

Data Use Partnership

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Landscape Analysis of Digital Health Learning Networks in Africa



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Contents

| Executive Summary 4 |
|--|
| Background |
| Approach |
| Power of Networks7 |
| Africa Digital Health Learning Network Landscape 10 |
| Learning Network Analysis |
| Observations and Conclusions |
| Next Steps |
| References17 |
| Appendix: Learning Network Profiles and References |
| |
| FIGURES |
| Figure 1: Data Use Partnership Theory of Change5 |
| Figure 2: WHO and ITU's National eHealth Strategy Building Blocks 6 |
| Figure 3: Network Visualization |
| Figure 4: AeHIN Health Information Sytem/ eHealth Capacity Building Roadmap8 |
| Figure 5: BLN Model |
| Figure 6: JLN Collaborative Learning Process9 |
| Figure 7: Learning Network Landscape |

Executive Summary

Academics and practitioners have increasingly looked to networks as a strategy to work through and identify solutions to complex problems that no single organization would be able to address alone. These problems often form the basis for the "common purpose" around which a network is formed and later functions. This flexibility in form and function, and the resulting benefits, represents the true power of networks. (See definitions on page 5.)

The global health community is increasingly interested in understanding how learning networks can accelerate capacity building -- specifically related to strengthening health data systems and increasing the use of health data to ultimately achieve health impact. Our hypothesis is that learning networks contribute to these outcomes by supporting and encouraging activities ranging from information sharing to problem solving.



If you want to go fast, go alone; If you want to go far, go together.





Photo: PATH/Trevor Snapp

This analysis is focused on documenting digital health related learning networks in Africa to better understand the current landscape and the approaches being used by these networks to develop capacity. We examined the key strengths and differentiators of thirteen selected networks (twelve in Africa, and one as a reference example of a network outside of Africa), raising up important considerations for funders and stakeholders interested in supporting learning networks as a means to develop digital health capacity.

This work revealed that the networks:

- Have similar goals focused on improving health outcomes by building digital health capacity and promoting data use, but differing approaches such as developing formal training programs, facilitating peer learning, and disseminating best practices.
- Are more complimentary than competing, given their differing approaches.
- Face common challenges mostly related to engagement and sustainability, but also have similar successes, largely around leadership, a focused purpose, and a supporting organization.

With the diversity of learning networks serving the African digital health landscape, there is no reason any donor or partner should invest in starting a new network. Collaborating with or investing in existing networks would sustain or extend their reach, while accelerating progress to achieving digital health capacity building goals.

Depending on stakeholder interests and objectives, there are several further actions that could be taken, such as: conducting additional research into network effectiveness, supporting the development of an operational plan for an emerging network, and exploring how to leverage complimentary approaches to better share resources and learnings across and between networks.

We look forward to further discussions on how to best use the power of networks for accelerating digital health capacity building, strengthening data systems, and building a data use culture that ultimately achieves health impact.

Background

The global health community is increasingly interested in understanding how learning networks can accelerate capacity building — specifically related to strengthening health information data systems and increasing the use of health data to ultimately achieve health impact. Our hypothesis is that learning networks do indeed contribute to these outcomes by supporting and encouraging activities ranging from information sharing to problem solving. This analysis is focused on documenting digital health related learning networks in Africa to better understand the current landscape and the approaches being used by these networks to develop capacity.

As part of our work through the Data Use Partnership (DUP) consultancy, we are developing a Theory of Change (TOC)² (Figure 1) to examine to what degree various factors accelerate the cycle of data production and information use and how that leads to improvements in health systems performance. The eHealth building blocks from the World Health Organization (WHO) and International Telecommunication Union (ITU)'s National eHealth Strategy Toolkit³ (Figure 2), including leadership and governance, strategy and investment, and services and applications, provide a framework and categorization of these factors which we are terming "levers" and "accelerators" in this TOC. We believe that networks, specifically learning networks, have the potential to move all of these levers through their focus on community learning, organizational capacity building, networking, and collaboration.¹

DEFINITIONS

NETWORK: Collaborative group made up of three or more organizations working toward a common purpose.'

LEARNING NETWORK: A network functionally focused on learning how to solve problems together through information sharing and collaboration. There are several types of learning networks, including peer-to-peer and technical assistance.¹

DIGITAL HEALTH: A field concentrated on using information and communication technology (ICT) to improve health systems, health services, and ultimately, health outcomes. It includes mHealth (mobile health) and eHealth (electronic health) data systems and use.

FIGURE 1. DATA USE PARTNERSHIP THEORY OF CHANGE

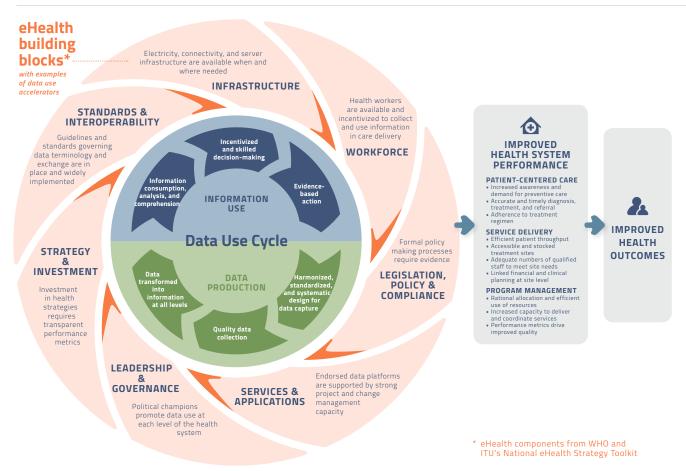


FIGURE 2. WHO AND ITU'S NATIONAL EHEALTH STRATEGY BUILDING BLOCKS



A recent literature review conducted by the BID Learning Network (BLN) illustrates some of the potential outcomes of learning networks:

- Social ties promote adaptation because they create high capacity information links between organizations and encourage information sharing, mitigate uncertainty, and yield benefits derived from insights and experiences of peers. Further, peers are more likely to imitate their successful peers rather than those that appeared to be different from them.⁴
- Collaborative learning is superior to individual learning as demonstrated in 226 comparative studies, and results in better outcomes and enhanced adoption of best practices among peers.⁵
- Bringing together equals and sustaining their interaction motivates them to share information and learn from each other.⁶
- Peer learning extends current capabilities (accretion), modifies current capabilities (re-tuning), or rebuilds new understanding (restructuring). Ultimately, this leads to a shared understanding between peers and forms a foundation for further progress.⁷

Multiple digital health learning networks exist in sub-Saharan Africa through which participants learn from each other, document best practices, and develop digital health plans to implement in their home countries. This analysis examines the key strengths and differentiators of a few of these networks, raising up important considerations for funders and stakeholders interested in supporting learning networks as a means to develop digital health capacity.

Approach

To conduct this analysis the authors:

- Carried out a light learning network mapping exercise to identify existing digital health related learning networks located in Africa. One digital health related learning network in Asia was also included as a reference example.
- Developed an assessment framework to profile each network.
- Conducted desk research on learning network literature.
- Conducted desk research on the identified learning networks.
- Selected a subset of seven learning networks for interviews.
- Conducted interviews with leaders from the selected subset of learning networks using the assessment framework as an interview guide.
- Synthesized information collected through desk research and interviews into short profiles on each network.
- Assessed key strengths and differentiators for the selected subset of learning networks.

It should be noted that this analysis did not attempt to measure the effectiveness or success of any of the identified learning networks or to research the link between learning networks and increasing digital health capacity. Rather, it was intended to profile African digital health related learning networks and compare what makes them similar or different in their goals and approaches.

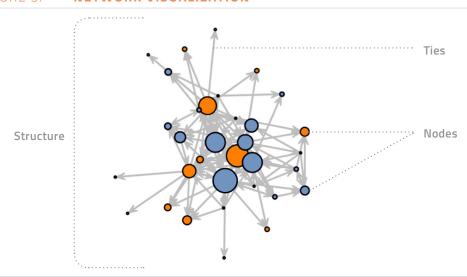
Power of Networks

Over the past two decades, academics and practitioners have increasingly looked to networks as a strategy to work through and identify solutions to complex problems that no single organization would be able to address alone. The interest in networks is wide-ranging as are the definitions. For our purposes, we will be defining networks as a "collaborative group made up of three or more organizations working toward a common purpose".

Networks can be visualized as having three parts (Figure 3):

- Nodes illustrating the attributes and behavior of each network participant.
- Ties illustrating evidence exchange and other relationships between the nodes.
- Structure illustrating the density, diversity, centralization, shape, and size of the network, along with any structural holes.*

FIGURE 3. **NETWORK VISUALIZATION**



Networks can take on a variety of functions depending on the "common purpose" and defined outcomes of the participants. It is important to keep in mind that while a network may be defined based on its primary function, most have multiple functions. The following is a simple classification structure that illustrates three basic network functions¹:

- INFORMATION SHARING AND KNOWLEDGE EXCHANGE: focused on sharing information across organizations as well as generating new knowledge and spreading practices.
- NETWORK LEARNING: focused on learning how to solve problems together through information sharing and collaboration.
- INNOVATION: focused on collaboratively adapting existing knowledge or generating new products or processes.

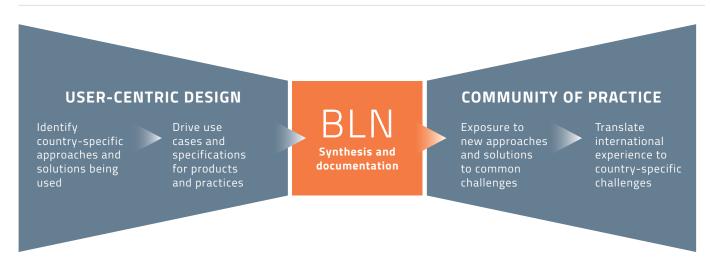
We have included the approaches of three networks to illustrate a few of the differing forms that networks take to achieve their defined outcomes.

FIGURE 4. AeHIN HEALTH INFORMATION
SYTEM/EHEALTH CAPACITY
BUILDING ROADMAP⁹



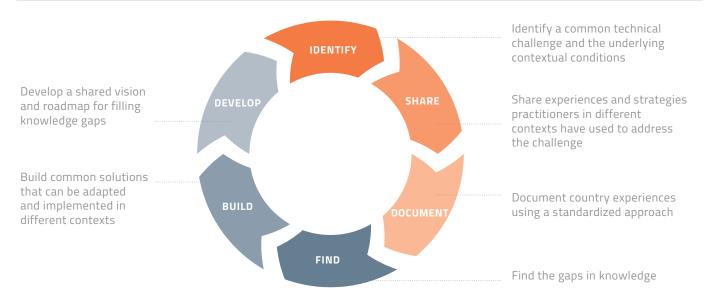
Asia eHealth Information Network (AeHIN) looks to build capacity through peer-to-peer assistance at every stage of a health information system (HIS) life cycle (Figure 4).

FIGURE 5. BLN MODEL¹⁰



The BLN seeks to create a community of practice which refines solutions and develops best practices, by synthizing, documenting, and sharing participants' digital health experiences in their own countries (Figure 5).

FIGURE 6. JLN COLLABORATIVE LEARNING PROCESS¹¹



The Joint Learning Network for Universal Health Coverage (JLN) works to connect practitioners and policymakers to bridge the gap between theory and practical 'how-tos' in order to achieve universal health coverage (UHC) (Figure 6).

It is this varying form and functionality, and the resulting wide-ranging benefits, that represents the true power of networks. Stakeholders can shape the form and function of a network to specific issues, challenges, or needs they have identified. In this way, the resulting benefits, potentially including accessing and leveraging resources, advocacy, shared accountability, efficiency, capacity building, and innovation¹, are very targeted and impactful.

The power of networks is in their flexible application and resulting wide-ranging benefits.

Africa eHealth Learning Network Landscape

FIGURE 7. LEARNING NETWORK LANDSCAPE

Health Information System Program

Health Information for All

HealthE Africa

Joint Learning Network for Universal Health Coverage

African Centre for eHealth Excellence

HARMONIZATION FOR HEALTH IN AFRICA - PERFORMANCE BASED FINANCING COMMUNITY OF PRACTICE

African Network for Digital Health

West African Health Organization Health Information Systems ASIA EHEALTH INFORMATION NETWORK

East African Community Health Sector's Open Health Initiative

The East African Public Health Laboratory Network

ROUTINE HEALTH INFORMATION NETWORK ORGANIZATION

BID Learning Network

Table 1 lists the digital health related learning networks in Africa identified for this analysis. The AeHIN network was also included as a reference example of a digital health learning network outside of Africa. The authors acknowledge this may not be a comprehensive list, but it does provide a clear view of the landscape and includes the most commonly known learning networks. Full profiles for each network are available in the Appendix.

TABLE 1. **LEARNING NETWORK LANDSCAPE SUMMARY**

| ACFEE | Acfee promotes eHealth's role in transforming African healthcare |
|-------|---|
| | systems with the goal of achieving better health for Africans. It supports and develops eHealth through teaching, research, publications, and partnerships with other key institutions and stakeholders. The network includes formal eHealth training in African universities and building national eHealth strategies. |
| ANDH | ANDH aims to promote the use of information and communications technology (ICT) to achieve better health through peer-to-peer assistance, knowledge sharing, and learning through a regional approach for country-level impact. ANDH was modeled on AeHIN, but was created by Africans for Africans and is open to all digital health professionals working in Africa. It focuses on empowering individuals and institutions through professional development as well as sharing experiences and best practices with planning and implementing health information systems. |
| AeHIN | AeHIN is focused on achieving greater country-level impacts across South and Southeast Asia by promoting better use of ICT to achieve better health. AeHIN believes eHeath is an enabler to improve the flow of information for delivering quality and equitable healthcare services and health system management. The network's strategy focuses on building capacity for eHealth, HIS, civil registration and vital statistics (CRVS) in the countries and in the region, increasing peer assistance and knowledge exchange through networking, promoting standards and interoperability within and across countries, and enhancing leadership, sustainable governance, and monitoring and evaluation. |
| BLN | The BLN is a peer-to-peer learning network that seeks to enable countries to learn from one another, develop solutions to common problems, and directly influence the BID Initiative's approach. Its agenda, initially focused on immunization data, is set by its members. The network aims to address how to rapidly and cost-effectively develop new strategies to improve the management of national health systems and design a set of solutions in one country that can be adapted and applied elsewhere. The network is focused on helping participating countries use better data to improve their healthcare systems at every level. Its stated goals are to: Bring countries together to identify shared problems and solutions and connect with peers. Use this knowledge to design common information system products, practices, and data policies. Experiment with these designs in countries to determine their applicability. Use this experience to inform national and global decision-making. |
| | AeHIN |

| LEARNING NETWORK NAME | KNOWN AS | SUMMARY DESCRIPTION |
|--|-------------------|---|
| EAST AFRICAN COMMUNITY (EAC) HEALTH SECTOR'S OPEN HEALTH INITIATIVE | ОНІ | OHI was founded to support meeting Millennium Development Goals 4 and 5 and seeks to improve women's and children's health by building sustainable networks. It is a regional effort of Burundi, Kenya, Rwanda, Tanzania, and Uganda. The network aims to promote the uptake and scale up of high impact interventions and innovations, as well as to enhance access to data to support stronger oversight of results and resources. |
| THE EAST AFRICAN PUBLIC HEALTH LABORATORY NETWORK | EAPHLN | EAPHLN is a regional network of public health laboratories for the diagnosis and surveillance of tuberculosis (TB) and other communicable diseases. It was created under a World Bank funded project with the goal to improve laboratory effectiveness and build capacity in laboratory technician training, as well as to support regional coordination and program management. |
| HARMONIZATION FOR HEALTH IN AFRICA - PERFORMANCE BASED FINANCING COMMUNITY OF PRACTICE (PBF COP) | ННА | HHA provides regional support to African governments for health system strengthening and to meet the Millennium Development Goals. The PBF CoP is a community of experts that communicate through an online forum and meet in person at events to share experiences, knowledge, and best practices with the goal of expanding the number of qualified PBF experts working in Africa and enabling regional capacity by documenting and assessing PBF experiences. |
| HealthE AFRICA | HealthE AFRICA | HealthE Africa is a peer assistance networking initiative undertaken by HealthEnabled in partnership with Knowledge for Health (K4Health). The network is aimed at strengthening digital health partnerships and fostering new collaborations in Africa. The network is based on the idea that context appropriate digital health solutions, provided by cost-effective local suppliers, strengthen health systems and promote health outcomes in Africa. Its goals are to raise the profile of African digital health experts and increase visibility of African digital health projects and solutions. |
| HEALTHCARE INFORMATION FOR ALL (FORMERLY HIFA2015) | HIFA | HIFA's vision is for a world where every person and health worker will have access to the healthcare information they need to protect their own health and the health of those for whom they are responsible. HIFA's strategy promotes communication, understanding, and advocacy among everyone involved in the production, exchange, and use of healthcare knowledge. The primary network consists of five online global forums under HIFA Global Forums, which are focused broadly on access to and use of healthcare information. |
| HEALTH INFORMATION SYSTEM PROGRAM | HISP | HISP is a global network developing, implementing, and building capacity to support use of the open-source District Health Information System 2 (DHIS2) software. Established by the Department of Informatics at the University of Oslo, the network focuses on sharing of best practices and products between partners which are actively engaged in HIS strengthening, such as universities, ministries of health, international agencies like WHO, PEPFAR and Norad, and in-country implementing agencies or nodes like HISP South Africa. HISP's guiding principle for strengthening HIS is based on "information for action." |

| LEARNING NETWORK NAME | KNOWN AS | SUMMARY DESCRIPTION |
|--|----------|--|
| JOINT LEARNING NETWORK FOR UNIVERSAL HEALTH COVERAGE | JLN | The JLN is a practitioner-to-practitioner learning network for countries to share knowledge and co-develop tools, guides, and resources to achieve universal health coverage (UHC) in low and middle-income countries. The network seeks to connect practitioners and policymakers across countries to bridge the gap between theory and the practical 'howtos' of implementing UHC reforms. The network forms topic specific sub-initiatives based on members' interests and priorities, and available partner support. Current initiative sub-networks are focused on quality improvements, provider payment mechanisms, information technology, expanding coverage, and primary health care. |
| ROUTINE HEALTH INFORMATION NETWORK ORGANIZATION | RHINO | RHINO focuses on improving the use of routine health information for decision making through sharing lessons learned and best practices. The network spun out of USAID's MEASURE Evaluation Project and aims to improve population's health in resource poor countries through the use of information produced by high quality, productive and sustainable routine health information systems (RHIS). Examples of its approaches include advocating for the use of routine health information in decision making, learning from and informing HIS professionals, managers, and users of health information systems of advancements in RHIS development, and improving access and availability of routine health information. |
| WEST AFRICAN HEALTH ORGANIZATION | WAHO | WAHO is an agency which brings together health leadership from the fifteen member states of the Economic Community of West African States (ECOWAS). WAHO's goal is to improve health by harmonizing policies, pooling resources, and cooperating towards a collective and strategic fight against health problems in the ECOWAS region. WAHO's Health Information Program focuses on the control of epidemics and information management. Its goals are to strengthen the development of HMIS's for disease prevention and control and to provide visibility to the health situation in the region for effective response and policy change. |

Learning Network Analysis

A review of the learning network profiles revealed that most of the networks' descriptions appear similar and include goals focused on improving health outcomes by building digital health capacity. To better understand varying network approaches, the authors selected a subset of the learning networks based on their focus of building eHealth capacity and as a representative sample of differing learning network approaches.

Table 2 summarizes the key strengths and differentiators for this selected subset of learning networks.

TABLE 2. LEARNING NETWORK STRENGTHS OR DIFFERENTIATORS

| LEARNING NETWORK NAME | KEY STRENGTHS OR DIFFERENTIATORS |
|--|---|
| AFRICAN CENTRE FOR EHEALTH EXCELLENCE (ACFEE) | Develops formal training programs with a network of African universities. Target market is the eHealth leaders in African countries and other individuals who are interested in playing a role in the digital health space in Africa. Financial sustainability model is to engage in projects that generating revenues (e.g., university programs in eHealth have course fees), and revenue is shared between the respective universities and Acfee. |
| AFRICAN NETWORK FOR DIGITAL HEALTH (ANDH) | A good representation of West and East Africa regions. Established by experienced in-country digital health leaders. Modeled on the AeHIN network and has a memorandum of understanding (MOU) to share information with AeHIN to support cross-region learnings. |
| ASIA EHEALTH INFORMATION NETWORK (AeHIN) | Sponsors participants for certified trainings to develop specific skills such as COBIT, TOGAF, etc. Focused broadly on eHealth, both from technical and policy perspectives. Well established and secure funding. Has cross-country success stories, especially in capacity building. |
| BID LEARNING NETWORK (BLN) | Focused on an immunization-specific use case but also broadly on improving health systems and data use. Designed to foster continuous learning and improvement in "real-time" through peer learning. Looking to design packaged solutions that are broadly useful for many. Participants play equal roles as teachers and learners. |
| THE EAST AFRICAN PUBLIC HEALTH LABORATORY NETWORK (EAPHLN) | Focused specifically on building capacity of public laboratories and using lab data. Well established, linked to existing EAC regional organization. Secured funding until March 2020. |
| HealthE AFRICA | Focused on matching technical assistance needs to technical assistance resources through a database of digital health experts. Use of large email distribution lists to reach out to all digital health experts. Developing country dashboards to provide information about digital health strategies and statuses in Africa countries. |
| JOINT LEARNING NETWORK FOR UNIVERSAL HEALTH COVERAGE (JLN) | Focused on policies and practices to implement UHC reforms. Uses technical facilitators to bring peer practitioners together to harvest country experiences and produce 'how-to' knowledge guidance and tools. Country-led governance structure supports flexibility of adding topic-specific initiative sub-networks based on country interests, priorities, and funding. A Joint Learning Fund is available for small grants supporting learning activities such as study-trips. |

Observations and Conclusions

The following are some observations and conclusions gleaned from a review of the African digital health learning network landscape.

- The networks have similar goals focused on improving health outcomes by building digital health capacity and promoting data use.
- » The networks are more complimentary than competing given differences in:
 - Capacity building approaches.
 - Geographic focus.
 - Digital health related focus area (e.g., UHC-related, PBF-related, software solution-related, and vertical data domain types such as lab or immunization data).
- >> The networks have differing approaches for building digital health capacity, with each typically focusing on one or two mechanisms to support learning. Examples include:
 - Developing formal training and education programs through universities.
 - Sponsoring participants for certified training programs.
 - Matching technical assistance needs with technical assistance resources.
 - Facilitating peer learning to co-develop knowledge products.
 - Disseminating digital health related best practices and promotion of resource repositories.
- The networks are still defining activities and approaches for supporting data use.
 Examples include:
 - Most networks have the goal of promoting data use but they are still at formation or growth stage.
 - Specific activities and approaches for supporting data use are less defined than general approaches for learning and building digital health capacity.
 - Data use is a broad topic, and types of data are very topic-specific. This presents challenges in how to leverage what could be very similar data use learnings and experiences to very different groups of users with unique domain-specific knowledge.

>> The networks face common challenges. Examples include:

- In contrast with the well established AeHIN network in Asia, most networks in Africa are still at a formation or early growth stage with limited or no proven track record in building digital health capacity.
- The engagement strategy for new network members is frequently unclear (e.g., a leader of ICT for Saving One Million Lives in Nigeria has tried to engage in Acfee and ANDH, with no clear understanding of how to engage and contribute). This risks enthusiastic leaders trying to start new networks rather than contributing to existing ones.
- Most networks' financial sustainability is fragile and they are competing for donor interest and funding. However, the networks are generally cooperative and looking to partner in ways that potentially increase their reach and impact or their access to funding (e.g., ANDH has been approached by HealthE Africa and Acfee for potential partnerships).
- Metworks are mainly housed by other organizations and lack capacity to sustainably exist on their own.

» The networks that have gained traction have some similar characteristics:

- Approaches aligned with targeted, specific goals.
- Strong, experienced, championing leaders.
- **¤** Funding.
- Open to partnerships.
- A support organization that assumes network coordination responsibilities.

Conclusions

With the diversity of learning networks serving the African digital health landscape, there is no reason any donor or partner should invest in starting a new network. There are many examples of learning networks that contribute, with differing approaches, to building digital health capacity in Africa. Collaborating with or investing in existing networks would sustain or extend their reach, while accelerating progress to achieving digital health capacity building goals.

For example, if you want to support:

- Production of knowledge products through peer learning >> consider the JLN and BLN models.
- Development of university training programs >> consider Acfee and HISP models.
- A broad based regional network and capacity building of digital health leaders » consider AeHIN and ANDH models.
- Matching technical assistance needs with technical assistance resources » consider HealthE Africa model.
- Knowledge around a specific software solution » consider the HISP for DHIS2 model. (Note that there are other examples of open-source solution communities (e.g., OpenHIE, OpenMRS, iHRIS, OpenLMIS) that were not included in this assessment.)

Next steps

The authors look forward to engaging in a discussion with the Bill & Melinda Gates Foundation stakeholders on this analysis and possible next steps. Depending on stakeholder interests and objectives, the following are examples of possible further actions:

- >> Conduct additional research into selected networks' effectiveness using network assessment techniques such as engagement mapping, participant surveys, or monitoring and evaluation of network outcomes.
- >> Conduct research on the evidence of how learning networks support developing digital health capacity and improved data systems and data use.
- >> Support developing an operational and/or investment plan for an emerging network such as ANDH.
- >> Work with a selected network or networks to host a regional peer learning workshop to exchange, discuss, and develop opportunities for strengthening data use, using the Data Use Partnership countries (Ethiopia, Malawi, Tanzania) plus additional countries as core participants.
- >> Encourage networks to seek partnerships with established regional technical leadership organizations such as African Union, the Economic Community of West African States (ECOWAS), the East African Community (EAC), and the Southern African Development Community (SADC).
- Explore further which network approaches could be extended and which network approaches could be replicated. Some approaches could be expanded to cover a broader geography or broader focus area, and some approaches may work better to remain specific to a region or a use-case, but could be replicated to other geographies or use-cases.
- >> Explore how to best leverage or combine complimentary approaches from multiple networks or create a 'network of networks' to better share resources and learnings across and between networks.

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African Centre for eHealth Excellence (Acfee)

Network Overview

Acfee is a nonprofit organization based in South Africa that supports a family of initiatives focused on building eHealth leadership and capacity in Africa.¹

Goals

With the goal of achieving better health for Africans, Acfee promotes eHealth's role in transforming African healthcare systems. It supports and develops the health strengthening potential of eHealth in Africa through teaching, research, publications, and partnerships with other key institutions and stakeholders. The network includes formal eHealth training in African universities and building national eHealth strategies.

Countries

Acfee's advisory board includes representation from: Botswana, Cameroon, Ethiopia, Kenya, Mali, Seychelles, South Africa, Swaziland, Tanzania, Uganda, and Zimbabwe.¹

Members

The Acfee board includes secretaries and leaders at ministries of health in Africa. Acfee's eHealth forum brings together its advisory board, leadership team, and private sector partners.¹

Governance

Acfee was founded in 2014. Its advisory board sets its strategy and ensures the strategy is aligned with health and healthcare needs. The board includes 12 members from African countries. 1

No external evaluation has been completed of Acfee, but PATH has completed internal evaluations.²

Funding and Partners

Acfee was created by the nonprofit tinTree International eHealth and Stellenbosch University Faculty of Medicine and Health Sciences (FMHS) in South Africa. FMHS is also Acfee's academic partner.

Acfee is self-funded through its African collaborations. The organization does not raise money through traditional means for a nonprofit (e.g., through fundraising or seeking grants). To be financially independent and sustainable, Acfee seeks its own income stream. For example, Acfee will share profits generated through its teaching program with Manash University (Acfee does not charge money to develop the program). Acfee also targets revenue from its annual African eHealth Forum meeting, held when Acfee's advisory board meets. Private sector attendees pay to attend and participate in two-hour sessions with eHealth leaders.²

African Centre for eHealth Excellence (Acfee)

Activities

CAPACITY BUILDING AND LEARNING

Acfee targets creating a strong African eHealth training program in African Universities and supports increasing the number of graduates and eHealth leaders with backgrounds in informatics, analytics, and implementation. In December 2015, Acfee finalized plans to create a network of universities that will have reciprocity to share people across the network (i.e., one person teaching the same module at many universities in the network). Universities will decide to start with either a 2-3 month program or a master's program. The training program's target audience is government officials, such as ministry of health officials. So far, in partnership with Monash University, Acfee is running one 3-month education course. Monash University is based in Australia, but also operates a satellite campus in South Africa. The course was accredited in 2015.²

KNOWLEDGE CREATION AND SHARING

Acfee produces summary reports on its eHealth Forum and includes a repository of these and other reports on its website. Through eHealth News Africa, Acfee produces blog posts, sends out newsletters, hosts a public website, and sends communications to a distribution list. Its website maintains directories of eHealth-related contacts, initiatives, organizations, and country-specific overviews.³

MEETINGS

Acfee hosts an annual African eHealth Forum.1

African Network for Digital Health (ANDH)

Network Overview

ANDH was created by Africans for Africans⁴ and is open to all eHealth professionals working in Africa. The network is modeled after the Asia eHealth Informatics Network (AeHIN) and focuses on empowering individuals and institutions through professional development, as well as sharing experiences and best practices with planning and implementing health information systems.

Goals

The network promotes the use of information and communications technology (ICT) to achieve better health through peer-to-peer assistance, as well as knowledge sharing and learning through a regional approach for country-level impact. ANDH's proposed strategic plan focuses on:

- Building capacity for digital health and health information systems (HIS), focused initially on topics such as civil registration and vital statistics (CRVS), digital health design, HIS, and governance.
- Increasing peer learning and knowledge exchange through networking.
- Promoting standards and interoperability within and across countries.
- Enhancing leadership, sustainable governance, and monitoring and evaluation of projects.

Countries

ANDH's founding members come from Nigeria, Ghana, Mali, Tanzania, Ghana, and Rwanda; however, network membership is open to all African countries.

Members

ANDH's current members are the founding members. Future membership will include individuals, institutions, development partners, and student members. The network encourages membership among digital health-related practitioners and organizations (government agencies, private and civil society organizations, development agencies) in the fields of HIS, CRVS, health statistics, epidemiology, health/biomedical informatics, knowledge management, health sector ICT project management, organizational development, and related disciplines.

Types of members include:

- Individuals: professionals working in digital Health on the African continent.
- Institutions: African government and non-government institutions or organizations, as well as other peer learning networks (e.g., AeHIN, Joint Learning Network (JLN)).
- Development partners: donors, technical agencies, and other non-governmental organizations (NGOs) that support digital health, HIS, and CRVS technical and financial assistance to countries.
- Students: African students enrolled in health informatics or related programs.

African Network for Digital Health (ANDH)

Governance

ANDH was founded in 2015 and will be governed and managed by an advisory board, an executive committee, and a secretariat. ANDH's 13 member advisory board evaluates stakeholder priorities, provides guidance on strategic direction, and monitors progress. A five member executive committee, nominated and elected by the advisory board, will consist of a chair, co-chair, executive officer, donor, and an NGO representative. The ANDH executive committee will meet quarterly by teleconference and annually in person.

Funders and Partners

The JLN IT Initiative, which is funded by the Rockefeller Foundation, supported ANDH's initial startup planning meetings. ANDH has a memorandum of understanding (MOU) partnership with AeHIN to share information and best practices across Africa and Asia regions.

Activities

CAPACITY BUILDING AND LEARNING

ANDH plans to:

- Advocate for digital health, HIS, and CRVS career paths to be addressed in annual sector budgets, training, and work plans.
- Define digital health, HIS and health informatics competencies for public health professionals.
- Conduct pre and in-service training.
- Support inter-universities' collaboration of curriculum development on digital health, HIS and health informatics for undergraduate and graduate programs.
- Expand linkages between public and private sectors.

KNOWLEDGE CREATION AND SHARING

ANDH plans to:

- Promote standard frameworks, data sets, and platforms of standardization and interoperability.
- Identify, develop, and implement appropriate health data standards.

MEETINGS

ANDH plans to convene national workshops on country health data standards and interoperability.

Asia eHealth Information Network (AeHIN)

Network Overview

AeHIN promotes improved use of ICT to achieve better health through peer-to-peer assistance, knowledge sharing, and learning through a regional approach. It is focused on achieving greater country-level impacts across South and Southeast Asia. In 2015, AeHIN became a nonprofit organization.⁵

Goals

AeHIN believes that better health can be achieved by strengthening evidence-based policies and health systems through better quality and more timely HIS and CRVS. It sees eHealth as an enabler to improve the flow of information for delivering quality and equitable healthcare services and health system management. The network's strategy focuses on:

- Building capacity for eHealth, HIS, and CRVS in the countries and regions of South and Southeast Asia.
- Increasing peer learning and knowledge exchange through networking.
- Promoting standards and interoperability within and across countries.
- Enhancing leadership, sustainable governance, and monitoring and evaluation.⁵

Countries

All countries in the South and Southeast Asia Region are encouraged to be part of the network. Current members of AeHIN come from over 45 countries.⁵

Members

At the end of 2015, AeHIN had over 800 members including individuals, institutions, development partners, and student members working in South and Southeast Asia. The network encourages membership among eHealth practitioners and organizations in the fields of HIS, CRVS, health statistics, epidemiology, health/biomedical informatics, knowledge management, health sector ICT project management, organizational development, and related disciplines.⁵

Types of members include:

- Individuals: professionals working in eHealth.
- Institutions: government and non-government institutions or organizations.
- Development partners: donors, technical agencies, and other NGOs that provide eHealth, HIS, and CRVS technical and financial assistance to countries.
- Students: enrolled in health informatics or related programs.⁶

Asia eHealth Information Network (AeHIN)

Governance

AeHIN was founded in 2011 and is governed and managed by an advisory board, a management committee, and a secretariat. Its current chair is based in Thailand and its executive director is based in the Philippines. The AeHIN advisory committee is composed of the AeHIN co-chairs, country representatives, development partners, and technical advisers. It oversees implementation progress and monitors that AeHIN's activities are aligned with its strategy. The secretariat is based at the National Telehealth Center at the University of the Philippines with additional secretariat support in Thailand. The management committee manages operations and includes a chair, a co-chair, and its secretariat. A scientific committee organizes AeHIN's body of knowledge and identifies growth opportunities.⁵

The network is guided by a strategic plan and is evaluated internally. Training and other capacity building activities are drawn from an eHealth capacity roadmap which makes eHealth technical support scalable and sustainable using certified governance, planning, and management procedures. An external evaluation has not been completed.⁶

Funders and Partners

AeHIN receives financial support or technical assistance from: World Health Organization (WHO), Norwegian Agency for Development Cooperation (Norad), the Asian Development Bank (ABD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (funding of participants' travel costs), United States Agency for International Development (USAID) (through personnel support), and United Nations Children's Emergency Fund (UNICEF).⁶

Activities

CAPACITY BUILDING AND LEARNING

AeHIN facilitates peer-to-peer assistance. It also supports its members by sending them to conferences, providing trainings, and exposing them to international exchanges, fellowships, and other opportunities to equip them to participate in national and regional efforts to improve health systems through ICTs. Examples of AeHIN-provided training include:

- HL7 online certification, a 14-week program with sharing on standards and interoperability.
- The Open Group Architecture Framework (TOGAF) certified training.
- COBIT®5 Foundation certification training.
- COBIT®5 Implementation training.⁶

KNOWLEDGE CREATION AND SHARING

Members share documents and resources from eHealth implementations on a public website. Communications also go out to an email distribution list. An AeHIN newspaper is published quarterly.

MEETINGS

AeHIN holds public bi-monthly webinars for members to share lessons learned from their implementation on topics suggested by its members. The network also conducts annual general meetings with a technical conference. AeHIN's working council holds online meetings, as does its secretariat (held monthly).

BID Learning Network (BLN)

Network Overview

The BLN is a peer-to-peer learning network that seeks to enable countries to learn from one another, develop solutions to common problems, and directly influence the BID Initiative's approach. Its agenda, initially focused on immunization data, is set by its members. The network aims to address how to rapidly and cost-effectively develop new strategies to improve the management of national health systems and design a set of solutions in one country that can be adapted and applied elsewhere. The BLN design was influenced based on JLN's experience with peer-to-peer learning.

Goals

The network is focused on helping participating countries use better data to improve their healthcare systems at every level. Its stated goals are to:

- Bring countries together to identify shared problems and solutions and connect with peers.
- Use this knowledge to design common information system products, practices, and data policies.
- Experiment with these designs in countries to determine their applicability.
- Use this experience to inform national and global decision-making.

BLN members collectively set and define the network's agenda. To date, discussion topics have included: capacity building mechanisms, logistics management information systems (LMIS), change management, registries, interoperability and architecture, determining requirements, estimating total cost of ownership, development of request for proposal (RFP)'s and evaluation of prospective vendors, and the identification and tracking of individuals across geographies.

Countries

Countries participating in the BID Initiative and the BLN include:

- Demonstration countries: Tanzania and Zambia.
- Design countries: Gambia, Sierra Leone, Cameroon, Cote d'Ivoire, Burkina Faso, Ghana, Nigeria, Mali, Kenya, Liberia, Uganda, South Africa, Malawi, Zimbabwe, Ethiopia, and Senegal.
- Discussion countries: Any country or individual can participate in the discussion.9

Members

The levels of participation in the network vary depending on the countries' membership tier. The types of country members include:

- Demonstration: primary partners working to deploy solutions at scale.
- Design: provide intellectual resources to assist with the development of BID solutions.
- Discussion: periodically informed on BID Initiative progress, but not devoting significant time to designing the solutions.⁹

BID Learning Network (BLN)

Governance

The BLN was launched in 2014 and is based in Africa with its secretariat functions managed through PATH's Zambia office. The expectation is to transition the BLN to a shared governance model with countries and other key stakeholders. The BLN director is charged with developing and deploying strategies to ensure that the learning network:

- Creates a vibrant, country-led, peer community of practice.
- Has a mechanism in place that will support the rapid uptake and spread of learnings/solutions that come out of the work currently being undertaken within the scope of the BID Initiative.

A peer advisory group for the BLN helps to maintain a country focus in three main areas: logistics management information systems, registries, and change management. The group advises the BLN director and is made up of six people representing West-Central and East-Southern Africa.

An external evaluation of the BLN is underway with a final report targeted for March 2016. The BLN is assessed internally under the initiative's M&E framework. To assess the network's contribution to meeting objectives, they measure if countries are actively involved in learning and sharing through the BLN and if BLN members gain knowledge, skills, and motivation to pursue BID interventions. The network's internal evaluations include: event evaluations, Google Group surveys (two to three times per year), output tracking, and a social network analysis.9

Funding and Partners

The Bill & Melinda Gates Foundation provided funding to the BLN for five years (2013-2018) through the BID Initiative grant to PATH. The BLN budget covers at least two in-person meetings per year, member study visits, and a competitive, small grant program providing up to \$30,000 USD funding for projects less than 12 months. Grants can be used to:

- Support immunization information systems within a country, priority areas in product development, change management, or supply management/logistics.
- Conduct exchange visits between design countries.9

Activities

CAPACITY BUILDING AND LEARNING

The BLN enables peer-to-peer learning exchanges, targeted discussions on topics like designing patient registries and change management to support data quality and use, and the development of local and regional capacity in informatics. The network supports capacity building through design collaborative and discussion meetings, peer-led presentations, and short courses to build knowledge among participants on strategies for improving data quality. While the BLN does not advocate, members may advocate in their country for increased involvement and participation.⁹

BID Learning Network (BLN)

KNOWLEDGE CREATION AND SHARING

The network facilitates Google Group discussions, supports a repository for reports and other materials, and responds to information requests. Members can engage through online sharing, co-creation of knowledge products, and through technical consulting.9

MEETINGS

The BLN conducts monthly webinars, as well as two to three in-person meetings per year. Members may host study tours and organize regional events.9

East African Community's (EAC's) Open Health Initiative (OHI)

Network Overview

OHI was founded to support meeting Millennium Development Goals (MDG's) 4 and 5 and seeks to improve women's and children's health by building sustainable networks. It is a regional effort of Burundi, Kenya, Rwanda, Tanzania, and Uganda.¹⁰

Goals

The network aims to promote the uptake and scale up of high impact interventions and innovations, as well as to enhance access to data to support stronger oversight of results and resources. OHI's strategy for meeting its goals is through implementation and promotion of:

- Accountability for results and resources; recognizing that given limited resources, quality data is needed to measure, target, and scale successful interventions.
- Best practices and knowledge sharing for action and innovation.¹⁰

Countries

The network includes Burundi, Kenya, Rwanda, Tanzania, and Uganda. 10

Members

Implementation of OHI is supported by global, regional, and national stakeholders in reproductive, maternal, newborn, and child health. Its sectoral council is supported by EAC's Sectoral Committee on Health. Technical leads from member states serve on the council and serve in roles within EAC's broader health sector. OHI's online expert directory includes over 50 experts.¹⁰

Governance

EAC was founded in 2012 and is headquartered in Tanzania. The 2012 EAC Sectoral Council on Regional Cooperation in Health directed its secretariat to develop and implement OHI with full participation from member states.

OHI's technical officers, based at the secretariat and in member states, are responsible for the initiative's implementation. Decisions for implementing OHI are made through EAC's technical and policy bodies. These bodies include research and policy technical working groups, a Sectoral Committee on Health, the East African Legislative Assembly, a Sectoral Council of Ministers of Health, the Council of Ministers for EAC Affairs, and the Summit of the Heads of State.¹⁰

Funding and Partners

Norad is providing financial assistance to support OHI. 10

East African Community (EAC) Health Sector's Open Health Initiative (OHI)

Activities

CAPACITY BUILDING AND LEARNING

OHI builds capacity through at its health and scientific conferences. 10

KNOWLEDGE CREATION AND SHARING

The network encourages collective knowledge sharing through mechanisms including an expert network and research sharing on topics such as innovation and operations. OHI's site includes a public repository, an expert directory, and a date warehouse with public indicators and a scorecard.¹⁰

MEETINGS

EAC has held five health and scientific conference and exhibitions, with the most recent held in 2015 and one scheduled for 2016. The EAC Sectoral Council of Ministers of Health holds an annual meeting. 11

East African Public Health Laboratory Network (EAPHLN)

Network Overview

EAPHLN is a regional network of public health laboratories for the diagnosis and surveillance of tuberculosis (TB) and other communicable diseases. The project aims to improve laboratory effectiveness and build capacity in laboratory technician training, as well as to support regional coordination and program management.¹²

Goals

EAPHLN's goal is to establish a network of efficient, high quality, public labs to surveil TB and other communicable diseases. Its objectives are to:

- Enhance access to diagnostic services.
- Provide capacity for diagnostic services and drug resistant monitoring.
- Create capacity for disease surveillance.
- Create a platform for research, training, and knowledge exchange.

It also aims to provide member states with a forum for reviewing progress on regional and international health targets. 13

Countries

Uganda, Rwanda, Kenya, Tanzania, and Burundi are members of the network. 13

Members

Members of the network include the five member states and 32 health facilities within the states. EAPHLN's steering committee includes senior officials in project implementing teams for each country. Capacity building is focused on technicians in the network. For each country, there is a national-level reference lab and district-level labs (particularly labs near borders).¹²

Governance

The network, established in 2011, is based at a regional office in Tanzania. At the regional level, a steering committee guides the network and a regional coordination team focuses on cross-cutting activities. Country-specific activities are handled by project coordination units. The network also includes regional and country working groups.

The network includes technical working groups focused on: lab accreditation, training and capacity building, disease surveillance, operational research, ICT, non-communicable diseases, and performance-based financing for laboratories.

As a project, EAPHLN is evaluated for donor reporting. The World Bank has also agreed to fund a similar project for Southern Africa. 13

The East African Public Health Laboratory Network (EAPHLN)

Funding and Partners

EAPHLN's primary financial donor is the World Bank, but it is also receiving technical assistance from K4Health to create a community of practice portal. The East, Central, and South African Health Community and the EAC also support the network. The organizations coordinate reviews, technical discussions, and provide knowledge sharing platforms.¹³

Activities

CAPACITY BUILDING AND LEARNING

Led by Rwanda, the project established an eLearning platform to train laboratory technicians. Six modules have been developed as part of a harmonized curriculum and one module is currently being piloted.¹³

KNOWLEDGE CREATION AND SHARING

An online community of practice (CoP) is being created with the help of Knowledge for Health (K4Health), supported by USAID. EAPHLN established a web-based disease surveillance system and makes weekly reports available. The network has also commissioned research (e.g., Public Private Partnerships for Laboratory Services in East Africa) and quarterly bulletins are sent out.¹³

MEETINGS

The steering committee for the project has met seven times. Regional and country working groups meet at varying frequencies.¹³

Harmonization for Health in Africa (HHA)'s Performance-Based Financing (PBF) Community of Practice (CoP)

Network Overview

HHA provides regional support to African governments for health system strengthening and to meet the MDGs. HHA initially included a CoP for each WHO health systems pillar, though not all CoPs have remained active. ¹⁴ The PBF CoP is a community of experts that communicate through an online forum and meet in person at events. It has evolved to also include results-based financing and areas outside of Africa. ¹⁵

Goals

The stated goal of the HHA is to: create a structured environment for sharing experiences, knowledge, and best practices for health systems strengthening. The PBF CoP's specific goals include the following:

- Expand the number of qualified PBF experts working in Africa.
- Consolidate operational knowledge through a cooperative model of knowledge exchange.
- Facilitate the policy dialogue with policy makers through advocacy and constructive assessments of strategies.
- Establish strong links between African countries implementing or considering PBF policies.
- Consolidate regional capacity by documenting and assessing PBF experiences.
- Enhance the visibility of African countries as pioneering a new strategy. 16

Countries

The PBF CoP is focused on Africa and is not restricted to specific countries. Examples of countries participating in CoP events include: Nigeria, Uganda, Burundi, Lesotho, Cameroon, Zambia, Mozambique, and Malawi.¹⁷

Members

Members of the CoPs include relevant experts and decision makers from government, donors, and academia. The PBF CoP welcomed its 1000th member in 2013 and includes over 1800 members in its Google Group.¹⁷

Governance

Each CoP is managed and administered by at least one CoP lead. The PBF CoP, established in Burundi in 2010, is led by one facilitator. 15 The finance blog is run by an editorial board drawn from members of the finance CoPs. 18

Funding and Partners

HHA was born out of support from the African Development Bank, the Global Health Workforce Alliance (GHWA), the Japan International Cooperation Agency, Norad, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the UN Population Fund, UNICEF, USAID, WHO, and the World Bank.¹⁹ CoP funding is on a per activity basis.¹⁵

Harmonization for Health in Africa (HHA)'s Performance-Based Financing (PBF) Community of Practice (CoP)

Activities

CAPACITY BUILDING AND LEARNING

The PBF CoP builds capacity through training sessions at its multilateral workshops. 15

KNOWLEDGE CREATION AND SHARING

The finance CoPs each have Google Group forums which are restricted to members only. HHA's health financing CoPs jointly produce a blog which aims to encourage the exchange of ideas on health financing in Africa and to provide a platform and visibility to experts working on health financing in Africa. The PBF CoP produced a series of working papers in French and English, available on the website for the blog.¹⁸

MEETINGS

The PBF CoP meets roughly annually and considers in-person meetings critical for knowledge exchange. Multilateral workshops focus on sharing implementation experience and best practices. The CoP also tries to coordinate meetings with other networks and CoPs. The PBF CoP's fourth meeting, titled, "ICT 4 RBF: when technological innovation meets health care financing innovation" took place in Burundi in 2014 and included guests from the JLN's IT Initiative. 15

HealthE Africa

Network Overview

HealthE Africa is a peer assistance networking initiative undertaken by HealthEnabled in partnership with K4Health. The network is aimed at strengthening digital health partnerships and fostering new collaborations in Africa.²⁰

Goals

The network is based on the idea that context appropriate digital health solutions, provided by cost-effective local suppliers, strengthen health systems and promote health outcomes in Africa. The network aims to support new and existing locally driven stakeholder networks to address local digital health needs, maximize opportunities, and mitigate challenges. Its goals are to:

- Understand the context and share this understanding with the community.
- Raise the profile of African digital health experts.
- Increase visibility of African digital health projects and solutions.²¹

Countries

The network is focused on Africa and is not restricted to specific countries. Individual members in the HealthEnabled Expert Network currently come from over 30 countries.²⁰

Members

The HealthE Africa network targets digital health stakeholders in Africa including government officials, health implementers, academics and students, private companies offering digital health products and services, potential and existing collaborators (e.g., ANDH, tinTree International, etc.), donors, and potential public-private partners. The network actively builds its robust stakeholder list by researching multiple sources and marketing to acquire new members.²¹

HealthEnabled's Expert Network currently includes over 60 members selected for their country knowledge and technical skills.²⁰

Governance

HealthE Africa was founded in 2015 and is managed by HealthEnabled in partnership with K4Health. Members are surveyed to evaluate HealthE Africa's effectiveness and to retain active members.²¹

Funders and Partners

HealthE Africa receives funding from USAID, which also funds K4Health.²¹ As an organization, HealthEnabled's partners include: the Global Development Incubator, K4Health, Johnson & Johnson, USAID and the President's Emergency Plan for AIDS Relief (PEPFAR), and UNICEF.²⁰

HealthE Africa

Activities

CAPACITY BUILDING AND LEARNING

HealthEnabled developed a database of digital health experts (known as Expert Network), to facilitate finding appropriate technical assistance. The HealthE Africa website links to training and other opportunities.²⁰

KNOWLEDGE CREATION AND SHARING

HealthE Africa creates and shares knowledge by:

- Facilitating online discussions which are divided into five African regions. To facilitate dialog amongst members, HealthE Africa initiates weekly discussions in its online forum by asking members to initiate discussions and invites young social media activists to participate.
- Creation of country profiles that are validated by country experts and communicated to country members when published. Once published, content is updated through member crowd-sourcing.
- Posting expert profiles, recruiting experts, and inviting members to write blog posts and participate in discussions.
- Publishing bi-weekly blog posts.
- Posting events and linking to other relevant blog posts and articles.
- Posting product profiles with the capability for members to rate products and services.²¹

MEETINGS

The network hosts webinars, trainings, and conferences. It also hosts weekly/monthly online chats that are topic-based or include influential or notable guests.²¹

HIFA (formerly HIFA2015) primarily consists of five online global forums under HIFA Global Forums, which are focused

Healthcare Information for All (HIFA)

Network Overview

broadly on access to and use of healthcare information.²²

Goals

The network's vision is for a world where every person and health worker will have access to the healthcare information they need to protect their own health and the health of those for whom they are responsible. HIFA's strategy promotes communication, understanding, and advocacy among everyone involved in the production, exchange, and use of healthcare knowledge.

Other key programs of HIFA include HIFA Voices and its Advocacy Programme. HIFA Voices uses expertise from providers and users of healthcare information with the goal of meeting information needs more effectively. HIFA's Advocacy Programme aims to use the experiential knowledge from its HIFA Voices network in evidence-based advocacy.²²

Countries

HIFA members come from 170 countries and is not specific to Africa.²²

Members

The network includes 15,000 health researchers, publishers, librarians, policymakers, clinicians, and information professionals. Members of HIFA can be individuals or organizations.²²

The HIFA Voices database includes 12,000 professionals and 2500 organizations from 170 countries.²³

HIFA has over 180 volunteers that provide technical support through: publicity and awareness-raising; content analysis; moderation of discussions; database skills; and participation in HIFA working groups.²²

Governance

HIFA was founded in Kenya in 2006 and is based in the United Kingdom. A steering group of volunteers leads implementation of HIFA's strategy. HIFA has an advisory panel which provides expert assistance. The HIFA Campaign is administered by the Global Healthcare Information Network (GHI-net), a United Kingdom-based nonprofit organization. HIFA Voices is coordinated through a working group. HIFA's forums are moderated and are supported by Dgroups, a platform for international development email-based and online group communications.²²

HIFA Global Forums are jointly administered by:

- HIFA-pt forum: WHO's ePORTUGUESe Network
- HIFA-EVIPNet-French forum: WHO's Evidence for Informed Policy Network
- CHIFA forum: International Child Health Group of the Royal College of Paediatrics' and Child Health
- HIFA-Zambia forum: Zambia UK Health Workforce Alliance
- All forums are jointly administered by Global Healthcare Information Network (GHI-net)

In 2011, HIFA was evaluated by external evaluators with funding from the Rockefeller Foundation.²²

Healthcare Information for All (HIFA)

Funding and Partners

In 2015, HIFA's primary funder was the British Medical Association. It also accepts donations and receives funding from dozens of organizations including the private sector, trade groups, and nonprofits representing both global and Africabased organizations.²²

Activities

CAPACITY BUILDING AND LEARNING

HIFA's advocacy program looks to add capacity by sharing experiential knowledge of experts coupled with available literature.²²

KNOWLEDGE CREATION AND SHARING

On its website, HIFA includes repositories of materials and building out its knowledge exchange. The HIFA forums include:

- HIFA (English)
- CHILD2015 (English)
- HIFA-pt (Portuguese)
- HIFA-EVIPNet-Fr (French)
- HIFA-Zambia (English)

HIFA Voices includes a database for searching quotes from HIFA's forums and literature.²³

MEETINGS

HIFA hosts ad hoc webinars and has conducted two international conferences to date (2011 in the United Kingdom and 2014 in Tanzania).²²

The Health Information Systems Programme (HISP)

Network Overview

The HISP is a global network focused on developing, implementing, and building capacity to support use of the open-source District Health Information System 2 (DHIS2) software.²⁴

Goals

The network focuses on sharing best practices and products between partners which are actively engaged in HIS strengthening such as universities, ministries of health, international agencies like WHO, PEPFAR and Norad, and in-country implementing agencies like HISP South Africa. HISP's guiding principle for strengthening HIS is based on "information for action."

The HISP UiO strategy focuses on:

- Strengthening HIS
- Developing and governing DHIS2.
- Training, education, and research.²⁴

Countries

HISP network nodes are located in India, Ireland, Nigeria, Norway, South Africa, Tanzania, Togo, Uganda, the United States, and Vietnam. There are 47 countries currently using DHIS2 (including pilots).²⁵

Members

Members of the HISP network include individuals and organizations such as universities, ministries of health, and international implementing partners. Members play roles such as developing human capacity, managing software development, coordinating educational linkages, and advocating for information cultures at the national level.

HISP's software development nodes are located in Ireland, the United States, South Africa, India, and Vietnam. Implementations nodes are located in Uganda, Tanzania, Nigeria, and West Africa (Togo).²⁴

Governance

HISP was originally founded in South Africa in 1994 by the Department of Informatics at the University of Oslo (UiO). HISP UiO's management group is based in Norway at the University of Oslo and holds monthly management meetings. It covers five focus areas: DHIS2 software development; implementation activities by HISP UiO employees; implementation sub-contracting; interaction with partners; and coordination of DHIS2 related research. Larger HISP nodes have their own management structure (e.g., HISP South Africa is governed by its own board).²⁴

PATH conducted an independent assessment of HISP in 2011 and is in the process of completing a second assessment of the network in 2016.²⁶

The Health Information Systems Programme (HISP)

Funders and Partners

HISP was originally funded by Norad and continues to receive Norad support for the core development of the DHIS2 platform and for the staff to support and coordinate country implementations. HISP has also received funding from organizations such as USAID, other Norwegian agencies and groups, the European Union, and the Danish International Development Agency (DANIDA). The Global Fund is supporting DHIS2 country implementations and PEPFAR is supporting DHIS2 development to meet PEPFAR's specific reporting requirements.^{24,26}

Activities

CAPACITY BUILDING AND LEARNING

HISP supports building capacity and learning through its academic research and graduate student programs.²⁴

KNOWLEDGE CREATION AND SHARING

Knowledge products are shared through the DHIS2 site which includes documentation and tutorials.²⁵

MEETINGS

The DHIS2 Academy program holds regional training seminars and hosts an annual meeting with its network of experts.²⁴

Joint Learning Network for Universal Health Coverage (JLN)

Network Overview

The JLN is a practitioner-to-practitioner learning network for countries to share knowledge and co-develop tools, guides, and resources to achieve universal health coverage (UHC) in low and middle-income countries (LMICs).²⁷

Goals

The network seeks to connect practitioners and policymakers across countries to bridge the gap between theory and the practical 'how-tos' of implementing reforms to achieve UHC. It aims to accelerate progress and improve the success of demand-side health financing reforms to help move LMICs toward UHC. The network forms topic specific sub-initiatives based on members' interests and priorities, and available partner support. Initial sub-initiatives were focused on quality improvements, provider payment mechanisms, information technology, and expanding coverage²⁷, and have since expanded to include primary health care.

Countries

Full members of the JLN include Ghana, India, Indonesia, Kenya, Malaysia, Mali, Nigeria, Philippines, and Vietnam.

Associate members are Bahrain, Bangladesh, Colombia, Egypt, Ethiopia, Japan, Kosovo, Mexico, Moldova, Mongolia, Morocco, Namibia, Senegal, South Korea, and Sudan.²⁷

Members

JLN members are practitioners and policymakers from ministries of health, national health financing agencies, and other key government institutions representing 24 Asian, African, Latin American, and European countries, as well as other international, regional, and local partners.

There are nine full member countries and 15 associate member countries. Full members have access to sponsored activities and engage by attending events, co-developing knowledge products, and hosting or participating in country learning exchanges (e.g., study visits). Associate members can actively participate by attending webinars, providing feedback on knowledge products, contributing country case studies, and participating in workshops and JLN meetings through self-funding. Associate and full members can access JLN's portal and attend virtual activities including webinars and facilitated discussions.²⁷

Governance

The JLN was established in 2009 and is governed and managed by a global-level Steering Group, country-level core groups, and a secretariat/network coordinator with membership from multiple organizations.

The Steering Group oversees JLN's strategic direction, ensures the network's technical initiatives are aligned with country priorities, and makes decisions about membership and use of the Joint Learning Fund. It includes representatives from member countries, network funders, and technical partners.

JLN's secretariat and network coordinator manage operations and include representation from ACCESS Health International, Results for Development (R4D), and the World Bank.

Joint Learning Network for Universal Health Coverage (JLN)

Country core groups bring together key UHC stakeholders and institutions in the JLN country to facilitate country leadership, strengthen engagement in countries, and ensure engagement with the JLN is beneficial and aligned with country priorities and needs. Country core groups also identify participants for key JLN activities, document country reforms, and ensure knowledge is disseminated within countries.

The JLN has a monitoring and evaluation (M&E) framework for the network and its sub-initiatives. An external network assessment was completed by the Pact Institute on behalf of the Rockefeller Foundation in 2013 and a JLN@5 report, including an overview of impact stories and results from a member survey, were published in January 2016.²⁷

Funding and Partners

The JLN received primary seed funding from the Rockefeller Foundation in collaboration with several development partners. It currently receives funding and technical assistance from country partners as well as WHO, the Bill & Melinda Gates Foundation, GIZ, the Rockefeller Foundation, and the World Bank.²⁷

Activities

CAPACITY BUILDING AND LEARNING

Through peer-to-peer exchange and targeted technical support, the JLN helps countries design, organize, implement, evaluate, and seek funding for UHC-related reforms. The JLN connects practitioners and researchers to help respond to pressing country demand. Through the Joint Learning Fund, the network also makes small grants available to country participants in support of learning activities such as country study trips.

KNOWLEDGE CREATION AND SHARING

The JLN uniquely supports the collaborative development of knowledge products (e.g., templates, tools, guidance papers, and 'how-to' guides) by leveraging JLN technical facilitators to harvest country experiences in a structured way, synthesize lessons learned, and draft co-developed guidance and tools for country-specific and globally adaptable use.²⁸

The JLN member portal supports sharing and dissemination through a member database, discussion boards, a repository of JLN documents, knowledge products, guides, tools, UHC-related news, and curated resources and events. JLN comparative case studies document country experiences and reforms related to UHC.²⁷

MEETINGS

The JLN conducts multilateral workshops to maximize opportunities for informal networking and discussions on UHC topics of shared interest and to co-develop knowledge products.²⁷

Routine Health Information Network (RHINO)

Network Overview

RHINO focuses on improving the use of routine health information for decision-making through sharing lessons learned and best practices. The network spun out of USAID's Monitoring and Evaluation to Assess and Use Results (MEASURE) Evaluation Project and incorporated as a nonprofit organization in the United States in 2008. RHINO is in the process of decentralizing its network to the regional level.²⁹

Goals

RHINO's stated goal is to improve population's health in resource poor countries through the use of information produced by high quality, productive, and sustainable routine health information systems (RHIS). Its approach to achieving its goal is to:

- Advocate for the use of routine health information in decision-making and to improve RHIS in resource poor countries.
- Learn from and inform HIS professionals, managers, and users of health information systems of advancements in RHIS development and use.
- Collaborate and coordinate in:
 - Research and development of new methods and RHIS standards.
 - Improving RHIS efficiency and effectiveness.
 - Improving access and availability of routine health information.²⁹

Countries

Members of the network come from over 70 countries and are not specific to Africa.²⁹

Members

The RHINO network includes nearly 1000 members globally and includes individual members and organizations. Individual membership is open to anyone and includes individuals from government, nonprofit organizations, and the private sector.²⁹

Governance

RHINO was founded in 2001 and is headquartered in the United States. It is led by a board of directors, a secretariat (JSI), and a technical advisory committee. Its board meets one to two times per year.²⁹

RHINO is working to devolve its capabilities to the regional level by coordinating with the West African Health Organisation (WAHO) in West Africa, AeHIN in Asia, and the Pan American Health Organization (PAHO) in Latin America.²⁹

Routine Health Information Network (RHINO)

Funders and Partners

USAID supported RHINO through the MEASURE project and has provided annual funding for RHINO's secretariat and international workshops. To reduce its dependency on USAID funding and to allow it to receive funding through donations, RHINO incorporated into a 501(c)(3) nonprofit organization.

RHINO's organizational members pay annual fees however United Nations institutional members do not pay fees. Fees are based on a tiered structure which factor in the organization's annual revenue, if the organization is based in a resource poor country, and how involved in RHINO's leadership the organization wants to be. Organizations paying lower fees have reduced roles in the network's leadership.²⁹

Activities

KNOWLEDGE CREATION AND SHARING

RHINO's communications include an email distribution list and a blog on its website. Knowledge and tools are shared on RHINO's website (e.g., RHIS data sources, information use, and a literature database with over 1100 records).²⁹

MEETINGS

Since 2013, RHINO has held five forums and four international workshops (most recently in 2010). Workshop transcripts and forum summaries are available online.^{29,30}

West African Health Organisation (WAHO)

Network Overview

WAHO is an agency which brings together health leadership from the fifteen member states of the Economic Community of West African States (ECOWAS). It was created out of an agreement from Heads of State and government of ECOWAS states to merge the efforts of a Francophone and an Anglophone intergovernmental health organization. One of WAHO's six divisions focuses on Research and Health Information System (DRHMIS).³¹

Goals

WAHO's goal is to improve health by harmonizing policies, pooling resources, and cooperating towards a collective and strategic fight against health problems in the ECOWAS region. It promotes regional health integration by:

- Maintaining sustainable partnerships.
- Strengthening capacity building.
- Collecting, interpreting, and disseminating information.
- Promoting cooperation and ensuring coordination and advocacy.
- · Exploiting information communication technologies.

WAHO's Health Information Program focuses on the control of epidemics and information management. Its goals are to strengthen the development of HMIS's for disease prevention and control and to provide visibility to the health situation in the region for effective response and policy change.³¹

Countries

WAHO member countries include Benin, Burkina Faso, Cabo Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.³¹

Members

Members of WAHO's original HIS Steering Committee included WAHO senior personnel, a representative from the ECOWAS Commission, three country representatives representing a Francophone, Lusophone, and Anglophone country, and a representative from Agence de Médecine Préventive, WHO, the University of Oslo, and USAID.³²

Governance

WAHO was established in 1987 and is headquartered in Burkina Faso. It is administratively autonomous from ECOWAS with its policies and strategic direction set by an assembly of health ministers. Programs and activities are executed by a general directorate. An HIS policy document for participating countries, developed by an HIS steering committee and an HIS technical committee, was adopted by ECOWAS in 2012.^{31,32}

WAHO's Department of Planning and Technical Assistance is responsible for M&E of the agency's strategic plan. In November 2015, ministers approved a new WAHO strategic plan for 2016-2020.³¹

West African Health Organisation (WAHO)

Funding and Partners

WAHO receives funding from donors and members states. It is financially autonomous from ECOWAS. Its donors (e.g., USAID) also provide technical assistance.³¹

Activities

CAPACITY BUILDING AND LEARNING

As an organization, WAHO conducts capacity building programs such as the Young Professional Internship Programme. It is also involved in capacity building projects (e.g., partnering on the now completed Capacity *Plus* project).

KNOWLEDGE CREATION AND SHARING

WAHO shares meeting materials through its website.

MEETINGS

Since 2010, WAHO has held annual, multi-day in-person meetings bringing together managers in HMIS and integrated disease surveillance and response. The May 2015 HMIS meeting co-hosted by USAID brought together over 150 participants from ECOWAS countries, as well as regional and international partners. The meeting focused on the performance of national HIS and lessons learned from the Ebola crisis, mechanisms and actions to support integrating HMIS, and action plans to strengthen institutional and operational capacity of national HIS in member countries.³²

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