DIGITAL HEALTH KNOWLEDGE BASE CONVENING

Sponsored by

[Logos of mPOWERING, PATH, and World Health Organization]

Facilitated and Summarized by

NEXIGHT GROUP
Meeting Objectives

Global development stakeholders—particularly in the digital space—are looking for better ways to structure and share findings, solutions, and best practices for reuse, adaptation, and attaining scale.

At the Digital Health Knowledge Base Convening in July 2016, participants with varying perspectives came together to discuss how to collaborate and align global development approaches and investments to build a stronger, more accessible, and more usable knowledge base.

This briefing summarizes the results of this meeting.
## Meeting Process

<table>
<thead>
<tr>
<th>Activity</th>
<th>Process Details</th>
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| **Review of Current Efforts and Near-Term Plans**        | **Focus Questions:**  
  - What are you doing to build or support the digital health knowledge base—considering content, taxonomy/categorization, and platform—and why?  
  - Who are the target users of these efforts and where are they located?  
  - What health area(s) or topics are these efforts focused on?  
  **Format:** Individual reporting                           |
| **Identify Overlapping Efforts and Gaps**                | **Focus Question:**  
  - Based on what we have collectively shared, are there major areas of overlap? Are there gaps in the collective work leading to unmet needs?  
  **Format:** Individual brainstorming; group discussion; individual voting on the more pressing gaps, biggest overlaps, or most impactful gaps to address (5 votes per person) |
| **Identify Collaborative Activities or Linkages of Efforts to Accelerate Progress** | **Focus Question:**  
  - What collaborative activities could we pursue, and how can we link current efforts to add value to the digital health field?  
  **Format:** Individual brainstorming; group discussion; individual voting on the opportunities with the greatest potential impact on digital health (5 votes per person) |
| **Action Planning: How Do We Make Real Change Happen?** | **Focus Question:**  
  - How can we stimulate collective action on the highest-priority areas for collaboration?  
  **Format:** Collaborative exercise in three separate groups focused on each action plan area |
Current Digital Health Efforts

* Activities represent a selection of current efforts based on meeting participant input

### CHMI
- CHMI innovation database

### GSMA
- GSMA mHealth Tracker

### ICT4HEALTH
- Provide greater return on investment in technology in health to mitigate fragmentation
- Working with government (Federal and state) to harmonize and coordinate the body of knowledge, within the scope of the e-Health strategy

### JOHN HOPKINS Center for Communication Programs
- mHealth knowledge (mHealthKnowledge.org [portal of portals])
- mHealth Basics (Global Health e-Learning [GHeL])
- mHealth Planning Guide
- mHealth Evidence (and taxonomy) (mHealthEvidence.org [7,000 records])
- Co-Chair Global Digital Health Network (GDHN) and project inventory
- Theory-informed media selection (Health Communication Capacity Collaborative [HC3])

### K4Health Knowledge for Health

### mPOWERING FRONTLINE HEALTH WORKERS
- Integrating existing open source technologies to create Open Deliver, a comprehensive approach to training for a nation’s health workforce
- Developed ORB, an open source online library
  - Over 300 resources, 14 languages
  - Curated, quality-assured content
  - Accessed by 144 countries
  - ORB content in training programs in sub-Saharan Africa and South Asia

### NETHOPE
- Operationalize principles for digital development
- Health Communication Capacity Collaborative (HC3): Springboard for health communication professionals
- SDG ICT Playbook—recommendations for where to make investment in ICT to support achievements of Sustainable Development Goals (SDGs)

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**Maternal and Chilc Survival Program**
- Provider training and education
- Gamification of learning

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**Digital Health Knowledge Base Convening - July 2016**
Current Digital Health Efforts

*Activities represent a selection of current efforts based on meeting participant input*

**PATH**
- BID Initiative packaging: accessible, modifiable, appropriate products, policies, practices to support scale and replication
- BID Learning Network (BLN)
  - Convene groups of monitoring and evaluation health and clinical managers to share learnings and network with peers (webinars, meetings, etc.)
- Advocacy for alignment and interoperability of digital health investments
- Ensuring digital health global goods, resilience, and accelerated adaptation and re-use

**World Health Organization**
- Guidelines for evidence-based recommendations
- TechNet (vaccines)
- Mobile network operator (MNO) engagement guide (with United Nations Foundation [UNF] and GSMA)
- Monitoring and evaluation for digital health handbook (previously done with UNF and JHU Global mHealth Initiative [GmI])
- National eHealth Strategy Toolkit (with International Telecommunication Union [ITU])
- Implementation toolkit
- Digital Health Atlas/Maps Toolkit
- mHealth Assessment and Planning for Scale Toolkit
- mRegistry (Digital Health Atlas) (with GmI)
- Innovation Working Group (IWG)—impact investment primer for digital health innovations (with UNF)

**USAID**
- Humanitarian Data Exchange (HDX)
- Digital guidance for USAID programs (Based on Principles for Digital Development)
- Monitoring and Evaluation Research and Learning Innovations (MERLIN)
- Connected health workers: mHero in West Africa
- West African Health Informatics Team (WAHIT)
- Global Learning for Adaptive Management (GLAM) center for learning with the Department for International Development (DFID)
- Interoperability and HIS Broad Agency Announcement (BAA)
- Global Resilience Partnership and DIAL (Global Development Alliances)
- Health Data Collaborative (HDC) → Digital Health and Interoperability Working Group

**Pan American Health Organization**
- Work with the countries generating material to make it easy to access
- Training, visits
- TechNet21
- Link with eHealth
- Case study
- Guide
- Work groups
- Courses
- Provide tools
- Practical materials
- Guidelines

**Digital Health Knowledge Base Convening - July 2016**
Target Users of Digital Health Efforts

Top Mentions

- GOVERNMENT
- IMPLEMENTERS & OPERATORS
- HEALTH WORKERS

Other Users Mentioned

- DONORS & FUNDERS INCLUDING PRIVATE SECTOR
- PUBLIC/COMMUNITIES
- LOCAL NGOs
- TRAINING INSTITUTIONS

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DIGITAL HEALTH KNOWLEDGE BASE CONVENING - JULY 2016
Top 5 Mentions

- Policy and strategy
- Nutrition
- Mental health and wellbeing
- Data use
- Open Health Information Exchange
- Change management
- Packaging
- Planetary health
- Interoperability and standards
- Diagnostics
- Supply chain information systems

*Activities represent a selection of current efforts based on meeting participant input*
Gaps & Overlaps of Digital Health Efforts

**Content Usability and Accessibility**
- Need to assess what resources are needed, by whom, and how information will be absorbed and accessed.
- Clinical transformation: need to use technology to transform the way services are delivered, not just automating current practices/processes.
- Need for translations into regional language (French, Spanish, Arabic, etc.).
- Lack of consistent methodology and sufficient understanding of the usability of existing content and its current impact on in-country implementation.

**Incentives and Change Management**
- Need for change management rather than focusing on just meeting demand: how do you get people to implement/adopt?
- Difficulty achieving health consumer engagement, which is critical for achieving Sustainable Development Goals.

**Working Groups and Communities of Practice**
- Multiple working groups, collaboratives, task forces, networks, alliances, and communities of practice (virtual and in-person) at local, country, and regional levels with overlapping but not necessarily connected focuses.

**Content and Toolkits**
- Need for capacity building (vs. tool/content development).
- Need to update and disseminate content in response to policy changes and other influencing factors.
- Program-level content delivery and data collection tools.
- Overlapping content of training, toolkits, guidance, platforms, and other resources in terms of focus and target audience.
- Competing system and resource development efforts due to donor-driven emphasis on product generation.

**Standards and Interoperability**
- Technology interoperability: data sharing, systems.
- Standards adoption and implementation (e.g., terminologies, codes, classifications).
- Interoperability between systems and platforms: more mindset-grounded than technology/operationalization.
- Lack of coordination between project registries—too many places to register activity.
Gaps & Overlaps of Digital Health Efforts

Target Audiences
- Need for increased involvement and sharing from local, country-based, and regional stakeholders, as well as the need for capacity building in these areas
- Significant focus on implementers, with duplication of efforts that target this audience, but in different ways

Geography
- Latin America
- West/East/Southern Africa

Health Areas
- Non-communicable diseases

Framework and Approaches
- Most theoretical frameworks are not rooted in behavioral theory, which is critical for effective design
- Insufficient legal frameworks for digital health, including policy for protection of protected health information, digital signatures, and use of data for research
- Insufficient understanding of how power/agency affect digital health programs: political economy analysis

Evidence and Data Collection
- Insufficient evidence-based verification of studies and research
- Need to analyze the existing evidence base

Sustainability and Investment
- Lack of coordinated investment of donors’ efforts
- Need for sustainable models (more than just financial)
- Need for cross-sectoral approaches/resources: build platforms across verticals, applying lessons learned across areas

● = one participant vote
Collaborative Activities & Linkages of Digital Health Efforts

- Improve linkages with the private sector
- Develop a sustainability framework that accounts for capacity, strategy, and funding
- Establish digital health donor/investor “principled” alignment processes
  - Operationalize Principles for Digital Development
  - Best ways to fund sustainable efforts
  - Strengthen regional networks
  - Encourage re-use/build to standards
  - Identify priorities for investment
  - Register tool
  - Guidelines for investing
- Increase emphasis on benefits of collaboration across donors, partners, and governments
- Encourage donors to reward collaboration
- Establish government ownership (or stakeholder on behalf of government) of Communities of Practice, Thematic Working Groups, or other “collaborative” mechanism to ensure collaboration across existing mechanisms

Resource Curation and Validation
- Develop inventory of existing toolkits, manuals, guidance, and platforms in terms of the managers of the resource, the resource purpose and audience, and the process for submission and maintenance/updates
- Conduct evidence landscaping
- Develop digital health competency framework for individuals to inform job postings and training and develop a capability matrix
- Conduct toolkit landscaping
- Establish digital health course certifications for local academic agents; clinic→hospital→minister of health
- Establish mechanism to cull and update resources
- Develop annotated registry of resources (building off mHealthKnowledge.org)
- Develop repository of “Gold Standard” legal frameworks for digital health

Usability and Accessibility
- Adapt in-demand content to ensure greater usability and accessibility (linkages to various sources)
- Carry out end-user “needs and use” assessment, leveraging local working groups/collaboratives (tools, resources, implementation support)
- If assessment illustrates a need, develop reusable framework/methodology to improve adaptation/modification/usability of capacity-building resources
- Use Yelp to obtain customer feedback—direct consumer transparency

- = one participant vote
### Collaborative Activities & Linkages of Digital Health Efforts

**Change Management and Collaboration Incentives**

- Identify incentives (e.g., mechanism, funding) to encourage collaboration
- Reach out proactively to country/regional networks with an invitation/proposal to join the Global Digital Health Network
- Develop shared, secure dashboards to visualize progress based on taxonomies and develop a national maturity index (infrastructure, enabling environment)
- Link clients/people into program design/development, potentially through local government or implementers

**Working Group and Communities of Practice Linkages**

- Link country groups with the Global Digital Health Network (GDHN)
- Use the Digital Health Forum as a space to convene a side “State of Play” meeting and a “Moving the Needle” meeting for digital health
- Establish collaborative use, case-based implementers network by geographic region
- Leverage the UN and Sustainable Development Goal (SDG) conversations for how digital health programming can be applied more broadly (the goal of DIAL)
- Pursue more active/aggressive inclusion of “representatives” mentioned in collaborative activities (e.g., conferences, meetings, call for proposals, working groups, assessments, strategy development)
- Establish a mechanism to ensure coordination within Communities of Practice (COPs), Thematic Working Groups (TWGs), etc. (e.g., Global Digital Health Network)
- Develop a Practical Adaptation Network to leverage the data use, learning, and adaptation work that is being pioneered in digital health

**Data Sharing Technology**

- Settle on collection and delivery system: identify existing content delivery and data collection systems or technology that can serve as foundations for scalable national systems
- Expand the Global Digital Health Network website to support global/regional/local extensions for streamlined information sharing through a single platform
- Agree on shared global taxonomy for digital health mapping
- Collectively develop agreed-upon guidelines for shared content (in addition to the shared taxonomy)