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CRITICAL ANALYSIS OF THE SOCIAL INNOVATION IN HEALTH INITIATIVE

DOCTOR OF PUBLIC HEALTH (DRPH) STUDENT
ORGANIZATIONAL AND POLICY ANALYSIS PROJECT

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LIST OF ABBREVIATIONS

SYMBOL	DEFINITION
CIDEIM	Centro Internacional de Entrenamiento e Investigaciones Médicas
LMIC	Low- and Middle-Income Countries
LSHTM	London School of Hygiene and Tropical Medicine
OPA	Organizational and Policy Analysis
PAHO	Pan American Health Organization
RE-AIM	RE-AIM Framework
SESH	Social Entrepreneurship to Spur Health
SDG	Sustainable Development Goals
SIDA	Swedish International Development Cooperation
SI	Social Innovation
SIHI	Social Innovation in Health
TDR	Special Programme for Research and Training in Tropical Disease
UHC	Universal Health Coverage
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
WHO	World Health Organization

1 INTRODUCTION

This chapter provides the background information on the project including the aim, objectives, research questions for this OPA and context-setting operational definitions.

1.1 ORGANIZATIONAL AND POLICY ANALYSIS

The Organizational and Policy Analysis (OPA) project forms the professional attachment component of the Doctorate of Public Health programme at the London School of Hygiene and Tropical Medicine. The purpose of the OPA is to study and evaluate how a public health organization functions to influence public health policy and/or how it delivers on its public health goals. The OPA report is intended to provide advice to the public health organization in the form of a constructive and practical critique, identifying areas for development and improvement. The Social Innovation in Health Initiative (SIHI) was selected as a suitable organization to be host of the OPA project based on my interest to learn more about social innovations and a desire for an evaluation by SIHI's key stakeholders.

Prior to starting the OPA project, I had no previous relationship to SIHI. I was introduced to key stakeholders at SIHI through LSHTM professors. Following discussions, a research study to evaluate SIHI was agreed upon by all parties. Over the course of the OPA project, I became more involved by attending stakeholder meetings, smaller internal workshops and assisting with other research projects after completion of the OPA data collection process.

The OPA project undertaken aims to analyze the Social Innovation Health Initiative as a network and determine its relative strengths and weaknesses. To help determine future directions of the initiative, the OPA will serve to highlight elements that can improve the sustainable adoption and implementation of social innovations to improve healthcare delivery. The OPA does not formally evaluate the public health impact of specific social innovation interventions implemented by the initiative or its partners.

1.2 THE INITIATIVE

SIHI was launched in 2014 and founded on the belief that health systems and services offered to millions of people across low-and middle-income countries (LMICs) often do not take into account local needs and expectations. The initiative aims to unlock the capacity of all health system actors and stakeholders, including innovators, policy-makers, frontline workers and academics, to work in collaboration and advance community-engaged social innovation in health care delivery in the Global South.

1.3 AIMS, OBJECTIVES AND RESEARCH QUESTIONS

The aim of this study was to analyze the SIHI initiative as a network of mobilizing partners and their role in creating a global culture change towards utilizing social innovations in health as appropriate interventions for healthcare delivery. The research study had two objectives to generate knowledge about SIHI's current impact and growing engagement.

Objectives:

1. Assess SIHI's relative strengths and weaknesses in creating an enabling environment for social innovation in health.
2. Examine SIHI's existing national, regional, and global dissemination of social innovation practices and determine future directions for growing engagement.

1.4 OPERATIONAL DEFINITIONS

1.4.1 Social Innovation

The term "social innovation" has gained popularity thanks to its multidisciplinary approach, its versatility in application, and increasing interest of government decision-makers, non-governmental organizations, researchers, and public and private institutions around the world(1) (some social innovation case studies are highlighted in Appendix 1: Social innovations literature review).

However, to define social innovation more clearly, it is useful to understand first what *innovation* means, and then what *social* refers to. The academic literature on *innovation* has divided the term into two streams(2): a) the processes that produce innovations such as individual creativity, organizational structure, environmental context and social and economic factors ; and b) the outcome that manifests itself in new products, product features, and production methods. However, process or outcome, the Stanford Social Innovation Review accepts that an innovation must be novel and more effective, efficient, sustainable or just than existing solutions or processes(2).

To define what *social* means, a number of efforts have focused on either the intention or motivation of the innovator, the sector to which it belongs (i.e. most people use social sector to mean nonprofits and international nongovernmental organizations), the class of needs, or the value it incurs that is distinct from financial and economic. Yet, more widely accepted is that social value is the creation of benefits or reductions of costs for society through efforts to address social needs and problems and which goes beyond private gains(3).

The major focus in defining social innovation within the theoretical framework of the social sciences appears to be focused on distinguishing from other forms of innovation – more specifically, 'economic' and 'technological' innovations(3). It has been largely tied to concepts such as social entrepreneurship and social enterprise. Thus, Phills and co-authors have defined social innovation as "the process of inventing, securing support for, and implementing novel solutions to social needs

and problems” “for which the value created accrues primarily to society as a whole rather than private individuals”(2) .

As such, social innovation has garnered several definitions, and has changed over time depending on different ‘schools of thinking’. However, the guiding definition for this report and the definition specified by SIHI is:

“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. Social innovation argues that having local beneficiaries drive the development of a health program results in more sustainable and accountable services”(4).

To avoid any semantic debate, SIHI has adopted its own definition related to specific outcomes of social innovations:

- The solution is a bottom-up and participatory process
- The solution engages communities, governments and other actors
- The solution requires multi-sectoral and multi-disciplinary approach
- The solution enables healthcare delivery to be more inclusive, effective and affordable
- The solution changes the social relationships between people and results in greater social inclusion
- The solution empowers and builds the capacities of communities and individuals involved
- The social innovation process reshapes institutions and thus builds greater resilience in the system

1.5 PERSONAL POSITIONALITY

When undertaking qualitative research, it is essential for the researcher to be aware of his or her own positionality and continuously reflect upon it. The concern of the researcher being either an outsider or an insider to the group studied is an important one that has received increasing exploration by social scientists(17). Insiders have been said to have easy and better access to quality data due to tacit knowledge they possess by nature of working within the organization. However, it has been argued that they tend to be inherently biased. Whereas, outsiders lack the tacit knowledge, but have the advantage of curiosity with being ‘unfamiliar’(18).

As an outsider to SIHI, I believe I benefited from the curiosity and thorough reflection required to gain as much insider knowledge of the organization’s inner workings. Being “new” to SIHI allowed me to engage without preconceived opinions about the processes, collaborations and regional/global influence, and to freely explore and ask questions. Yet, over the course of my involvement, I took on a more “insider” role by not solely contributing through my independent research but embedding myself in other member activities such as member workshops, meetings, secondary data analyses and manuscript preparations. I believe that both the recent arrival and rapid embeddedness, have provided me with a unique blend of ‘outsider’ and ‘insider’ positions in the study.

It is possible increasing involvement as an ‘insider’ may have influenced my objectivity as a researcher however, throughout the design of the study, data collection, analysis and writing

process, I was constantly reflecting on my position in the process as a researcher and applied different strategies such as *triangulation* and *reflexivity* to minimize personal bias in data collection, analysis and interpretation. These techniques recommended by Mays and Pope (19), help ensure validity and reliability of findings. I employed methodological triangulation, which checks consistency of findings by using different data collection methods such as in-depth interviews, document review and observation during meetings. I was also constantly reflecting on my personal position, critically appraising how my own values, beliefs and experiences might influence data collection, analysis and interpretation of findings. I kept a journal to record key impressions while conducting the interviews which deepened some critical contextual factors.

1.6 STUDY RATIONALE

Despite social innovations beginning to take root as new practices that aim to address healthcare delivery challenges – there is still an ongoing inquiry of how to facilitate or promote an enabling environment for social innovation at local, national, and global levels. This study will provide an evaluation of the Social Innovation in Health Initiative in achieving its mission of embedding social innovations in health and provide useful data for improving the implementation of strategic goals.

2 BACKGROUND

This chapter provides the background information on the Social Innovation in Health Initiative and its members.

2.1 THE SOCIAL INNOVATION IN HEALTH INITIATIVE

SIHI is not a formal entity or organization but rather a global network of individuals, organizations, and institutions passionate about social innovation in health. By sharing processes and resources the initiative supports key activities but is neither a formal partnership nor a funding body. SIHI brings individuals and institutions together (outlined below), through a non-formal process, to fulfill the mandate of advancing social innovation in health in the Global South.

SIHI intends to catalyze social innovations through the identification of existing local solutions to healthcare delivery challenges. Country hubs, based at academic institutions, use research to inform these local solutions, monitor development of innovations, and evaluate the impact and implementation of these solutions, with an emphasis on sustainability. Capacity-building activities organized by the network encourage community-based participatory research to ensure local uptake and sustainability. SIHI showcases the various identified social innovations using its platform and works with local government officials, national policymakers and global partners to advocate and scale social innovations in a sustainable manner.

2.2 ORGANIZATIONAL CONTEXT

2.2.1 Mission

SIHI's mission is to advance social innovation in health in low-and middle-income countries through research, capacity building and influence(7).

2.2.2 Vision

SIHI's vision is to have an increasing number of research institutions in the Global South that promote and advance social innovations to transform health care delivery.

SIHI's operational approach is based on two pillars: i) creation of SIHI research hubs aiming to engage countries; and ii) provide research support through affiliated universities (8).

2.2.3 History

The Initiative was established in October 2014 through the joint efforts of 4 partners: University of Cape Town's Bertha Centre for Social Innovation and Entrepreneurship, Oxford University's Skoll Centre for Social Entrepreneurship, the London School of Hygiene and Tropical Medicine and TDR, the Special Programme for Research and Training in Tropical disease co-sponsored by UNICEF, UNDP, the World Bank and WHO and which is hosted by the World Health Organization (WHO)(7). As a network of researchers and technical advisors, SIHI intended to create country research hubs based in LMICs to promote social innovation research and implementation.

SIHI established a crowdsourcing approach whereby individuals and organizations from all backgrounds and sectors were invited to share innovative solutions for healthcare delivery. The first crowdsourcing call, conducted by 2 of the founding partners, Cape Town's Bertha Centre and Oxford's Skoll Centre, was conducted between 10 January and 28 February 2015. SIHI created a request for ongoing social innovation projects across Africa, Asia and Latin America and 150 examples were identified. Through a specific selection process supported by a 20-member independent expert review panel, 23 social innovations were chosen to be showcased and be used as advocates for social innovation approaches(9).

This crowdsourcing call and subsequent calls, raised the profile of social innovations and resulted in the World Health Organization promoting a global call to action to advance social innovation in health.

In 2016, the second phase of SIHI saw the expansion of the network to engage low- and middle-income countries as implementing partners and SIHI country hubs were established(7) (see figure

1). In 2017, three country hubs (Malawi, Uganda, the Philippines) undertook the crowdsourcing innovation process to identify local community-based social innovations in health. In 2020, a continuation of the third phase expanded the network further to include new SIHI hubs. (7).

Figure 1: Timeline of the Social Innovation in Health Network



To date, more than 200 social innovations have been identified in low-and middle-income countries (LMICs) and more than 40 case studies have been conducted. These case studies analyses are jointly conducted with the innovators and SIHI network partners. The advocacy and research capacity provided by SIHI has even resulted in social innovations to be taken up by governments and expanded to national-level programs, with a notable example seen in Uganda through the Drugs Shops Integrated Care Project.

2.2.4 Governance and Organizational Structure

The SIHI initiative was first envisioned by a small group of individuals from TDR, LSHTM, the Bertha Centre and the Skoll Center in hopes to raise awareness and provide a platform to advocate for and provide skills and resources to local innovators. The initiative quickly grew into a global network of individuals, organizations, and institutions. These include communities in the Global South, governments (national/regional/local) and ministries of health, academic institutions (universities), and local and international organizations.

SIHI classifies 'implementing partners' as country hubs based at universities that have varying degrees of 'hands-on' involvement in terms of actively contributing to the identification process of SI's, instituting research protocols, evaluating health solutions and supporting advocacy at local and national levels. They are also responsible for convening appropriate stakeholders i.e., community-based organizations, ministries of health and academic institutions to further the implementation goals of SIHI.

SIHI's 'contributing partners' provide technical skills and expertise to implementing partners. They also provide funding and contribute to the dissemination of SIHI case studies and other advocacy roles.

Figure 2: Social Innovation in Health Global Partnerships

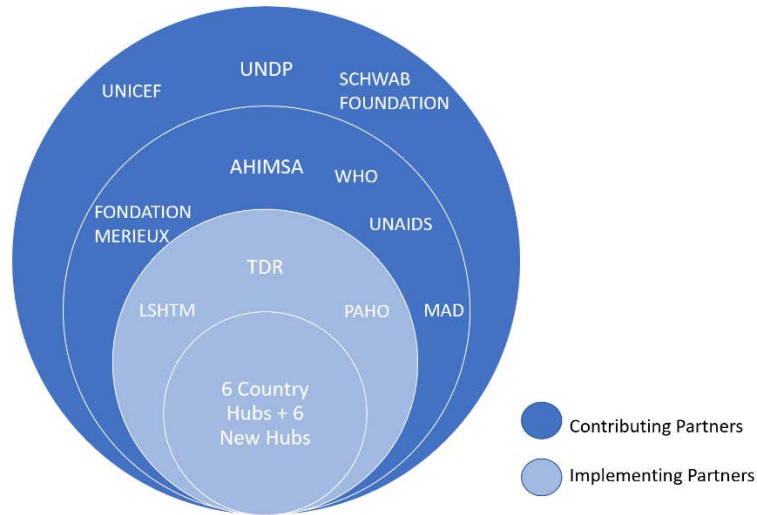


Source: Social Innovation in Health, Partner Overview(10)

In 2020, the SIHI network established a Secretariat at the University of the Philippines, alongside the SIHI Philippines hub. The Secretariat is responsible for coordinating the growing SIHI network by sharing and learning between partners, leveraging resources and harmonizing SIHI communications to support advocacy efforts.

Leveraging support across the globe, the SIHI network receives funding from TDR and other contributing partners. Budgetary considerations are a joint decision with TDR acting as liaison. Similar approaches are seen with decision-making. Yet, the SIHI Secretariat has enhanced leadership from low-and middle-income countries to coordinate these processes. Network events are organized by different country hub organizers and enable the network to meet regularly and coordinate efforts.

Figure 3: SIHI Network of Implementing and Contributing Members



3 METHODOLOGY

This chapter addresses the methodology used to answer the research questions. The chapter includes the study design, sampling, and data collection techniques used.

3.1 QUALITATIVE RESEARCH DESIGN

I adopted a qualitative descriptive study design. The methods used include in-depth interviews and the analysis of documentary materials. These capture the necessary subjective and narrative qualitative material that allows for understanding of complex interdependencies between organizations and social processes. Qualitative research has both strengths and weaknesses. One of the strengths is its explorative nature which involves extensive analysis of background information as well as collected data which offers a basis for understanding. Weaknesses associated include generalization and biasness due to formed opinion or conflict of interest on the part of the researcher. A qualitative study design seemed most appropriate to capture information related to the objectives in this study.

3.2 RESEARCH METHODS

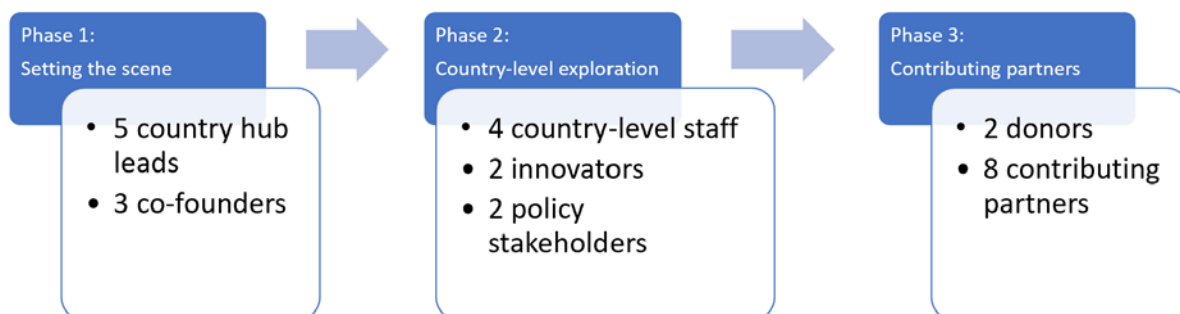
The research methods employed utilized two phases. Phase one, a documentary analysis consisted of materials from the SIHI website and those made available to me including annual reports, case compendium reports, terms of reference of SIHI positions, and other internal records. Relevant documentation regarding the background of SIHI (including the context, country program frameworks, organizational structure and activities) were reviewed. The information from these documents were used to frame the analysis of the interview and observational data. During this phase, I interacted with two senior managers of TDR to ensure all relevant materials were accessible.

Phase two involved 26 in-depth interviews with key informants who were willing and able to articulate their involvement with SIHI. This phase focused on exploring individual's perspectives on SIHI, how it is structured and managed, how collaboration amongst implementing and contributing partners takes place and what contextual and key influences constrain or enhance social innovation in health.

3.3 STRATEGIES OF SAMPLING AND RECRUITMENT

A purposive sampling technique and interviewee recruitment strategy was chosen based on discussion with two senior managers at TDR. These reflected the research questions being considered and the role of members in the SIHI network. The strategy chosen capitalized on the direct staff experiences from country hub members to maximize the potential richness of the data from country-level dissemination. The sampling and recruitment strategy followed three phases as depicted in Figure 4.

Figure 4: Sampling and Recruitment Strategy



Phase one, consisted of SIHI co-founders to garner in-depth understanding of the functioning of SIHI, its conception, evolution, and future intended direction. Phase one also focused on conducting interviews with five country hub staff: Philippines, Uganda, Malawi, China and Colombia. These individuals all held the SIHI hub lead positions and therefore were selected to provide insights from the different localities on how SIHI's vision was being pioneered in their respective settings. Key informants from Uganda and the Philippines were specifically advised to provide referrals to recruit for further interviews through snowball sampling technique. This was intended to gain a broader and more comprehensive understanding of key national partner stakeholders i.e., grassroots innovators, policymakers, etc.

Phase two, consisted of recruitment via snowball sampling technique directly from Uganda and Philippines country hub leads. With a more in-depth focus, the strategy of a deeper dive into a subset of country experiences was chosen to better understand community-level enablers and facilitators for social innovation in health.

Phase three, targeted global-level perspectives, specifically from contributing partners to gain insights on SIHI's role in the global landscape of healthcare delivery. The informants were selected based on strength of organizational relationship to SIHI and accompanying contribution to SIHI's work to date. This stage of input was relevant to better understanding SIHI's current perceived value and necessary future directions.

3.4 DATA COLLECTION

For the purposes of this study, recorded in-depth semi-structured interviews and document review were the primary data collection strategies. I conducted 24 face-to-face in-depth interviews in English via SKYPE (20-60min) with 26 respondents (2 interviews consisted of 2 stakeholders present) in Asia, Africa, South America and Europe, using a semi-structured interview guide as the primary data collection tool (see Appendix 5, 6 & 7). The interview guide was developed to address the research objectives and key concepts/ topics from implementation research. The interview topic guide and associated guiding questions were pilot tested with TDR supervisors and modified accordingly.

3.5 ETHICS

This study received ethics clearance from the London School of Hygiene and Tropical Medicine (LSHTM) Ethics Committee (reference number 21494). All interview respondents provided informed consent for their participation in interviews as well as consent for their interviews to be taped and transcribed. To ensure identities of those interviewed or observed remained anonymous and information provided remained confidential, no names were used in interviews or notes. Codes were assigned and used instead. Each interview began with the researcher reiterating the purpose of the study. The interview took place only after the interviewee agreed to participate and signed the consent form.

3.6 CONCEPTUAL FRAMEWORKS

Evaluating health programs, including people-centered community-based interventions, requires the crucial utilization of implementation research, which is defined as a study of methods that support the application of research findings and other evidence-based knowledge into policy and practice. Implementation research provides methods and tools to plan, adapt, evaluate and spread implementation of healthcare interventions(11). This generates the knowledge needed to help make improvements in the health of populations. A crucial step in implementation research is identifying the contextual factors that serve as facilitators and barriers to improving the implementation of health interventions and their outcomes at the global, national, ministry and community levels. Implementation research can determine what makes social innovations successful or unsuccessful in real world settings, how to scale up SI's in an existing context, what the important outcomes are, and where and how to adapt SI's to other countries and contexts.

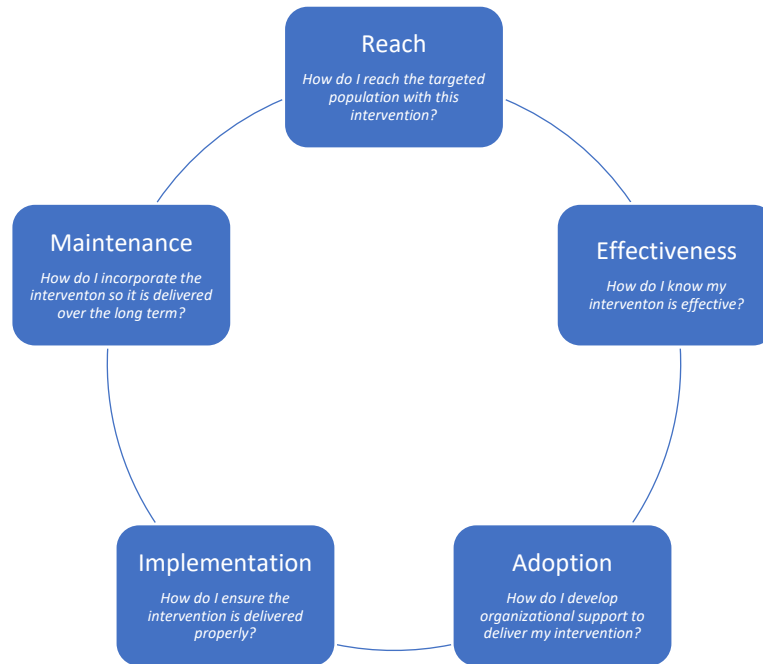
Implementation science is essential to the successful achievement of translating health programs into real-world practice. As such, an implementation research framework, the RE-AIM framework(12), will be used to evaluate SIHI as an initiative that aims to improve the sustainable adoption and implementation of effective, generalizable social innovation interventions. The RE-AIM framework was chosen given its inclusion of individual (or community-level) and setting-level influences which are a direct reflection of the initiatives key concepts – utilizing community engagement under a wider social innovation network.

The conceptual frameworks were used to inform the research and address a priori issues related to the objectives of the study but also allow flexibility to incorporate new themes which arose during data collection.

3.6.1 RE-AIM Framework

The RE-AIM framework is a planning and evaluation model that addresses five dimensions of individual- and setting- level outcomes important to program impact and sustainability: Reach, Effectiveness, Adoption, Implementation and Maintenance (table 1).

Figure 5: The RE-AIM Framework



The RE-AIM framework was originally developed to be used as an evaluation tool that could determine the public health impact of a program or policy(14). Over time, the framework has evolved to be used effectively across a variety of settings (e.g. community, policy, public health) and has expanded to be used as both a planning and evaluation tool. Recently, RE-AIM was operationalized successfully to evaluate the impact of a community-based public health initiative delivered in partnership between community organizations and academic researchers(15).

As such, the RE-AIM framework has been adapted to address and evaluate the multi-faceted nature of SIHI's influence in creating an enabling environment for the implementation of social innovation interventions. It should be noted the framework is intended to evaluate SIHI as a collective of partners in reaching the initiative's aims as opposed to evaluating interventions resulting from the initiative. Table 1 provides an overview of how the five RE-AIM dimensions can be applied to evaluating SIHI's performance in engaging countries and creating an empowering environment for the embedding of social innovations.

Table 1: RE-AIM Framework Adapted to SIHI

RE-AIM DIMENSION	KEY ISSUES	SIHI TRANSLATION
REACH	The absolute number, proportion, and representativeness of individuals who are willing to participate in a given initiative, intervention or program	The extent of global support (formation of country hubs, partnerships with ministries, academics and local innovators) and endorsement generated to accelerate and incorporate social innovations in health to address healthcare delivery challenges
EFFECTIVENESS	The impact of an intervention on important outcomes, including potential negative effects, quality of life, and economic outcomes	SIHI embedding research in social innovations to demonstrate health impact and any other indirect positive outcomes, i.e. capacity building, economic outcomes, quality of life etc.
ADOPTION	The absolute number, proportion and representativeness of settings and intervention agents (people who deliver the program) who are willing to initiate the program	The number of implementing (beneficiaries, innovators, researchers, policy stakeholders, country hubs) and contributing (funders, international organizations) partners willing to take the social innovation in health approach forward
IMPLEMENTATION	At the setting level, implementation refers to the intervention agents' fidelity to the various elements of an intervention's protocol, including consistency of delivery as intended and the time and cost of the intervention. At the individual level, implementation refers to the clients' use of the intervention strategies	The methods and tools used by SIHI to engage countries and create an enabling environment for catalyzing social innovation in health at global, national and local levels
MAINTENANCE	The extent to which a program or policy becomes institutionalized or part of the routine organizational practices and policies.	SIHI's ability to institutionalize social innovation in health as a global approach towards health by stakeholders of all types (government, grassroots, academic, etc.,)

3.7 DATA ANALYSIS

Data analysis methods included memo writing and thematic content analysis(16). I used a method of analysis which would address a priori issues of the objectives of the study and the framework used while still allowing enough flexibility to incorporate new and hitherto unconsidered issues which arose during data collection. All interviews were audiotaped, transcribed verbatim, and imported in N-Vivo11 for thematic analysis. The following steps were undertaken: First, transcripts and notes were reviewed in-depth; Second, I developed a coding framework in N-Vivo 11 and aligned with the five RE-AIM dimensions (Reach, Effectiveness, Adoption, Implementation, Maintenance) to assess SIHI performance. Transcripts were imported and individually coded based on the thematic nodes. During the coding, if there was a theme that did not quite fit under the established coding framework, I included it as a new emerging theme. After the coding, I reviewed

the coding framework again, consolidated it and matched it to Kotter’s 8 steps to evaluate SIHI’s creation of a social innovation culture change; Third, I identified and interpreted associations among the different themes and their relationships in the data set against the research questions and study objectives to evaluate SIHI. I used a method of triangulation which checks consistency of findings by using different data collection methods. Similarly triangulating with the documentary review, allowed me to produce informed recommendations and conclusions for the study.

4 RESULTS

The thematic framework analysis enabled a set of codes to be identified directly from the transcripts of interviews. These reflect the coded themes that arose from the exploration of the objectives of the study and the interview questions used to probe interviewees. Table 2 showcases these empirically deduced themes that emerged from interviews. These results alongside analysis of documentary review and observation of meetings – were then structured around an adapted version of the RE-AIM evaluation framework. This offered a comprehensive approach to considering five dimensions important for evaluating public health impact. The inductive learning generated from codes identified in the interviews was able to be directly translated and applied to the deductive reasoning of the RE-AIM framework used.

Table 2: Empirical Themes Emergent from Interviews

Objectives	Themes Uncovered	Mapped to RE-AIM Framework
1. Assess SIHI’s relative strengths and weaknesses in creating an enabling environment for social innovation in health.	SIHI creation SIHI vision Defining social innovation Organizational role Collaboration Barriers encountered Enablers discovered	‘Reach’ ‘Adoption’
1. Examine SIHI’s existing national, regional, and global dissemination of social innovation practices and determine future directions for growing engagement.	Advocacy Capacity building Implementation process Research Current level of influence Future direction	‘Effectiveness’ ‘Implementation’ ‘Maintenance’

4.1 REACH

The first dimension of reach is exemplified clearly by the progressive growth that the SIHI network has organically garnered over the course of the past 6 years. With the establishment of country hubs and the development of the Secretariat, the governance of the SIHI network has been able to lobby and create a platform for showcasing social innovations. This has raised the voice of local innovators and to demonstrate their positive work of innovative solutions for healthcare delivery. SIHI benefited from the call to action by the WHO which resulted in a larger reach and broad base of support and advocacy for the network.

A common response shared by interviewees was SIHI's ability to generate advocacy which led to acceptance of social innovation processes for identifying suitable health interventions by local ministries, national stakeholders and local innovators. Participants highlighted the desire for participatory interventions that can be more sustainable and therefore recognized social innovations as being suitable approaches to finding effective and also sustainable solutions.

"There's a readiness I feel in a lot of these countries to really engage with social innovation at a higher level like - Ministries saying...how can we work with you in a closer way to link to the communities.." - Contributing partner

However, this acceptance was not initially easy as the term 'social innovation' was so new and its understanding was varied. For grassroots innovators themselves, they had a difficult time considering themselves as 'innovators' and that their work could be recognized through national calls. There was a big effort by SIHI to define social innovation and stress its inclusivity of local solutions.

'... if you say to people "are you doing innovation?", they would say "no, but I fix this problem". So they didn't see their work even as being innovative. So I think [highlighting these innovations] brought a lot of validation to people and recognition" - Contributing partner

The very nature of social innovation requires a multidisciplinary, multisectoral approach with various stakeholders. As such, the reach of social innovation hinges on the development of partnerships – grassroots innovators to originate solutions, researchers to evaluate impact, contributing partners to help with advocacy, funding and providing resources, and ministries to take up solutions to national scale. Contributing partners interviewed stated that they have come to realize social innovations are tangible solutions that are more inclusive, effective and sustainable than the status quo.

"And in a way that is the most radical thing about SIHI - the people who have been involved in SIHI have set aside an assumption that society is divided in a particular way. And instead looked for people who want to be involved and work with those who want to engage." - Founding stakeholder

Yet there is a desire and necessity for continued advocacy surrounding social innovation. As a health implementation approach, it is still relatively new in the global health space and requires more emphasis. Several partners have stressed the desire to advocate further and to highlight the networks identified solutions more broadly.

The key strength of SIHI has been the ability to legitimize social innovation at a global level through TDR and the various partners. It has built momentum for incorporating bottom-up solutions into

transformational and sustainable healthcare delivery. The ability for SIHI to legitimize social innovation as a global health concept demonstrates the 'reach', the number of interested parties willing to participate with a given approach, program or intervention.

4.2 EFFECTIVENESS

SIHI aims to showcase social innovations and demonstrate their positive impact on healthcare delivery. Given social innovations start from the community, there is oftentimes a lack of measurable and demonstratable impact or efficacy of interventions. The initiative has sought to embed research and capacity building in existing social innovations to determine the effectiveness of such solutions. Starting in 2014, the first study occurred across Africa, Asia, and Latin America resulting in identification of 25 case studies which were to be used as the basis of evaluation and to showcase the health impact that they could produce.

This exploration led to the formalization of the research process to crowdsource and identify community-based and citizen-led social innovations based on a set of selection criteria and investigate the mechanisms of operation through descriptive and explorative case study research methodology. This research component, largely untapped not only helped showcase the health impact many of these innovations provide, but also allowed innovators to realize their true influence.

"the authors or the owners didn't do research on their work and didn't know how their work was progressing...So after gathering all this information, we [wrote] a case study report and it was amazing - some of [the innovators] didn't know how much they were doing until [we gave] them a copy of the report of their work." – Country hub stakeholder

A common view among interviewees is the importance of research to evaluate innovations and showcase their impact so that they may be supported and scaled. The scope and type of research required to capture the level of interest and uptake for social innovation is a topic of discussion. Interviewees concluded that standardizing evaluations of innovations can hinder the level of creativity and take away from the premise of social innovations. As such, celebrating the opportunity to veer away from traditional methods (i.e. randomized controlled trials) of evaluation whilst highlighting the positive health impacts is valuable.

The benefit of the SIHI network has been in the structure of the network - the focus on partnerships with academic institutions to instill research is a critical component of the social innovation approach. Furthermore, the legitimacy provided by academic institutions enables policy stakeholders to take on innovations that would otherwise be difficult to support without strong proven efficacy.

"I think the research aspect helps to systematize some of these learnings and knowledge...The learning at the community level and build it within a framework that has the rigor of academic research." – Contributing partner

Yet, the impact, if not explicitly measurable through traditional methods of evaluation has been shown to lead to meaningful improvements. These can be assessed through the scaling of innovations from smaller regions, to national and ultimately to different contexts or alternatively

proving the operational aspects of success. SIHI has provided a platform to showcase the ability for social innovations to scale for public health impact.

“if you look at SIHI and what it's done like Health Center By Phone... to take that idea and then implement it in a city, in a region, in a whole nation, and then to have a country adopt it like the Malawi government has...a small idea from a local area making a big difference.” – Country hub stakeholder

Given the competing interests of various potential health interventions that Ministries of Health have to decide amongst, the evidence of proven solutions is still critical. A culture change of using community-based solutions, although highly regarded, still requires demonstration of effectiveness for true adoption. As such, the ability for social innovations to prove sustainability - through uptake by local individuals is key.

The uptake of solutions will not only prove the effectiveness of social innovation and eventual health impact, but importantly, the building of capacity amongst local end-users to be part of the research group is critical. This will enable sustainability of the solution and appropriate adaptations taken based on the findings of the research to be accepted by end-users.

The strong necessity to democratize research was echoed by several interviewees. The need for all levels of stakeholders to be part of the research process. From end-users, innovators, academic researchers and policy stakeholders. Oftentimes, the innovators who appreciate the value their innovations bring, are unable and largely unaware of the magnitude of their health impact. As such, capacity-building to encourage innovators to be part of the research process cannot be stressed enough.

Despite the enthusiasm regarding current evaluations of social innovations, many interviewees still stress the importance of demonstrating their usefulness through rigorous scientific research. The emphasis on traditional approaches continues to hold strong merit. The use of a blend of evaluation methods would benefit social innovation perceived effectiveness and as a result, adoption.

“people speak in evidence they speak in data and science. So if you can underpin [data] without going overboard and killing innovations...make the case through some data.” – Contributing partner

4.3 ADOPTION

Adoption in the context of SIHI's mandate is the ability for the network to contribute to the implementation of social innovations rather than simply provide advocacy and extend reach. It is important to understand how and why different organizations, stakeholders, ministries and end-users choose to participate. For the SIHI network, it is vital to understand characteristics associated with adoption by all relevant stakeholders.

Interviewees shared the critical role that the backing of WHO has on the legitimacy and adoption of social innovation specifically for policy stakeholders in low-and middle-income countries. The advocacy generated by WHO-TDR has been critical for many ministries to take notice.

Another critical component that SIHI undertook that encouraged adoption of interested parties was convening stakeholders and providing a platform for discussion and sharing of evidence, processes and impact.

“advocacy starts with showcasing [and] also convening - convening for people to really see them and discuss.”- Founding stakeholder

Interestingly, some policy stakeholders can ‘buy-in’ to the idea of social innovation through policy if they see that a solution works. Yet, the value of social innovation is to support a movement towards community-based citizen-led solutions and providing the necessary resources for scalability and sustainability. As such, there is a need to continue to advocate for such solutions at local levels for them to contribute in more substantial ways.

Inclusion of end-users as part of the evaluation team is critical for sustainability, as described in the effectiveness dimension above. Finding ways to encourage and motivate their involvement would be beneficial for all involved.

Yet, the most optimal contextual situation would be to bring all relevant stakeholders together simultaneously to embrace a social innovation solutions. This trifecta of having policy stakeholders, researchers and the grassroots together can be incredibly effective for sustained adoption and support.

“this is the perfect example of what works... you've got the ministries right there from the beginning, the NGO's, the villagers - also engaged directly with the village chief. They engaged the researchers..had all the types of research all the way - they have an evaluation. And now this [intervention] has been really disseminated and it's scaled up...” – Founding stakeholder

For new country hubs, interviewees stressed the importance of the SIHI network as a resource for connecting to global partners. Yet, still a critical component is the acceptance on a local level - to seek partnerships within the country. Creating these relationships is key to recognition and eventual full adoption.

Some interviewees also stated the potential of the private sector to take on a bigger role in social innovation. Having the involvement of private sector stakeholders has the potential to open new avenues of funding, new creative ways of thinking, and can have an influence on the long-term scalability and sustainability of proven social innovations.

Expanding adoption to other sectors, unrelated to health, in the social innovation approach can have valuable synergies. Through the lens of universal health care, the ability to use other sectors to have both primary and secondary outcomes on health gains can further ensure sustainability.

“If you look at some of the SIHI innovations they all have an impact in health. But not all of them come from working specifically in the health sector.” – Contributing partner

4.4 IMPLEMENTATION

Investigating SIHI's dimension of 'implementation' is critical to the survival of the initiative. Without effective implementation of social innovation approaches, it is likely that effects are diminished, and acceptance is subverted.

A critical implementation component of the initiative driven by TDR has been to ensure the narrative is focused on the grassroots from the very start. Rather than driving the application of innovations for the local context, the focus became empowering the local drivers to be creative and originate solutions and drive their implementation.

As with any network, the ability to identify 'champions' who align with social innovations and are willing and able to advocate for their usage on a wide-scale is advantageous. Similarly, the value of strong relationships and open dialogue is key to developing trust and shaping ideas and processes.

To create an 'enabling environment' for social innovation in health, interviewees expressed the need for both global and local advocacy. The nature of social innovation requires actions from both sides of the aisle to make a sustainable impact and it requires collaboration among stakeholders.

"to affect any kind of change - it has to start locally...you need both local and global movement to get traction. The sort of secret sauce and the recipe of [social innovation]" – Country Hub Partner

The most pertinent first step is to bring awareness to social innovations and the opportunities that exist. In some contexts, the act of seeking solutions from the communities is yet to be seen as a productive endeavor. Therefore, simply showcasing the work that is already happening at the grassroots levels and the potential that lies in simply highlighting and providing additional resources can give.

Once innovations are identified and have piqued the interest of relevant stakeholders, a big realization includes the necessity to build capacity of innovators to take their innovations to the next stage. What several interviewees called "democratizing research" and fostering a bottom-up approach of monitoring and evaluation further embeds social innovations.

Similarly, the inclusion of research in the approach of social innovation, not only helped measure the health benefits associated and increased outside support, but it also enabled the innovators to take those findings and help inform their next steps.

"..But it's even critical for [innovators]..to collect information that is going to inform their next steps." – Country Hub Partner

The process of finding social innovations is open-ended and allows for flexibility based on the needs within a certain context. The introduction of crowdsourcing and open calls has enabled country hubs to search for both specific healthcare outcomes-based solutions and process-based innovations that inform a certain health priority. The ability to use the approach of social innovation in an open-format or as a targeted search for priority health interventions showcases its versatility and flexibility for the needs of a certain context. Being able to effectively respond to the needs of stakeholders and generating 'quick wins', allows stakeholders to further justify a new way of doing, through social innovation.

Developing successful country hubs has enabled the advancement of the three main objectives: advocacy, research, and capacity building. Several interviewees highlighted the importance of partnerships at the country- hub level and the convening of stakeholders to discuss social innovations in health.

SIHI's key component of capacity building helps to empower stakeholders towards a common goal in a collaborative manner and has been a strength of the SIHI network. This builds appropriate skills and structures to help implementations take root.

Ultimately, the value of social innovation in health is as a narrative or way of doing. As a global collective, the move towards universal health coverage requires a set of tools and approaches that deliver effective healthcare delivery to the most vulnerable in societies. The enabling of social innovation as one of these approaches will encourage implementation at all levels.

"And I think this is the key here... to change the narrative to realize that if countries want to actually reach universal health coverage and reach beyond the end of the routine health services that [social innovations are] a really good legitimate way of doing it... I think it's an important part of changing the narrative and legitimizing this kind of grassroots driven work." – Founding Stakeholder

4.5 MAINTENANCE

Planning for sustainability of the SIHI network is imperative and can evaluate the multi-sectoral nature of the initiative.

One of the most critical and frequently voiced notions for sustainability of SIHI is the necessity for country hubs to become self-sustaining. The support provided by TDR has been insurmountable and has enabled the establishment of a strong network. The concern remains that relying on TDR to wholly aid the initiative hinges too much on one source of funding. Progress has been shown with the recent success of every dollar funded by TDR resulting in \$1.4 leveraged by hubs and other partners.

"So sustainability and what's the revenue source...In some ways, that's the existential question of SIHI - how can the network generate its own revenues so that it can be totally independent from TDR" – Founding stakeholder

However, the role that TDR and other international organizations play in supporting social innovations will need to continue. The authority that these players bring is supreme and is required for the next phase of the lifespan of the initiative. Homing in on aspects related to each partner and what advocacy they can continue to provide would be advantageous.

The role of country hubs to foster social innovations, too, cannot be diminished. Listening to the needs of the grassroots at the local level is paramount to fostering trust. Creating a local environment that generates and fosters new knowledge to better understand what works and what does not work is important.

Interviewees continued to stress the importance of partnerships in the work that SIHI does and how essential continued engagement will need to be. In its current state, the SIHI network has an

opportunity to collaborate across established country hubs. The level of expertise and resources can be better utilized for cross-country projects to explore the potential of adapting and adopting practices to test the flexibility of social innovations in health.

Global advocacy and local support are vital, but there may be a more distinct role for regional-level convening such as seen in the Latin America country hub. The exploration of regional hubs or regional-level activities to support various context-specific efforts could have the potential to exchange lessons learned, support language fluencies (i.e. Spanish speaking Latin America, francophone Africa etc.), and share best practices that further establish capabilities and scale.

“How things are done in Africa may not be the same way things are going to be done in Asia or Latin America... [maybe] start thinking about doing things at a regional level and even coming up with strategies that work at regional level...” – Country Hub Partner

Looking forward, many interviewees stated the need to build and integrate stronger research designs to better understand how to improve performance, how to best engage with governments, and which factors are involved in moving towards replicability, scalability and sustainability.

Another key direction for the SIHI network is to extend systems thinking of social innovation and encourage private sector and philanthropy players to get involved. With the goal of creating an enabling environment for social innovation, it is difficult to exclude a sector with potential for significant impact on sustainability. The ability to recognize a common goal is paramount to the expansion of SIHI’s resources and capabilities. As such, finding creative ways to showcase the value of a social innovations will be critical to get the attention of this vital group.

Multilateral organizations and governments have an increasing role to play in fostering change so that effective health care delivery solutions can reach the most vulnerable populations. Therefore, they hold a normative role to lead by example and catalyze similar innovative approaches in healthcare delivery. The ability for SIHI to influence social innovation at the highest-level would not only unlock the capacity of people and communities to take an active role in their own health systems, but also propagate social innovation widely. This type of institutionalization at the global, regional and local levels would have significant impact.

“that’s the way of institutionalizing it... how do we embed it in the health care system. How do we embed it to the ministry of health, how do we embed [it globally]” – Founding Stakeholder

5 DISCUSSION

The aim of the study was to analyze SIHI’s role as a catalyzing agent to embed social innovation in health, understand SIHI’s context in the global health landscape and provide recommendations for future directions.

In this section, I present the key findings mapped against the two objectives of the study, according to the analytical RE-AIM framework adapted for the research study, as well as the study strengths and limitations in the following text. The practical recommendations drawn from the findings are summarized in the next section.

5.1 ASSESS SIHI'S RELATIVE STRENGTHS AND WEAKNESSES IN CREATING AN ENABLING ENVIRONMENT FOR SOCIAL INNOVATION IN HEALTH.

The creation of the Social Innovation in Health Initiative, grew out of a sense that all members of society are competent interpreters of their own lives and have the capacity to solve their own problems (20). With more great medical advances in the last century, the reality of health systems and services offered to millions of people in low-and middle-income countries is far from expectation. Failures of the health system are oftentimes not due to a lack of devices or medicines, but rather the organizational aspects of the system. Aspects related to healthcare delivery are failing people – time after time.

The global health narrative began to shift from what health interventions need to be created, and more to how these solutions can get implemented within the communities that require them most. Based on these challenges, a few critical stakeholders began to discuss how to best engage beneficiaries for the betterment of their care. Taking inspiration from social entrepreneurship, they envisioned a new lens for health system transformation whereby a bottom-up, participatory approach towards solution creation would help to overcome the systemic challenges of healthcare delivery.

The initial step of the SIHI collaborative undertaking was to find solutions across the globe that fit the criteria of being people-centered, multi-sectoral and multi-disciplinary and with a participatory engagement with the community beneficiaries. With TDR's interests, the focus on research to identify and evaluate such solutions was central. As such, the two foundational premises upon which SIHI was established included: 1) across LMICs, multiple creative solutions exist (that may yet be known or researched) that have been developed by non-traditional actors and embedded within communities; and 2) research institutions are well positioned to convene all stakeholders in an inclusive manner, embed research in the process of social innovation and act as catalysts for social innovation to be institutionalized within national health systems, based on evidence demonstrating impact.

While this conceptualization of social innovation quickly garnered support, the operationalization has been a positive work in progress for several reasons. Improvements in addressing social problems are typically longer, subject to contestation by citizens and the sheer breadth of activities that may constitute new and improved solutions make setting designations difficult (21). The ability for the SIHI network to design and implement a structure of contributing and implementing partners with identification processes in a relatively short span of time is a great achievement. This is a reflection of strong individuals from the co-founding institutions who conceptualized the initiative and the structure (i.e. TDR, LSHTM, Bertha Centre and Skoll Centre) and created the groundwork for the formation of the initiative. In addition, the appetite and willingness for bottom-up approaches to be endorsed (i.e. WHO call to action) that enabled the initiative to take root. Implementation theories of organizational readiness for change(22) and organizational theory(23) shed light on the impact of organizational shared commitment and external environments, respectively.

The structure of SIHI to include implementing and contributing partners in a loose network was a natural evolution of the reach generated by the founding 4 partners and the focus on institutionalization of SI (outlined below). The term 'inclusive leadership' is central to SIHI as it

describes the process of providing a vision for the network whilst enabling partners to contribute in their own way based on their individual strengths and abilities. SIHI's implementing partners, also called country hubs, are engaged in active efforts to conduct country research and building the capacity for social innovation within their countries. Contributing partners, such as TDR and other international institutions, undertake efforts to advocate and build global capacity on social innovation in health.

Per the RE-AIM framework, SIHI garnered the effective reach required for successful implementation and for public health impact. This was accomplished through the World Health Organization's Call to Global Action in Social Innovation. Also essential was the role of strong change agents to both communicate the need for change and to guide, coordinate and communicate its activities. For the swift and widely adopted social innovation culture change, a few key 'champions' were critical to facilitating WHO's call to action. Similarly, the strong actors who then carried the initiative through its first phase, were vital to the growth thereafter. It is presumed that the combined nature of strong agents and bold urgency through the 'call to action' were pivotal to the initial reach gained. This resulted in a general acceptance of social innovation as a new process of identifying suitable health interventions and extended reach, per the RE-AIM framework.

Intrinsic to the social innovation in health bottom-up view design, the adoption of country-led leadership rather than a Geneva-based 'big brother' leadership at TDR was an obvious choice for the growing network of partners. Based on the successes seen in the initial exploratory phase identifying social innovations across three continents, the 'case' for social innovations was demonstrated. As such, the strategic aim of advancing applications of social innovations in low- and middle-income countries to address inequities in health, required a matching strategic approach.

Critical to this approach is the idea that social innovation, requires a two-way dialogue – starting with a bottom-up participatory approach. Country hubs created a sensible and appealing vision of the future of the network through a matched vision to the aims of the network. Furthermore, the forming of partnerships with all stakeholders – the end-users, innovators, academic researchers, and policy decision-makers, enabled this bottom-up approach to flourish. This allowed each critical stakeholder to be active contributors to the enabling environment and provide indications of what health issues exist (end-users), what solutions are available (innovators), what methods for evaluating are required (researchers), and what country priorities remain (policy stakeholders).

The ability to form a strategic vision along with a guiding coalition of initial stakeholders enabled SIHI to embrace country-led leadership. Utilizing a structure where country hubs are based at academic institutions, centered around the core focus of institutionalization. This was to be achieved through a core local team responsible for identifying and supporting social innovations, leveraging academic resources and partnerships within the country, and pursuing partnerships with key national or regional organizations and policy stakeholders. The alignment of these key processes used by SIHI map to RE-AIM's framework of 'reach' and 'adoption showcase SIHI's creation of an enabling environment for social innovation and addresses objective 1 of the study goals. The trifecta of relevant players including policy stakeholders, researchers and grassroots together has been successful and will continue to be effective in scaling and sustaining the SIHI network.

5.2 EXAMINE SIHI'S EXISTING NATIONAL, REGIONAL, AND GLOBAL DISSEMINATION OF SOCIAL INNOVATION PRACTICES AND DETERMINE FUTURE DIRECTIONS FOR GROWING ENGAGEMENT.

The development of SIHI's core areas of operation – research, capacity building and advocacy, were foundational to growing engagement and facilitating implementation. The advocacy at both local and national-levels for social innovations removed the stigma that community-based solutions were somehow inadequate, as referenced by stakeholders. The proliferation of case studies that depicted strong health care delivery solutions originated by grassroots stakeholders was critical to eliminating any uncertainty. Similarly, incorporating research as a critical component of the social innovation approach eliminated barriers associated with social innovations being in the 'soft science' category and having less rigorous evidence-based impacts. Finally, embedding strong capacity building efforts within the country hubs, eliminated any perceived assumptions related to knowledge, skills or resources being inadequate. This elimination of these barriers empowered appropriate stakeholders to act rather than grapple with system restraints.

Another critical component that enabled the creation of an enabling environment for social innovation in health was the focus on partnerships. The formalization of partnerships both within a country (innovators, researchers, ministries), across country hubs, and between contributing partners (SIDA, Fondation Merieux, etc) has proven to be an influential aspect that has generated significant positive aspects to the SIHI collective. It reiterates the need for multisectoral action to address pressing global health challenges and is critical for achieving the Sustainable Development Goals (24). The gaining of mutual knowledge and building trust, appears to be an essential dimension required for these relationships to function. Trust is built up over time, and is affected by the nature and quality of experiences of collaboration(25), therefore it is expected continued relationships will foster growing engagement.

Other critical methods that helped catalyze SIHI's progress, as depicted through the RE-AIM Framework – effectiveness and implementation dimensions, were the focus placed on evaluating social innovation solutions as well as addressing implementation factors that address policy and end-user needs. The inclusion of end-user beneficiaries and grassroots in the participatory research process will continue to strengthen the effectiveness and implementation of such solutions. Similarly, responding to specific needs, as exemplified by targeted calls to specific health concerns prioritized by policymakers, has shown the adaptability of social innovations to local contexts to improve outcomes in a specific setting. The opportunity for cross-hub collaboration, especially between hubs of similar localities, can further these learnings. The focus placed on democratizing research, creating partnerships, identifying champions, capacity building and generating advocacy have been crucial for SIHI to catalyze social innovation.

At this stage in the lifespan of the Social Innovation in Health Initiative and based on the successes seen so far (rapid growth and expansion of the network), there is no question of the intrinsic national, regional, and global value. Of note, established country hubs have been able to secure the strong foundation and lessons learned that newer hubs are now benefitting from. It is presumed that the organic growth will continue to cultivate and build up from the groundwork established. As depicted by the maintenance dimension of the RE-AIM framework, the focus should rest on

sustained and maintained acceleration for catalyzing social innovation in health. Recognizing appropriate actions that will determine future directions for growing engagement generates knowledge relevant to objective 2.

In social innovation theory terms, most of the effort to date seems to be on the ‘growing the idea’ of community participation, with less thought given to the development, sustainability and diffusion phases. As such, it is necessary to utilize the increasing credibility of social innovation to improve systems, structures, and policies at all levels. It is also important to secure the progresses made by relentlessly solidifying existing connections and partnerships. For country hubs, the focus should be on engaging and strengthening relationships with ministries and finding creative funding streams to rely less on TDR funding. For TDR and other contributing partners, the focus should be on encouraging more global advocacy for enhancing healthcare delivery through the use of social innovations. Another critical factor is engaging the private sector to facilitate and showcase their important role in the social innovation approach to health. There is a fundamental role of cross-sector dynamics: exchanging ideas and values, shifting roles and relationships, and blending public, philanthropic and private resources. This will be a significant step towards ensuring appropriate scale and maintenance of that growth in the long-term. Sustainability, or appropriately termed ‘maintenance’ under the RE-AIM framework suggests that in order for a culture change to last, there is a need to sustain the acceleration made. This requires nurturing established partnerships, creating a local enabling environment that fosters new knowledge, and securing funds to ensure this growth.

To institutionalize social innovations in health, it is critical to articulate the connections between behaviors and organizational success. What has become evident is progress seems to depend on the quality of relationships, and the caliber of the partners. To ensure SIHI’s continued success, these implementation and change elements will be critical.

6 SUMMARY OF KEY FINDINGS

The Social Innovation in Health Initiative has made considerable progress towards its mission to create an enabling environment for social innovations for health care delivery at a global, regional, and local level. The initial three phases of SIHI’s maturity have enabled the legitimization of social innovation as a global health concept to be used for healthcare delivery. Furthermore, the extent of global support through the establishment of country hubs, partnerships with ministries, collaboration with academic institution and empowerment of local innovators has further endorsed SIHI’s mission. It is clear the support established and continued reach hinges on partnerships with multi-disciplinary, multi-sectoral stakeholders. Despite this positive trend, it is also evident there is a necessity for continued advocacy at all levels within the SIHI network to penetrate and further catalyze social innovation.

A key component of SIHI’s success centers around the promotion and integration of research. The ability to produce evidence-based insights not only helped SIHI’s country hubs showcase the health impact of innovations and garner support from ministries, but also democratized research for local innovators to realize their own potential. Local innovators have been able to use insights garnered from research to improve upon their social innovation interventions to better impact healthcare

delivery. For continued propagation of research, there is a strong need to test the newly refined monitoring and evaluation framework to help increase rigor of social innovation research. Furthermore, the inclusion of all levels of stakeholders in the research process – end-users, innovators, academic researchers and policy stakeholders will strengthen capacity and magnify the adoption, scale and sustainability of successful solutions.

SIHI's ability to partner with a number of implementing (beneficiaries, innovators, researchers, policy stakeholders, and country hubs) and contributing (funders, international organizations) partners to catalyze social innovation for healthcare delivery showcases a key strength. Of critical importance is the ability to convene appropriate partners to create awareness and support a movement towards community-based citizen-led solutions. This ability to assemble appropriate partnerships with applicable interests and skills is critical. As such, it has been stressed that the SIHI network can further proliferate this critical component by acting as a resource and convener to connect global partners. The increasing engagement of the private sector could open new avenues of funding and creative ways of thinking that can have influence on long-term scalability and sustainability. Although an area of exploration already initiated, the involvement of non-health sector partners can similarly add valuable synergies and influence both primary and secondary health gains through the lens of universal health care. Furthermore, an exploration of how partners may embed social innovation tools in their own institutions has been proposed to further institutionalize and lead by example.

SIHI's ability to catalyze social innovations for healthcare delivery has been a direct outcome of the advocacy at both global and local levels. This direct ability to showcase and offer a different lens of discovering good ideas has facilitated a culture change to view grassroots ideas as valuable. Continuation of such norms and establishing social innovation as a new narrative or way of doing, will facilitate the move towards universal health coverage. Social innovations may be reinforced as appropriate sets of tools and approaches that deliver effective healthcare delivery to the most vulnerable in societies.

Despite the immense success SIHI has achieved, planning for continued sustainability of the network is vital. The establishment of country hubs with support from TDR has been invaluable. Several hubs have even made big strides towards self-reliance and have secured independent funds. However, continued emphasis on sustainability is insurmountable to ensure the initiative can leverage enduring funding sources. The focus on local and contextual insights is similarly key to sustainability as institutional change requires generating trust for long term transformation. This institutionalization of social innovations withing ministry programs and alongside other implementing partners will help to ensure sustainability at scale. The SIHI network is also an invaluable resource to be leveraged as lessons learned can be conveyed and utilized across the different country hubs. Delving into regional-level activities may be of interest to explore as context-specific exchanges may propel lessons learned and best practices to take the initiative to scale and maintain sustainability at scale to improve global health.

7 STRENGTHS AND LIMITATIONS

This study has the following strengths. First, it contributes to the literature on interorganizational collaborative implementation research of innovations in global health, by modifying and applying the RE-AIM framework. Second, the data captures the breadth of relationships among members of the Social Innovation in Health Initiative, offering a snapshot of interorganizational collaboration required amongst community members, academic researchers, policy stakeholders, and contributing partners in a culture change environment.

A few limitations should also be considered when interpreting the study findings. First, the RE-AIM framework is best adapted through mixed-methods of qualitative and quantitative findings and therefore the absence of quantitative data in this study might restrict elucidation of the five dimensions. Second, the use of purposive sampling can limit the external validity of the findings. Study participants were limited only to implementing or contributing partners of SIHI. External stakeholders, not yet part of the initiative, might have different perspectives on the current influence and other aspects covered. These perspectives could have added value as to the future expected support. Thirdly, the role and objectivity bias of my role as researcher must be mentioned as my position changed from “outsider” to “insider” during the course of my research on the SIH Initiative. Therefore, the evaluation of the initiative may have been influenced unbeknownst due to establishing relationships with relevant players. I have strived to take this into account when analyzing my data, reflecting on any biases and commenting as objectively as I am able to on the findings.

8 RECOMMENDATIONS

Based on the key findings and discussion sections, I would like to suggest the following recommendations for the Social Innovation in Health Initiative, so it can further the aims of the network and facilitate the creation of an enabling environment for social innovation at all levels – local, national and global.

Strategic-level

- Re-examine a strategic plan to ensure all contributing and implementing partners are aligned on the mission, vision and objectives of SIHI. The strength of the network and embedding social innovation at all levels is dependent upon strong collaborations and consensus. Incorporate annual targets for SIHI network which would create a system of accountability for the country hubs and result in measurable progress.

- Lead by example and continue embedding social innovation approaches within existing member organizations. This type of step towards universal health coverage could have innumerable positive knock-on effects at a global-level.
- Explore how best to propagate regional knowledge whereby sharing of best practices and lessons learned can be communicated to other country hubs that share commonalities based on their context. The specific differences seen across localities can be targeted and better optimized so that exemplary implementation practices can be exchanged. Considerations of annual regional events, context-specific research studies or formation of regional-hubs.
- Increase global cross-hub collaboration and capacity building – sharing and learning best practices and key insights. Potential to develop exchange program on social innovation in health.
- Intensify partnership building activities with philanthropies and private sector. Encourage partnership mapping between individual country hubs and private sector organizations. Focus on the fundamental role of cross-sector dynamics for scalability and sustainability.

Country-level

- Increase the focus on engaging community stakeholders (end-users) and local innovators as research partners to monitor and evaluate their own health solutions. Community-based participatory research is integral to establishing the health impact of social innovations and to the continued sustainability of interventions.
- Continued engagement with ministries and key policy stakeholders to demonstrate the value of social innovation solutions for healthcare delivery; and create systems-level changes of institutionalizing the approach into national health agendas. This will help ensure sustainability and scalability of appropriate solutions.
- Test and assess the Social Innovation in Health Monitoring and Evaluation Framework to evaluate its effectiveness as a research tool. Review and revise accordingly to ensure metrics correspond to experiences of innovators and associated health impact.
- Develop core competencies framework in social innovation – the knowledge, skills and attributes needed for people within an organization which could inform appropriate capacity building activities.
- Encourage usage of different rigorous research methods to evaluate success of social innovation healthcare delivery solutions – to broaden the research evidence and enable flexibility for innovators to use most appropriate research.
- Seek different avenues of funding, external from TDR, for scalability and sustainability of independent country hubs

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10 APPENDICES

10.1 APPENDIX 1: SOCIAL INNOVATION LITERATURE REVIEW

Article title	Authors	Defining characteristics of social innovation
Funding social innovation for health with research funds for development	Hannah Akuffo and Teresa Soop	<ul style="list-style-type: none"> • Social innovation procedures generated in local settings, in response to local social structures, contingencies and constraints are more likely to be able to address roadblocks in appropriate health delivery. • A key feature for any successful innovation, especially in low income countries, is efficient and effective interaction between different stakeholders at an early stage.
Universities and social innovation for global sustainable development as seen from the south	Rodrigo Arocena and Judith Sutz	<ul style="list-style-type: none"> • Social innovation is not only an outcome but also a process – social participation in the definition of problems and intended solutions, as well as getting people involved with building of solutions through co-production. • Social innovations transform social relations and people’s empowerment – changing power structures through processes of awareness, capacity building and increased participation • The ‘triangle’ of players needed for social innovation include governments, academia and the ‘producers’ of social innovations
Innovations in maternal and child health: case studies from Uganda	Phyllis Awor, Maxencia Nabiryo and Lenore Manderson	<ul style="list-style-type: none"> • The Social innovations demonstrated strong community participation; multi-stakeholder engagement; addressing gaps in health and wellbeing (needs-based); and contribution to transformation in the health and lives of beneficiaries • The three cases provide pragmatic solutions to the ‘three’ delays in access to health care – they focus on improving access to healthcare deliver (affordability of services, bringing services

		closer to the people, and utilization of task-shifting mechanisms)
Documentary research on social innovation in health in Latin America	Diana Maria Castro-Arroyave and Luisa Fernanda Duque-Paz	<ul style="list-style-type: none"> The social innovations identified focused on a few characteristics: cost-effectiveness to maximize value for customers; on adaptation and interculturality by focusing on the health needs identified by communities; focused on inclusion and empowerment; and addressing social determinants of health.
Integrated vector control of Chagas disease in Guatemala: a case of social innovation in health	Diana Castro-Arroyave, Maria Carlota Monroy and Maria Isabel Irurita	<ul style="list-style-type: none"> The main objective of the innovation was the control of the vector responsible for transmission of Chagas disease – community involvement in home improvement program not only enabled long lasting social transformation but also capacity building and community empowerment
Social innovation for health: engaging communities to address infectious diseases	Phyllis Dako-Gyeke, Uche V. Amazigo, Beatrice Halpaap, and Lenore Manderson	<ul style="list-style-type: none"> The engagement of concerned communities, a characteristic of social innovation, is particularly relevant to infectious diseases of poverty – community-directed programs provide opportunities for government health services and other social actors to work closely with populations directly affected by such diseases i.e. mass drug distribution in treating tropical diseases or recruiting and equipping community members to deliver health services to neighbors
Fostering social innovation and building adaptive capacity for dengue control in Cambodia: a case study	Pierre Echaubard, Chea Thy, Soun Sokha, Set Srun, Claudia Nieto-Sanchez, Koen Peters Grietens, Noel R. Juban, Jana Mier-Alpano, Sucelle Deacosta, Mojgan Sami, Leo Braack, Bernadette Ramirez and Jeffrey Hii	<ul style="list-style-type: none"> Community engagement in disease control and health development enabled low-cost strategies and ownership of dengue control for long term impact. Social innovation approach contributes to emergence of culturally relevant solutions and products
How to make your research jump off the page: co-creation to broaden public engagement in medical research	Nina Finley, Talia Swartz, Kevin Cao, Joseph D. Tucker	<ul style="list-style-type: none"> Co-creation is iterative, bidirectional collaboration between researchers and laypeople to create knowledge; public engagement is mutually beneficial interaction between specialists and non-specialists – provides opportunity for laypeople to contribute and learn about processes that affect their health and holds researchers accountable
Social innovation in global health: sparking location action	Beatrice Halpaap, Joseph Tucker, Don Mathanga, Noel Juban, Phyllis Awor, Nancy G Saravia, Larry Han, Katusha de Villiers, Makiko Kitamura, Luis Gabriel Cuervo, Rosanna Peeling, John Reeder	<ul style="list-style-type: none"> Crowdsourcing calls can be used to identify social innovations and tap into creativity and power of local individuals – this may require disruption of established systems of healthcare delivery and for relevant stakeholders to adapt (researchers, governments, and health professionals)
The role of multilateral organizations and governments in advancing social innovations in health care delivery	Beatrice Halpaap, Rosanna Peeling and Francois Bonnici	<ul style="list-style-type: none"> Effective partnerships, strong engagement with and endorsement by governments and communities, regulations, trust and sometimes willingness are key factors to enhance system integration, replication and dissemination of social innovations

		<ul style="list-style-type: none"> Multilateral organizations and governments play important role in creating enabling environment – promoting concept of social innovation in health care delivery, spreading social innovation approach and lessons learnt, fostering partnerships and leveraging resources, convening communities, health system actors and various stakeholders to work together across disciplines and sectors
Community-led delivery of HIV self-testing to improve HIV testing, ART initiation and broader social outcomes in rural Malawi: study protocol for a cluster randomised trial	Pitchaya Indravudh, Katherine Fielding, Moses Kumwenda, Rebecca Nizawa, Richard Chilongosi, Nicola Desmond, Rose Nyirenda, Cheryl Johnson, Rachel Baggaley, Karin Hatzold, Fern Terris-Prestholdt, Elizabeth Corbett	<ul style="list-style-type: none"> A parallel arm, cluster randomized trial aims to determine if community-led delivery of HIV self testing can improve HIV testing uptake, ART initiation and broader social outcomes in rural Malawi Strong example of research embedded process to determine impact of community- led approach to health interventions
Social innovation research checklist: a crowdsourcing open call and digital hackathon to develop a checklist for research to advance social innovation in health	Eneyi Kpokiri, Elizabeth Chen, Jingjing Li, Sarah Payne, Pryanka Shrestha, Kaosar Afsana, Uche Amazigo, Phyllis Awor, Jean-Francois de Lavisson, Saqif Khan, Jana Mier-Alpano, Alberto Ong, Shivani Subhedar, Isabella Wachmuth, Kala Mcta, Beatrice Halpaap, Joseph Tucker	<ul style="list-style-type: none"> A proposed research checklist to standardize and improve reporting of research findings, promote transparency and increase replicability of social innovation studies Research checklist will further help and democratize research in social innovation in health and increase rigor of research
Men who have sex with men-friendly doctor finder hackathon in Guangzhou, China: development of mobile health intervention to enhance health care utilization	Chunyan Li, Yuan Xiong, Hao Fong Sit, Weiming Tang, Brian Hall, Kathryn Muessing, Chongyi Wei, Huyanyu Bao, Shufang Wei, Dapeng Zhang, Guodong Mi, Joseph Tucker	<ul style="list-style-type: none"> A crowdsourcing hackathon is a feasible approach to create tailored health interventions – generated 8 complete prototypes that could help MSM access local health services Hackathon accelerates traditionally slow public health intervention development processes – translating research-driven ideas into real world solutions; participatory approach to redress power imbalances among community, research and technology partners Community mobilization for developing mHealth tools – novel innovative example
A community-driven and evidence-based approach to developing mental wellness strategies in First Nations: a program protocol	Melody Morton Ninomiya, Ningwakwe George, Julie George, Renee Linklater, Julie Bull, Sara Plain, Kathryn Graham, Sharon Bernards, Laura Peach, Vicky Stergiopoulos, Paul Kurdyak, Gerald McKinley, Peter Donnelly, Samantha Wells	<ul style="list-style-type: none"> Using community- driven research to action for mental health and substance/use addition and violence solutions – 4 phases: community-wide survey to understand issues, needs and community strengths; analysis of local data sources and knowledge sharing; involving communities to develop and implement solution; sharing of solutions and cross-community mentoring
Exploring social innovation in health in Central America and the Caribbean	Josselyn Mothe, Luis Vacafior, Diana Castro-Arroyave, Luis Gabriel Cuervo, Nancy Gore Saravia	<ul style="list-style-type: none"> Crowdsourcing call in LAC country hub generated several solutions for reducing impact of neglected tropical diseases; key findings emerged: innovative solutions were based on knowledge and experience of individuals and communities facing adverse situations and innovative solutions were knowledge was shared through health promotion and

		education, leading to empowerment of communities.
Involving end-users in adapting a Spanish version of a web-based mental health clinic for young people in Colombia: exploratory study using participatory design methodologies	Laura Ospina-Pinillos, Tracey Davenport, Alvaro Andres Navarro-Mancilla, Vanessa Wan Sze Cheng, Andres Camilo Cardozo Alarcon, Andres Rangel, German Eduardo Rueda-Jaimes, Carlos Gomez-Restrepo, Ian Hickie, Franczp Fassa	<ul style="list-style-type: none"> • Effective engagement with local stakeholders, use of local capacities and systems and measurement of relevant results for community promote translational research - Co-design and culturally adapted mobile solution to provide young people with accessible, available, affordable and integrated mental health care
What if communities held the solutions for universal health coverage?	John Reeder, Marie-Paule Kieny, Rosanna Peeling, Francois Bonnici	<ul style="list-style-type: none"> • Emphasis on research to guide local community innovators to understand the importance of what works, what does not work to make their innovations sustainable and scalable • Research can also demonstrate impact of social innovations to enhance uptake within health systems
Researching social innovation: is the tail wagging the dog?	Emma Rhule and Pascale Allotey	<ul style="list-style-type: none"> • Social innovations are wide ranging, encompassing products, services, behavioral practices, and models or policies – innovations do not have to be new inventions, or new to the world, but their deployment should be novel either to the beneficiary group or in the way in which they are applied • To be effective, researchers need to be willing to enter the process of social innovation as learners, not just experts - too often participatory models of engagement from single perspective. Holistic approach values each stakeholder as holder of expertise – emphasizing co-creation
Social innovation in diagnostics: three case studies	Megan Srinivas, Eileen Yang, Priyanka Shrestha, Dan Wu, Rosanna Peeling, Joseph Tucker	<ul style="list-style-type: none"> • Social innovation an address equity issues in access to diagnostic testing – implement diagnostics and treatment through school-based program (extension of services in rural areas); self-collection for screening shows power of bottom-up approach and patients agency in health services; and crowdsourcing solutions to HIV testing materials
Crowdsourcing to improve HIV and sexual health outcomes: a scoping review	Weiming Tang, Tiarney Ritchwood, Dan Wu, Jason Ong, Chongyi Wei, Juliet Iwelunmor, Joseph Tucker	<ul style="list-style-type: none"> • Crowdsourcing can be an effective tool for informing the design and implementation of HIV and sexual health interventions • More strategies for engaging members of key populations or marginalized groups in crowdsourcing research are needed; more effective methods for evaluating interventions are needed
Crowdsourcing in medical research: concepts and applications	Joseph Tucker, Suzanne Day, Weiming Tang, Barry Bayus	<ul style="list-style-type: none"> • Crowdsourcing shares elements with community-based participatory research, participatory action research and community-driven research – all emphasize the importance of participation, partnerships, empowerment and assessment of local priorities
Crowdsourcing to identify social innovation initiatives in health in low-and middle-income countries	Lindi van Niekerk, Arturo Ongkeko, Rachel Alice Hounsell, Barwani Khaura Msiska, Don Pascal Mathanga, Josselyn Mothe, Noel	<ul style="list-style-type: none"> • Study explored using crowdsourcing to identify social innovations in Africa, Asia and Latin America – key aspects included: developing locally relevant health challenge and locally

	Juban, Phyllis Awor, Dina Balabanova	relevant communication strategies for widespread dissemination
Universities as catalysts of social innovation in health systems in low- and middle-income countries: a multi-country case study	Lindi van Niekerk, Don Pascal Mathanga, Noel Juban, Diana Maria Castro-Arroyave, Dina Balabanova	<ul style="list-style-type: none"> Universities are strategically equipped to act as a bridge between communities, governments and other country actors – to leverage existing research capacity and ability to build capacity to engage social innovations in health
Crowdsourcing in health and medical research: a systematic review	Cheng Wang, Larry Han, Gabriella Stein, Suzanne Day, Cedric Bien-Gund, Allison Mathews, Jason Ong, Pei-Zhen Zhao, Shu-Fang Wei, Jennifer Walker, Roger Chou, Amy Lee, Angela Chen, Barry Bayus, Joseph Tucker	<ul style="list-style-type: none"> A systematic review identified crowdsourcing approaches – evidence was most robust on crowdsourcing for evaluating surgical skills, increasing HIV testing and organizing layperson assisted out-of-pocket CRP Extensive community engagement in crowdsourcing may help to improve acceptability of intervention among key affected populations by drawing directly upon community member perspectives
A crowdsourcing open contest to design pre-exposure prophylaxis promotion messages: protocol for an exploratory mixed methods study	Jordan White, Allison Mathews, Marcus Henry, Meghan Moran, Kathleen Page, Carl Latkin, Joseph Tucker, Cui Yang	<ul style="list-style-type: none"> Paper describes research protocol of a contest approach to solicit PrEP promotion messages among black men who have sex with men Long history of medical mistrust and power imbalances between scientists and community members suggests social innovations may enable appropriate messaging to be developed with community and address their needs and priorities
Crowdsourcing to promote hepatitis C testing and linkage to care in China: a randomized controlled trial protocol	William Wong, Nancy Yang, Jingjing Li, Hang Li, Eric Wan, Thomas Fitzpatrick, Yuan Xiong, Wai-Kay Seto, Polin Chan, Ruihong Liu, Weiming Tang, Joseph Tucker	<ul style="list-style-type: none"> Paper describes protocol for randomized controlled trial of intervention group receiving crowdsourced materials with control group receiving no promotional materials; trial aims to evaluate crowdsourcing as a strategy to improve HCV awareness testing and linkage to care in China
Crowdsourcing methods to enhance HIV and sexual health services: a scoping review and qualitative synthesis	Dan Wu, Jason Ong, Weiming Tang, Tiarney Ritchwood, Jennifer Walker, Juliet Iwelunmor, Joseph Tucker	<ul style="list-style-type: none"> Multidisciplinary collaboration and heterogeneity are key features of crowdsourcing which maximize potential for innovations by aggregating crowd wisdom; crowdsourcing also provides an anonymous channel for people to make their voice heard without fearing stigma – potential to empower marginalized or vulnerable communities into priority setting
Community dashboards to support data-informed decision-making in the HEALing communities study	Elwin Wu, Jennifer Villani, Alissa Davis, Naleef Fareed, Daniel Harris, Timothy Huerta, Marc LaRochelle, Cortney Miller, Emmanuel Oga	<ul style="list-style-type: none"> Community-tailored dashboards can help communities monitor their own progress and address opioid overdose epidemic; importance of co-creation by researchers and community stakeholders to ensure alignment
Key populations and power: people-centered social innovation in Asian HIV services	Fan Yang, Rena Janamnuaysook, Mark Boyd, Nittaya Phanuphak, Joseph Tucker	<ul style="list-style-type: none"> Shifting from disease-focused to people-centered approaches for HIV programming – engaging key populations in outreach and mobilization; co-creation of innovative programs through crowdsourcing; key populations responsible for managing, funding, designing, delivering, evaluating and sustaining HIV services

10.2 APPENDIX 2: LETTER OF SUPPORT FROM HOST INSTITUTION



Tel. direct: +41 22 791 5807
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LSHTM Ethics Review Committee
London School of Hygiene & Tropical Medicine
Keppel Street, London WC1E 7HT

14 February 2020

**Special Programme for Research and Training in Tropical Diseases (TDR)
UNICEF/UNDP/World Bank/WHO**

**Reference: Letter of support for RSI/OPA (organisational and/or policy analysis) research project
February 2020 to October 2020**

I am writing to express the Social Innovation in Health Initiative's (SIHI) support of Patricia Moscibrodzki's study proposal titled "Critical Analysis of SIHI's Influence in Creating and Promoting an Enabling Environment for Social Innovation".

The research study hopes to assess SIHI's role in catalysing a global culture change towards social innovation and influencing health agenda uptake at the local, national, regional and global levels. The study design, methods, timing for obtaining consent and data collection activities are appropriate for the setting and study participants. SIHI is prepared to support the study protocol and provide internal and external documentation, assist with stakeholder mapping and facilitate interview requests with relevant research participants.

It is our intention and hope that this project will provide insights on SIHI's current global influence and highlight a renewed perspective on the direction and strategy that furthers SIHI's aims.

We are excited to support Patricia Moscibrodzki's endeavours and will dedicate efforts to support the research and data needed for this necessary work.

Sincerely,
Beatrice Halpaap

A handwritten signature in blue ink, appearing to read 'B. Halpaap', with a horizontal line underneath.

Dr Beatrice Halpaap,
Unit Head,
Programme Innovation and Management
Special Programme for Research and
Training in Tropical Diseases co-sponsored by UNICEF /
UNDP / World Bank / WHO

10.3 APPENDIX 3: ETHICAL APPROVAL

London School of Hygiene & Tropical Medicine

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Observational / Interventions Research Ethics Committee

Ms Patricia Moscibrodzki
LSHTM

11 March 2020

Dear Patricia

Submission Title: Critical Analysis of the Social Innovation in Health Initiative's Global Influence

LSHTM Ethics Ref: 21494

Thank you for responding to the Observational Committee Chair's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Conditions of the favourable opinion

Approval is dependent on local ethical approval having been received, where relevant.

Approved documents

The final list of documents reviewed and approved is as follows:

Document Type	File Name	Date	Version
Local Approval	Support Lettert RSI OPA	14/02/2020	1
Investigator CV	Moscibrodzki_Patricia	18/02/2020	1
Other	GCP_Certificate_R2_new	18/02/2020	1
Information Sheet	Participant information sheet	20/02/2020	1
Protocol / Proposal	SIHI Research Project Protocol	20/02/2020	1
Protocol / Proposal	Interview Topic Guide-SIHI relevant members	20/02/2020	1
Protocol / Proposal	Interview Topic Guide- Contributing/implementing partners	20/02/2020	1
Information Sheet	Informed Consent Form	20/02/2020	1
Covering Letter	Cover Letter	05/03/2020	1
Information Sheet	Informed Consent Form_v2	05/03/2020	2
Information Sheet	Participant information sheet_v2	05/03/2020	2

10.4 APPENDIX 4: STUDY INFORMATION SHEET

Participant Information Sheet

My name is Patricia Moscibrodzki and I am a research student at the London School of Hygiene and Tropical Medicine. You are being invited to participate in a research project. Before you decide to take part, it is important for you to understand why the research is being done and what it will involve. Please ask me if there is anything that is not clear or if you would like more information.

What is the purpose of the study? I want to understand how SIHI influences social innovation at the local, national, regional and global levels. I am looking to explore the role of SIHI's key stakeholders in the influencing process and any factors which may impact its progress. To do this, I will be interviewing approximately 15-20 individuals, including SIHI and key contributing partners.

What is involved today? I will ask you questions about your organization. I will also ask you about your views on how the "Social Innovation in Health" initiative functions to influence social innovation globally and what factors may facilitate or impede this culture change. The interview will last approximately 45 minutes.

Recording: If you agree, I would like to record the interview. If you do not agree to it being recorded, please let me know and I will take notes instead.

Confidentiality: All information and recordings collected in the research will be kept confidential and will not be shared with anyone outside the research team. I will not use your name or job title in any reports from this study. All data will be anonymized by a number instead of your name. Only the researchers will know what number your name is associated with. However, I may use direct quotations in the reports and it is possible that people familiar with this setting may be able to identify you by the role/type of organization. If you prefer to not have your quotations used for potential identification reasons please let me know and record so on the consent form.

What are the benefits? The information collected in this interview can help understand, guide, plan and improve SIHI approach and implementation by embedding social innovation as well as develop and implement appropriate policies at the local, regional and national levels.

What are the risks? There are no risks of physical or psychological harm associated with this interview. The questions will take up a bit of your time – about 45 minutes. You will not receive a financial or other type of reimbursement for taking part in the study.

Do I have to take part? No. It is up to you to decide whether or not to take part. If you agree to take part you are still free to withdraw any time and without giving a reason. If there are any questions that you don't want to answer then you don't have to. If you agree to take part I will ask you to sign the consent form, which I will store securely.

If you have any further questions that are not answered here or require further information or explanation, please contact:

Ms. Patricia Moscibrodzki, DrPH Research Student, London School of Hygiene and Tropical Medicine,

Email: patricia.moscibrodzki@lshtm.ac.uk

Ms. Ana Gerlin Hernandez Bonilla, Officer for Social Innovation in Health Initiative, World Health Organization, Email: anhernandez@who.int

Dr. Beatrice Halpaap, Unit Head Programme Innovation and Management, Special Programme for Research and Training in Tropical Diseases (TDR), World Health Organization; Email: halpaapb@who.int

Dr. Katharina Kranzer, Research Supervisor, London School of Hygiene & Tropical Medicine,

Email: katharina.kranzer@lshtm.ac.uk

Dr. Joanna Schellenberg, Research Supervisor, London School of Hygiene & Tropical Medicine,

Email: joanna.schellenberg@lshtm.ac.uk

Thank you for your time!

10.5 APPENDIX 5: INFORMED CONSENT FORM

Informed Consent Form

Project Title: Critical Analysis of the Social Innovation in Health Initiative's Global Influence

Consent Form Version and Date: Version 2; March 4, 2020

Investigator: Ms. Patricia Moscibrodzki, London School of Hygiene and Tropical Medicine

Please initial

I confirm that I have read and understood the information sheet for the stated study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily	
I understand that my participation is voluntary and that I can stop the interview at any time without giving a reason	
I understand that if I decide to stop the interview all data collected will be destroyed	
I agree to take part in the study	
I understand that recording the interview is optional. By ticking this box, I agree to have this interview recorded	

	Yes	No
I agree to the research investigator using my quotations anonymously for the purposes of publications, reports or knowledge transfer.	<input type="checkbox"/>	<input type="checkbox"/>

Name of Participant (please print):

Signed:

Date:

Name of Researcher (please print):

Signed:

Date:

If you have any further questions that are not answered here or require further information or explanation, please contact:

Ms. Patricia Moscibrodzki, DrPH Research Student, London School of Hygiene and Tropical Medicine,

Email: patricia.moscibrodzki@lshtm.ac.uk

Ms. Ana Gerlin Hernandez Bonilla, Officer for Social Innovation in Health Initiative, World Health Organization,

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Dr. Joanna Schellenberg, Research Supervisor, London School of Hygiene & Tropical Medicine,

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10.6 APPENDIX 6: PHASE ONE INTERVIEW TOPIC GUIDE

Interview Topic Guide

Project Title: Critical Analysis of the Social Innovation in Health Initiative's Global Influence

Consent Form Version and Date: Version 2; April 20, 2020

Investigator: Ms. Patricia Moscibrodzki, London School of Hygiene and Tropical Medicine

Name of Interviewee:

Identifying Information:

Institution:

Standardized filename:

Background

1. *How did the idea for a social innovation in health initiative begin? (Co-founders only)*
2. *Did the SIHI strategy evolve/change over time? (Co-founders only)*
 - a. *If so, how did the vision/strategy change from the initial idea?*
 - b. *Do you agree with these changes?*
3. Briefly describe what your organization does and its relationship with SIHI
4. Tell me about your role in SIHI?
5. What are your organization's goals and objectives in terms of catalyzing social innovations?

Social Innovation

6. How do you define SOCIAL INNOVATION?
 - a. What does this term mean to you and how is it used?
7. What do you think of the social innovation process embodied by SIHI i.e. innovation calls, innovation criteria, expert review etc.
 - a. What can be done better/ changed?
 - b. What do you think is done really well?
8. How does your organization address SOCIAL INNOVATION in terms of your policy, guidelines, or programmes?
 - a. Give me an example?
 - b. Do you think the process in place is valuable?
 - c. How do you feel about this level of involvement/participation?

Organizational Commitment

9. How would you describe your organizations commitment in supporting social innovation activities?

10. What is your relationship with SIHI? Would you consider your organization one of SIHI's key stakeholders? Explain.

Influencing Process/Strategy

11. In your opinion, what would be some enablers or barriers which may impact social innovation?
12. In your opinion, what has SIHI's role been in catalyzing a social innovation culture change?
13. What are the outcomes that you have seen from social innovation on strengthening health care delivery or health systems?

Collaboration, barriers and facilitators

14. Who do you consider your key stakeholders to collaborate on social innovation in health?
a. How does your organization/hub collaborate with TDR global or other members?
b. Is the current level of collaboration enough? Can it be improved on? How?
15. How is your organization making use of its work on social innovation to inform policy at the local, district national, and international levels?

SIHI's current influence

16. How influential do you think SIHI currently is in its mission?
17. Does SIHI currently hold the level of influence at the local/regional/global level necessary to make big changes in global healthcare delivery?
a. Do you see the impact of SIHI's work in policy?

Vision for the future of SIHI

18. Tell me your vision of how you would like SIHI to be in the future
19. What are the barriers and opportunities for achieving your vision?

Is there anything else you'd like to add? Suggestions? Recommendations?

Are there other individuals or organizations you can suggest I speak with regarding SIHI?

Have you got any questions for me?

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10.7 APPENDIX 7: PHASE 2 INTERVIEW TOPIC GUIDE

Interview Topic Guide

Project Title: Critical Analysis of the Social Innovation in Health Initiative's Global Influence

Consent Form Version and Date: Version 1; June 25, 2020

Investigator: Ms. Patricia Moscibrodzki, London School of Hygiene and Tropical Medicine

Name of Interviewee:

Identifying Information:

Institution:

Standardized filename:

Background

1. Briefly describe your relationship with the SIHI [country hub].
2. Tell me about your role in helping to cultivate social innovation.

Social Innovation

3. How do you define SOCIAL INNOVATION?
 - a. What does this term mean to you and how is it used?
4. What are the biggest benefits of incorporating social innovation into healthcare delivery in your country?
5. What do you envision as an appropriate process for social innovation in your country context?

For Research Stakeholders

6. What are the methods used in-country to evaluate the social innovation projects identified?
 - a. What types of study designs have been used?
 - b. What monitoring and evaluation tools are used?
7. How are different stakeholders involved in the research of social innovations? Innovators themselves? Researchers? Policymakers?
8. What are the research capabilities of the country hub/innovators?
9. What is the level of capacity-building needed?
10. How is the research structured to enable programmatic and policy changes?
 - a. Is the evidence as a result of the research design/evaluation method applicable to policy stakeholders?
 - b. If not yet influencing policy, how could research be used to elevate the evidence to inform policy?

11. Do you think developing a roadmap for embedding research into social innovation would be useful?

For Policy Stakeholders

12. What aspects of social innovation are particularly interesting from a policy standpoint?
13. Is there interest to use social innovation as a process to identify health delivery problems and develop solutions?
 - a. How could social innovations become better utilized by Ministries of Health?
14. What factors are considered in scaling innovation projects? (or would be considered, if not yet)
15. What enablers/barriers exist to embedding social innovation at the national level?
16. What type of research evidence is required to translate into programmatic or policy proposals?
17. Would developing a social innovation roadmap from problem identification to policy be useful?

For Innovators

18. What was the social innovation proposal application process like?
 - a. What were the enablers/barriers to being selected?
19. What support do you require from the country hub?
20. Were you involved in the research aspects of your social innovation?
 - a. If not, would you be interested in being involved in evaluating your innovation?
21. What does your innovation require for sustainability/scalability?

Influencing Process/Strategy

22. In your opinion, what has SIHI's role been in catalyzing a social innovation culture change?
23. What are the outcomes that you have seen from social innovation on strengthening health care delivery or health systems?
24. What level of advocacy exists? Do you think more could be done from an advocacy perspective?

Collaboration and Facilitation

25. Who do you consider your key stakeholders to be?
26. What is the level of collaboration between country hub staff and the different stakeholders?
 - a. Is the current level of collaboration enough? Can it be improved on? How?
27. Are there currently any convenings of the different stakeholders happening? Would this be useful?

SIHI's Current Influence

28. How influential do you think SIHI currently is in its mission at the country-level?
29. Does SIHI currently hold the level of influence at the local level necessary to make big changes in healthcare delivery?

Vision for the Future of SIHI

30. Tell me your vision of how you see social innovation in [country] in the future
31. What are the barriers and opportunities for achieving your vision?

32. What are the urgent next steps to ensure sustainability of social innovation in your country?

Is there anything else you'd like to add? Suggestions? Recommendations?

Are there other individuals or organizations you can suggest I speak with regarding SIHI?

Have you got any questions for me?

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10.8 APPENDIX 8: PHASE 3 INTERVIEW TOPIC GUIDE

Interview Topic Guide

Project Title: Critical Analysis of the Social Innovation in Health Initiative's Global Influence

Consent Form Version and Date: Version 2; August 17, 2020

Investigator: Ms. Patricia Moscibrodzki, London School of Hygiene and Tropical Medicine

Name of Interviewee:

Identifying Information:

Institution:

Standardized filename:

Background

1. Briefly describe what your organization does and its relationship with SIHI
2. What are your organization's goals and objectives in terms of catalyzing social innovations?

Social Innovation

3. How does your organization address SOCIAL INNOVATION in terms of your policy, guidelines, or programmes?
 - a. Could you give me an example?

Organizational Commitment

4. How would you describe your organizations commitment in supporting social innovation and further embedding into regular programs/policy?
5. What is your relationship with SIHI?
 - a. How does your organization collaborate with TDR global or other members/hubs?
 - b. How do you feel about this level of involvement/participation?
 - c. Do you have suggestions on how this could be improved?

Influencing Process/Strategy

6. In your opinion, what would be some enablers or barriers which may impact social innovation?
7. In your opinion, what has SIHI's role been in catalyzing a social innovation culture change?
 - a. How influential do you think SIHI currently is in its mission?

Vision for the future

8. Tell me your vision of how you would like social innovation to be used within your organization in the future
9. Do you have suggestions for how SIHI could collaborate better towards reaching its mission?

Is there anything else you'd like to add? Suggestions? Recommendations?

Have you got any questions for me?

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