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.

**KEY DIGITAL ARCHITECTURE NEEDS**

**Rapid integration with third party platforms capabilities** to drive data capture across client health journeys and in different solutions (e.g. integration with communication platforms such as WhatsApp).

- **Digital solutions:** integration and API management platforms such as Dynamic Web Service (back-end API management architecture developed by PSI).

**Effective data management capabilities** - high performance storage, unique identification and triangulation of client/provider data.

- **Digital solutions:** MongoDB, data lake architecture, Spark.

**Advanced data visualization and analysis capabilities** - tools for managers to track program progress and more easily access program insights.

- **Digital solutions:** PowerBI, Tensorflow.

**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. We bring innovation to scale through our presence in 50 countries and a network of over 10,000 health clinics and pharmacies. We shape mixed health systems through consumer powered healthcare (CPH) and private sector interventions, in pursuit of Universal Health Coverage (UHC).

**CONTACT US**

**MALCOLM QUIGLEY**
Lead, Strategic Partnerships

- mquigley@psi.org
- +202.568.6496
- psi.org