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Original research

Social innovation in health, community engagement, financing and outcomes: qualitative analysis from the social innovation in health initiative

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ABSTRACT

Background Social innovation in health is a community-engaged process that links social change and health improvement, drawing on the diverse strengths of local individuals and institutions. However, there are few studies that examine community engagement, financing and outcomes. The purpose of this study is to use a qualitative descriptive analysis to assess 40 social innovations in health identified through a global open call.

Methods This qualitative analysis examined social innovation case studies from low- and middle-income countries identified by a global social innovation network. A crowdsourcing open call identified projects and key components of each social innovation were evaluated by an independent panel. We used a US Centers for Disease Control and Prevention framework to measure community engagement as shared leadership, collaboration, involvement, consultation or informing. We used descriptive statistics to examine key aspects of community engagement, financing, health outcomes and non-health outcomes.

Results Data from 40 social innovations were examined. Social innovations were from Africa (21/40), Asia (11/40), and Latin America and the Caribbean (8/40). Community engagement was diverse and robust across the cases and 60% (24/40) had either shared leadership or collaboration. Financing for social innovation came from research grants (23), national or provincial government support (15), revenues from sales (13), donations (13) and local government support (10). Social innovations reported health and non-health outcomes.

Conclusion Our data demonstrate social innovations had robust community engagement. Innovative financing mechanisms provide mechanisms for sustaining social innovations.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Social innovation in health suggests innovations may be more effective when organically emerging from local actors in partnership with community members.
⇒ Importance of community engagement has been recognized but more research and action on community engagement is needed to ensure sustainability.

WHAT THIS STUDY ADDS

⇒ Data suggests robust community engagement across the life of social innovations, with over half of the cases meeting criteria for shared leadership or collaboration.
Diverse funding sources support social innovations and these financing mechanisms enable the sustainability of social innovations.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE AND/OR POLICY

⇒ Community engagement is a critical component of social innovations which should be highlighted for programmatic and policy considerations.
⇒ Exceptional innovation opens space for the implementation of both health and non-health outcomes; further research is needed.

Further research on health and non-health outcomes of social innovation is needed.

INTRODUCTION

Health systems and services remain largely implemented through an expert-driven, top-down process which often fails to recognise community engagement as a key feature of improving health and well-being. However, the field of social innovation in health suggests that innovation may be more effective when it organically emerges from local actors in partnership with community members, especially people in low- and middle-income countries (LMICs). Social innovation in health is a community-engaged process that links social change and health improvement, drawing on the diverse strengths of local individuals and institutions.[1] Social innovation provides innovative solutions to address healthcare delivery challenges, engaging community from multiple sectors.

Drawing on the expanding social innovation in health movement, the Social Innovation in Health Initiative (SIHI) was launched in 2014.[2] SIHI is a diverse network of community members, innovators, researchers and government leaders focused on creating an enabling environment for social innovation and engage countries in advancing social innovation through research, capacity strengthening and advocacy. SIHI aims to unlock the capacity of all health system actors and stakeholders, including innovators, policymakers, front-line workers and academics, and to advance community-engaged social innovation. Community engagement, defined as the process of working collaboratively with groups of people who are affiliated by geographic proximity, special interests or similar situations with respect to issues affecting their well-being,[3] remains a critical factor in driving this culture shift. While the importance of community engagement has been recognised for decades,[4] there has been more research and action on community engagement to ensure sustainability. In addition, non-health collaborations can help social innovations to have impact on social, environmental and other outcomes.

There is limited research on social innovation in health.[5] Few studies have examined community engagement or financing related to social innovation. In addition, research has not explored relationships between Sustainable Development Goals (SDGs) and health and non-health outputs emerging from social innovations. Better understanding community engagement, financing and outcomes related to social innovation will help to expand this field and increase the rigour of research.[6] TDR (the UNDP/UNICEF/World Bank/WHO Special Programme for research and training in tropical diseases), the WHO and other organisations have underlined the importance of high-quality research on social innovation.[5 7]

In this paper, we assess social innovation cases identified through a crowdsourcing open call approach.[8] Crowdsourcing has a group of individuals solve all or part of a problem and then share solutions with the public.[9] The comprehensive open call process appointed independent expert panels to review key aspects of each social innovation. The crowdsourcing open call was conducted in 2015 and subsequent open calls resulted in selection of a total of 40 case studies conducted by SIHI researchers. These solutions have increased access to affordable and effective healthcare delivery and strengthened public health systems. This analysis uses descriptive case study research methodology to investigate mechanisms of operation and learn transferable lessons from social innovations, including critical elements of community engagement. The purpose of this study is to use a qualitative descriptive analysis to assess 40 social innovations in health identified through a global open call to better understand community engagement, financing and social determinants.

METHODS

Scope

The overarching goal was to gain insights from existing case studies of social innovations used across Africa, Asia and Latin America, to determine best practices and gaps to be addressed. A qualitative analysis of 40 social innovations identified characteristics of successfully initiating community-led or community-engaged innovations to enhance healthcare delivery.

Study design

The study adopted a qualitative analysis of case studies identified by the SIHI network. We used textual methods to identify themes and extract relevant data on community engagement and other characteristics from 40 selected social innovation case studies. This qualitative analysis involved an iterative process combining elements of content analysis and thematic analysis. We also examined the depth and nature of engagement using the community engagement framework.[3]

Case study recruitment

The SIHI network has periodic global and regional crowdsourcing open calls to identify social innovation. More details about crowdsourcing open calls can be found in the TDR/SESH/SIHI practical guide.[10] The network has consensus guidelines on implementing open calls.[11] The first crowdsourcing open call took place in 2015, with subsequent regional open calls during 2017–2018. The open calls invited individuals and organisations from all backgrounds and sectors to nominate social innovation initiatives that help to solve local healthcare delivery challenges. Nominations were received through a dedicated online platform and open during a 6- to 8-week period. To review and select innovations, SIHI appointed independent panels comprising external experts to review submissions received through the call according to a predefined criteria: degree of innovativeness, affordability, inclusiveness and effectiveness. Each project was reviewed

by at least two panel members and high scoring projects proceeded to a second round of review. This second review assessed the extent to which cases contributed to knowledge about social innovation in health. SIHI researchers then travelled to each local partner to see the implementation and collect additional data in the form of document reviews, participant observations and semistructured interviews. This resulted in a total of 40 case studies.[12]

Data extraction

We used qualitative data analysis methods to examine text in the case studies. Thematic content analysis addresses a priori issues embedded within the data while allowing enough flexibility to incorporate new and hitherto unconsidered issues. Specific themes generated prior to coding were merged with existing data-driven codes to develop analytical and descriptive themes, respectively. Three coders individually coded the case studies. During coding, if a theme was unclear, it was discussed within a core group of five authors for resolution.

Data analysis

Following extraction of key elements of community engagement and other characteristics of social innovations from detailed descriptions of 40 selected case studies, content analysis was carried out using inductive and deductive coding. Our coding drew on a community-based participatory research framework developed by the US Centers for Disease Control and Prevention.[13] This framework (figure 1) was developed which aligned with the levels of engagement framework as defined as: Inform (provides community with information); Consult (gets information or feedback from the community); Involve (involves multi-participation with community on issues); Collaborate (forms partnerships with community on each aspect of the project), and Shared Leadership (strong or long-term partnership structure is formed).[14] We also used content analysis aligned with community engagement framework[3] to generate themes that are potential facilitators and barriers of community engagement. A summary codebook was then used to code each case study submission separately. An analysis of descriptive characteristics of social innovations were similarly examined to facilitate understanding of phenomenon across social innovations.

We also categorised each social innovation according to which SDGs it could potentially address. We undertook this analysis because social innovations often reach beyond the health sector,[1] and this provides a more rigorous framework for categorising non-health values in a structured way.

RESULTS

Among the 40 case studies (table 1), more than half of them, that is, 52.5% (21/40) were from Africa. 27.5%

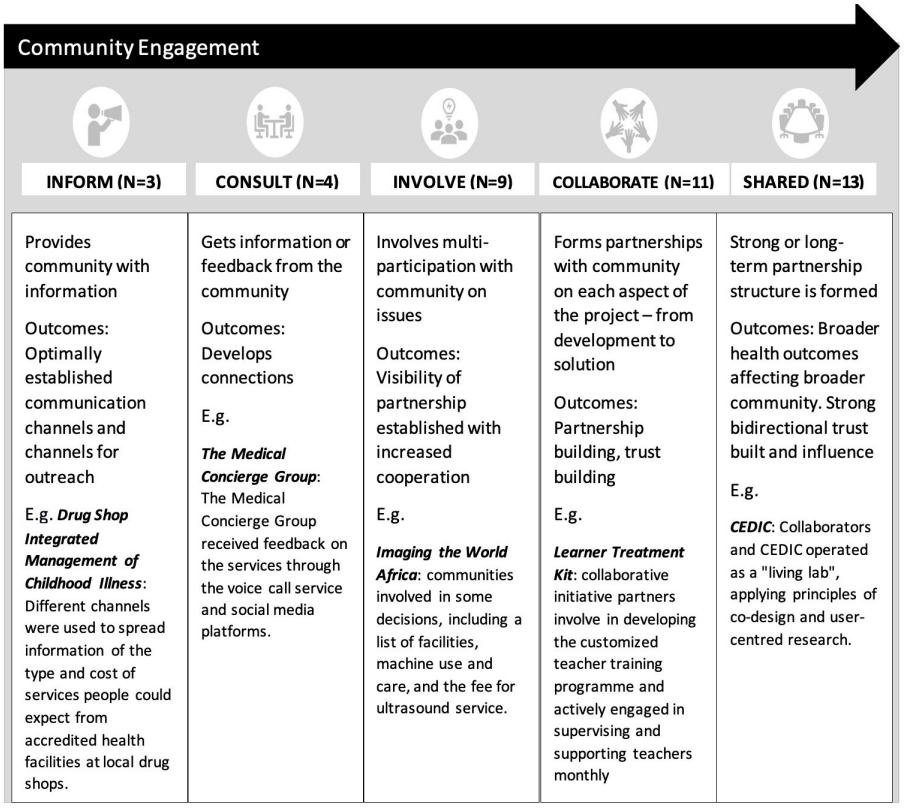

Figure 1 Spectrum of community engagement demonstrated in social innovation in health projects. Categories adapted from the US Centers for Disease Control and Prevention framework.

Table 1 Characteristics of social innovation case studies included in this analysis (n=40)

Variable	n
Continent	
Africa	21
Asia	11
Latin America and the Caribbean	8
Health focus	
Primary healthcare	19
Maternal and child health	7
Malaria	6
HIV	3
Neglected tropical diseases	4
General	3
Others*	7
Areas of interest	
Private providers	6
Community mobilisation	14
Alternate care providers	3
Community health workers	5
Digital technology	7
Last mile distribution	3
Franchising	3
Health research	5
Health education	5
Service delivery	6
Others†	34
Health system focus	
Service delivery	14
Healthcare financing	4
Community service delivery	7
Health workforce	7
Information systems	4
Medical products and technologies	3
Others‡	9
Beneficiaries	
Women	35
Men	28
Children	31
Families	5
Others§	14
Financing	
Research grants	23
National or provincial government support	15
Local government support	10
Revenues or sales	13
Private sector	5
Donations	13

*Community health, Sexually transmitted diseases, Tuberculosis, Infectious disease.
†Indigenous people, Health promotion, Disease prevention, Cross-sector collaboration, Intercultural health, Education sector involvement, Transport and logistics, Disease control and elimination, Community Health, Community engagement, Renewable energy, Crowdsourcing, Medical technology, Public–private partnerships, Women's health, Community empowerment, Financial risk protection, Maternal and child health, Maternal health, Technology, Community health insurance, Child care.
‡Community empowerment, Health insurance, Medical resources, Leadership/governance, Logistics, Information.
§Health offices, Health facilities, Healthcare workers, Non-government organisations, Community-based organisations, Faith-based organisations, Teaching institutions, Community leaders, Decision-makers, Policymakers and Businesses.

(11/40) of cases were from Asia. 20.0% (8/40) of cases were from Latin America and the Caribbean. Nearly half of the social innovations 47.5% (19/40) focused on provision of primary healthcare services whereas others provided maternal and child health, malaria and HIV services. Regarding the health system focus of these social innovations, slightly more than a third aimed at improving service delivery while 17.5% (7/40) of them were focused on improving health workforce and community service delivery.

Majority of the beneficiaries of the social innovations were women (87.5%), children (77.5%) and men (70.0%). It was noted that most of these social innovations 57.5% (23/40) were financed through research grants. We observed substantial community engagement across the cases studies. The largest group of social innovation projects was classified as shared leadership (n=13, 32.5%), followed by collaborate (n=11, 27.5%), involve (n=9, 22.5%), consult (n=4, 10%) and inform (n=3, 7.5%). Shared leadership demonstrated strong and often long-standing relationships, grounded in shared principles, co-ownership or partnerships between social innovators and community stakeholders. Processes of inclusive training and capacity building were shown in shared leadership cases (online supplemental table 1). One team provided medical and management training programmes to faith-based primary care clinics, nurturing mentorship. This service also provided access to drug delivery and medication insurance.

Collaborative cases involved community partners at several steps. One case study had teachers facilitate school-based malaria detection and treatment referral in Malawi. Community members, especially parents, were mobilised to develop and evaluate the programme. The District Health and Education officials supervised and supported teachers on a monthly basis.

In 'involving cases', communities participated in only some processes of the project. Another social innovation had community partners providing knowledge, materials and craftsmanship to build and maintain boats used for the intervention. Boats were then assigned to midwives in each of the village health stations. In consultative cases, community stakeholders participate in either the initial stages being required for information or offered feedback or both. Lastly, in informative cases, social innovators directly spread information or provided suled by local nursesrveys to community members. One project in Kenya delivered health promotion and disease screening services in a neighbourhood-based primary healthcare chain at affordable private rates.

Our analysis identified a wide range of financing mechanisms to localise support for social innovation projects, studies and pilots. Social innovation financing came from research grants (23), national or provincial government support (15), revenues from sales (13),

Figure 2 Localisation of financing demonstrated in social innovations.

donations (13), local government support (10) and private sector contributions (5). Although financing mechanisms included both foreign and domestic sources, there was a prominent trend towards localisation and strong local municipal, regional and national support. The often long-standing relationships between social innovators and local community stakeholders were leveraged to create resources for the development and maintenance of the social innovation. One social innovation in China[15] was initially supported by foreign grants, but then support was transitioned to a mix of foreign and domestic research grants. In addition, strong links between social innovators and beneficiaries provided mechanisms for revenue generation.

We also identified innovative mechanisms to finance social innovations for health (figure 2). These include community-based health insurance and nurse franchising. One community-based health insurance model[16] provided coverage for hard-to-reach rural areas in Malawi. A Rwandan project created a system of rural health centres led by local nurses.[17] Nurses with at least 5 years of experience can join the network and have access to a rent-free building in their village to provide health services as part of a franchise system. They received training on essential primary care services and then generated income by charging small fees with services. Partnerships with the Ministry of Health increased the likelihood of sustainability as they were able to scale or embed the initiative more broadly.

Social innovations reported on both health and non-health outcomes. The most frequently reported health outcomes focused on improving disease-specific services (n=22). Other health outcomes included an increase in the overall efficiency of healthcare service delivery (n=10), improving maternal and child health (n=8) and providing health education (n=4). When mapped against the SDGs (table 2), all social innovations addressed SDG3 (Good Health and Wellbeing). However, some health-related benefits may have a dual impact by addressing multiple SDGs (table 2). This can be seen with interventions that provide health interventions embedded within education (SDG3 and SDG4) as well as health interventions that improve industry, innovation and infrastructure (SDG3 and SDG9).

Table 2 Social innovation health and non-health impacts mapped against the Sustainable Development Goals (SDGs)

Social innovation outcomes	Frequency	SDGs
Health		
Improved disease-specific services		
HIV	2	3
Tuberculosis	1	3
Malaria	2	3
Chagas disease	3	3
Schistosomiasis	1	3
Leprosy	2	3
All diseases	2	3
Increased efficiency of healthcare service	10	3
delivery	3	3
Improved child health	1	3
Improved antenatal care	8	3
Improved maternal and child health	1	3
Improved sexual health services	1	3
Decreased malnutrition	1	3
Improved sanitation	4	3, 4
Health education	1	3
Reduce harms from counterfeit drugs	1	3, 9
Affordable medical diagnostics		
Non-health		
Community engagement	15	10, 17
Capacity building	16	4, 17
Digital innovation	8	9
Housing reform	3	9
Women's empowerment	2	5
Stigma reduction	3	10
Transportation	2	9, 10
Employment	3	8
Task shifting	3	17
Public–private partnership	2	17
Financial risk protection	1	8
Improved infrastructure	1	9
Clean energy	1	7

The non-health social benefits of the innovative community-based interventions were substantial. The most common non-health impact was community engagement (n=15) which is characterised by reducing inequities (SDG10) and strengthening partnerships (SDG17). Other common outcomes included capacity building (n=16), fostering digital innovation (n=8), building resilient infrastructure through housing reform (n=3) and empowering women and girls (n=5). Additional health and non-health impacts related to SDGs are highlighted in table 2.

DISCUSSION

This qualitative study analysed social innovation case studies from LMICs to assess community engagement, financing and outcomes. Our data suggest robust community engagement across the life of the social innovations, with over half of the cases meeting criteria for shared leadership or collaboration. Diverse and novel financing mechanisms were used in these cases. Non-health outcomes captured social benefits from the interventions. Our study extends the literature by focusing on social innovation in LMICs, examining non-health outcomes related to social innovation and measuring community engagement.

Our study showed robust community engagement across all types of case studies included. This finding contrasts a broader literature showing minimal community engagement[18 19] and is consistent with other social innovation research. While shared leadership projects achieved long-term investments in community partnerships and empowered the community to make their own decisions, projects with a lower level of community engagement were still able to increase awareness and knowledge in the community. Our study provides insights on community engagement that could similarly be organised in other LMIC settings. Potential explanations for the higher level of community engagement include more diverse funding, engagement of community leaders and local government stakeholders[20] and involvement of beneficiaries in the planning of social innovations.[21] We speculate that the increased community governance in social innovation research studies may allow for greater sustainability, but further dissemination and implementation research is needed.

Our data show diverse funding sources to support social innovation. In addition to traditional scientific research grants, governments at all levels supported social innovation through funding, in-kind support, policy support and advocacy. This is important because cooperation between organisations and the public sector plays a key role in creating an environment conducive to social innovation. Social innovation collaboration between organisations and public sector partners can accelerate universal health coverage programmes and contribute to SDGs.[1] In addition, sustainable funding is essential for health services, especially services for marginalised groups like people living with HIV. These diverse funding sources increase the likelihood of sustainability.

The study suggested that many social innovation projects addressed health service delivery gaps. Similarly, other studies noted that health innovations improve health service delivery in LMICs.[22–25] The focus on health service delivery may be related to the importance of this topic within LMIC health systems. In addition, this finding may have been related to many social innovations directly related to primary care services. Many studies indicate that comprehensive primary healthcare services are an essential part of strengthening the health system.[26 27] This suggests the importance of social innovations in expanding primary care services to achieve universal health coverage.

Our analysis of social innovations demonstrated non-health outcomes that align with the framework of the SDGs. Social innovations are wide ranging and encompass products, services, behavioural practices, and models or policies which can work to solve various community challenges. Improving healthcare delivery involves influencing the social determinants in the environment. As a result, it is important to explore innovations that can alter environments through non-health spillover effects and indirectly improve health. Our research shows that social innovations may have direct and non-direct mechanisms for improving health outcomes. Cocreation through community engagement provides an opportunity for stakeholders to contribute and learn processes that affect their health and can influence scale-up and sustainability. For example, social innovations that build modern home infrastructure to facilitate vector control show how health and non-health outcomes are often tightly linked. Research on non-health outcomes and spillover effects produced by social innovations is warranted.

A few limitations should be considered when interpreting the study findings. First, this is a small sample of social innovations and is not representative of the various community-based solutions present within the selected contexts. As a result, the study was not powered to assess differences in community engagement, financing or other key outcomes. However, our sampling frame was determined through a global consortium that intentionally focused on LMICs. Second, the data collected were limited to the compendium text alone. Qualitative research is needed to better understand the social context of social innovation and community engagement. Third, the extent of community engagement was not completely captured in the case study texts. At the same time, each social innovation was assessed by an external expert panel.[28] Fourth, our data did not include detailed information about the evolution of financing over time, mechanisms for securing government support and how financing could work outside of SIHI hubs. Each of these financing issues is worthy of further consideration.

In conclusion, finding appropriate ways to fund social innovations and tailoring solutions to local conditions, social structures, emergencies and constraints, is more likely to address health issues across services. Embedding local stakeholders and communities in any stage of the ideation, implementation and evaluation of social innovations can also enhance the uptake and sustainability of interventions. Social innovations can provide direct and indirect health and non-health outcomes that catalyse the achievement of the SDGs. There is a need for more rigorous community engagement research to better understand underlying elements to emulate in similar conditions. From a policy perspective, this study demonstrates the funding mechanisms that may be useful for social innovators and partnerships to support future social innovation initiatives.

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Supplemental Materials

Table 1: Social Innovation in Health Case Studies 2015-2021.

Country	Social Innovation Idea	URL
Uganda	Deliver integrated package of services to address the health, economic-development and social empowerment of women 2. Working with men to address negative gender dynamics and change beliefs around value of women 3. Delivering services through beneficiary volunteers	Social Innovation in Health Initiative | AWARE
Uganda	The Mother's Waiting Hostel (MWH) at Bwindi Community Hospital (BCH) provides a place for mothers to stay within the hospital as they await delivery. Pregnant women at the hostel are reviewed daily and monitored for pre-existing conditions. Mothers make a one-time co-payment of USD 1.5 to stay in the hostel.	Social Innovation in Health Initiative | BWINDI MOTHERS' WAITING HOSTEL

South Africa	The GP Model is a public-private partnership (PPP) that enables medically stable HIV patients to be down-referred from public sector hospitals to local private general practitioners (GPs). The Model has two main components: 1) a referral system that enables public sector patients to be treated at private GPs for a negotiated, fixed consultation fee; 2) a patient case management and treatment support programme (enabled by an electronic data management system and an appointed Regional Coordinator) to improve information flow and patient follow-up	Social Innovation in Health Initiative | BROADREACH GP DOWN-REFERRAL MODEL
Uganda	The Drug Shop Integrated Management of Childhood Illness is a pilot program that aims to bring childhood illness testing and treatment closer to children and families in low-resource areas of Uganda. The program does this by engaging private drug shop owners, conducting iCCM	Social Innovation in Health Initiative | DRUG SHOP INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

	training for all participating drug shop owners and giving subsidies drug supplies. Community awareness campaigns were also held.	
Uganda and Tanzania	Health Child Uganda (HCU) established a volunteer community health work (CHW) network in the rural communities. CHWs deliver health education, manage simple child illnesses, and identify children and pregnant women who require referral to health facilities. The innovation is comprised of two main components: 1) 5,500 volunteer CHWs; 2) a "Mama Toto" community health worker program implementation package that illustrates best practices based on two decades experience in district-led facility and CHW MNCH programming.	Social Innovation in Health Initiative | HEALTHY CHILD UGANDA'S MAMATOTO APPROACH
Uganda	Provides affordable ultrasound scan solutions for women at rural health facilities, which lack standard	Social Innovation in Health Initiative | IMAGING THE WORLD, AFRICA

	infrastructure for imaging systems. Task shifting of ultrasound service provision from sonographers to point of care healthcare workers at lower level facilities, particularly nurses and midwives	
Malawi	A rural health facility that employs community health insurance scheme to improve utilisation and access to healthcare, and so reduce maternal and child mortality	Social Innovation in Health Initiative | SIHI Malawi at the University of Malawi
Uganda	KCDC uses a holistic community-embedded approach to provides affordable rehabilitative and educational services and subsidised orthopaedic equipment in resource constrained, rural environment. They also provide free training and education to community members to raise disability awareness and management. KCDC also provides entrepreneurial business training, organizes sports activities for	Social Innovation in Health Initiative | KYANINGA CHILD DEVELOPMENT CENTRE

	families with disabilities, and encourages trained father to be role models in the community.	
South Africa	Kheth'Impilo recruits previously unemployed candidates from rural, marginalized communities, and admits qualified applicants to the Pharmacist Assistant Training Programme. People under training take class and also work in a designated pharmacy in a government facility. Kheth'Impilo instructors provides both technical instructions, mentorship and counselling. All learners get a living stipend of R2,000 per month during their training. Kheth'Impilo also works with the Provincial Department of Health to create posts in anticipation of graduation	Social Innovation in Health Initiative | KHETH'IMPILO PHARMACIST ASSISTANT TRAINING PROGRAMME

Liberia	Last Mile Health (LMH) models a community health worker platform at grass roots level. LMH recruits community health workers (CHWs)and provide a training program in four modules including different health areas. CHWs are equipped with tools and medications and can refer patients to their affiliated health facilities as needed according to guidelines, provide point-of-care services, and received remuneration based on performance. In addition, LMH providing technical assistance to the National Ministry of Health to help develop policy to scale the CHW model nationwide.	Social Innovation in Health Initiative | LAST MILE HEALTH
Malawi	The Learner Treatment Kit cross-sector, collaborative initiative partners developed a customized training programme for teachers, and equipping them to confidently diagnose and treat malaria within primary schools. Community	Social Innovation in Health Initiative | LEARNER TREATMENT KIT

	members, especially parents, are mobilized to engaged in some programme processes. This programme reduces cost by using existing government distribution system.	
Burundi	LifeNet has teams of university-qualified nurse and management trainers providing medical and management training programmes in their faith-based primary care centre partners. This is an inclusive training with long time mentoring relationships. LifeNet provides their health centre partners with access to their pharmaceutical delivery programme, medicines assurance programme, and growth financing programme. Health centres completing the first module of training are marked as health centres of quality by receiving LifeNet's brand.	Social Innovation in Health Initiative | LIFENET INTERNATIONAL

Kenya	Livewell is a hub-and-spoke primary health care model. Clinical officers in hub clinics and spoke health centres work in their duty facility, and each facility extends in to the community, and deliver health promotion and disease screening services in a neighborhood-based primary health care chain at affordable private rates	Social Innovation in Health Initiative | LIVEWELL CLINIC
Uganda	Living Goods pioneered an entrepreneurial community health worker (CHW) platform. It provides CHW with necessary knowledge and skills to improve mothers and children health in their own villages, and enable them to earn an income as self-employed microentrepreneurs. Living Goods community health promoters (CHPs) move from house to house in their home surrounding areas and engage in health activities. Live Goods provides both financial and non-financial incentives to	Social Innovation in Health Initiative | LIVING GOODS

	CHPs. CHPs have smart mobile tools and the real-time data are used for monitoring and evaluation of CHPs' work, Distribution organisms are used to ensure CHPs access to essential medicines and products.	
Rwanda	To improve access to entry level primary healthcare in rural underserved communities, One Health Family in partnership with Ministry of Health established a network of rural franchise health posts owned and operated by local nurses. The OHF model includes two main components: 1) Nurse-role transformation to entrepreneur. Nurse receive training in Rwandan primary healthcare disease protocol, basic financial management and drug stock management. They also get access to free rented community buildings and low interest loans. 2) Ensuring service quality	One_Family_Health_SIHI_Case_Collection.pdf (socialinnovationinhealth.org)

	delivery through mobile technology platform	
Lesotho	Riders for health is a social enterprise that enhances access to health services among the rural populations and bridges the last mile healthcare delivery gap, by providing transport services. Riders enables the existing health system to be more effective by managing and maintaining a transport network of vehicles and motorcycles. Components of the riders for health model include: vehicle management system; training in operating vehicles; and provision of support services such as supply chain distribution, diagnostic sample transport and medical emergency transportation.	Social Innovation in Health Initiative | RIDERS FOR HEALTH

Malawi	Child Legacy International established an integrated healthcare prototype in rural Lilongwe, Malawi using a sustainable programme development model. The model uses renewable energy to provide integrated development. Vulnerable communities are empowered through provision of quality healthcare services, integrated agriculture services and marketable skills. A community research component was put in place to inform health services design and delivery.	Social Innovation in Health Initiative | Sustainable Integrated Rural Healthcare Model
Ethiopia	The Goal of SCI is to eliminate schistosomiasis and its negative impacts on health by working with African Ministries of Health. The approach employed by SCI focuses on creating national sustainable programmes through strengthening the country's capacity. The first step of SCI's approach is the national mapping exercise, which identifies high risk populations in need of the treatment.	SCI_SIHI_Case_Collection.pdf (socialinnovationinhealth.org)

	This is followed by mass drug administration campaigns, which are supported by trained teachers, community leaders and ministry officials.	
Mozambique	SMS-Hub Leprosy Case Management System is an electronic system used in case management, and surveillance and monitoring of leprosy in Mozambique. It aims at improving the management of Leprosy by improving the accuracy, reliability and availability of Leprosy control information to and from Leprosy service providers in Mozambique. The SMS-Hub uses Short Message Service (SMS) to capture Leprosy notification data using a basic mobile phone. This data is captured by district and province health supervisors and all the data is stored in a central database.	Social Innovation in Health Initiative | SMS-HUB LEPROSY CASE MANAGEMENT SYSTEM

Kenya	The Safe Water and AIDS Project (SWAP) is a community health network that utilizes best practices from public health, business and research. It prioritises economic and social empowerment for marginalized community members and resource poor communities in rural Western Kenya. The project identifies, recruits and trains community health promoters (CHP), who move door-to-door in the communities educating households and promoting good health practices. The focus is on 6 principles for better health: 1) diarrhoea prevention; 2) Malaria prevention; 3) Eating Nutritious foods; 4) Immunization; 5) Family Planning; 6) and Prevention of HIV and mother-to-child transmission of HIV. SWAP also offers support to vulnerable population in terms of infrastructure development	Social Innovation in Health Initiative | SAFE WATER AND AIDS PROJECT (SWAP)

Uganda	The Medical Concierge group utilizes existing communication platforms such Facebook, Whatsapp Messager, Skype, Twitter, SMS and voice calls to provide free access to health care professionals and health information. The group is comprised of doctors and pharmacists who work in the call centre. These professionals collectively respond to incoming questions on health and wellbeing for 24 hours a day and 7 days a week. To access the mobile platforms, the users pay standard call rates or data rate however the consultation services are free of charge.	Social Innovation in Health Initiative | THE MEDICAL CONCIERGE GROUP LTD
India	Embryyo is a private medical device and technology innovation company that focuses on designing low-cost, user-centered, portable innovations (e.g. devices for blood plasma separation, TB surveillance system). The main elements of this social innovation are: 1.	https://www.socialinnovationinhealth.org/downloads/Case_Studies/Embryyo_Technologies_SIHI_Case_Collection.pdf

	comprehensive, user-centered needs assessments conducted; 2. affordable, context-appropriate technological solutions designed; 3. Leverages existing public health infrastructure where possible and appropriate; 4. incorporates a mixed funding model, utilizing different grants for specific projects	
India	The Mobile-based Surveillance Quest using IT (MoSQuIT) is a digital platform that automates and streamlines malaria surveillance for all stakeholders involved. The main elements of MoSQuIT are: 1. real-time snapshot of malaria incidence in a community; 2. detection of changes in malaria incidence distribution to initiate and appropriate health system response; 3. transparency and accountability across the value-chain for malaria surveillance; 4. measuring the effectiveness of anti-malaria interventions and real-time assessment of health system needs (e.g.	Social Innovation in Health Initiative | MOBILE-BASED SURVEILLANCE QUEST USING IT (MOSQUIT)

	stocks of medical supplies)	
India	Noora Health trains family members into equipped caregivers through engaging practical training at hospital premises. There are three main components of this social innovation: 1. Mobilization of an additional workforce (patients' families) in the care process; 2. Flexible, scalable training tools that improve hospital staff's interpersonal skills and career development, namely the train-the-trainer and certification approaches; 3. Interactive Voice Response Technology for follow-up interaction and engagement geared towards low-literacy families	Social Innovation in Health Initiative | NOORA HEALTH

India, Cambodia	Operation ASHA decentralizes tuberculosis diagnosis and care through a community-based model that closes the delivery gap experienced by low-income patients in India. In urban areas, it does this by establishing community treatment centres in partnership with local individual informal providers, merchants or religious institutions. In rural areas, Op ASHA trains and employs community members to take the diagnosis and care of TB directly to patients. A specifically developed technology platform is also in place to track compliance and adherence to care.	Social Innovation in Health Initiative | OPERATION ASHA
Philippines	PILA is a project that serves to integrate stakeholders in the national leprosy system and provide them with resources such that awareness, education and care for patients affected by leprosy can be improved and stigma associated with the disease can be reduced. The project has	Social Innovation in Health Initiative | PARTNERS IN LEPROSY ACTION (PILA)

	three main elements: 1. Facilitating integration of all members of the care continuum 2. Supportive training resources for health care workers and patients 3. Community mobilization for enhanced screening and stigma reduction	
Chin a	SESH is a research programme and a multisectoral collaboration that aims to leverage and test social entrepreneurial approaches, such as crowdsourcing, to enhance sexual health services, encourage use of sexual health services, and reduce the stigma around sexual health for marginalized populations in China.	SESH_SIHI_Case_Collection.pdf (socialinnovationinhealth.org)
Philip pines	The One Health Service Boat (or the Inter-island Health Service Boat Project) provides high-risk pregnant women with boat services so they can be transported from their remote island villages to the main birthing facility in Zumarraga for	Social Innovation in Health Initiative | INTER-ISLAND HEALTH SERVICE BOAT PROJECT

	safer, facilitated childbirth. The Rural Health Unit (RHU) is reimbursed with USD 191 for every eligible pregnant woman who delivered in the RHU. This amount help fund volunteer health workers, purchase of essential medicines, and additional support for health-related activities.	
Philippines	PHP 6.60 Everyday Family Health Plan is a savings mobilisation scheme to provide health insurance coverage for households whose members are employed in the informal sector. The scheme involves educational activities, mentorship, and trainings to increase health awareness, financial literacy and savings mobilization. The Local Health Insurance Office (LHIO) also aggregates marketing, enrolment, and collection services to serve members of the informal sectors to facilitate their bulk or group membership and premium	Social Innovation in Health Initiative | P6.60 Everyday Family Health Plan

	payment collection.	
Philippines	Seal of Health Governance is a health leadership programme that encourages community leaders and members to actively participate and engage in addressing health issues that affect them. The programme includes two main elements: 1) a scorecard, which is co-created with community leaders, and features a set of performance indicators and targets; 2) awards for recognition for positive change, which are incentives for community-based initiatives and innovations for health.	Social Innovation in Health Initiative | Seal of Health Governance
Philippines	The National Telehealth System (NTS) aims to provide timely and quality specialty health care in remote areas in the Philippines. The three key elements of	Social Innovation in Health Initiative | National Telehealth System (NTS)

	the NTS are: 1) telemedicine platform, 2) training program, 3) network of primary care physicians and clinical specialists in participating government health facilities in the Philippines. The telemedicine platform connects primary care physicians to specialists through text messaging (SMS) or web-based application.	
India, Nigeria, Kenya, Ghana, Pakistan	Sproxil, Inc has developed a technology-based solution for counterfeit medication that combines mobile phone use with simple, low-cost product labels. Consumers can validate the authenticity of the medication with a free text/call. If the medication is shown to be fraudulent, consumers are connected with a help line that facilitates follow-up from local authorities.	Social Innovation in Health Initiative | SPROXIL

Paraguay	Community-centered research approach "living lab", inviting inclusive participation to develop new context-specific solutions to address Chagas disease in the Chago region: model brick homes to reduce vector infestation; surveillance systems to enhance vector detection; educational games for community awareness and others	Social Innovation in Health Initiative | CENTRE FOR THE DEVELOPMENT OF SCIENTIFIC RESEARCH (CEDIC)
Brazil	A community health worker programme enhancing health care services in remote indigenous communities by incorporating the cultural underpinnings and voices of the Brazilian indigenous peoples and their community health agents; blending indigenous medical practices with biomedical approaches	Social Innovation in Health Initiative | INDIGENOUS HEALTH AGENT PROFESSIONALIZATION PROGRAMME IN THE ALTO RIO NEGRO REGION

Peru	Community health workers (CHWs) and traditional birth attendants are trained to promote essential newborn care practies during home deliveries when health facility-based deliveries are not feasible. CHWs conduct regular home visits to pregnant women and mothers with newborns; during these visits, they distribute paper materials and clean delivery kits. They use tablet computers with a mobile application to help monitor women's health status and to provide education related to maternal and newborn health.	Social Innovation in Health Initiative | MOTHERS OF THE RIVER PROGRAMME
Honduras	Reducing unnecessary patient transfers and the impact of the cost of seeking health care on family and community economies through the use of telemedicine and community health education in the Misquito language; crowdsourcing allowed them to have expertise and resources not available in	Social Innovation in Health Initiative | MosquitiaMed

	Puerto Lempira but which was mobilized through a cell phone	
Colombia	Comprehensive Healthcare Model for Rurality. Key components of this model: Community engagement on studying of necessities, co-construction of knowledge, and community education by 10 community networks; Guaranteeing comprehensive health access with efforts on interinstitutional management and interdisciplinarity by home visits and “Health Routes”; Food safety and natural medicine related education and training activities in the Chaquén Park	Social Innovation in Health Initiative | INTEGRATED CARE MODEL FOR RURAL AREAS
Guatemala	Active participation of communities to understand, prevent, diagnose and treat Chagas disease	SIHI LAC_Eco-health approach for Chagas Disease_Guatemala_Final Case Layout_2019 (socialinnovationinhealth.org)

Guatemala	Home improvement programme that filled cracks in floors and walls using mix of locally available materials, white raising awareness and training community leaders and members to repair their own homes and contribute to behavioral and cultural changes to eliminate vector. Solutions to health problems must be developed according to cultural and socio-economic context of intended beneficiaries	SIHI LAC_Comprehensive Approach to Chagas_Guatemala_Final Case Layout_2019 (socialinnovationinhealth.org)
Colombia	three main components: i. Visiting medical teams provided comprehensive medical care to infants, which enabled them to identify the clinical manifestations associated with Zika and so to define medical procedures required. ii. Inter-institutional management was fundamental in guaranteeing access to and the quality of health care for paediatric patients and in developing a public policy "Recommendations for the	Social Innovation in Health Initiative | Zika Kids

	care and follow-up of paediatric patients with prenatal exposure to the Zika virus." iii. Two foundations aimed at providing psychosocial support were established: God's Miracles, the children of Zika (Milagros de Dios, los niños del Zika) in Neiva; and Angels on Wheels (Ángeles sobre Ruedas in Barranquilla.	