client flow, service use, quality, etc.)	X	X	X	X	
Technology used	Mobile	Mobile	Electronic	Mobile	Mobile
Target Technology User	Frontline health workers	Community Health Workers	Frontline health workers/health providers	Health providers (primarily nurses/midwives)	Community Health Workers
Service coverage	Rural	Rural/peri-urban	Urban/peri-urban	Rural/peri-urban	Rural
Partnerships	Partnership with state government and private industry (i.e., telecoms); donor supported	Partnership with the government* *Initially donor supported	Investor capital and partnership with government	Partnership with Ghana Health Service* *Funded by Bill & Melinda Gates Foundation	Donor supported
Results					
Efficiency	- Increased operational efficiencies	- Increased operational efficiencies	- Increased operational efficiencies	- Increased operational efficiencies	- Improved efficiency of referrals - Improved efficiency of service delivery information exchange
Access	- Increased client awareness - Increased registration	- Increased registration	- Increased registration	- Increased client awareness - Increased registration	- Expanded service coverage - Increased client flow
Quality	- Improved service delivery - Enhanced care coordination	- Improved service delivery - Enhanced care coordination	- Improved service delivery - Enhanced care coordination	- Improved service delivery - Enhanced care coordination	- Improved service delivery
M&E	- Improved supply/commodity forecasting - Improved access to information for clients and providers	- Enhanced data collection	- Improved supply/commodity forecasting - Improved data collection and monitoring	- Improved access to information for clients and providers	

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## Salient takeaways and challenges

Aggregators have a unique opportunity to leverage and apply existing technologies within their networks or develop new partnerships and services to better enhance service and operational efficiency and effectiveness.

**Multi-faceted preparation and market research should precede the introduction of technology.** Regardless of the technology itself, evidence is needed to measure the impact of, and readiness for (i.e., physical infrastructure, equipment, user readiness, policies, regulations, etc.), these technologies before implementation. Poor initial planning and research, insufficient design, and lack of technology readiness are often the downfalls of implementation. Key considerations for successful use and expansion of eHealth initiatives should include:<sup>33</sup>

**Assessing access to technologies:** Access to these technologies is an important consideration to the success of its application. Mobile technologies, in particular, tend to be far more accessible, especially as the rate of mobile subscriptions has exponentially increased within the last decade.<sup>34</sup> However, when MoTech Ghana floated the technological design of the Mobile Midwife app, it quickly received feedback from test nurses stating their refusal to use personal phones for business. MoTech – hoping to reduce program costs by leveraging personal phones – had to rethink its original design and implementation plan. After conducting an extensive review of the market (i.e., of SMS versus java-enabled transmission, cost of phone ownership versus rental, etc.), MoTech identified affordable phones and services for the program in addition to developing an equipment agreement policy with the Ghana Health Service to address potential user challenges such as theft and negligence. Hence, assumptions about access to mobile technologies were adjusted in light of user preferences and operational imperatives.

**Considering IT and cultural literacy limitations:** One challenge many eHealth applications face is ensuring their end users have the skills and knowledge to correctly use the technologies. Many eHealth initiatives conduct several site

visits and pilot test the products to identify and address challenges before full-scale implementation. For instance, MoTech Ghana aimed to implement an SMS-based platform. After a brief field trial, MoTech realized that older nurses did not know how to craft, send, and/or receive SMS. So, in addition to basic SMS training, MoTech created 10 different built-in SMS templates. Understanding the nature of these limitations will help to build a more user-friendly technology, accessible to all.

**Collaborating with potential partners/ key stakeholders and users throughout the design process:** The mSehat/ mSakhi mobile platform in India is one of the largest mHealth initiatives under a public-private partnership model. The state government of Uttar Pradesh identified a need to better utilize frontline health workers to reduce infant and maternal mortality rates, and identified Kellton Tech as its partner to develop, implement, and expand the mobile app. The support and commitment from the UP government enabled the tech partner to pitch and pilot creative solutions. Thus far, the initiative has displayed promising results, supporting nearly 12,000 health workers to update their skills, track and report data, and provide high-quality health care to their communities; the program is set to expand to two other states soon.<sup>35</sup>

Similarly, before securing MOH support, ZiDi Technologies – a social enterprise in Kenya – worked closely with its target users (nurses and other healthcare professionals) to identify bottlenecks in the clinical management of the public health delivery system and build a technology to address those concerns. Once the concept was developed, ZiDi employed the new technology in two health facilities for one year before gaining the support of the Muhoroni District Health Management team to officially pilot it in a few of their health centers.<sup>36</sup> One key factor to ZiDi's success was its understanding of the political environment and what was needed in order to achieve the commitment of key stakeholders of interest.

While both these examples display different starting points, they both relied on identifying and collaborating with key partners/users of interest to successfully design and implement an innovative concept.



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## Moving Forward – Recommendations for the Tunza Platinum NMO

- 1. Foster partnerships with existing platforms and public officials.**  
Implementing eHealth solutions for community mobilization activities presents an opportunity for the Tunza Platinum NMO to expand coverage, and empower and leverage frontline health workers to generate and drive demand, increase service utilization, enhance health operations (e.g., enrolment and registration), and realize cost-savings. There are several ongoing eHealth initiatives in Kenya. Creating partnerships with existing platforms that have experience in building tools to promote health services, register clients, and collect service delivery information will minimize potential financial and technical hurdles the NMO may face.
- 2. Build technical and management expertise to help supervise, monitor, and support the initiative** including developing trainings and providing support, establishing proper monitoring and evaluation systems, and overseeing financial and program sustainability.

### Questions to ask when identifying the type of eHealth initiative to pursue

1. Define the purpose of the eHealth initiative – what problem will the technology solve or what goal will it help to reach?
2. Who is the target audience? Why would they benefit from this service?
3. Who are the users of the technology? What skills are needed to implement the tech? What equipment or infrastructure is needed to implement and continue using the tech?
4. What are the costs associated with implementation? (e.g., contracts with technology partner, trainings needed for users, equipment/infrastructure set-up/readiness). Does the initiative aim to make a profit or break even – what is the business model?
5. If data is being collected, will the systems be interoperable with the national HIS? If not, how will data flow to the appropriate stakeholders?
6. What partnerships are needed/will need to be made to make the initiative viable and operable?

## Brief 4: Implementing private sector health microinsurance (HMI) schemes

### Introduction

PS Kenya is also exploring solutions to advance commercial goals of the Tunza Platinum NMO, including health microinsurance (HMI) products. This brief considers relevant HMI models, practices, and lessons from within Kenya and the wider HMI industry for relevance to the NMO value proposition. Such small-scale health financing mechanisms may (1) be scalable at the national and subnational levels in Kenya, (2) attempt to target users in lower wealth quintiles, and (3) eventually integrate into UHC mechanisms, for instance in a hub-and-spokes model. However, they may also fragment income and risk pooling mechanisms for UHC; depend on voluntary participation that limits scale, sustainability, and equity; suffer from market hazards like adverse selection and risk selection<sup>38</sup> by insurers; and even create interest groups that ultimately resist coverage of the poor under national UHC mechanisms. Drawing on questions and survey responses provided by PS Kenya, this brief recaps salient takeaways on dominant practices in developing, promoting, implementing, and managing HMI products in a commercially viable manner for the general information of PS Kenya managers.

### Background

Based on discussions with the PS Kenya team, we define health care microinsurance here as the promotion and implementation of self-sustaining voluntary health insurance products for individuals and families, with typically low premiums, capped benefits comprising outpatient and/or inpatient services, and a well-targeted clientele covering low-income, informally-employed, and often rural beneficiaries. HMI schemes are typically offered by commercial insurance companies, large NGOs, community-based organizations, microfinance lenders, cooperatives, public sector institutions, donors, and others, and may look different from case to case. These schemes are mostly offered in the private sector, may be marketed to beneficiaries and providers nationwide, and are sometimes supported by donors, technical partners, and governments or public-sector enterprises (PSEs). Finally, HMI products may or may not be subject to insurance regulations, depending on the type of risk-bearing institution (such as a formally incorporated insurance company versus an NGO or informal community scheme) and whether reinsurance is featured, since reinsurers must be formal insurance companies subject to insurance regulations.

Image  
Tunza provider performing health consultation.  
© PS Kenya



### International examples: Key actors and roles

Small scale health insurance models are quite wide-spread globally, with highest (though still limited) coverage rate concentrations in Latin America and South Asia, followed by West and East Africa.<sup>39</sup> Table 4 summarizes key features of five different models from Kenya and South Asia to draw out takeaways for the Tunza NMO initiative. These examples (1) were selected from countries with comparable income levels (Kenya, Pakistan, India, and Bangladesh), (2) were chosen to capture diversity across key features of the schemes, (3) comprise of former or ongoing initiatives,<sup>40</sup> and (4) were picked to reflect as much as possible the HMI definition provided above. These examples include HMI products implemented by NGOs, private insurers, insurance brokers, and, in one case, in part by a public sector enterprise.

Summary Table 4 – Key ingredients of relevant health microinsurance models

Key HMI Implementation Features	Selected Health Care Microinsurance Program Examples <sup>41</sup> (Timelines in brackets indicate the continuity or discontinuity of products.)				
	Linda Jamii, Kenya (2012-2015)	Bima ya Jamii (BYJ), Kenya (2008-2010)	Arogya Raksha Yojana (ARY), India (2006 – )	Nirapotta, Bangladesh (2006 – )	Naya Jeevan, Pakistan (2009 – )
Key implementers	Changamka Microhealth (through subsidiary Changamka Microinsurance Ltd.), Britam, and Safaricom	Swedish Cooperative Center, Cooperative Insurance Company (CIC), NHIF (ILO/BMGF Microinsurance Innovation Facility)	HDFC-ERGO General Insurance Company Limited (joint venture between India's HDFC and ERGO Int'l AG of Munich Re Group); Biocon Pharma CSR foundation	HDFC-ERGO General Insurance Company Limited (joint venture between India's HDFC and ERGO Int'l AG of Munich Re Group); Biocon Pharma CSR foundation	Naya Jeevan Health Quest (NJHQ), for-profit social enterprise & registered insurance broker (intermediary); aggregates groups of individuals into blended risk pools and negotiates group health insurance (not always HMI) with various PHIs on their behalf
Public sector involvement	None	The NHIF underwrote the health cover and provided free access to Category A public hospitals and rebates for private hospitals	None	None	None
Target clientele	Urban/peri urban; typically secondary school educated; running small businesses or holding small plots of land; Living Standard Measures 1-8 (n≈1,100)	SACCO members, MFI clients and Jua kali (open air) artisans; mainly living in rural areas and informal sector self-employed persons (n≈8,300)	Targeted at key rural Indian markets where HDFC-ERGO has a strong presence; coverage is offered on group basis per village to manage risk (n≈3,000 in 2012)	Compulsory enrollment of microfinance loan borrowers for the period of the loan (n≈527,000)	Low-income individuals from formal and informal sectors, including domestic workers, employees at SMEs, and workers within corporate value chains, such as suppliers, distributors or small retailers. Sponsors pay premiums for these individuals. (n≈7,200 in 2012)
Promotion and marketing of HMI product	Retails outlets, post offices, Safaricom MPESA agents and retail locations	CIC managed the product and marketed it via MFIs, cooperative channels such as SACCOs, and other member-based organizations	Biocon Foundation (Biocon Pharma CSR) carries out free marketing and mobile enrollment in villages, and runs educational and preventive health camps	Microfinance borrowers automatically enrolled; CHWs also operate in communities to provide education, referrals and services to lower hospital costs	NJHQ engages direct employers or corporations higher up in the value chain who sponsor, as philanthropy, most or all of the premiums for a pool of low-income workers; Naya Jeevan then negotiates rates with private health insurers
Service coverage	Comprehensive benefits (hospitalization, OP services, cash benefit, funeral assistance); with per period and per family limits	3-in-1 product (including health, accidental death and disability, and funeral insurance) providing comprehensive in-patient health cover through NHIF	In-patient services only, including coverage limits on major and minor surgeries and excluding conditions deemed to be "less common"	Hospitalization benefit varying by service category; capped at US\$83/family/year	All IP day procedures and hospitalization covered in the basic plan, with only associated OP services covered for 30-day pre/post admission. Additional coverage can be purchased for major medical events, preexisting conditions, and maternity care.

Summary Table 4 – Key ingredients of relevant health microinsurance models

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Provider aggregation		711 individually-contracted, Britam-approved private hospitals nationwide	NHIF accredited Category A public hospitals; rebates at private hospitals	Individually empaneled providers providing HDFC-ERGO discounted services with maximum day and coverage limits and submitting cashless claims	Empaneled (or sufficiently reputed) hospitals covered; some free and discounted services at the two SAJIDA-owned hospitals	Cashless (no upfront payments) card-based services at 260 individually-accredited high-quality hospitals across Pakistan.
Financial sustainability	Inflows (subsidies and premium revenues)	Only premiums, at KSH12,000/family/year for full benefits	Only premiums, at KSH3,650/family/year (excluding funeral); significantly higher premium from mandatory OP coverage imperiled product	Premiums of US\$3.22/person/year; plus free marketing, enrollment, and health camps by Biocon Pharma	Premiums per family per period paid upfront and depend on the duration of the MFI loan (US\$4.14 for 1 year); growth is limited by number of MFI borrowers	NJHQ earns premium margin (premium amount paid by sponsors minus that negotiated with PHIs; 15-20% of total premiums) and a 10% brokerage commission paid by PHIs. Additional fees from sponsors earned for value-add services like tele-health line, etc.
	Outflows (claims and overheads; excluding initial set up cost)	Significant claims cost, especially through retail users, at a limited set of facilities for a concentrated set of services (mainly maternity care)	Claims ratio for the health component (claims/premiums) at 120%	Claims ratio brought down to 40% in 2012 from 140% in 2010 after benefits were reduced and premiums were increased	Rising claims ratio with health accounting for over 50% of claims; losses in 2011, 2012; premiums increased and IP benefits restricted in 2012 to reduce claims	(Decreasing) operating losses each year but strong compound annual growth; sourced donor grants to offset losses and seeking equity partners and more niche markets; aggregate claims ratio across PHIs rose from 50% in 2010 to 96% in 2012 and 71% in 2013
Client experience		Cost, quality, and pleasantness of services rated well; barriers like effective information about providers and coverage, and proximity and availability of clinics experienced	High IP coverage; lack of easy premium payment options; release from hospital contingent on policy verification; excessive NHIF documentation	Clients benefit from free health camps and discounted drugs, but enrollment significantly lowered due to premium increases and benefits rollback to manage costs	Clients must pay cash upfront for services at scheme providers to be reimbursed; services cease at age 70; no fees or discounts at SAJIDA-owned facilities	Clients must pay cash upfront for services at scheme providers to be reimbursed; services cease at age 70; no fees or discounts at SAJIDA-owned facilities NJHQ is only the insurance intermediary but has propelled strong enrollment and premiums growth. Direct data on client satisfaction is not available, but claims have increased significantly and premiums have not stalled.

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## Salient takeaways and challenges

### **HMI models are not typically mediated by (NMO-type) provider aggregators.**

Instead, they are characterized by traditional payer-provider relationships where payers, brokers, or other instigators (e.g., donors) take the initiative to individually approach, accredit, and contract providers and engage communities. Financial intermediaries dealing with individual clients – such as MFIs SAJIDA in Bangladesh or KWFT in Kenya – may package HMI products with microfinance loans on a pilot basis or limited scale, but examples of provider aggregators initiating HMI schemes or supporting with claims processing, provider engagement and accreditation, and community outreach were not readily observed.

**It is not common for public sector payers or funding to be part of commercial HMI schemes.** In all models except one, public policymakers, insurers, and funding were not involved in planning or paying for privately-designed and delivered HMI products. Only in the case of Kenya's Bima ya Jamii did the NHIF join in to underwrite the in-patient health component of a composite microinsurance offering as part of increasing informal sector coverage. This was, however, ultimately not sustainable since coverage was a function of voluntary participation, funded by premiums and not public (budget) funds, and dropped significantly once premiums were raised to included outpatient benefits under binding regulation.

### **There are similarities in the client profile targeted by HMI products.**

These products are targeted commonly at clients with low-income, informal sector employment, and low education backgrounds. Other key features of the client profile appear to be access to ICT like a mobile wallet subscription, as well as ability and propensity to save and invest in health care. Covering low-income, informal sector clients helps achieve social impact and UHC goals, but it also threatens the sustainability or viability of commercial HMI products. Target clients may (1) find premiums unaffordable and require donor subsidy or philanthropic contributions, (2) not typically prioritize investing in health care over making other household spending choices, and (3) not save to fully or partially pay for premiums in a smooth and sustained manner (for instance, it is preferable that clients can consistently save small amounts over time rather than be asked to make a one-time lump sum payment<sup>42</sup>).

**Technology is driving growth in health care and other types of microinsurance** and is particularly salient for marketing and promotion of HMI products, enrollment and premium collection, and connecting clients with services and providers<sup>43</sup>. Key technologies include mobile phone subscriptions, data-enabled products like mobile wallets, and remote assistance services like telehealth call-in centers. These help to reduce operating costs (e.g., from sales outreach), streamline the flow of information to and about clients, and attach value-add services like preventive education to entice clients and sponsors. Importantly, promoting HMI to, for instance, mobile subscribers helps to potentially reach scale that is otherwise unavailable via points of sale like retail outlets and conventional insurance brokers.

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**HMI products suffer from a serious solvency challenge; commercial revenue does not typically wholly offset claims and administration costs.** The claims ratio of an HMI product—claims cost as a share of premiums earned—can often be in excess of 100 percent. This is because annual premiums are often low, some key (hospitalization) services are expensive, and utilization can be high once retail clients are aware of their insurance entitlements. For instance, in the case of Kenya’s Linda Jamii, maternity coverage represented just 4 percent of all visits by patients but accounted for 45 percent of claims cost. Operating costs can also be high because of intensive administration and marketing needs, and concentrated use of a few costly (high quality) clinics can put further pressure on commercial viability.<sup>44</sup> These issues can lead to premium increases and rollback of benefits, and cause clients and providers to drop out. Importantly, because HMI is voluntary, the risk of adverse selection—clients opting in because of sickness or impending health care costs—is high. Hence, as an example, Linda Jamii and Naya Jeevan sought to delay maternity coverage or charge extra for it when enrolling clients to avoid the risk of beneficiaries joining only to defray the costs of delivery. Ultimately, better quality cost and utilization data is essential for improved actuarial evaluation of HMI products, but these data are often unavailable.

**Finally, managing providers and clients presents a crucial and discrete set of challenges in implementing microinsurance schemes.** As mentioned above, HMI products face specific challenges like constraints on funding and services, marketing and promotion activities for frequently large target markets, management of an often nationwide or dispersed provider network, and a crucial imperative to reduce overhead costs.<sup>45</sup> Gaps can easily emerge in the management of providers and clients at scale. For instance, in Kenya, beneficiaries’ “experience revealed two barriers to improving access to health care through Linda Jamii: effective information about providers and coverage, and the proximity and availability of clinics.” In case of Bima ya Jamii, NHIF claims processing for providers was often held up because of documentation requirements. In the absence of provider intermediaries and intensive community engagement, provider and client engagement can pose challenges, causing payment delays and lack of HMI policy renewals.

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## Moving forward – Recommendations for the Tunza Platinum NMO

These takeaways yield some clear ideas for the roles NMOs may play towards providers and communities in support of HMI schemes, such as (1) helping to gather consistent, reliable, and up-to-date data for actuarial and monitoring purposes from communities and providers, (2) carrying out systematic monitoring of network facilities, especially for quality and claims management, as payers focus on expanding the network for accessibility, and (3) engaging beneficiary communities to educate on treatment expectations, prevention, and appropriate care. In the longer run, improved accreditation, claims processing, and community engagement functions by the NMO can provide a more ready platform for facilitating HMI and other types of insurance mechanisms. In the near term, however, given that HMI schemes are fraught with operational and financial risks and not easily aligned to UHC goals, the Tunza Platinum NMO may consider the following “low-lift” recommendations:

1. **PS Kenya and Tunza Platinum can create an advisory group to further unpack the specific HMI value proposition for the NMO, define implementation steps, and detail financial and data requirements in Kenya’s context.** HMI schemes are not new to Kenya. Tunza Platinum can learn from others in a working or advisory group. Such a group may contain delegates, for instance, from HMI implementers like Changamka Microhealth, CIC (insurance), Safaricom (telecom), providers like the Coptic Mission Hospital, NHIF, and MFIs like KWFT and K-Rep Development Agency.
2. **Gain implementation experience by supporting service delivery under an external HMI scheme rather than developing and promoting Tunza’s own HMI product.** As mentioned above, Tunza Platinum NMO is prioritizing several functions for supporting insurers vis-à-vis providers and clients, such as accreditation, claims processing, and community engagement. As the HMI models considered demonstrate, provider aggregators are largely missing from HMI schemes. Similar to the role it would perform for other insurance

schemes, Tunza Platinum NMO can, as a start, leverage the functionalities being developed to be the service delivery partner to an external HMI model being implemented or tested, or one which it can, preferably, help design. Doing so can also result in vital experience for playing an intermediary role vis-à-vis providers on behalf of payers like the NHIF.

3. **The insurance brokerage model tested out in the case of Naya Jeevan in Pakistan provides an alternative to launching and managing an own HMI product.** The operator—Naya Jeevan Health Quest—is able to earn premium margins and brokerage fees, demonstrate sharp growth, attract donor and philanthropic funding, and enroll clients in bulk with existing PHI products—without needing to develop and mass-market a new HMI product, manage claims, and collect individual premiums.
4. **Tunza Platinum NMO will need to carefully consider the risks posed by an HMI scheme to its reputation and brand,** such as from unmet expectations on part of clients and providers, potential damage to relationships with key actors like private health insurers and telecoms, and threat of financial losses.

## References

- <sup>1</sup> For AHME information and learning products please visit <https://www.hanshep.org/our-programmes/AHMEresources>
- <sup>2</sup> Accreditation is a formal, third-party recognition of a facility's achievement of standards set and defined by the accreditation organization and/or national government.
- <sup>3</sup> In Kenya, empanelment refers to the process by which facilities meet defined criteria to join the NHIF and participate in its coverage scheme. Empanelment may, however, also refer to a process (such as in the US) that assigns care for individuals and populations to specific health care facilities, teams or providers.
- <sup>4</sup> PhilHealth Corporation, "PhilHealth Benchbook," 2014, <https://www.philhealth.gov.ph/partners/providers/benchbook/>.
- <sup>5</sup> PhilHealth Corporation, "Manual of Procedure of the New Accreditation Process," 2012, [https://www.philhealth.gov.ph/downloads/accreditation/MOP\\_PEACHEs.pdf](https://www.philhealth.gov.ph/downloads/accreditation/MOP_PEACHEs.pdf).
- <sup>6</sup> National Hospital Insurance Fund, "NHIF Accreditation Manual – 1st Edition," 2005, [http://publications.universalhealth2030.org/uploads/nhif\\_accreditation\\_manual.pdf](http://publications.universalhealth2030.org/uploads/nhif_accreditation_manual.pdf).
- <sup>7</sup> "AHME Snapshot Overview," 2016, [http://www.hanshep.org/news-and-events/AHMECasestudyseries\\_Nov2016.pdf](http://www.hanshep.org/news-and-events/AHMECasestudyseries_Nov2016.pdf).
- <sup>8</sup> R Viswanathan and A Avanceña, "Social Franchises: The Bridge between Healthcare Providers and National Health Insurance Programs | Lessons Learned from Two Initiatives in the Philippines" (San Francisco: Global Health Group, 2015), <http://sf4health.org/sites/sf4health.org/files/wysiwyg/SF-bridge-between-private-national-PHL.pdf>.
- <sup>9</sup> Amanda Folsom. Phone Interview. May 10, 2018.
- <sup>10</sup> Center for Health Strategies, Inc. "Delineating Responsibilities across Accountable and Managed Care Organizations". 2019. [http://www.chcs.org/media/ACO\\_MCO-Tool\\_021616.pdf](http://www.chcs.org/media/ACO_MCO-Tool_021616.pdf)
- <sup>11</sup> Shirley Domingo, "Institutionalizing Quality Standards In Health Care," 2012, <https://www.slideshare.net/PhilipDoromal/institutionalizing-quality-standards-in-health-care>.
- <sup>12</sup> Adenike Olaniba, "Relationship Management between HMOs, and Providers: Matters Arising," in Healthcare Providers Association of Nigeria, 2014.
- <sup>13</sup> "AHME Snapshot Overview," 2016, [http://www.hanshep.org/news-and-events/AHMECasestudyseries\\_Nov2016.pdf](http://www.hanshep.org/news-and-events/AHMECasestudyseries_Nov2016.pdf).
- <sup>14</sup> "AHME Snapshot 13". 2017, <http://www.hanshep.org/news-and-events/AHMESnapshots.pdf>
- <sup>15</sup> The BlueStar social franchise used some of their membership fees to cover accreditation activity costs, but still heavily relied on donor funding.
- <sup>16</sup> Young-Taek Park et al., "Health Insurance Claim Review Using Information Technologies," *Healthcare Informatics Research* 18, no. 3 (2012): 215, doi:10.4258/hir.2012.18.3.215.
- <sup>17</sup> PhilHealth Corporation, "PhilHealth Circular 2016-0016: Full Implementation of the Electronic Claims System" (2016), <https://www.philhealth.gov.ph/circulars/2016/circ2016-016.pdf>.
- <sup>18</sup> Eric Nsiah-Boateng et al., "Reducing Medical Claims Cost to Ghana's National Health Insurance Scheme: A Cross-Sectional Comparative Assessment of the Paper- and Electronic-Based Claims Reviews," *BMC Health Services Research* 17, no. 1 (February 2017): 115, doi:10.1186/s12913-017-2054-1.
- <sup>19</sup> VMAs primarily manage claims for a discrete, small set of services
- <sup>20</sup> Aneesa Arur et al., "Insights from Innovations: Lessons from Designing and Implementing Family Planning/Reproductive Health Voucher Programs in Kenya and Uganda," 2009, [https://www.shopsplusproject.org/sites/default/files/resources/5361\\_file\\_FINAL\\_FP\\_Voucher\\_Innovations.pdf](https://www.shopsplusproject.org/sites/default/files/resources/5361_file_FINAL_FP_Voucher_Innovations.pdf).
- <sup>21</sup> Naomi Beyeler et al., "Public Financing Partnerships to Improve Private Sector Health Care: Case Studies of Intermediary Purchasing Platforms," 2018.
- <sup>22</sup> While not operational, BlueStar is also considering offering a claims submission service to its franchisees; BlueStar would submit all claims on behalf of the franchisees and subtract a small percentage from the reimbursements.
- <sup>23</sup> Folsom, "Phone Interview."



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- <sup>24</sup> Lindsay Morgan, "More Choices for Women: Vouchers for Reproductive Health Services in Kenya and Uganda," 2011, <https://www.rbhealth.org/sites/rbf/files/vouchers.pdf>.
- <sup>25</sup> Raja Bollineni, "Documentation of Implementation Processes: Claims Processing and Reimbursement," 2012, <http://www.impactinsurance.org/sites/default/files/Process Document Claims process.pdf%0A>.
- <sup>26</sup> CHAM's function is largely underfunded, with minimal support from the government, CHAM has consolidated funding from many, often unpredictable, third-party sources.
- <sup>27</sup> Alain B Labrique et al., "mHealth Innovations as Health System Strengthening Tools: 12 Common Applications and a Visual Framework," *Global Health: Science and Practice* 1, no. 2 (August 2013): 160–71, doi:10.9745/GHSP-D-13-00031.
- <sup>28</sup> Global diffusion of eHealth: making universal health coverage achievable. Report of the third global survey on eHealth. Geneva: World Health Organization; 2016. Licence: CC BY-NC-SA 3.0 IGO. <http://apps.who.int/iris/bitstream/handle/10665/252529/9789241511780-eng.pdf?sequence=1>; Additional resources include: <https://www.intrahealth.org/sites/ihweb/files/attachment-files/msakhijhansibookletweb.pdf>, <https://www.intrahealth.org/msakhi-award-winning-mobile-phone-app-frontline-health-care>
- <sup>29</sup> Uddin, Jasim, Tuhin Biswas, Gourab Adhikary, Wazed Ali, Nurul Alam, Rajesh Palit, Nizam Uddin, Aftab Uddin, Fatema Khatun, and Abbas Bhuiya. "Impact of Mobile Phone-Based Technology to Improve Health, Population and Nutrition Services in Rural Bangladesh: A Study Protocol." *BMC Medical Informatics and Decision Making* 17, no. 1 (December 6, 2017): 101. doi:10.1186/s12911-017-0502-9.
- <sup>30</sup> Gayle Mendoza, Lungi Okoko, Sarah Konopka and Edna Jonas. November 2013. mHealth Compendium, Volume Three. Arlington, VA: African Strategies for Health project, Management Sciences for Health
- <sup>31</sup> Tim Wood et al., "Mobile Technology for Community Health in Ghana," 2012, file:///C:/Users/nhariharan/Downloads/Grameen Foundation 18 – MOTECH Lessons Learned.pdf.; LeFevre, Amnesty E, Diwakar Mohan, David Hutchful, Larissa Jennings, Garrett Mehl, Alain Labrique, Karen Romano, and Anitha Moorthy. "Mobile Technology for Community Health in Ghana: What Happens When Technical Functionality Threatens the Effectiveness of Digital Health Programs?" *BMC Medical Informatics and Decision Making* 17, no. 1 (March 2017): 27. doi:10.1186/s12911-017-0421-9.
- <sup>32</sup> Lemay, Nancy Vollmer, Tara Sullivan, Brian Jumbe, and Cary Peabody Perry. "Reaching Remote Health Workers in Malawi: Baseline Assessment of a Pilot mHealth Intervention." *Journal of Health Communication* 17, no. sup1 (May 2, 2012): 105–17. doi:10.1080/10810730.2011.649106.
- <sup>33</sup> Källander, K., Tibenderana, J. K., Akpogheneta, O. J., Strachan, D. L., Hill, Z., ten Asbroek, A. H. A., ... Meek, S. R. (2013). Mobile Health (mHealth) Approaches and Lessons for Increased Performance and Retention of Community Health Workers in Low- and Middle-Income Countries: A Review. *Journal of Medical Internet Research*, 15(1), e17. <http://doi.org/10.2196/jmir.2130>
- <sup>34</sup> Global diffusion of eHealth: making universal health coverage achievable. Report of the third global survey on eHealth. Geneva: World Health Organization; 2016. Licence: CC BY-NC-SA 3.0 IGO. <https://events.drupal.org/sites/default/files/slides/msehat.pdf>
- <sup>35</sup> "mSakhi: Award-winning Mobile Phone App for Frontline Health Care". IntraHealth <https://www.intrahealth.org/msakhi-award-winning-mobile-phone-app-frontline-health-care>
- <sup>36</sup> "The trials of Social Entrepreneur: SiSi, MicroClinical Technologies ad Kenya HealthCare". Harvard T.H. Chan School of Public Health. Boston, 2015. <https://casesources.hsph.harvard.edu/files/case/files/zidi.pdf>
- <sup>37</sup> Leveraging Health Microinsurance to Promote Universal Health Coverage. Meredith Kimball, Caroline Phily, Amanda Folsom, Gina Lagomarsino, & Jeanna Holtz: Results for Development & the Microinsurance Innovation Facility, International Labor Organization. 2013.

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- <sup>38</sup> Whereby insurers may only cover individuals with low risk of utilizing health care services
- <sup>39</sup> World Map of Microinsurance. Microinsurance Network. 2015.
- <sup>40</sup> Therefore, excluding older initiatives in Kenya like: the Jami Salam policy via CIC; the KWFT HMI for (mainly rural) women; Kinga ya Mkulima, offering health and funeral coverage for tea farmers via Majani Insurance Brokers, BRITAK, and a subsidiary of Kenya Tea Development Agency; and HMI products Afya Card and Afya Loan by K-Rep Development Agency via partnership with K-Rep Bank and HMO AAR Health Services.
- <sup>41</sup> These examples are taken from: Changamka Line Jamii Learning Journey. ILO. 2014.; Is Health Microinsurance Sustainable? An Analysis of Five South Asian Schemes. Paper No. 41. Impact Insurance, ILO. 2015. Learning Journey Bima ya Jamii, Impact Insurance, ILO. 2010; additional publicly-available documents for each scheme were also consulted.
- <sup>42</sup> This was a particular challenge for Changamka's Linda Jamii in Kenya where only about 60 percent of the enrollees saved enough to pay the annual KSH12,000 premium.
- <sup>43</sup> The Landscape of Microinsurance in Africa 2015. The World Map of Microinsurance. Microinsurance Network, Munich Re Foundation, and Microinsurance Center. 2015.
- <sup>44</sup> The Coptic Mission Hospital alone, for instance, accounted for 30 percent of inpatient costs and 57 percent of hospital stays for Changamka's Linda Jamii. Linda Jamii Learning Journey. Changamka Microinsurance Ltd. Impact Insurance, ILO. 2014.
- <sup>45</sup> Administration can account for about a quarter of aggregate costs for health microinsurance in the Africa region. The Landscape of Microinsurance Africa 2015. The World Map of Microinsurance. Microinsurance Network, Munich Re Foundation, and Microinsurance Center. 2015



