

# Introduction the Digital Health Atlas

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# Investments into digital tools

- **Innovation** is a donor favorite - Increasing Investments into digital solutions
- **Ebola Epidemic** highlighted the challenges in many digital tools that weren't well understood and didn't interoperate
- Single purpose, **project-based** tools, didn't leverage or strengthen country digital systems



# Challenges at Country-level

- Inadequate **coordination** of investments and tool development;
- **Reinvention** of tools;
- **Insufficient description** of existing goals, functionality, and maturity of existing digital systems;
- Inability to **compare** digital systems in standardized way
- Inadequate **digital inventory** mechanisms that offer value to all stakeholders



# WHO Digital Health Atlas

Global web-platform to **curate digital health intervention** and shared asset info-structure investments, supporting **governments, donors, technologists and implementers** to map, monitor, and foster digital health investments planning to meet Government health goals





# Stakeholder Process

- UN IWG mHealth Innovators Grant mechanism to **standardize** describing, understanding maturity of digital tools
- BAA Interoperability Mechanism - co-collaboration begins to address interoperability needs
- **Stakeholder meetings** to define requirements, hear from MOH
- **Collaboration** with MOH, donors, and technologists in development



# What do we need to know?

- **Trusted source** for all information about digital health activities in country
- What does the digital product **do for health**?
- Who is the **product owner, and partners**?
- **Where** is the project operating in the country?
- What is the **technology**, functionality?
- How **mature** is the deployment?
- How does it **interoperate** with other systems?



Get MAPS Toolkit now!


Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed eiusmod tempor incididunt umque!

[DOWNLOAD PDF](#)



# Welcome!

(Editable) This Digital Health Atlas aims to strengthen the value and impact of digital health investments, improve coordination, and facilitate institutionalization and scale.

 Type and search project...

## Sign up

Whether you are an implementer, government, or financial investor, sign up below.

### 1. SELECT YOUR ROLE



☒ I'm an "Implementer"

How can I better scale-up my implementation? Are there tips and resources that I should consider to improve my implementation? Sign up to complete the digital version of the MAPS toolkit and track the performance of your implementation.



☐ I'm a "Financial Investor"

What are the different projects within your portfolio? Sign up to access a visual dashboard displaying the performance metrics of projects within your portfolio.

### What Digital Health Atlas is?



Digital Health Atlas offers technologists, implementers, financial investors, and governments a platform of tools and guidance to improve the use of digital innovations for health. Leverages the WHO mHealth Assessment and Planning for Scale (MAPS) Toolkit.



Using metrics from the WHO mHealth Assessment and Planning for Scale (MAPS) Toolkit, the DHA allows implementers to assess the maturity of



# Government Inventories

- Supports **Government led mechanisms to conduct inventories**
- Allows for trusted partner to **uniquely identify and categorize** specific investments using minimum data set, and then hand over to project to add details
- Additional **data fields and customization** will be added throughout 2017 with input from Governments, donors, and technologists
- Mechanism for Government to verify information





# Partner Organizations

- Supports **Organizations** to register and consistently describe the functions, goals, and scope of ICT deployments
- Supports **Donors** to identify emerging innovations, track portfolio of investments, and establish gaps for investment, opportunities for improved coordination
- Supports **technologists** to learn of other deployments, facilitating reuse and collaboration.



# Consistent Classifications

## Health System Challenge (HSC)

Need or problem to be addressed

## Digital Health Intervention (DHI)

Digital functionality for addressing the Health System Challenge

## Application Category

ICT system that delivers one or more of the Digital Health Interventions

Insufficient supply of commodities

3.2.1

Manage inventory and distribution of health commodities

3.2.2

Notify stock levels of health commodities

» Logistics Management Information System

Healthcare provider's poor adherence to clinical guidelines

2.3.1

Provide prompts and alerts based according to protocol

2.3.2

Provide checklist according to protocol

2.5.2

Communication and performance feedback to healthcare provider

2.7.2

Scheduling of health worker activities

» Telemedicine systems  
» Decision support systems

Lack of access to information or data

2.2.4

Routine health indicator data collection and management

4.1.2

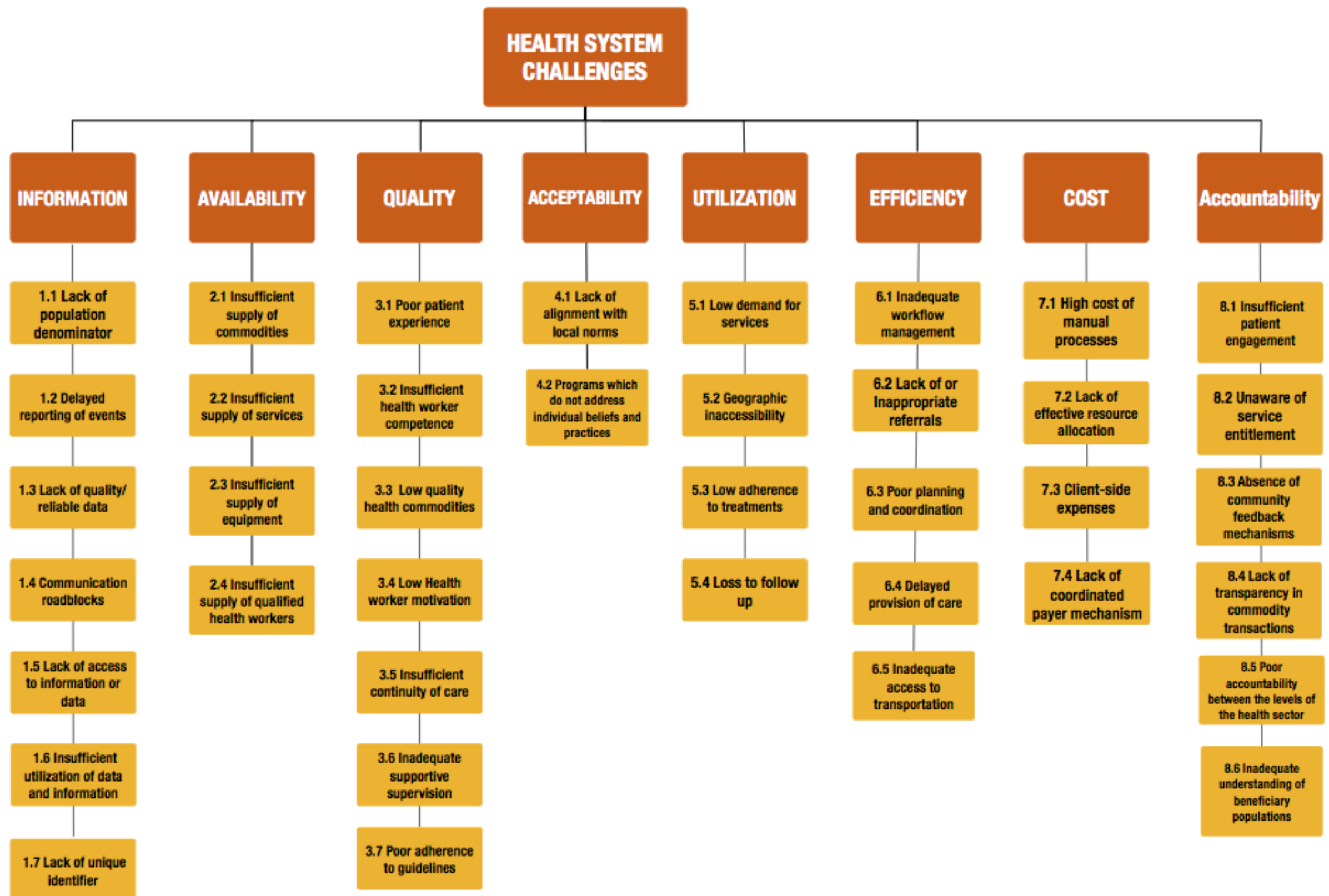
Data storage and aggregation

4.1.3

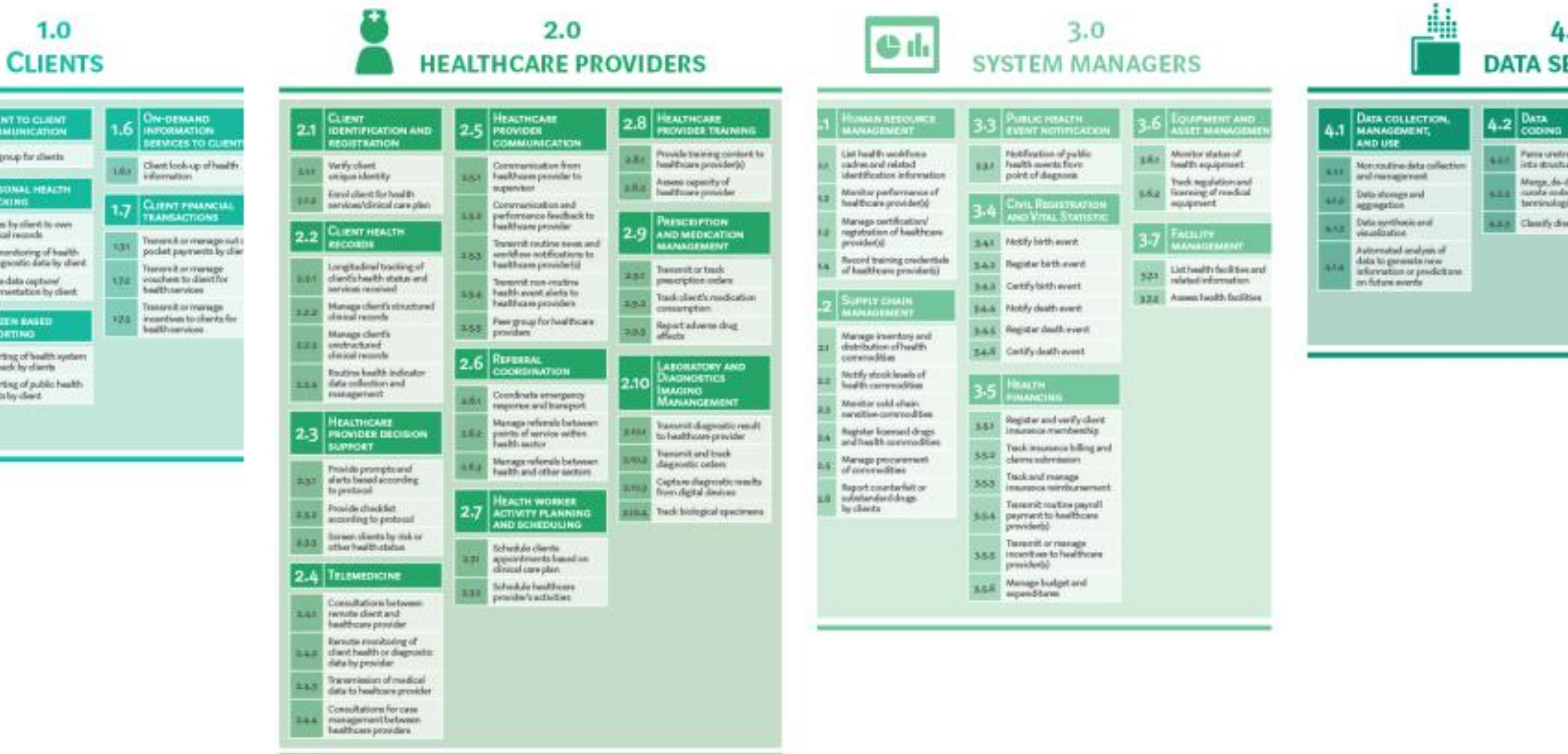
Data synthesis and visualizations

» Health Management Information System (HMIS)  
» Electronic Medical Record  
» Identification registries and directories

# Health Challenges Targeted

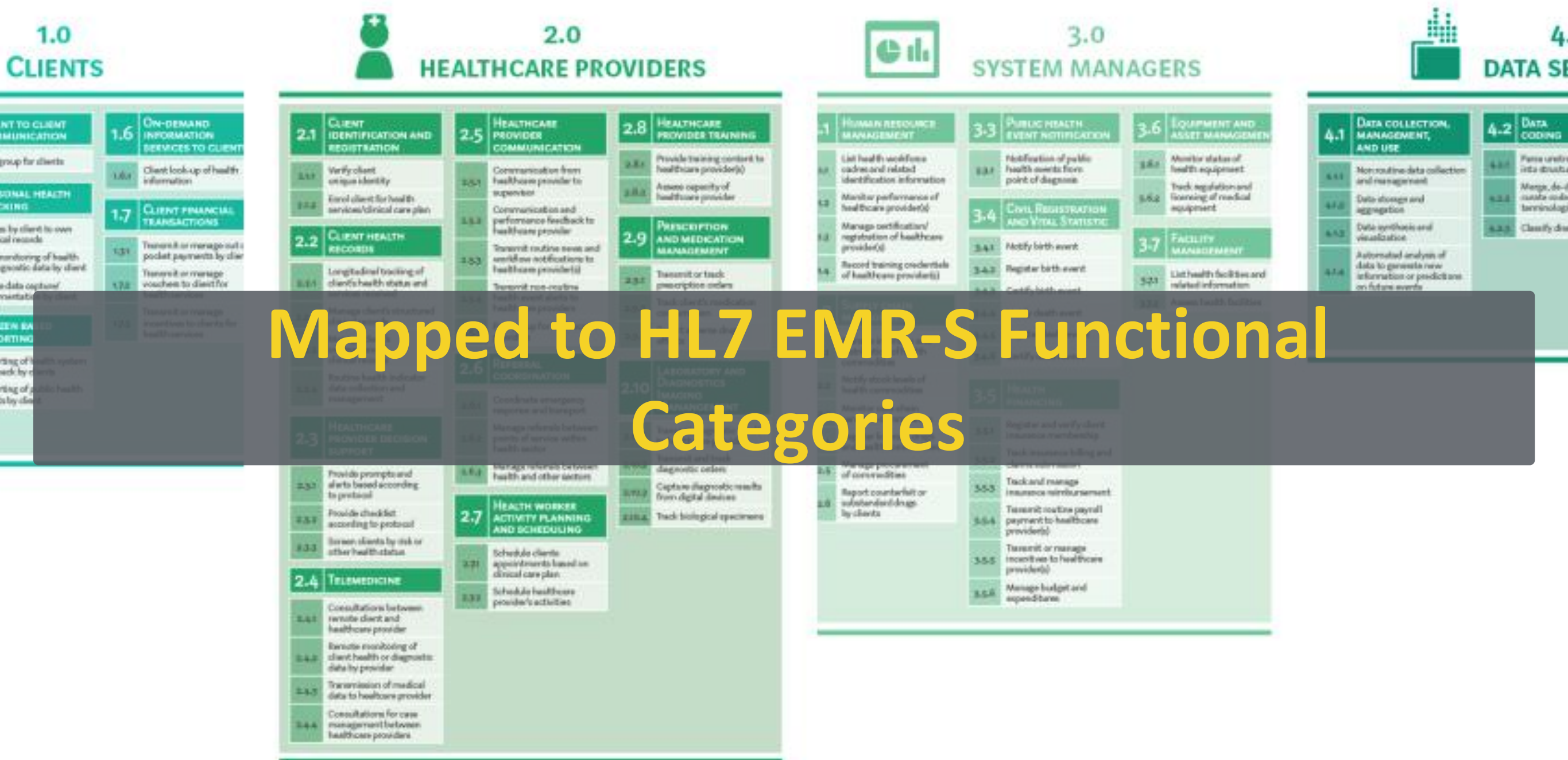


# What functions does the digital system perform?



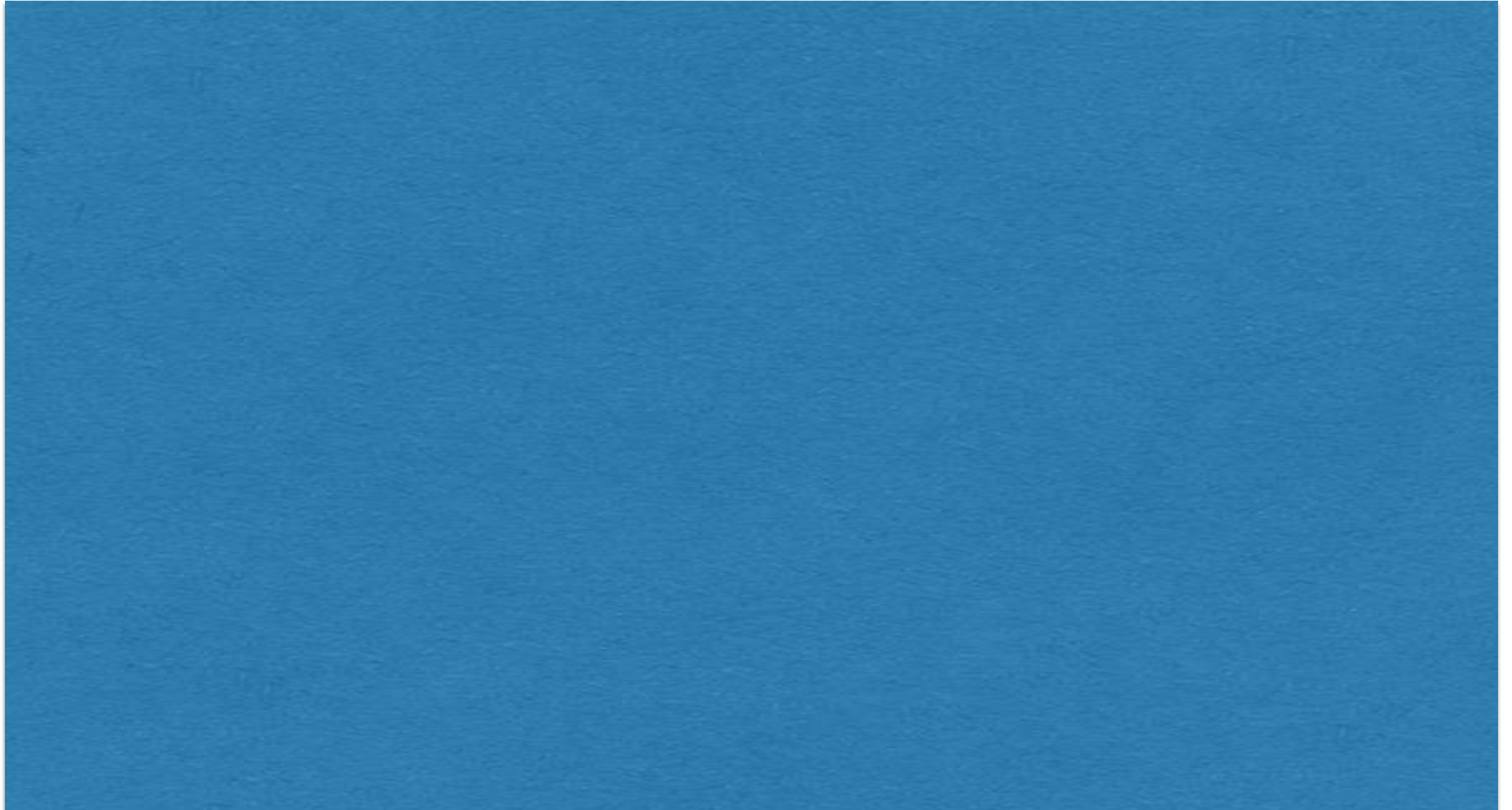


# Digital Health Intervention Classifications





# Application Categories





## COUNTRY LEVEL VIEW

MAP VIEW

LIST VIEW

Sierra Leone



Area name #1234

**Helen Keller International**  
Routine nutrition monitoring

**eHealth Africa**  
SENSE contact tracing

**GOAL International**  
SENSE contact tracing

**23 projects**  
Click on district to show all!

**i** How to use this map?

Hover on districts shows list the list of active projects in an area.

Click on a district to enlarge and browse the list of projects.



## COUNTRY LEVEL VIEW

MAP VIEW

LIST VIEW

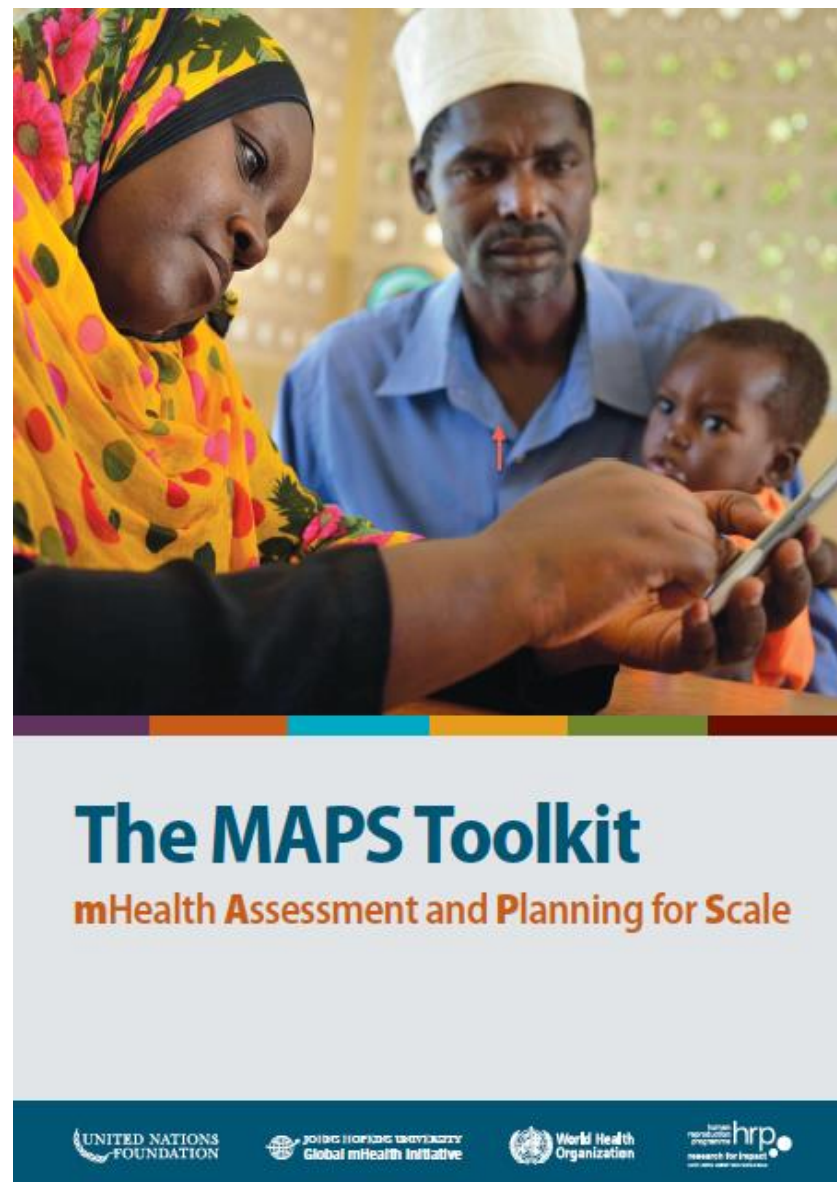
Sierra Leone



★ My projects

Project name ▾	Country	Organization name	Donor name	I'm following	I've funded
★ eHealth Africa	Sierra Leona	Organization name	Donor name	✓	✓
GOAL International	Sierra Leona	Adipisici Elit	Adipisici Sed Magna		
★ Helen Keller International	Sierra Leona	Sed Eiusmod Tempor	Sed Eiusmod	✓	✓
Lorem ipsum dolor	Sierra Leona	Incidunt Labore	Tempor		✓
Sit amet Consectetur	Sierra Leona	Et Dolore Magna	Incidunt Labore		
Adipisici Elit	Sierra Leona	Aliqua	Et Dolore Magna		
Sed Eiusmod Tempor	Sierra Leona	Sed Eiusmod Tempor	Aliqua Tempor	✓	
★ Incidunt Ut Labore	Sierra Leona	Incidunt Ut	Sed Eiusmod		
Et Dolore Magna	Sierra Leona	Et Dolore Magna	Incidunt Tempor		
Aliqua Lorem	Sierra Leona	Lorem Ipsum	Donor name	✓	✓
Sed Eiusmod Tempor	Sierra Leona	Organization name	Adipisici Sed Magna		
Incidunt Ut Labore	Sierra Leona	Adipisici Elit	Sed Eiusmod	✓	
Et Dolore Magna	Sierra Leona	Et Dolore Magna	Incidunt Magna		
Aliqua Lorem	Sierra Leona	Aliqua	Aliqua Eiusmod		

# Assessment and Planning for Scale (MAPS) toolkit for Digital Project Maturity Assessment



- MAPS provides **actionable information** to improve digital projects' capacity to scale up
- Informed by WHO, UN IWG Catalytic Grant Mechanism
- MAPS has **two main goals**:
  1. Assess Maturity
  2. Plan

## STATISTICS



2.

Version

Push to save your current stats as a new version:



SNAPSHOT



1

Donors

## PROJECT DETAILS

### OVERVIEW

### AXIS

### DOMAINS

### TECHNOLOGY

### RESOURCES

	<b>GROUNDWORK</b> P <div><div></div></div> S <div><div></div></div>	Parameters Of Scale S <div><div></div></div>	Contextual Environment S <div><div></div></div>	Scientific Basis S <div><div></div></div>	
	<b>PARTNERSHIPS</b> P <div><div></div></div> S <div><div></div></div>	Strategic Engagement	Partnership Sustainability		
	<b>FINANCIAL HEALTH</b> P <div><div></div></div> S <div><div></div></div>	Financial Management S <div><div></div></div>	Financial Model S <div><div></div></div>		
	<b>TECHNOLOGY &amp; ARCHITECTURE</b> P <div><div></div></div> S <div><div></div></div>	Data	Interoperability	Adaptability	
	<b>OPERATIONS</b> P <div><div></div></div> S <div><div></div></div>	Personnel	Training And Support	Outreach And Sensitization	Contingency Planning
	<b>MONITORING &amp; EVALUATION</b> P <div><div></div></div> S <div><div></div></div>	Process Monitoring	Evaluation Research		

Already started
 Not started yet
 P - Progress
 S - Score
  0-49%
  50-99%
  100%

## PROJECT PERFORMANCE

### GEOGRAPHICAL VIEW

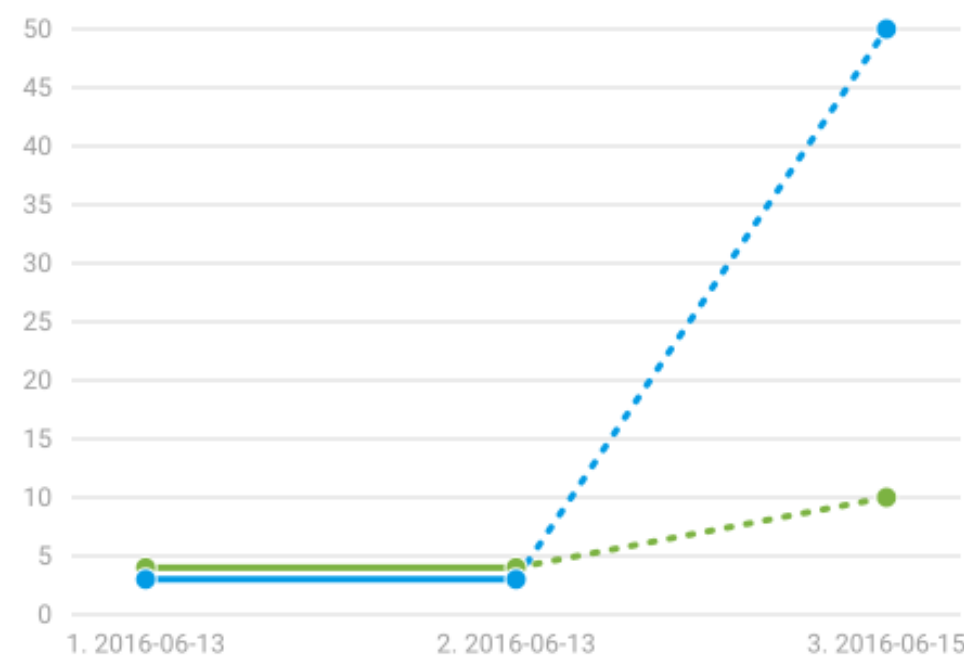
### HISTORICAL VIEW

— closed






..... in progress


● Facilities

● Health Workers



# Curated guidance and knowledge sharing

**Digital Health Atlas**  COUNTRY VIEW  DASHBOARD  PLANNING & GUIDANCE   + NEW PROJECT


**PATH Immunization Registry** ★ ▼ UUID  
KE95654b50x13 VERSION  
1. (May 2, 2017) ORGANIZATION  
WHO CONTACT PERSON  
Maeghan Orton  EMAIL

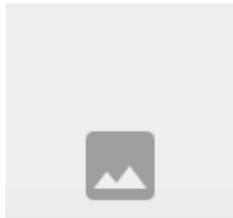
EDIT PROJECT UPDATE SCORE SUMMARY SCORE [SHARE PUBLIC LINK](#)

## Planning & Guidance


SHOW ALL LESSONS & TIPS **RESOURCES** EXPERIENCES

Specific examples demonstrating how different implementers have approached and addressed some of the major challenges to scaling up.








### WHO M&E toolkit

 in Monitoring & Evaluation - Evaluation Research


WHO document on digital health Monitoring and evaluation [http://bit.ly/who\\_me\\_download](http://bit.ly/who_me_download)


RESOURCES



Apply filters to list:

 ☐ Groundwork

 ☐ Partnership



# Use Case: Country Planning

- **Use Case:** Understanding current assets against future needs, to develop **digital health investment plan**
- DHA has been developed as a **complement to WHO guidelines** and online digital health implementation Guide due in Q2 2018





# Digital Health Atlas

## Walk Through Demo



# DHA Status

- Version 0.5 was fully functional and could be used for project registration, geographic scope, maturity assessment, and scalability progress tracking
- **Version 1.0 has been released in July, focused on inventory use case: detailing country digital health investment functions and health focus**
- Target countries are starting to use the DHA for country level inventory of digital HIS investments
- Version 2 will incorporate results of requirements gathering and capacity building from Asian, African and HDC countries - in Q3 2017.

# Tanzania Workshop

- Multi-country user requirements gathering (call)
- Regional Workshop, July 2017

## Workshop Goals

1. **To review current functionality** of the Digital Health Atlas (DHA) platform from MOH perspective
2. **To review country-specific customization needs**, and train participants in customizing the DHA
3. **To gain feedback from participants to ensure DHA** is usable and valuable for their use cases
4. **To review and find consensus** on standard operating procedures and recommended country-level governance of the DHA





# Prioritized Roadmap

- Use cases clarified and combined across countries
- Voting and Ranking of priorities



	Scoring (0-10)	Level of Effort 1: Hours 2: Days 3: Weeks 4: Months	Use Case Owners	Countries that voted Green
4. Validation of projects / Data integrity handling. Process for [MOH] approval before data is publically published	10.0	3	Nigeria, Sierra Leone	Kenya Liberia Malawi Nigeria Sierra Leone Uganda Tanzania WAHO
11. Validation error: Improve usability around seeing the error	9.4	2	Liberia, Malawi	Liberia Malawi Nigeria Sierra Leone Uganda Tanzania WAHO
8. Adjusting map hierarchies (e.g. if country can admin can change the map level)	9.3	2	Liberia, Malawi	Kenya Liberia Malawi Sierra Leone Uganda Tanzania
16. Verify email before proceeding to login	9.3	1	No use case	Kenya Liberia Malawi Nigeria Uganda Tanzania
22. Autosave while progressing with project entry data	8.8	3	Nigeria, Kenya	Kenya Liberia Sierra Leone Uganda Tanzania WAHO
1. Compatibility with other internet browsers	8.6	3	No use case	Kenya Liberia Malawi Uganda Tanzania
25. Dropdown as country fields	8.1	3	Nigeria, Uganda	Liberia Malawi Nigeria Uganda Tanzania
26. Add scroll bar for calendar	8.1	2	No use case	Kenya Liberia Sierra Leone Tanzania WAHO
5. Draft and publish projects (e.g. projects are entered and saved, but to continue working on at another time until user confirms to publish)	7.9	3	Sierra Leone, Uganda,	Liberia Nigeria Sierra Leone Uganda
9. Have multiple map levels, such as National level, Sub-Level_1, Sub-level_2 etc	7.5	4	Nigeria, Kenya	Kenya Liberia Malawi Nigeria Uganda

+

≡

Voting ▾

Ranking ▾

Launch Requirements ▾



# DHA Next Steps

- Rolling monthly releases with prioritized features
  - January 2018  
(internationalization, country validation workflows)
  - February 2018  
(three-tier country admin hierarchy, ODK2 support)
- Regional Workshop (Spring 2018)



# Double Global Good

- Digital Health Atlas was designed to be a country digital health inventory platform to reduce overall cost and make data available for planning and decision making
- Digital Square will look at Digital Health Atlas as part of investment prioritization framework





# As government, how do I use DHA?

- Set up a **meeting with WHO and Digital Square** by emailing [digitalhealthatlas@gmail.com](mailto:digitalhealthatlas@gmail.com).
- Meet within MOH to **customize data needs**.
- **Establish country administrators** who can validate projects added by implementing partners.
- Plan **national rollout and standard operating procedures (SOPs)**, available from [digitalhealthatlas@gmail.com](mailto:digitalhealthatlas@gmail.com).
- **Launch and monitor** the use of DHA to support oversight and coordination of digital health investments.

COUNTRY MAP ADMIN

MAP SHAPEFILE Country\_map\_CostaRica\_20171111.dat

Update file

COUNTRY MAP



COSTA RICA



SUBLEVEL 1 \*

Select form list



SUBLEVEL 2

Select from list

FACILITIES

Import from CSV



# As an implementer, how do I use DHA?

- **Register** as a user in the DHA at [www.digitalhealthatlas.org](http://www.digitalhealthatlas.org)
- **Enter project information** onto the website
- Manage and assess your projects through use of the **digital MAPS Toolkit**.



# As a donor, how do I use DHA?

- **Contribute to national efforts** to institutionalize the use of DHA among stakeholders
- Gain **recognition** for country level contributions.

## Global support to DHA



## In-country support to DHA



# For more information

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