



**USAID**  
FROM THE AMERICAN PEOPLE

aternal and Child  
Survival Program

# Digital Health Overview

September 21, 2017

# Common Digital Health Interventions



Labrique AB, Vasudevan L, Kochi E, Fabricant R, Mehl G. mHealth innovations as health system strengthening tools: 12 common applications and a visual framework. Glob Health Sci Pract. 2013;1(2):160-171. <http://dx.doi.org/10.9745/GHSP-D-13-00031>.

# A few challenges DH tools can help address

- Fragmentation
- Quality of care
- Data Burden
- New Indicators
- New medicines
- Shifting disease burden

# Types of forms and common data flows

## Sick child/client recording forms

## Registers

## Summary forms

# Facility

[illegible]

NHIMS QUARTERLY FORM FOR HEALTH FACILITIES									
(Revision: 2015)									
<b>Identification</b>		<b>Quarterly Period</b>							
Health Facility Name		Jan-Mar		Apr-Jun		Jul-Sep		Oct-Dec	
Type of Health Facility		Type							
USA		Public							
Facility Code		Hospital		Nursing		Clinic		Other	
<div style="display: flex; justify-content: space-between;"> <span>Facility Code</span> <span> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </span> </div>									
<b>Health Service Offered</b>									
	1. Do you offer Antenatal care services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	2. Do you offer delivery services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	3. Do you offer abortion services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	4. Do you offer postnatal care services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	5. Do you offer growth monitoring / immunization services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	6. Do you provide oral contraceptive pills?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	7. Do you provide emergency contraception of 200mcg?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	8. Do you offer family planning services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	9. Do you offer a support group?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	10. Do you provide counseling and referring to RHCS?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	11. Do you offer prevention of mother to child transmission of HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	12. Do you provide HIV testing services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	13. Do you offer laboratory services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	14. Do you offer TB/HIV services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	15. Do you offer TB screening services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	16. Do you offer TB treatment services?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
<b>Monitoring and Reporting Supervision</b>									
	17. Do you receive medical and nursing supervision from DHQ/indispensable by health facility?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	18. Do you receive medical and nursing supervision from DHQ/indispensable by health facility? (in large village health facility only)	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	19. Do you receive treatment (from health facility) from health facility?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
<b>Capacity Building</b>									
	20. Health Care Workers (HCHWs) of health facilities have been trained on integrated health care services in health facility?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	21. Health Care Workers (HCHWs) of health facilities have been trained on integrated health care services in health facility?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	22. Health facility staff have been trained on integrated health care services in health facility?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	23. Health facility staff have been trained on integrated health care services in health facility?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
<b>Service Delivery and Community Participation</b>									
	24. Do you provide 24x7 health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	25. Do you provide health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	26. Do you provide health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	27. Do you provide health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	28. Do you provide health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	29. Do you provide health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
	30. Do you provide health services provided services in health facility during operating hours?	Yes <input type="checkbox"/> No <input type="checkbox"/>							
<b>Completed by</b>		Name		Signature		Date			
Initiated by		Designation		Signature		Date			



The screenshot shows the AWS IAM console interface. On the left, the navigation menu is visible with 'Groups' selected. The main content area displays a list of groups under the heading 'Groups (1)'. The first group, 'AWS-ReadOnlyAccess', is selected, and its details are shown on the right. The details include the group name, type (AWS managed), and a list of permissions. The 'Permissions' section shows that the group has the 'AWS-ReadOnlyAccess' policy attached.

***CB-HMIS data  
flow example:***

# DHIS2

[illegible][illegible]

COMMUNITY VILLAGE LEVEL HEALTH INFORMATION SYSTEM							
COMMUNITY MONTHLY SUMMARY FORM							
<b>Identification</b>							
Community Name				Year			
Facilitator Name				Month			
Health Service							
<b>Human Resources</b>							
	CHW/HC	CHWS	VNPs	CNPs	PNPs	CHDs	Other
Community Health personnel's capacity							
Number							
Training							
Community Health personnel's workload							
Number							
Workload							
Other Village members & Client loads							
Number							
Workload							
<b>Community Integrated Disease Notification (Community IDDR)</b>							
							<b>TOTAL</b>
Diseases/ non cases							
Suspected measles cases							
Suspected pneumonia cases							
Suspected malaria cases							
Confirmed malaria cases							
Suspected tetanus cases							
Suspected diphtheria cases							
Acute/diarrhea cases							
Suspected diarrhoeal cases							
Suspected acute conjunctivitis cases							
Suspected wound/infected cases							
Suspected STI cases							
Cough cases – 3 weeks							
Suspected rabies cases							
Herdling in home cases							
Lymphadenitis cases							
Ergonomics cases							
Eye or blindness cases							
HIV/AIDS cases							
Whispering cases							
Hemorrhoids cases							
Onychocryptosis cases							
Schistosomiasis cases							

# Community

# Types of forms and common data flows

Sick child/client  
recording forms

Registers

Summary forms

## Facility



	Aug 2013	Jul 2013
<b>Patients</b>	2	
	1 0 1 0	
<b>Subtotals</b>	1 0 1 0	
New registrations	1 0 1 0	
Returning patients	0 0 0 0	
<b>Home treatment</b>	2	
	1 0 1 0	
<b>Subtotals</b>	1 0 1 0	
Referred	0	
Referrals lack of medicine	0	

## Interoperability Layer

Authentication ILR Entity Matching  
Interoperability Layer

*Future data  
flow example*



	Aug 2013	Jul 2013
<b>Patients</b>	2	
	1 0 1 0	
<b>Subtotals</b>	1 0 1 0	
New registrations	1 0 1 0	
Returning patients	0 0 0 0	
<b>Home treatment</b>	2	
	1 0 1 0	
<b>Subtotals</b>	1 0 1 0	
Referred	0	
Referrals lack of medicine	0	



**DHIS2**

## Community

**1** Design with the User

**2** Understand the Existing Ecosystem

**3** Design for Scale

**4** Build for Sustainability

**5** Be Data Driven

**6** Use Open Standards, Open Data,  
Open Source, and Open Innovation

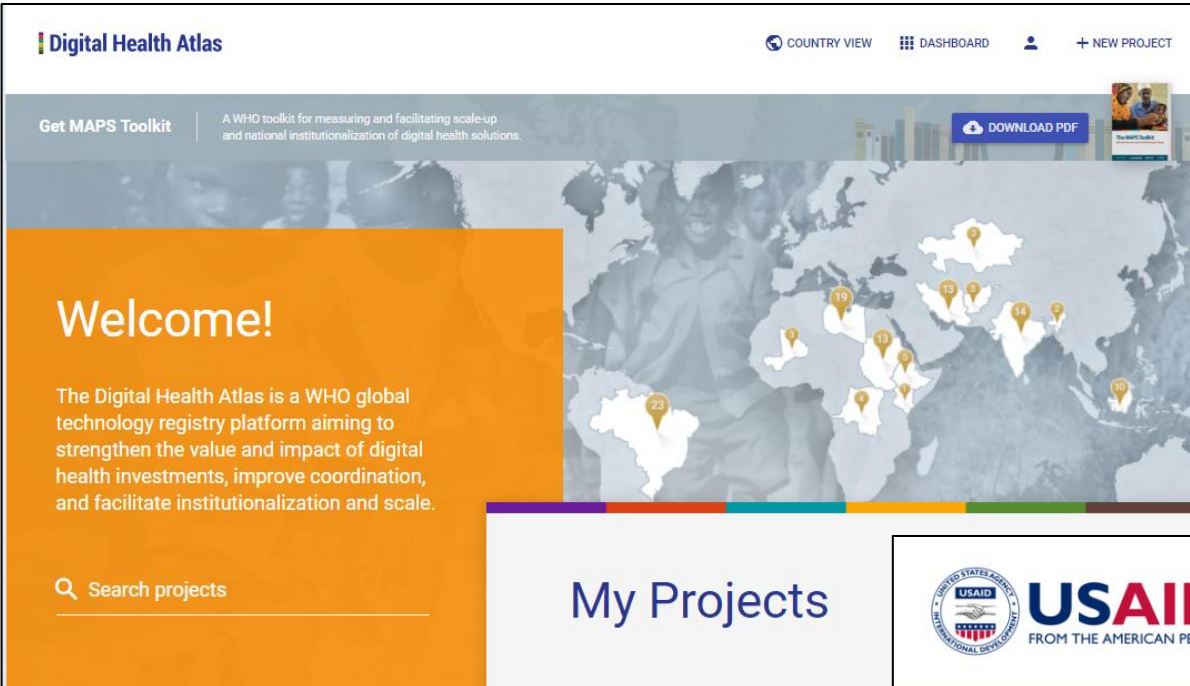
**7** Reuse and Improve

**8** Address Privacy & Security

**9** Be Collaborative



# Resources



Final site

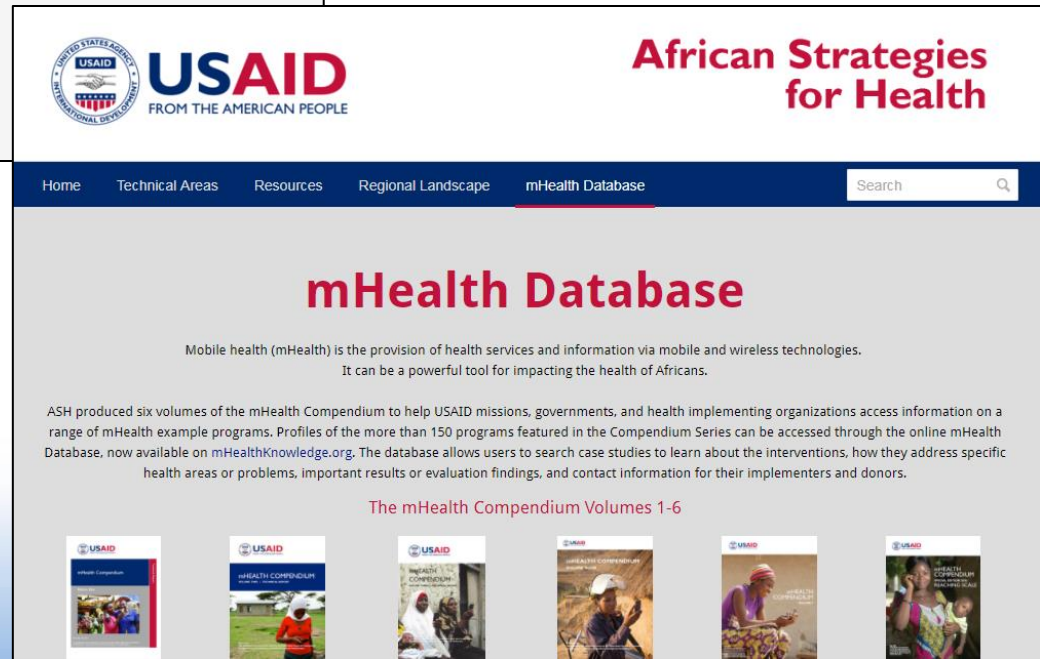
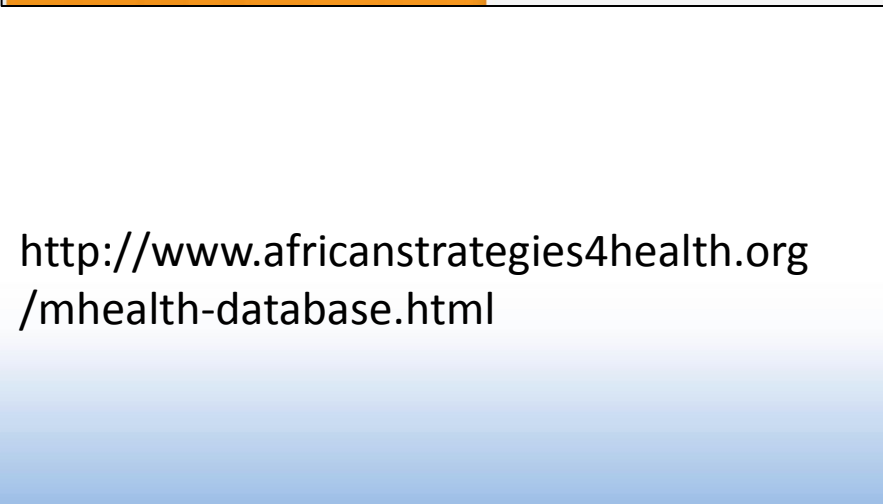
[digitalhealthatlas.org](https://digitalhealthatlas.org)

Test site

[www.qa.whomaps.pulilab.com](http://www.qa.whomaps.pulilab.com)

Learn more

[digitalhealthatlas@gmail.com](mailto:digitalhealthatlas@gmail.com)



<http://www.africanstrategies4health.org/mhealth-database.html>

# HW Training Content



Connecting Frontline Health Workers to resources, organize content into courses, and share



**Family Planning**  
96 resources



**Antenatal**  
35 resources



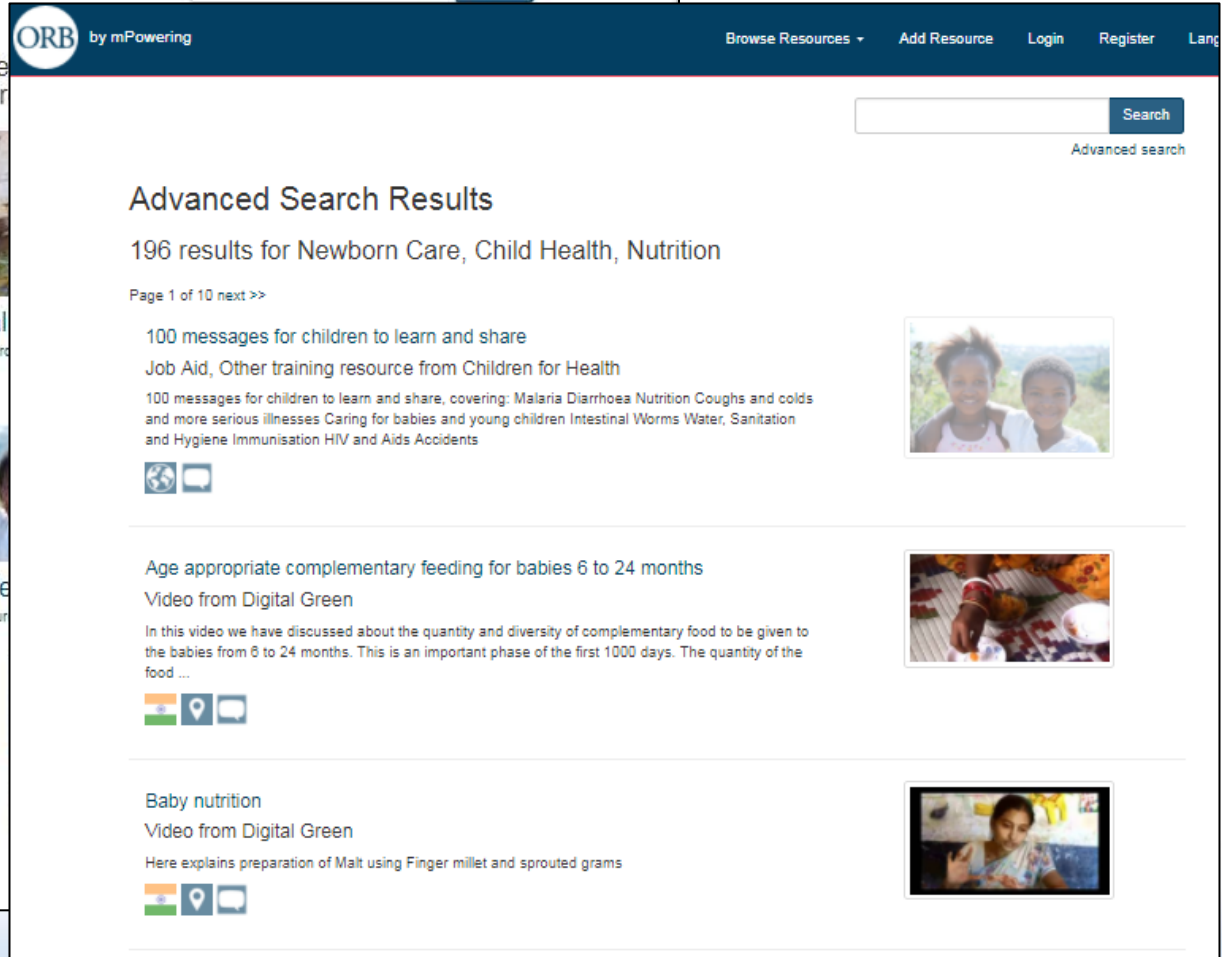
**Newborn Care**  
90 resources



**Child Health**  
114 resources



**Zika**  
40 resources





# Digital Circuit

- Ask questions
- Explain your context
- Understand cost implications
- Think about what existing systems could be combined on single platform or single device

For more information, please visit  
**[www.mcspprogram.org](http://www.mcspprogram.org)**

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