UNE PLATEFORME DE GESTION DE CONNAISSANCE POUR L'IMPLÉMENTATION DE SOLUTIONS DE SANTÉ NUMÉRIQUE

Mirana Randriambelonoro
1. Context and background
2. Promises and challenges of digital health
3. gdhub (Geneva Digital Health Hub)
4. Implementome
Smartphone

88% of the time next to us

However, little is known about the impact of digital-only interventions on health-related outcomes in employee groups. The aim of this systematic review was to assess the impact of pure digital health interventions in the workplace on health-related outcomes.
Innovation in health is an imperative

- new processes
- new professions in the digital age
- new expectations from patients and their families
Promising fields for medical innovation and technologies
The Promise of Digital Health: transform healthcare

Empowerment
- Patients
- Health providers
- Governments

Access
- Greater access to care

Cost
- Reduced cost

Quality
- Better quality care

Outcomes
- Improved outcomes through better diagnosis and treatment
What is the status of global digital health?
Ecosystem & Stakeholders
The private sector is playing a major role in the digital health space in LMIC countries

Start-ups are using mobile and frontier technologies to profoundly transform health systems

Source: Digital Health - A health system strengthening tool for developing countries, GSMA

Source: Data analysis – eHealth Observatory Pierre Fabre Foundation
Digital transformation in Healthcare is complex and **very challenging**!

<table>
<thead>
<tr>
<th>Fragmentation</th>
<th>Lack of best practices</th>
<th>High failure rate</th>
</tr>
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<tbody>
<tr>
<td>and a Landscape defined by pilotitis</td>
<td>and access to up-to-date data on past and recent implementations</td>
<td>in digital health projects</td>
</tr>
<tr>
<td>Scarcity</td>
<td>Cybersecurity, Data privacy, Trust concerns and issues</td>
<td>Ethics and Equity concerns and issues</td>
</tr>
<tr>
<td>of qualified resources that understand both healthcare and IT Domains</td>
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Pilots always work and never scale

Uganda pilots in 2012

Challenges do not only represent a barrier, but also have **risks associated**!
Connecting the dots

**Digital Health** has the potential to significantly improve population health globally but faces challenges in achieving scale. Leveraging on the international Geneva, and assisted by advanced data analytics and knowledge management tools, the **gdhub** aims at translating guidelines and policies into actionable insights, and to document and federate knowledge and stakeholders active in global digital health to connect the dots for effective coordination, governance, collaboration and ultimately impact.
Lessons learnt from COVID

Table 1. Scorecard showing global successes and shortcomings in the multilateral response to the COVID-19 pandemic.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Successes</th>
<th>Shortcomings</th>
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<tbody>
<tr>
<td>Research collaboration and information sharing</td>
<td>• Sharing of information by researchers</td>
<td>• Many regions and countries slow to learn policy lessons from elsewhere</td>
</tr>
<tr>
<td></td>
<td>• International research collaborations</td>
<td>• Lack of systemic global research governance</td>
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<td></td>
<td>• Public data repositories</td>
<td>• Duplication of research studies</td>
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</table>
New ways of improving global health are emerging thanks to partnerships and sharing of data and knowledge e.g. HUG
Science-informed policy-making

Enabling science-based policy and decision making that facilitates the development of global policies and norms for responsible digital health implementations based on advanced knowledge management approaches.
Ontology

- COMPANY: WIDGETS, Inc.
  - Works for
- COMPANY: Consult, Inc.
  - Works for
- CONSULTANT: KAT THOMAS
  - Working on
- EMPLOYEE: BOB JONES
  - Works for
  - EMPLOYER: ALICE

Connect

The Things!
Launch of the

#digitalhealth #knowledgemanagement #platform

IMPLEMENTOME

Tuesday 22nd of November 2022, 11.00 CET
Recommendations & Insights

- Implementation Reporting
- Assessing the Role of Telemedicine in providing equitable access to care
- Responsible Digital Health (sustainable and environmental)
Capacity building, learning and collaboration

Fostering active learning and collaboration to improve institutional capacities and cooperation to support responsible digital health development and implementation and reduce fragmentation of efforts.
Hackathons

Unleashing the power of collective action for global digital health

Outcomes of the first GDHack
Knowledge Exchange Promoter
Communities of Practice connect people in meaningful ways, to learn and share in a particular domain area, to build everyone's knowledge and capabilities, so that

Individually, we are better at what we do, Collectively we achieve much greater impact
Implementome
1450 members
This community aims to bring together stakeholders working on digital health

CDSS CoP
83 members
This community aims to bring together stakeholders working on digital health

Telemedicine
77 members
This community aims to bring together stakeholders working on digital health

Space and global health
77 members
This community aims to bring together stakeholders working on digital health

Communities of practice
Country outreach: sustainable value creation

Advancing sustainable value creation through strengthened national and sub-national digital health ecosystems that embed global norms and best practices.
Digital Outposts
Advancing sustainable value creation
Fostering active learning & collaboration
Ontology
Implementome (knowledge management)
Living Evidence
Recommendations & insights
Evolving digital health competency framework
Country outreach: sustainable value creation
Capacity building, learning and collaboration
Impactful collaboration
Productive digital outposts
Guidance & risk assessment
Science-informed policy-making
IMPLEMENTOME
Geneva Digital Health Hub
Partners
UNIVERSITÉ DE GENÈVE
Swiss Agency for Development and Cooperation SDG
Hôpitaux Universitaires de Genève
World Health Organization
Geneva Health Forum
“Implementomics,” the ability to capture, organize and exploit the multidimensional knowledge related to implementation issues.
360° Knowledge Management Processes

**Create**
- Creativity and Technology go hand in hand
- Document of Contract Automation
  - Speed
  - Consistency
  - Quality
  - Up to Date

**Capture**
- Make Knowledge Explicit
- Autosave in One Place
- Smart Integration
  - API

**Organise**
- Auto-classification
- Context Driven
  - Just Validate
- Drag & Drop

**Share**
- Communication is Key
- Face-to-Face
- Digital
  - Meetings
  - Group
  - Context is Important
  - Notifications
  - Feeds

**Use**
- (Re-)Use
  - Reward Retaining Existing Knowledge
  - Smart Search
  - Speed Up Legal Services Delivery

**Manage**
- Extract Key Data
  - Workflows
  - Approval
  - E-Signing

**Enhance**
- Knowledge Portal as a Self-Service
- Interact to Improve
  - Knowledge Feeds

**Promote**
- Multi-Channel
  - Story-Telling
  - Content is King

**Sell**
- Online Platform
  - Off-the-Shelf
  - Fast Customising
  - Client Solutions

**Sell**
- New Insights
  - Discuss
  - Collaborate
The **Implementome** accompanies digital health transformation for impact and sustainability.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
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<tbody>
<tr>
<td>Raising awareness</td>
<td>on stakeholders and solutions by visualizing digital health ecosystems</td>
</tr>
<tr>
<td>Managing knowledge</td>
<td>of global and local digital health best practices, and lessons learned (do’s &amp; don’ts)</td>
</tr>
<tr>
<td>Improving decision-making</td>
<td>Through a database of digital health case studies with detailed up-to-date insights</td>
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<tr>
<td>Enabling match-making</td>
<td>for collaboration and creation of communities of practices that help each other in designing &amp; implementing digital health</td>
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<tr>
<td>Promoting policies &amp; guidelines</td>
<td>awareness and uptake amongst implementers of digital health solutions e.g. privacy by design</td>
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<tr>
<td>Advocating</td>
<td>and accelerating discussions towards more inclusive, responsible &amp; sustainable digital health implementations</td>
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**Background**

Digital health is not just a buzzword. It is a movement that has been transforming the way people have access to healthcare and how they manage their health. Despite its potential, the use of digital health in LMICs to overcome barriers to health service delivery has faced challenges in achieving scale and is characterized by fragmentation.

**Implementome**

Implementome is a knowledge management platform which aims at documenting knowledge and facilitating the identification of determinants for the success or failure of digital health implementations. The Implementome provides a multidimensional and evolutive digital health knowledge base of people, projects, publications, evaluations, lessons learned, and evidence. Based on a formal ontology and structured terminologies, the tool can be explored and enriched both by humans and AI-enabled automated processes.

**For more information:**
www.gdhub.org
Learn

Evidence-based decision making

Connect

Initiate & support collaboration

Exchange
Digital Health Atlas

Mapping: Nepal - Mali - Kenya

Communities of practice

Validation process

Users
Use case

I’m the director of a district hospital in rural Nigeria. I plan to implement a tele-expertise service in cardiology:

• What tools could I use?
• Whom could I learn from and collaborate with? Whom should I contact?
• What are the challenges and best practices regarding sustainable business models for this activity?
• How do I demonstrate impact?
• Is there an appropriate community of practice I could join?
• I want to hear about the experience of colleagues who have done the same work before. How other projects face similar challenges to mine?
Demo
Implementome: long-term vision

Automatic mechanisms for collecting and annotating data

Implementome

Share
- Advanced information navigation
- Living evidence
- Data-driven project risk assessment
- Evidence-based decision making

Learn

Connect
- Customized communities of practice
- People recommender systems
- Intelligent team creation

Exchange
- Collaboration initiation and support
Enriching user profile

CV

Publications
- Google scholar
- Researchgate
- IEEE profile
- Pubmed
- ORCID

Projects

Experience
- Linkedin

Previous events attended

Interaction with the platform
BE IMPACTFUL
Thank you

More information: https://gdhub.org/

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