GHEID

Global/Geneva Hub for Evaluation and Implementation of Digital Health

Caroline Perrin, PhD
Geneva University Hospitals / University of Geneva
12th of June 2020
GHEID

• Hosted by HI5LAB: HEALTH INFORMATICS FOR INNOVATION, INTEGRATION, IMPLEMENTATION AND IMPACT

• Vision: to federate diverse competencies in the field of digital health implementation and evaluation into a network of experts that has the critical mass and credibility to provide the services necessary to support diverse implementations and evaluations of digital health in various settings.

• Tool: inter-connected mapping of digital health activities, stakeholders, and outputs
SMART-GHEID

Preliminary insights
SMART-GHEID preliminary insights

**SMART:** Study to Map and Assess Relevant Technologies for health

- 28 people interviewed from 23 Organizations / initiatives
- 13 Surveys from initiatives already funded by SDC
SMART-GHEID bottlenecks

**Overarching (Global / National Level)**

- **Fragmentation**: Pilotitis
- **Interoperability**: DH space crowded with applications/systems, and data that cannot communicate with each other
- **Knowledge Silos**: The lack of mechanisms to effectively share knowledge
- **AI**: Multitude of challenges related to AI

**Individual (Implementers / End users)**

- **Data security concerns**: Concerns about data access, protection and utilisation lead to the data security bottleneck
- **Capacity**: is characterized by low digital competencies and lack of appropriate digital education (digital illiteracy)
- **Culture**: Misconception of digitalization paired with a lack systemic thinking leads to complacency

**Impact Outcomes**

**Incentive**: The lack of clearly defined incentive systems for digital health solutions
Key priorities

Impact (on digitalization success)

Urgency (immediate action required)

Stimulus
- AI

Alert signals
- Data security concerns

Derivative
- Interoperability
- Culture

Key priorities
- Knowledge Silos
- Capacity
- Incentive
- Fragmentation
Increased collaboration / meaningful connection will address key priorities

Fragmentation:
- Coordinate on digital health projects according to the Principles of Donor Alignment for Digital Health
- Increase collaboration Of Stakeholders
- Consider ethical challenges, and human rights of digital health (particularly AI)

Knowledge Silos:
- Consider mechanism to break knowledge silos
- Improve sharing and exchange of insightful knowledge

Incentive:
- Demonstrate impact
- Identify value chain models

Capacity:
- Consider the youth: future champions that will create and implement systemic changes
Increasingly voluminous and cluttered landscape: ¹ published articles, guidelines, experience, projects, apps (mHealth: 3.000.000 apps, 200 added daily)

How can we achieve this Platform to connect

“Implementomics,” the ability to capture, organize and exploit the multidimensional knowledge related to implementation issues.

• As for other “omics” domains, a key challenge is to master the variety and volume of information
• Knowledge models can improve this
Consultations between healthcare providers in Mali for maternal care?
Implementome

inter-connected mapping of digital health activities, stakeholders, and outputs
Main interface

Quick view: implemented projects trends

View

Explore

Analyze
Map view: clustered items (projects) view on the map
Map view: example - programs
Map view: example - publications
Map view: example - organizations
Map view: example - persons
Filter: by type/status/system level - example here: by type person
Explore: by country - example here: United States
Trends

Maturity level

System level

Implementome

Analyze

Home > Trends

Overview

implemented projects

TRENDS

93%
Established operation

21%
Pilot

10%
Informal

List of items

Show 10 entries

SMS reminders to improve ad
Georges Beding, Boit Stoll, ...
completed and ended
publication
local

Réseau en Afrique Francophone
Antoine Geissbuhler, Choic...
completed and continued
network
intern

World Health Organization
Souryna Swaminathan, Susa...
ongoing
organisation
intern

ICRC
Stephanie Sarawati Cristin, P...
completed and continued
organisation
intern

System Level

Items are categorized by system level

- Local
- National
- International
Trends: list of items

<table>
<thead>
<tr>
<th>Items</th>
<th>Characteristics</th>
<th>Status</th>
<th>Syster</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS reminders to improve ad</td>
<td>publication</td>
<td>completed and ended</td>
<td>local</td>
</tr>
<tr>
<td>Georges Bediog, Boat Stoll,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Réseau en Afrique Francopho</td>
<td></td>
<td>completed and continu..</td>
<td>network</td>
</tr>
<tr>
<td>Antoine Geissbuhler, Choic..</td>
<td></td>
<td></td>
<td>intern</td>
</tr>
<tr>
<td>World Health Organization</td>
<td></td>
<td>ongoing</td>
<td>intern</td>
</tr>
<tr>
<td>Sournya Swaminathan, Suza..</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICRC</td>
<td></td>
<td>completed and continu..</td>
<td>intern</td>
</tr>
<tr>
<td>Staphania Saraswati Cristin,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trends: list of items

Filter:

Search:

System Level:
Items are categorized by system level

List of Items:

Show: 10 entries

Search: world

World Health Organization
Soumya Swaminathan, Suz.. ongoing organization intern

World Bank
Jaquín Andrés Ilaya completed and continu.. organization intern

Showing 1 to 2 of 2 entries (filtered from 28 total entries)
Trends: challenges

Challenges

- Capacity building
  - 20 challenges

- Technical and Design challenges
  - 23 challenges

- Normative challenges
  - 16 challenges

- Financial challenges
  - 6 challenges

- Ethical challenges
  - 4 challenges

- Infrastructure
  - 7 challenges
Advanced search: single search

By country
All the entities tackling ethics in Switzerland
Thank you

For your attention