Performance and Outcome Study of the Pathway for Integrating DFS and Health Systems

Executive Summary

Our consortium team with global and local partners proposes that the landscape exercise be structured as a performance and outcome landscaping study. The study would identify and describe digital health initiatives with a digital financial services (DFS) component in three countries at different stages of digital health and health system development. The study will include an in-depth analysis to identify performance success factors, barriers and opportunities for expansion of financial inclusion and protection in these three settings. In this way, we will provide a deeper analysis of the key takeaways set forth in USAID's recently published Technical Brief of DFS and USAID health goals. The study will adapt the methodology set forth by WHO in its guide for evaluating digital health interventions to measure the outcomes of these interventions. We will apply the mERA core criteria (WHO 2016[1]) to DFS integrated digital health initiatives in three countries with one each from East Africa, West Africa and Southeast Asia.

Consortium Team

Our consortium team combines a global health firm, Realizing Global Health, www.realizingglobalhealth.com, with the expert DFS consulting firm, Strategic Impact Advisors, www.siaedge.com and two academic institutions, The Lagos Business School, www.lbs.edu.ng and the Directorate of ICT of Muhimbili University of Health and Allied Sciences in Dar Es Salaam, Tanzania, www.muhas.ac.tz.

RGH is a global health consulting company founded by Dr. Elvira Beracochea in 2005 to help achieve global health goals through systemic solutions that develop sustainable and self-reliant health systems. RGH helps client achieve the health targets of the Sustainable Development Goals (SDGs) using innovative, effective and sustainable global health assistance solutions. RGH has assisted USAID, NGOs and Global Fund Grantees in over 40 countries to improve how they manage and monitor performance and use that data to make timely programmatic decisions. Dr. Beracochea recently assisted USAID Tanzania to review its health information system portfolio, and in particular its contribution to the digital health platform being built by the Government of Tanzania. RGH also has conducted numerous global health project evaluations and designed a number of online training programs.

SIA is a global consulting firm that supports the creation and expanded use of financial services and digital solutions to transform a wide variety of economic activities, including access to finance, energy, health care and information services. SIA works at the global and country level. Globally, SIA is a technical advisor to institutions such as USAID and the World Bank. At the country level, SIA has conducted assessments and created toolkits and guidance for use by private, public and development sector actors on using DFS to achieve development outcomes across a variety of sectors. This year, SIA assisted USAID in evaluating the opportunity for DFS to improve health outcomes in its programming in Nigeria.

Lagos Business School is Nigeria's premier business school and host of the Sustainable and Inclusive Digital Financial Services (SIDFS) Initiative. Through this initiative, LBS has become a leader in studying

[1] See Monitoring and evaluating digital health interventions: a practical guide to conducting research and assessment. Geneva: World Health Organization; 2016. License: CC BY-NC-SA 3.0 IGO.

and advocating for DFS in Nigeria. Led by Professor Yinka David-West, the team is making significant contributions towards advancing the financial inclusion discourse in Nigeria.

The ICT Directorate of Muhimbili of Health and Allied Sciences The Directorate of ICT of Muhimbili of Health and Allied Sciences in Tanzania is at the forefront of digital health developments in Tanzania. Dr. Felix Sukums, its Director, has conducted numerous studies among them a study to document the implementation of the open source district health information system (DHIS2) and health facility digitalization in Tanzania Mainland from March 2018-September 2019. He also evaluated the implementation of the country's national eHealth Strategy (2013-2018) and led the development the new Digital Health Strategy (2019-2024).

Project Description

1. Problem statement

Digital financial inclusion has been shown to address long-standing development challenges. Over the past decade, advances in digital ecosystems and mobile phone networks and the adoption of mobile telephony have expanded service access to rural and underserved communities. According to the World Bank's 2017 Global Findex, 44% of adults (70% of account owners) reported having made or received at least one digital payment using their account in the past year. GSMA's 2018 State of the Industry Report database shows 866 million registered mobile money accounts in 90 countries and $1.3 billion transacted every day. There has been significant attention paid to the role of digitization and DFS in agriculture and with smallholder farmers, but less attention given to DFS integration into health care delivery, access and outcomes. While significant global gains have been made in the opening of accounts for DFS, challenges remain in securing its active use and incorporation across sectors. As DFS ecosystems mature, there are now efforts being made to leverage them to support the digitization of health care. While there has been progress made around the application of DFS in health systems, little has been done to fully understand the scope and outcomes of this progress to help establish benchmarks on success, failure and the underpinning factors that have led to either result. Therefore, this study will assess how digital platforms are being built and used to address systemic problems in the health sector, specifically around the mismanagement of critical human resources: shortages, maldistribution, lack of supervision and career paths, absenteeism, low productivity and burnout of frontline health care workers.

2. Approach

The goal is to describe the digital health platform and the DFS landscape in three countries and assess how well DFS have increased financial protection, demand and use of services and overall health performance and outcomes in three countries. Our approach will assess how DFS products are performing in the context of various countries' public and private health systems. After identifying the digital health and DFS integration solutions, our study will assess the health outcomes in terms of increased access and coverage of patient-centered quality health services, the population's resilience to financial shocks, and the actual impact on the performance and organization of the countries' health systems. The results then will describe the landscape at large and the scale-up potential of successful DFS and digital health solutions that can be used for further dissemination and implementation. The study will follow the guidelines set forth by WHO for evaluating digital health initiatives, looking at the landscape as consisting of a number of pathways for improving access to health services and health outcomes through more efficient and better funded health systems. No two health systems are the same, so for scale, we propose the study

take place in two low-income countries including a large one with state-level health care systems, and a country currently digitizing its national health care system, and one middle-income country known for a more developed financial protection and digital health platform.

Table 1: WHO Guideline Description of Performance or Outcome Evaluations:

Objectives		Illustrative questions asked
Performance or outcome evaluation	Measures the effectiveness of intervention activities on immediate and intermediate changes in key outcomes, including knowledge, service provision, utilization and coverage	**Provision:** Are the services available? What is the intervention's effect on changes in service delivery? **Utilization:** Are the services being used? **Coverage:** Did the digital health system increase coverage of the health intervention? Is the target population being reached?

We propose to use a customized version of the mERA checklist published by WHO in 2016 to organize the three-country landscape study. The checklist provides guidance for evaluating and reporting on the feasibility and effectiveness of digital health interventions. Our team will take this checklist and ensure key elements around DFS are included into the mERA format, such as regulatory considerations, payment infrastructure and distribution network penetration (i.e. agents, merchants). Use of this custom checklist will provide a standard frame for measuring and analyzing the impact and potential of digital health services.

Table 2: mERA Checklist

Core mERA Criteria ✓			
Infrastructure	Intervention content	Cost assessment	Replicability
Technology platform	Usability/content testing	Adoption inputs/ program entry	Data security
Interoperability	User feedback	Limitations for delivery at scale	Compliance with national guidelines or regulatory statutes
Intervention delivery	Access of individual participants	Contextual adaptability	Fidelity of the intervention

3. Risk mitigation

The consortium sees potential risks in two areas: (1) limited access to data to measure impact on health outcomes of DFS and (2) delays in accessing key stakeholders and in country experts that shift report completion out beyond expected project timelines. Our approach to mitigate these risks is to build our consortium with local academic institutions with expertise in the health and digital sectors. These consortium members will inform the country authorities in the health and financial sectors at the time of the award and start what will be a long-term working relationship. The local partners will keep the authorities informed of the progress and results so they also take ownership and benefit from the study results.