GARA World - Public Health Africa Network (PHAN)

Proposal Status: Out of Scope

Executive Summary

In order to improve the health of families, women, and children around the world, organizations need to know that what they are doing is working. Most health organizations do this primarily by collecting quantitative and qualitative data about the services they provide and the outcomes they expect to see. These types of data can be effectively and routinely collected in a health information system, such as the GARA World System. We envision the GARA World System to be a health information system that will provide a people-centred and integrated solution for public health system entities to securely exchange health-data as well as access public health tools and information electronically. This system was used in 2015 as part of a community public health effort in response to the Ebola Virus Disease (EVD) crisis in Liberia by a national organization working against poverty and injustice. They used it to collect qualitative data on EVD contacts and report progress on Monitoring and Evaluation.

At this time, many other public health organizations in Malawi, South Africa, Liberia, and Sierra Leone have limited the use of public health information systems because of the prohibitive costs involved with purchasing, implementing, and maintaining these types of systems. These organizations do vital work that helps ensure the health of young mothers and people with HIV, and some of them have set up mobile health networks and health learning programs. Without access to health information systems, they have a harder time collecting qualitative health data

(especially in rural areas) and sharing their health data with other community health organizations, keeping up with health standards and procedure changes, contributing to health policy changes using quantitative data analysis, and more.

SMAG Media is seeking financial assistance to establish program and organizational support to implement the Public Health Africa Network or PHAN (to consist of a number of organizations working in communities in Malawi, South Africa and Liberia). PHAN members will work together and in collaboration with SMAG Media to setup the open-source GARA platform, which would enable them to link to the envisioned GARA World System. GARA is a virtual digital health token system for public health service delivery. GARA provides the ability to digitally track and report on each activity in health service delivery with transparency and accountability to healthcare stakeholders, including health providers, governments and local health departments, non-governmental agencies, community health workers, and patients. It does so by maintaining a distributed electronic ledger of each transfer of GARA ("digital health credits") in exchange for a health service.

Ultimately, SMAG Media aims to assist these organizations in implementing and maintaining GARA. This open-source software system will position them to integrate into larger health information management systems, such as the envisioned GARA World System. If these communities implement a health information system, they will be able to share knowledge about health services, develop local and regional public health policies, exchange health-data securely using data contracts, as well as track their work and the outcomes they are trying to achieve. By having greater accountability through the use of open-source health information software, these organizations will be able to show that what they are doing works to improve health and gain additional resources to become part of a larger, integrated health information system. And with greater information sharing will come continued investment in the important work they are doing to ensure the health and wellbeing of families, women, and children in African developing countries.

Consortium Team

PHAN is a health information system community that is currently comprised of a medical board in Malawi, equity health network in southern Africa, community health organizations in Liberia and Sierra Leone, and public health program coordinators in Madison, Wisconsin affiliated with the State of Wisconsin Department of Health. To build on these relationships, SMAG Media is working with these organizations to hold an event called the GARA World Community Health Information Exchange Forum or GWCHIEF as a project activity. Outcomes from the GWCHIEF will form the basis of health data standards, health codes, health interoperability, health knowledge base, and public health policies that will be managed by PHAN Members in GARA World System.

Project Description

GARA (coined "digital health credit") is a virtual digital health token, representing one (1) unit of a health service that has been delivered. Each digital health token is transferable and can be rendered, using an adjudication process to inject transparency and accountability, into a monetary value which can be distributed as electronic payment to health care providers, incentives to community health workers, service charge to health vendors and more.

Developed by SMAG Media as an open source technology, GARA is part of the response to a community public health effort to address health information systems gaps and limitations that impact qualitative and quantitative methods of health data collection in developing countries, particularly during health crisis. GARA is an easy to use mobile system for individuals (e.g. young mothers) to receive health services (e.g. pay for transport to local health clinics, register at community health clinics, purchase medicine at local pharmacies, report self examinations, etc). Other participants (e.g. community health workers) who distribute GARA can receive incentives (mobile credits, mobile money, health re-supplies) after verifiable health services by providers and vendors to individuals are adjudicated. And health organizations use GARA as a digital platform to interact with individuals, participants and health service providers using standard defined mobile health workflows and to collect health data for qualitative reporting in health information systems such as full featured digital HMIS platforms or the GARA World System.

SMAG Media will implement PHAN in three phases and collaborate with each PHAN Member to use the GARA World System:

1. PHASE I would establish baseline information on existing health information systems supporting programs from each PHAN Member.

2. PHASE II would include technical assistance and integration support of PHAN Members to customize GARA (an open source subcomponent of GARA World System that establishes a virtual digital health token system for public health service delivery) for use in their health communities.

3. PHASE III would link each PHAN Member's GARA system to the GARA World System so that they can exchange health-data and access health programs information and other public health tools.

PHAN project activities will include the GARA World Community Health Information Exchange Forum or GWCHIEF to bring PHAN Members together to share and exchange community health information, knowledge and experiences, data collection solutions, health standards, public health policies and programs that will define the context of data used by the GARA World System. The GWCHIEF will aim to establish a digital framework and single platform for a sustainable engagement of community health information exchange among health organizations.

PHAN project expected outcomes, after successful implementation, will be evaluated by tracking the outputs of health information used by PHAN Members, assisted by the GARA World System and other integrated health information systems. These outcomes include:

1. The ability to digitally generate 100% relevant health information data in accordance with WHO standards including the qualitative and quantitative data about their health services and programs;

2. Standardization and easy use of GARA, to strengthen the health-data collection, cleansing, analysis, integration, transparency and data exchange of information in health service delivery to end-users at community, national and international levels; incorporate various levels of validation processes during data input and that raise red flags where mismatch of information is inputted for accountability;

3. Management of health information data used for sharing and exchange with other community health organizations in PHAN Member countries to support interoperability, shared knowledge base and shaping of public health policies.

4. The framework for incorporating other community health organizations into PHAN, representing other communities, to scale and diversify implementations of GARA nationally and regionally.

The PHAN project implementation timeline is 18 months.

Commenting is closed.