OpenHIE Background

Our History

Introduction

The OpenHIE community of practice formed in early 2013, evolving from the work that initially began in 2009 to establish the Rwandan Health Information Exchange (RHIE). As the benefits of the approach adopted in Rwanda became apparent, interest gathered from other countries looking to apply similar architectural tactics within their environments. Today, OpenHIE’s approaches, reference technologies, and community processes are being leveraged or explored in multiple countries.

Background

As health systems have evolved, care delivery has increasingly been distributed amongst a broad assortment of healthcare personnel - primary care physicians, specialists, nurses, technicians, public health practitioners, community health workers, and corresponding health system management personnel. Each member of the team has specific, limited interactions with an individual patient and differing vantage points into their health. In effect, the health care team’s view of the patient has become fragmented into disconnected facts and clusters of information.

Health information systems, like healthcare personnel, also typically operate independent from one another. The result is disaggregated information stored in different locations and formats, making it impossible for data to be harmonized, and for healthcare personnel to share knowledge, collaborate in care, and truly understand the full breadth of an individual’s health history. Those who manage and oversee the health system have little ability to make inferences from these data for monitoring and evaluation purposes. Many other healthcare personnel are forced to make life-altering decisions for their population without key health information.

The Evolution of OpenHIE

As the problem of incongruent health information architecture unfolded, global health practitioners that focused upon health systems strengthening activities increasingly recognized the importance of harmonizing health information systems. They understood the importance of an upfront architecture for implementation of health information systems. This approach would encourage a way for these systems to better communicate with one another.

In response to these growing country-driven demands, multiple philanthropic organizations attempted to create a coordinated response. These organizations connected thought leaders and experts with real-world experience in health information technologies implementation, creating partnerships focused on health information architecture and interconnectivity. In 2010, this work culminated in the formation of the Health Informatics Public Private Partnership (HIPPP).

HIPPP responded to direct country requests for health information architecture technical support. Initial requests came from the Ministries of Health in Rwanda and Cambodia. In particular, throughout 2011, HIPPP invested a significant amount of resources to operationalize health information architecture in Rwanda. This project ultimately became known as the Rwanda Health Information Exchange (RHIE).

Rwanda believed a better information architecture could support their strategic plan to achieve the Milenium Development Goal of improving maternal health outcomes (MDG 5). The Ministry of Health sought to better coordinate care and reduce key indicators by bringing together information from multiple care stakeholder groups, including the community health workers, hospitalists, and health clinic clinicians who were all providing care to maternal health patients. They coordinated their work through information architecture, with the establishment of the RHIE.
The work in Rwanda exemplified the possibilities of health information architecture. RHIE served as an important reference example, as it helped the larger global health community understand how to practically instantiate interoperability at scale, and helped highlight the many technical, sociopolitical, and capacity development challenges that accompany this type of initiative.

Once the RHIE went live in 2012, the fledgling community was compelled by other environments to establish a more generalized approach. Several countries expressed a need for support around health information architecture. The OpenHIE community grew out of this need, and assembled to bring together peer-supported processes, broad reaching experience, and a series of reusable technologies to give countries a framework in which they can start to address their own health information architecture. In 2013, the OpenHIE “community of communities” was formally established.

Our Principles

OpenHIE operates according to principles of openness, transparency and sharing of ideas, software and strategies for deployment and use. Our approach is founded on the principle that those who use the health information must aid in the development of their information systems.

We believe it’s important to design highly adaptable processes and technologies to respond to rapidly changing health information needs in complex healthcare environments. We collaborate closely with resident health experts and open-source healthcare developers to sustainably build technologies, infrastructure, and human resources to meet local health information needs.

We appreciate that different constituencies come at work in different ways. OpenHIE and our local partners benefit from this wide range of valuable talent and experience. Our community processes encourage constituents to contribute to the process in ways that make sense to them. Working transparently within our community and with local partners allows different organizations to contribute.