DIGITAL HEALTH AT PSI



DIGITAL HEALTH MATTERS NOW MORE SO THAN EVER

Over the next decade, PSI aims to reimagine healthcare worldwide by placing our consumer at the center, and, whenever possible, bringing quality care closer to our consumer. We live in a rapidly changing world; advancements in mobile technology access coupled with increased connectivity in Low and Middle Income Countries (LMICs) presents an unprecedented opportunity to make healthcare more accessible by changing the way we engage with consumers. In addition, COVID-19 has seriously strained already fragile healthcare systems in many of these countries. Limitations in physical movement and social interaction have further accelerated the need for digital health solutions targeted at both consumers and the health workforce.

PSI'S VISION FOR DIGITAL HEALTH

PSI's Digital Health vision is to improve consumer health and well-being by using digital technologies to increase access and personalize delivery of quality information, products and services throughout their life course. The vision will be delivered through the Digital Strategy Framework highlighted below, aligned to WHO's Classification of Digital Health Interventions.

DIGITAL STRATEGY FRAMEWORK

In order to achieve the Digital Strategy vision, PSI focuses on the following framework:

CONSUMER
DIGITAL HEALTH

Leverage mobile technology in the hands of consumers to power their health journey.

WORKFORCE
DIGITAL HEALTH

Leverage mobile technology to improve quality, efficiency and stewardship of health service delivery.

COMMUNITY INFLUENCE
DIGITAL HEALTH

Coordinate adoption of digital health across implementers to accelerate scale and improve sustainability.

DIGITAL **DATA TRANSFORMATION**

Continually shape, course correct and evaluate implementation activities through timely generation and use of data.

CONSUMER DIGITAL HEALTH STRATEGIC PRIORITIES

Consumer Digital Health at PSI delivers interventions that leverage mobile technology in the hands of consumers to power their health journey. There are three priority areas.

PERSONALIZED HEALTH INFORMATION ON-DEMAND

Consumers in LMICs often do not have quality health information at their fingertips. PSI takes advantage of mobile phones as an entry point to bring consumers a 'click' away from health information curated in a manner that makes it easy for them to access, digest, understand and apply to making informed health choices. The key entry point is the consumer's mobile handset, always considering consumer mobile engagement preferences (Voice, SMS/USSD, WhatsApp, Facebook Messenger, etc.) in the contexts in which we work.

Spotlight: Chatbots have been launched in Latin America, the Caribbean, Cote d'Ivoire and Kenya to provide personalized, actionable information on Sexual and Reproductive Health through popular messaging platforms including WhatsApp, Facebook Messenger and microsites. The chatbots are currently reaching many thousands of users, with good interaction rates and positive consumer experience ratings.

ON-DEMAND LINKAGE TO QUALITY PRODUCTS AND SERVICES

Consumers in LMICs are not always aware of where they can access quality healthcare. PSI signposts consumers to the products and services they need on-demand through their mobile phones by providing: a) locations and general information of service providers situated near the consumer, b) linkage to third-party e-commerce providers for product delivery (where applicable), and c) linkage to third-party telemedicine providers for remote consultation (where applicable).



Spotlight: In Uganda, we partner with Viamo to use their interactive voice response (IVR) platform principally targeted at basic handset users. This platform receives approximately 80,000 unique engagements with health content each month, with one third of engagements on Sexual and Reproductive Health topics. PSI worked alongside Viamo to incorporate provider location services to facilitate users' connections to care. In 2020, 15,000 users opted to be pointed to high quality providers.

MAINTENANCE OF HEALTHCARE UPTAKE

Discontinuation and irregular healthcare uptake are major barriers to improving health outcomes of consumers in LMICs. PSI amplifies consumer voices, and captures consumer experiences with regards to their interaction with health providers and use of products and services. We subsequently aim to use this information to improve the offering to consumers, in a manner that will facilitate more consistent health behavior. With the consumer's consent, PSI seeks to develop their digital health profiles, to track their health engagements over time and provide better continuity of care, thus improving their health systems offerings. Digital back-end architecture has been developed that enables PSI to piece together the different interactions consumers have along their health journey. This architecture is currently being incorporated into existing interventions, early results expected in 2021.

WORKFORCE DIGITAL HEALTH
STRATEGIC PRIORITIES

Workforce Digital Health at PSI delivers interventions that leverage mobile technology to improve quality, efficiency and stewardship of health service delivery. There are two priority areas.

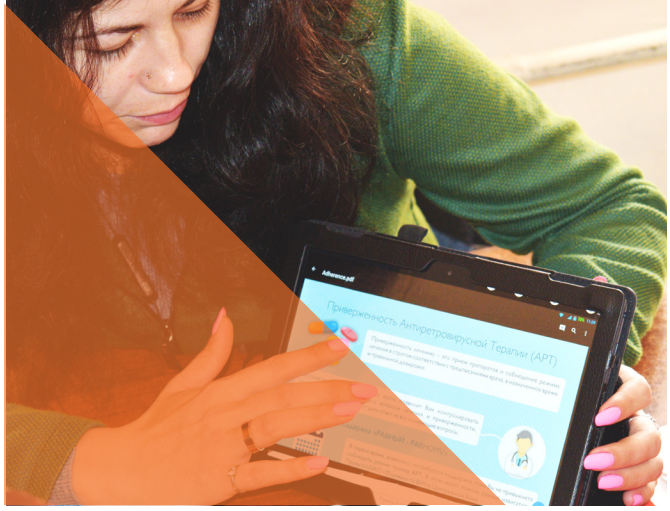
REMOTE STEWARDSHIP AND SUPPORT
FOR HEALTH PROVIDERS AT SCALE

LMICs private health sectors are large and diverse, which presents challenges regarding visibility, stewardship, and support. Health provider support-related challenges also feature in the public sector, given the resource intensive nature of the effort. PSI aims to leverage mobile phones in the hands of providers to drive continuous remote engagement to facilitate:

1. Regulatory check-ins and information sharing
2. Training and capacity building
3. Supportive supervision activities
4. Behavior change communications
5. Insight and service-related information gathering

To implement, we will adapt existing architecture put in place by PSI and partners, to drive engagement principally through platforms that are easily accessible by providers depending on their mobile handset and preferences.

Spotlight: In 2020, we launched an open source, Moodle-based eLearning platform in Angola, targeted at public sector health workers. By mid-year, approximately 400 frontline health workers had interacted with the platform, with a further 400 targeted throughout the rest of the year. As part of our COVID-19 response, PS Kenya launched a COVID-19 eLearning program in Kenya for private sector providers, using WhatsApp connected to a chatbot to improve user experience. Approximately 1,300 providers have used the platform, with positive user experience reported.



DIGITAL CLINICAL
QUALITY ASSURANCE

Supportive supervision of health providers – focused on quality improvement – is a critical, yet resource intensive activity. Supervision teams face challenges such as effectively targeting their efforts across their catchment of providers, as well as providing reliable, consistent feedback and coaching on quality improvement. PSI leverages mobile technology to strengthen the efficiency and effectiveness of supportive supervision activities by equipping supervisors with digital solutions that facilitate planning and delivery of supportive visits to health providers.

Spotlight: As part of our efforts to strengthen supportive supervision of health providers, PSI developed and launched the Health Network Quality Improvement System (HNQIS). This tablet-based tool guides Quality Assurance Officers to target supportive supervision visits, undertake observational assessments, provide consistent feedback, and monitor performance improvement. The tool is currently in use in approximately 30 countries (of which 11 are in the public sector), and has been used to deliver over 75,000 assessments across 8,000 providers. Based on demand for the tool, PSI is working to integrate the tool into the core DHIS2 architecture.

COMMUNITY INFLUENCE ON DIGITAL HEALTH
STRATEGIC PRIORITIES

PSI promotes better coordination of adoption of digital health solutions across implementers to accelerate scaling, and secure sustainability of effective solutions. There are three priority areas.

RE-POSITIONING PSI'S IN-HOUSE DIGITAL SOLUTIONS AND LEARNINGS AS GLOBAL GOODS

During recent years, PSI has invested in adapting existing digital technologies to generate digital solutions that support our implementation activities. These solutions have proven to deliver value with regards to improving how we implement; therefore we intend to re-position them as Global Goods accessible by all implementing organizations including governments. This will include:

- Integration of some of PSI's digital solutions into the core DHIS2 architecture to make it easier for other implementers to use this tool off-the-shelf
- Re-positioning some of PSI's solutions as stand-alone Open Source applications
- Developing and disseminating technical implementation guidance on the use of existing platforms such as Google's Chatbot Manager Dialog flow and WhatsApp for public health related implementation

Spotlight: Following successful implementation of PSI's supportive supervision digital solution (HNQIS) within our programs as well as in the public sector, we have witnessed an increase in demand for the use of the tool. In order to make it easier for governments and implementing agencies to adopt the solution, we are working closely with the University of Oslo (DHIS2's Architects) to integrate HNQIS into the core DHIS2 architecture by mid-2021.



STAKEHOLDER COORDINATION TO SHAPE COLLABORATIVE DIGITAL IMPLEMENTATION

PSI pursues opportunities to convene and steward engagement of key stakeholders involved in digital interventions (governments, donors, implementers, technology companies) to drive more coordinated implementation activities in the contexts where we work. In addition, PSI participates and influences global and country level digital health communities of practice.

Spotlight: In 2020, PSI worked alongside PATH to strengthen the use of digital solutions within community level Malaria interventions across the PMI countries. The project focuses on landscaping, prioritizing, and strengthening uptake of digital solutions that show promise, working alongside governments, donors and implementers.

DHIS2 ADVOCACY AND ROADMAP SUPPORT

PSI is one of the leading global implementers and thought leaders of DHIS2, with implementations in over 30 countries. PSI works closely with the University of Oslo and partners to continue to shape the software roadmap.

Spotlight: PSI co-founded the DHIS2 Community of Practice alongside the University of Oslo.

DIGITAL DATA TRANSFORMATION STRATEGIC PRIORITIES

Data is the foundation of every digital transformation. PSI powers up how we shape, course correct and evaluate implementation activities through timely and responsible generation and use of data, taking advantage of digital solutions.

REAL-TIME DATA MANAGEMENT AND ADVANCED ANALYSIS

Digitization is leading to implementation data increasingly captured and transmitted in real-time as opposed to periodic capture associated with paper-based systems. This presents an opportunity to sharpen implementation efforts by having relevant data at the fingertips of implementers in a timely fashion. PSI is investing in high-performance data storage and warehousing architecture as well as more sophisticated data visualization tools such as Power BI to better support storage, analysis and easy interpretation of high volumes of real-time data. PSI is also upskilling staff to strengthen data-driven adaptive program management, turning real-time insights into agile program adaptations.

Digitization has also brought about a diversification of data sources that are useful in shaping, implementing and evaluating health interventions. As PSI captures more data from diverse sources such as consumer records, social media monitoring, program data, and third-party sources, we are investing in more advanced data science capabilities to generate deep program and market insights, and leverage insights more responsively to adapt to consumer preferences.

Spotlight: PSI has been leveraging Social Listening to shape consumer-facing health interventions in Latin America since 2017. For example, Social Listening-based behavior change digital marketing content development has led to an increase in engagement, thus driving more consumers towards health product and service uptake.



UNIQUE CONSUMER PROFILES AND RESPONSIBLE DATA USE

To better track a consumer's digital health engagements with us over time, and provide better continuity and quality of care, PSI is strengthening its capabilities to build unique digital profiles of consumers. PSI uses interoperability standards such as FHIR for increased integration capabilities with electronic medical record systems.

As PSI collects more data on consumers, we owe it to them to make sure we have robust consent and opt-out procedures at each engagement, thus giving consumers more control over their health information, and where necessary, building consumer digital literacy so that they understand how their data is being used. PSI is bolstering its responsible data use guidance and systems in these areas, building off existing consumer data protection policies.

Spotlight: PSI has a robust Consumer Data Protection Policy (CDPP) that establishes the principles and guidelines by which personally identifying consumer data is collected, stored, used and shared. CDPP is one of the institutional network standards that is tracked by all country teams, also applying to information management through digital solutions.

WHAT PSI BRINGS
TO ACHIEVE OUR VISION

REACH	REPUTATION	EXPERTISE	EXPERIENCE	DELIVERY MODELS
• Presence in over 50 countries • Private sector networks in most countries • Large existing consumer base	Strong relations with: • Donors • Government • Implementers • Technology agencies	• Health Experts • Digital Technology Experts	• Five decades of implementing health intervention • Almost 10 years of implementing digital health interventions	• Non-profit • Social Enterprise

PARTNERSHIPS

PSI enters partnerships to fund, scale, and implement health solutions that are built to last. We work with governments, corporations, foundations and individuals to build thoughtful, innovative, and strategic partnerships committed to helping our archetypal consumer Sara lead a healthy life and plan for the family she desires.

ABOUT PSI

Population Services International (PSI) is a global non-profit organization focused on encouraging healthy behaviors and delivering affordable health products and services around the world. PSI takes a business approach to saving lives, designing effective, sustainable solutions to the world's biggest challenges in healthcare. PSI is specifically focused on scaling Consumer Powered Healthcare (CPH) and bringing quality care closer to consumers, in pursuit of Universal Health Coverage (UHC). We bring innovation to scale through our presence in 50 countries and a network of over 10,000 health clinics and pharmacies, while shaping mixed health systems principally through consumer powered and private sector interventions.

CONTACT US

MARTIN DALE
Director, Digital Health & Monitoring

martind@psi.org
+254 712 577 861
psi.org