



Advancing community health worldwide.

# COVID-19 Response Coordination Call

## Digital Technology

March 27, 2020

# ***CORE Group Community-Based e-surveillance for COVID-19 Response***

Presentation by

**AHMED ARALE**

**CORE Group Polio & GHS Project**

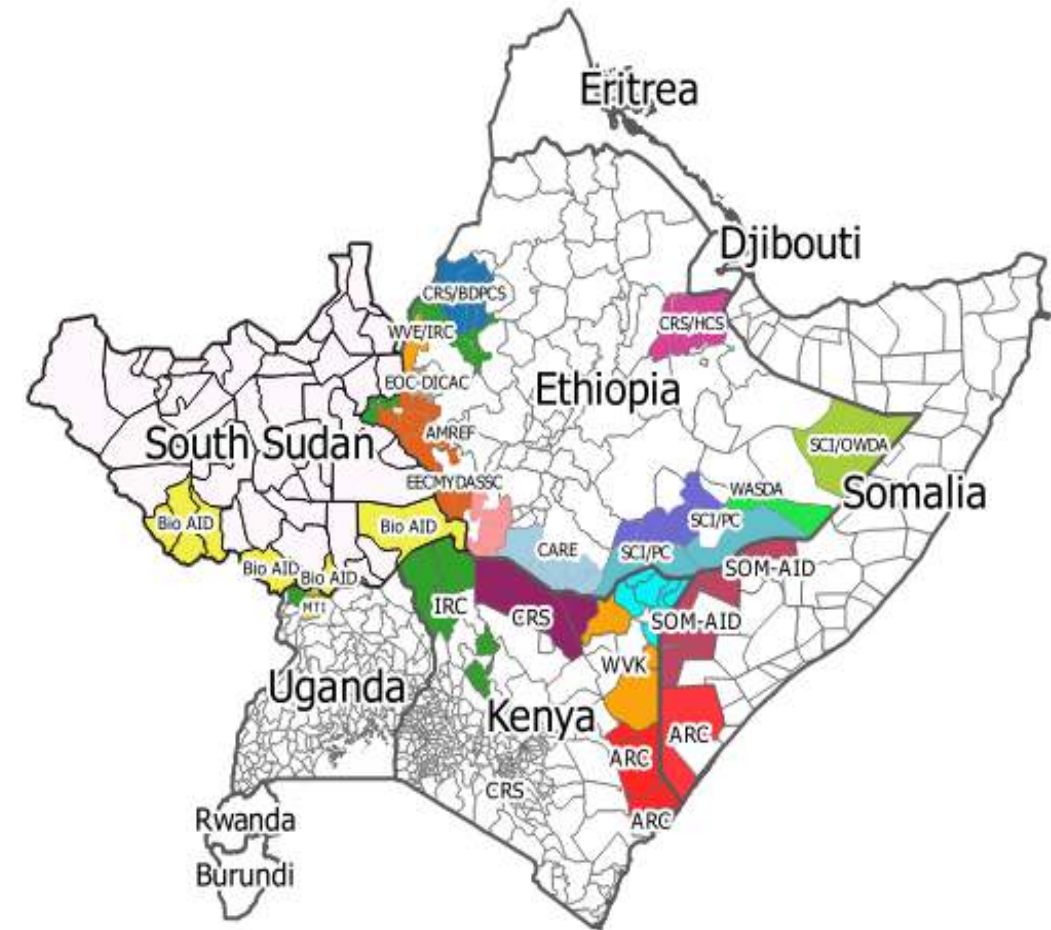
**March 27, 2020**



# CORE Group Polio & GHSA Project (CGP-GHS) HOA

Contribute to global AFP & GHSA priority zoonotic disease surveillance in hard to reach nomadic and cross border communities.

Country	INGO	LNGO	Region/ Counties	Districts/ Sub-counties
Ethiopia	5	6	5	85
South Sudan	-	5	4	37
Kenya	5	0	7	21
Somalia	1	1	3	9
Uganda	2	-	2	4
Total	13	12	21	156



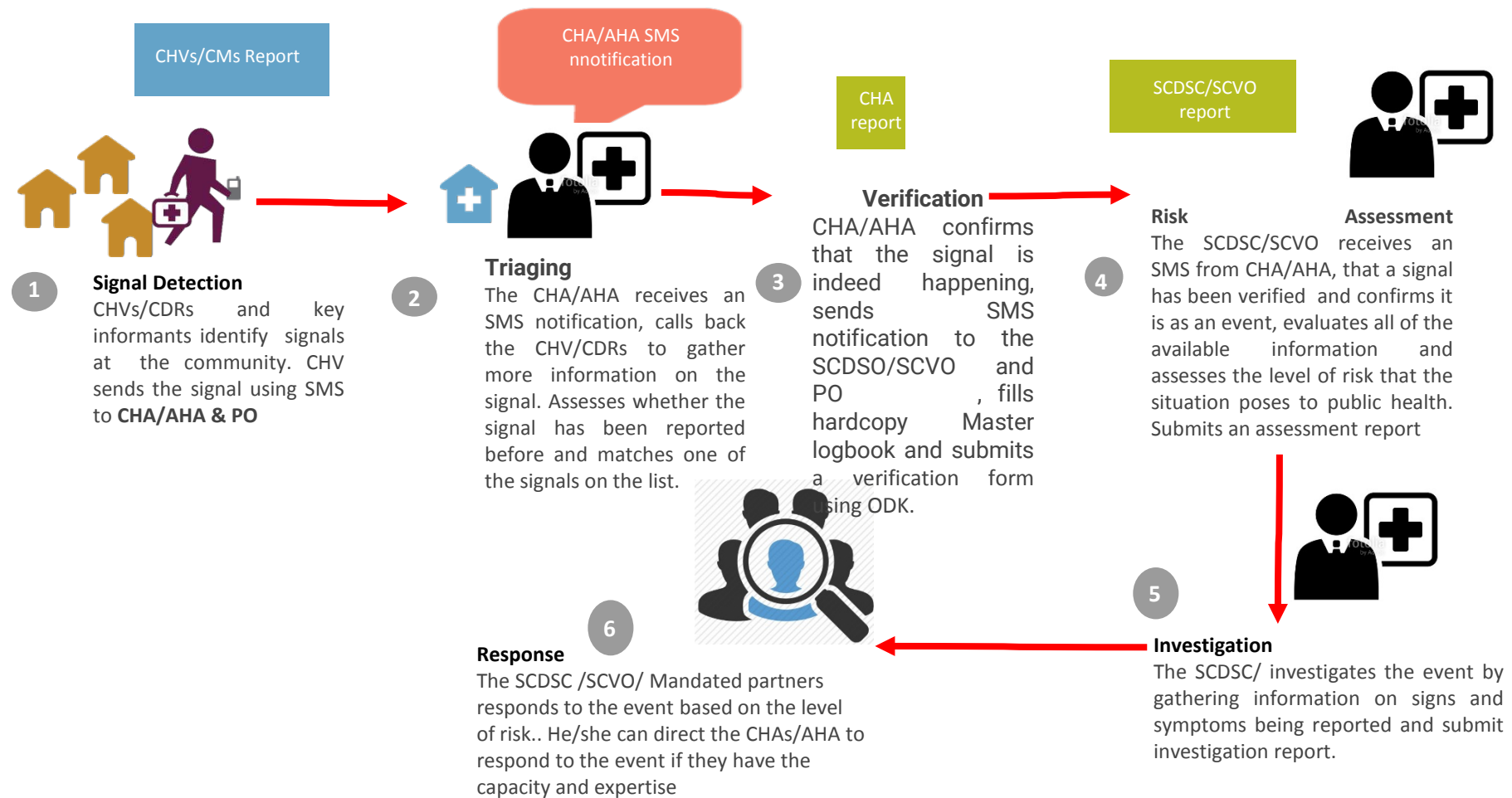
# Community Based e-surveillance

- Kenya has a 91% penetration of mobile subscriptions compared to Africa's 80%.
- Community-Based Surveillance helps to detect diseases early and take appropriate action in a timely manner to prevent further spread of the disease, minimize disabilities or deaths, mitigate against future occurrence of the disease, influence health-seeking behaviors and helps to understand local diseases affecting them
- Focus on active case search for AFP suspect cases, Measles, NNT and 5 priority GHSA zoonotic diseases (Anthrax, Trypanosomiasis, Rabies, RVE, Brucellosis)
- Use of CHVs who are part of the existing community health units, supervised and report to the catchment health facility.



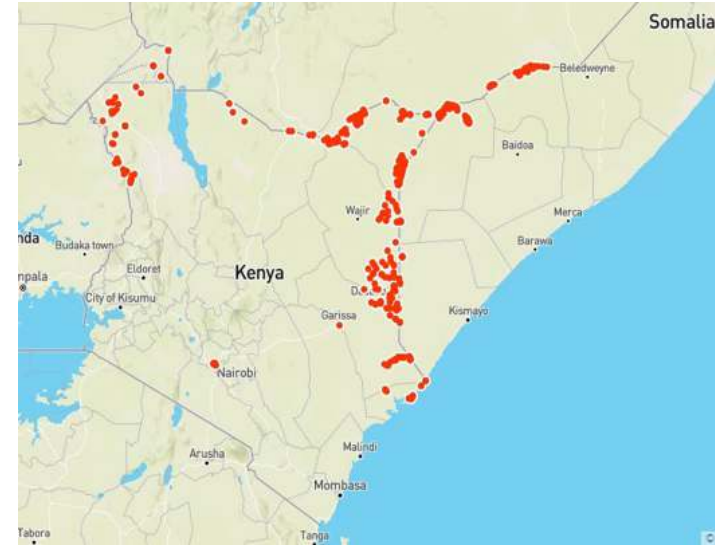


# Community Based Surveillance Workflow



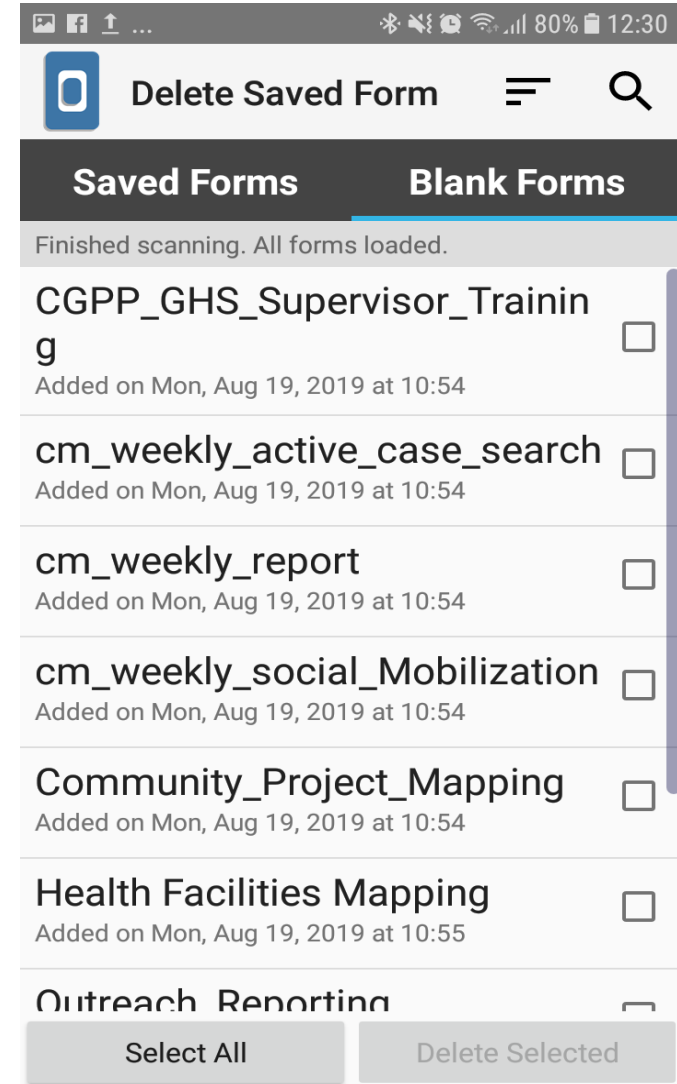
# Mobile Data Collection (ODK)

- CHVs trained on the use of Mobile phones to capture timely and accurate information on both human and animal related conditions.
- Use of Open Data Kit (ODK) & KOBO collect App, a free & open-source set of tools.
- Use of ONA platform as a database: A paid up platform for mobile data collection and visualization.
- Timely and reliable data, geocodes of the reported conditions, the system works offline, easy and does not require technical knowledge.
- Digitized reporting tools: immediate signals, weekly report, outreach, social mobilization, and verification too to be used by the supervisor.
- The near-real-time system involves the CHVs detecting signal and alerting the Supervisor (CHA/AHA), who then call back to verify the signals to confirm if it's an event or not.



# Data collection process

- **CHVs** detect signals that matches Community case definition and initiate the following steps:
- **STEP 1: RECORD** the details on the **CBS SIGNAL RECORD Sheet** and **ONA** Electronic tools
- **STEP 2: REPORT** signal immediately to the supervisor through SMS
- **STEP 3: SUPPORT:** Provide health talk to the family on ways of preventing and managing the event
- **Use the CGP-GHS Flip Chart:** Follow the instruction to provide care to the person, household and community to curb the spread.
- **ZERO REPORTING** If no Signals are encountered during your activities, you must send a ZERO Report on the KOBO tool. A ZERO report is sent as signal code “0”
- **RUMOR REPORTING:** RECORD the suggestions, rumors, fears etc. that you hear in your community & Share with CBS Supervisor.



The screenshot shows the KoboCollect mobile app interface. At the top, there's a status bar with icons for social media, a share icon, and system status (80% battery, 12:30). Below the status bar is a header with a blue icon, the text "Delete Saved Form", and a search icon. The main content area has two tabs: "Saved Forms" (selected) and "Blank Forms". Below the tabs, a message says "Finished scanning. All forms loaded." A list of saved forms follows, each with a checkbox on the right and a timestamp below the title:

- CGPP\_GHS\_Supervisor\_Training (Added on Mon, Aug 19, 2019 at 10:54)
- cm\_weekly\_active\_case\_search (Added on Mon, Aug 19, 2019 at 10:54)
- cm\_weekly\_report (Added on Mon, Aug 19, 2019 at 10:54)
- cm\_weekly\_social\_Mobilization (Added on Mon, Aug 19, 2019 at 10:54)
- Community\_Project\_Mapping (Added on Mon, Aug 19, 2019 at 10:54)
- Health Facilities Mapping (Added on Mon, Aug 19, 2019 at 10:55)
- Outreach Reporting

At the bottom, there are two buttons: "Select All" and "Delete Selected".

## CBS Alerts- Human

Volunteer ID#VillageID#Alert

Example : 4#3#7

Volunteer ID		Village ID		Code	Alert
#	Name	#	Village Name	HUMAN	
				1	A newborn baby who dies within the first month of life.
				3	Any person with hotness of the body and rash
				7	Any child less than 15 years with a sudden onset of weakness of leg(s) and/or arm(s) not caused by injury
				11	Any person 5 years of age or more with lots of watery diarrhea.
				13	Hotness of the body, Cough and Breathing problem in a person who had travelled from a Country/Territory / Areas community reporting local transmission of Covid19 OR Two or more people who have interacted having hotness of the body, cough and breathing problem
				41	Unusual illness or deaths of people

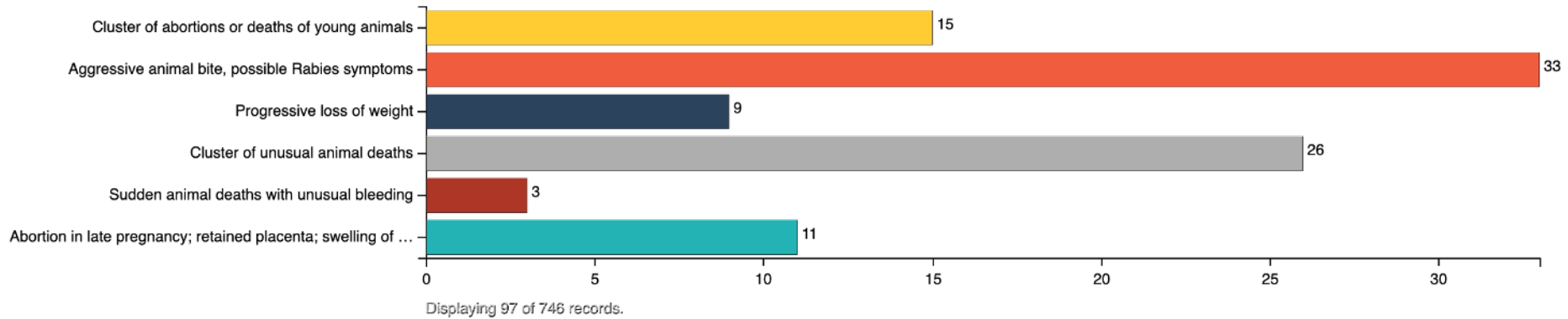
## CBS Alerts- Animal

Volunteer ID		Village ID		Code	Alert
#	Name	#	Village Name	ANIMALS	
				61	Cluster of livestock abortions
				63	Agressive animal bite, Rabies symptoms
				65	Loss of weight, shedding tears, fever
				67	Cluster of unusual animal deaths
				69	Deaths with unusual bleeding
				ZERO REPORT	
				0	I am active , but have not seen alert this week

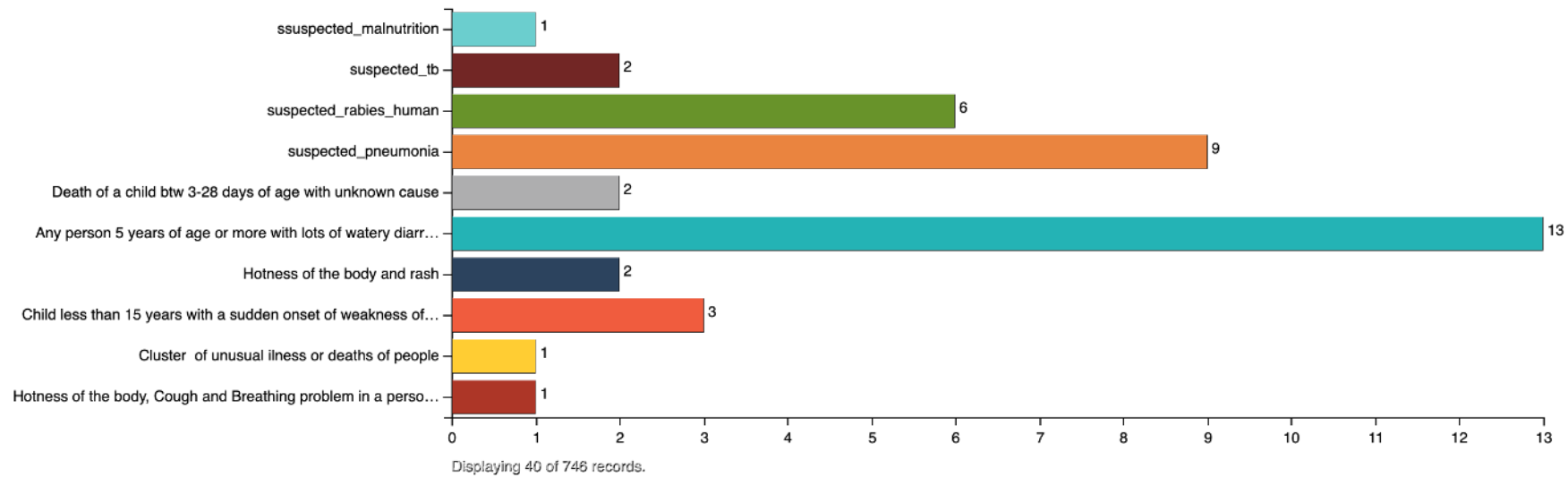


# Dashboard

## Which animal alert are you reporting?



## Which Human illness alert are you reporting?



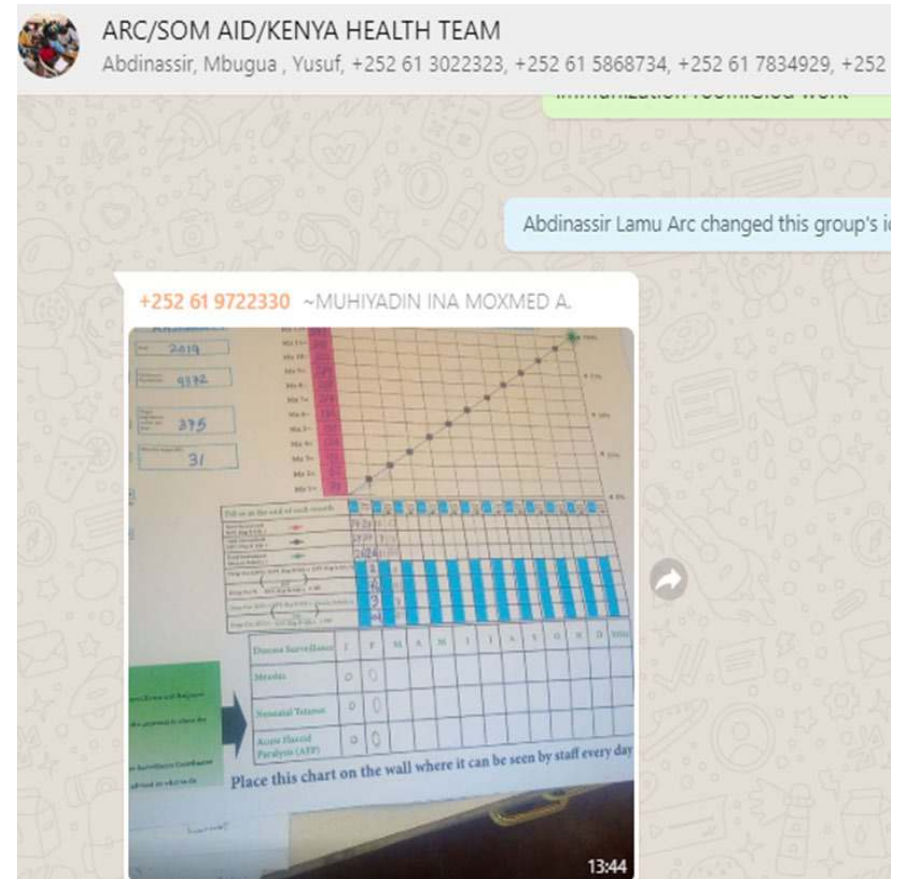
# Challenges

- For COVID-19, How do we protect the communities and the volunteers and also get the surveillance reports & health messages out?



# Way forward

- Use of **social media e.g. WhatsApp** in providing information to the households and communities on COVID-19.
- Training of the community volunteers through the mobile phones without bringing together in big groups
- Develop protocols House to House visits for COVID-19 surveillance & response for community volunteers



# CGPP IMPLEMENTING PARTNERS IN KENYA



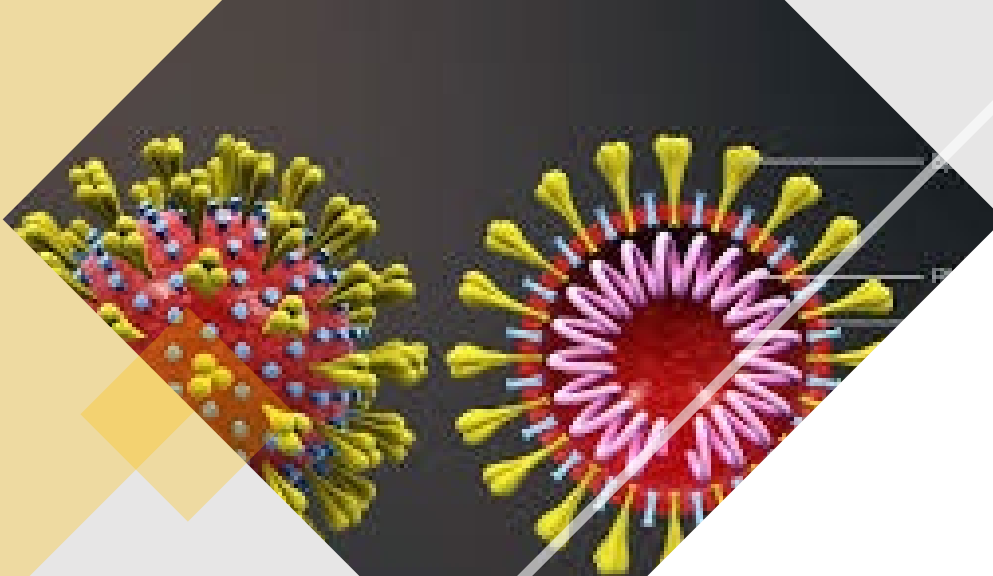
**Partnership avoids duplication of Efforts, saves resources, enhances development and brings change**

World Vision





Zenysis Technologies



# National COVID-19 – Disease Surveillance System



Dr Neranga Liyanaarachchi  
(MBBS, PgDiP, MSc, MD, TOGAF)  
Ministry of Health, Sri Lanka

## Current Opportunity



Everyone has only one goal; one priority: to combat the disease



The intra- and extra-sectoral collaboration



Multiple partners to offer support: Development partners/private sector/ NGOs/ etc.



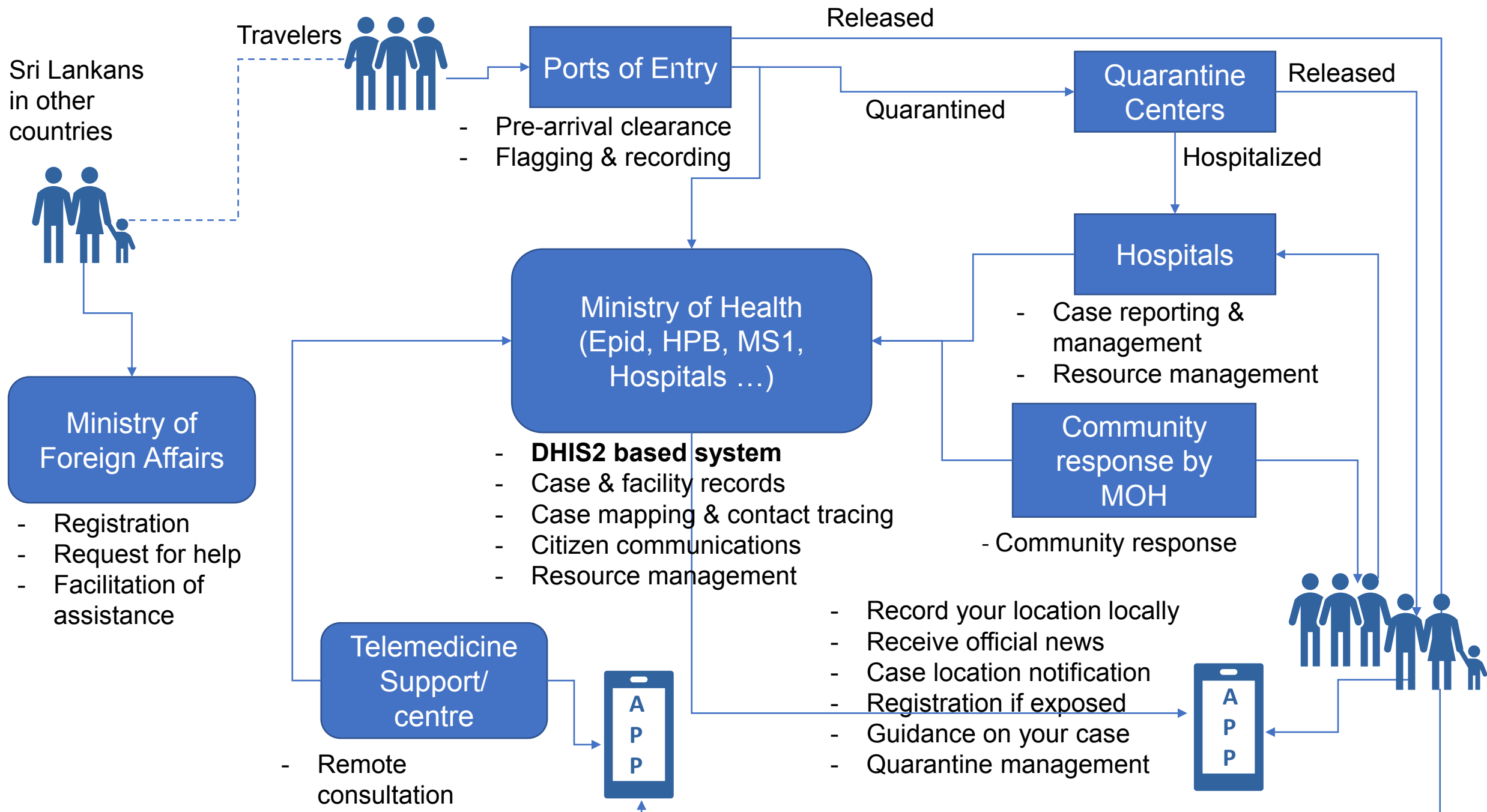
Expertise can be pooled without usual barriers



Strengthening the existing infrastructure, processes and systems



Further increase the credibility about different sectors in safeguarding the citizen and their rights





# DHIS2

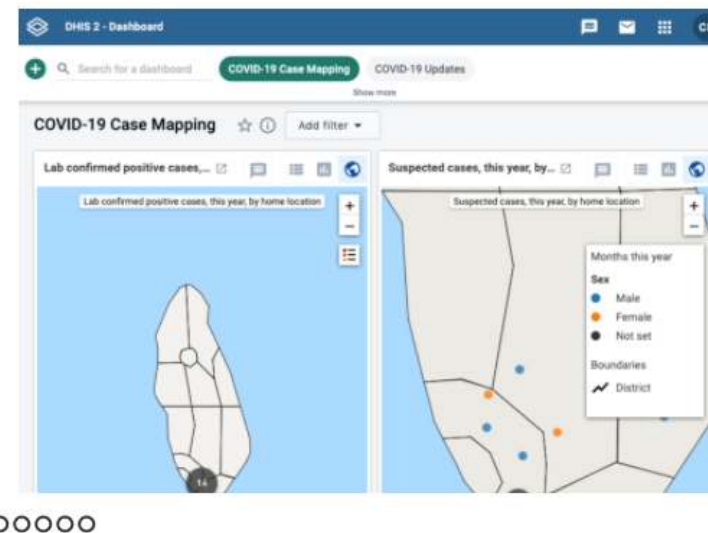


ABOUT COVID-19 LEARN ACADEMY EDUCATION ANDROID DOWNLOADS HOSTING DEVELOPMENT

## COVID-19 surveillance package released

DHIS2 has released a digital data package to accelerate case detection, situation reporting, active surveillance and response for COVID-19.

[Find out more](#)



Looks interesting? [Schedule a demo »](#)

### Global impact

DHIS2 is the world's largest health management information system (HMIS) platform, in use by 67 low and middle-income countries. 2.28 billion (30% of the world's population) people live in countries where DHIS2 is used. Read more in the [factsheet](#).

[Learn more »](#)

### Integrated system

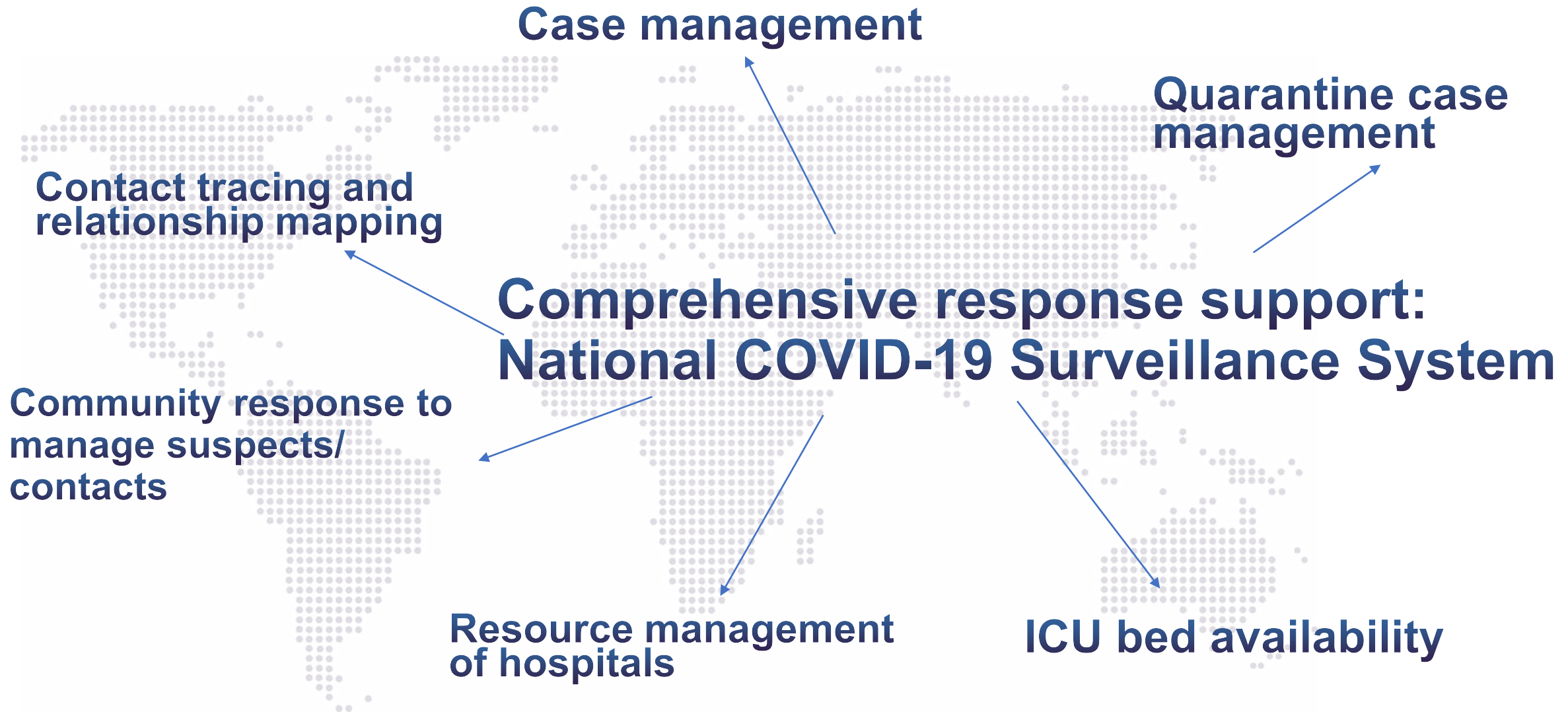
DHIS2 is typically used as national health information systems for data management and analysis purposes, for health program monitoring and evaluation, as facility registries and service availability mapping, for logistics management and for mobile tracking of pregnant mothers in rural communities.

### Runs on everything

With DHIS2 you can capture data on any type of device, including desktops, laptops, tablets, smartphones and feature phones. Most solutions work-offline, enabling improved reach in locations with poor connectivity. DHIS2 provides a wide range of solutions based on HTML5, SMS and Java.

# DHIS2 in Ministry of Health

- Has been used by public health programmes for many years
- Separate deployment for COVID-19 surveillance started with the aim of incorporating all disease surveillance activities in future
- Now being set up for integrated comprehensive management of COVID-19 response
- There is a consensus to implement all components



# Case/suspect management

**COVID19 Surveillance** National COVID19 Surveillance System of Sri Lanka Search apps NL

Back Full Name : Dummy Gender : Male Full address in Sri Lanka : test

2 - COVID19 Case Reporting

### Enrollment

**Selected program**  
Owned by: IDH - Infectious Disease Hospital

Enrolling organisation unit: IDH - Infectious Disease Hospital

Date of enrollment: 2020-03-26

[Complete](#) [Deactivate](#) [Delete](#)

**Other programs**  
1 - COVID19 Suspect registration

### Profile

**Profile**

BHT Number: 2345

Full Name: Dummy

Gender: Male

Nationality: Afghanistan

Full address in Sri Lanka: test

### Timeline Data Entry

2020-03-26 IDH - Infectious Disease... Case Registration (Open)

2020-03-26 IDH - Infectious Diseases... Daily Status (Open)

2020-03-26 IDH - Infectious Diseases... Outcome (Open)

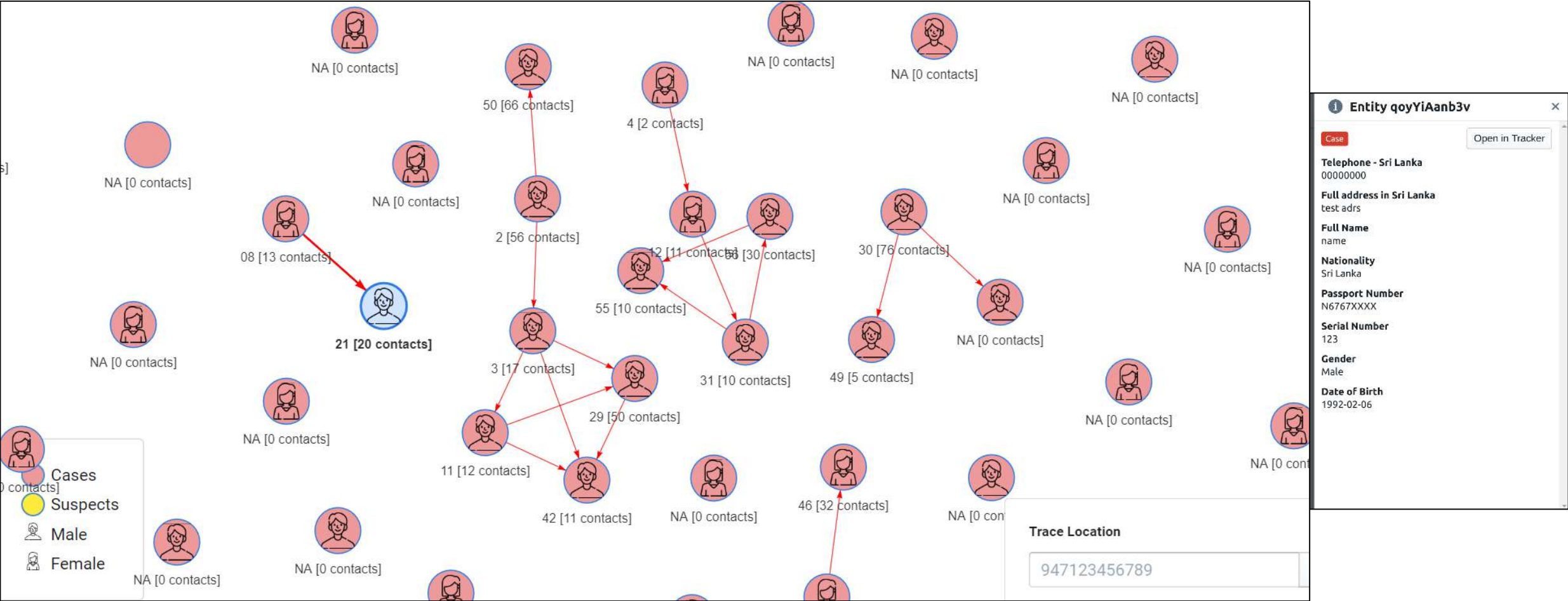
2020-03-26 IDH - Infectious Diseases... COVID19 PCR test (Completed)

Date of Confirmation \*

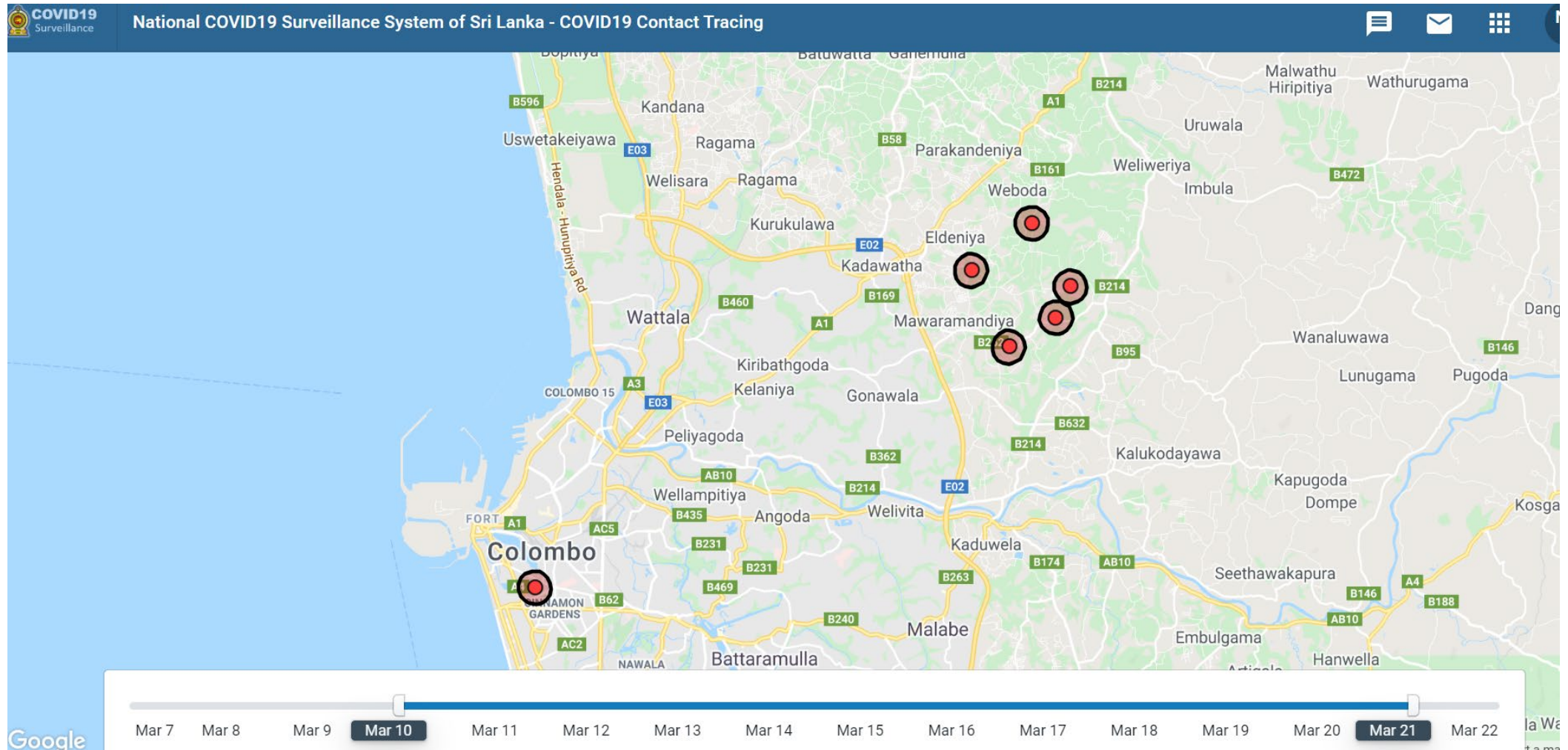
- Enrollment into
  - Suspect reporting
  - Case reporting
- Metadata pack and country specific modifications




# Tracking case dependency in the Disease Surveillance system



# Tracing the places case/s travelled



# Quarantined persons



COVID19 Surveillance System of Sri Lanka

Search apps

TT

QC - 1 CR - Borawewa

QC - 1 Gemunu Watch - Diyathalawa

QC - 18 SLNG HB- Meeyankulam

QC - BCO Campus - Poonani

QC - Dhamminna

QC - Diyathalawa - (MRS)

QC - Galkanda

QC - Kahagolla

QC - Kandakadu

QC - Pampemadu (Wanni)

QC-Panichchankerni

QC-Periyakadu

QC-SLAF - Purawasankulam

Data Entry ?

Organisation Unit

QC - 1 CR - Borawewa

Data Set

Quarantine Statistics

Period

2020-03-25

Prev year

Next year

QC - 1 CR - Borawewa - 2020-03-25 - No Data Element Selected

Run validation


Print form

Print blank form

Quarantine Statistics



	Locals		Foreigners		Total
	Male	Female	Male	Female	
1. No. Quarantined (by yesterday)					0
2. New Quarantines					0
3. Hospitalizations					0
4. Released from Quarantine					0
Today's Total:	0	0	0	0	0




# Resource management


**COVID19**  
Surveillance

COVID19 Surveillance System of Sri Lanka

Search apps



Sri Lanka

- Central PDHS
- Eastern PDHS
- North Central PDHS
- North Western PDHS
- Northern PDHS
- Sabaragamuwa PDHS
- Southern PDHS
- Uva PDHS
- Western PDHS
  - CMC
  - Colombo RDHS
    - BH - Mulleriyawa**
    - CSTH - Kalubowila
    - IDH - National Institute of Infec
    - MOH - Battaramulla
    - MOH - Boralesgamuwa
    - MOH - Dehiwala
    - MOH - Egoda Uyana
    - MOH - Gothatuwa
    - MOH - Hanwella
    - MOH - Homagama
    - MOH - Kaduwela
    - MOH - Kahathuduwa

Isolation Unit

Filter in section	Value
Total beds	
Beds occupied	
Total ventilators	
Ventilator occupied	
Building availability for proper isolation unit	

Needs

Filter in section	Value
Needed PPEs	
Needed Face Mask (Normal)	
Needed Face Mask (N-95)	
Needed Surgical Glove	

✕ BH - Mulleriyawa - 2020-03-25 - No Data Element Selected

# Integrated Mobile application COVID-19 tracker → My Health Sri Lanka app



ICTA  
*ideas actioned*





# FUNCTIONALITY

What happens after installing

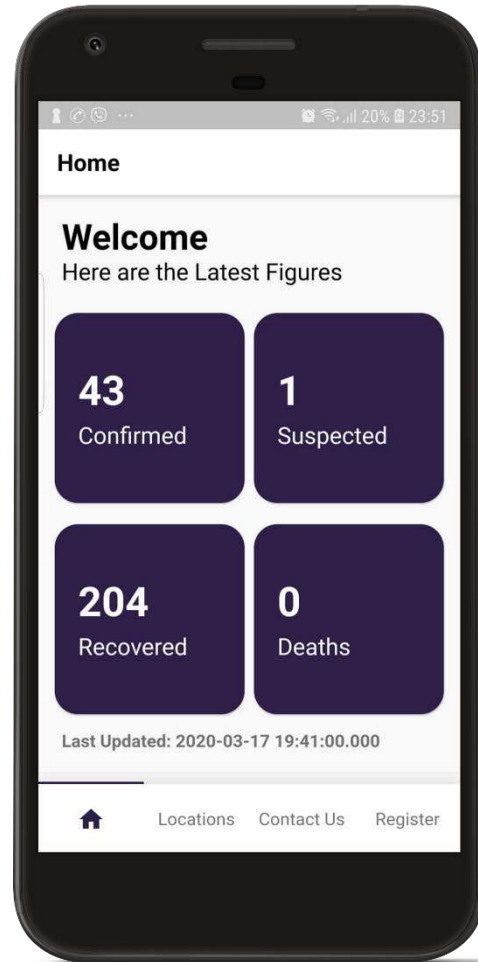
Receive official updates  
and notifications from  
Health authorities



Track your location  
& update locally



Self-register in to the  
COVID19 System



Provide personalized  
messages

- Patients
- High risk



Emergency contacts



# Integrations and new developments

## Integrations

- Immigration system
- Telecom tower information
- My Health Sri Lanka app

## Developments

- Contact-case mapping tool
- Tool to supporting addresses into community org unit assignment
- Tracing the case's travel
- My Health Sri Lanka app
- ICU bed availability management

# Stakeholders/ collaborators

## **Ministry of Health**

- Epidemiology Unit
- DDG-Public Health Services I
- Health Information Unit
- Medical Services Unit
- Health Promotion Bureau
- Hospitals
- PDHS/RDHS/MOH

## **External**

- The national COVID19 Task force
- Ministry of Defense
- ICT Agency of Sri Lanka
- Department of Immigration
- The tri-forces
- Ministry of Foreign Affairs
- HISP Sri Lanka
- Health Informatics Society of Sri Lanka
- Mobile providers
- WHO Sri Lanka
- Volunteer developer community in Sri Lanka
- Global DHIS2 community

Contact the core team

[neranga.liyanaarachchi@gmail.com](mailto:neranga.liyanaarachchi@gmail.com) (Dr Neranga Liyanaarachchi)

[priyanga.senanayaka@gmail.com](mailto:priyanga.senanayaka@gmail.com) (Dr Priyanga Senanayake)

[pamodm@gmail.com](mailto:pamodm@gmail.com) (Dr Pamod Amrakoon)

[sanjiva@weerawarana.org](mailto:sanjiva@weerawarana.org) (Dr Sanjiva Weerawarna)

A  
CRISIS  
CAN  
BECOME →  
OPPORTUNITY



Thank  
you



openIDEO

**COVID-19-Communication  
Inspiration Challenge**

Coronavirus Global Response  
Coordination Call #5  
Digital Technologies

WE ASKED ...

How might we rapidly inform and empower communities around the world to stay safe and healthy during the COVID-19 outbreak?

Community members contributed experiences and inspiration through **three opportunity areas**:

1. Sustainable and equitable access to information
2. Inspiring and uplifting each other
3. Thoughtful preparation for a new reality



IN LESS THAN A WEEK ...

Our global  
community showed  
up in BIG ways...

**26,000+**

Unique Visitors

**700+**

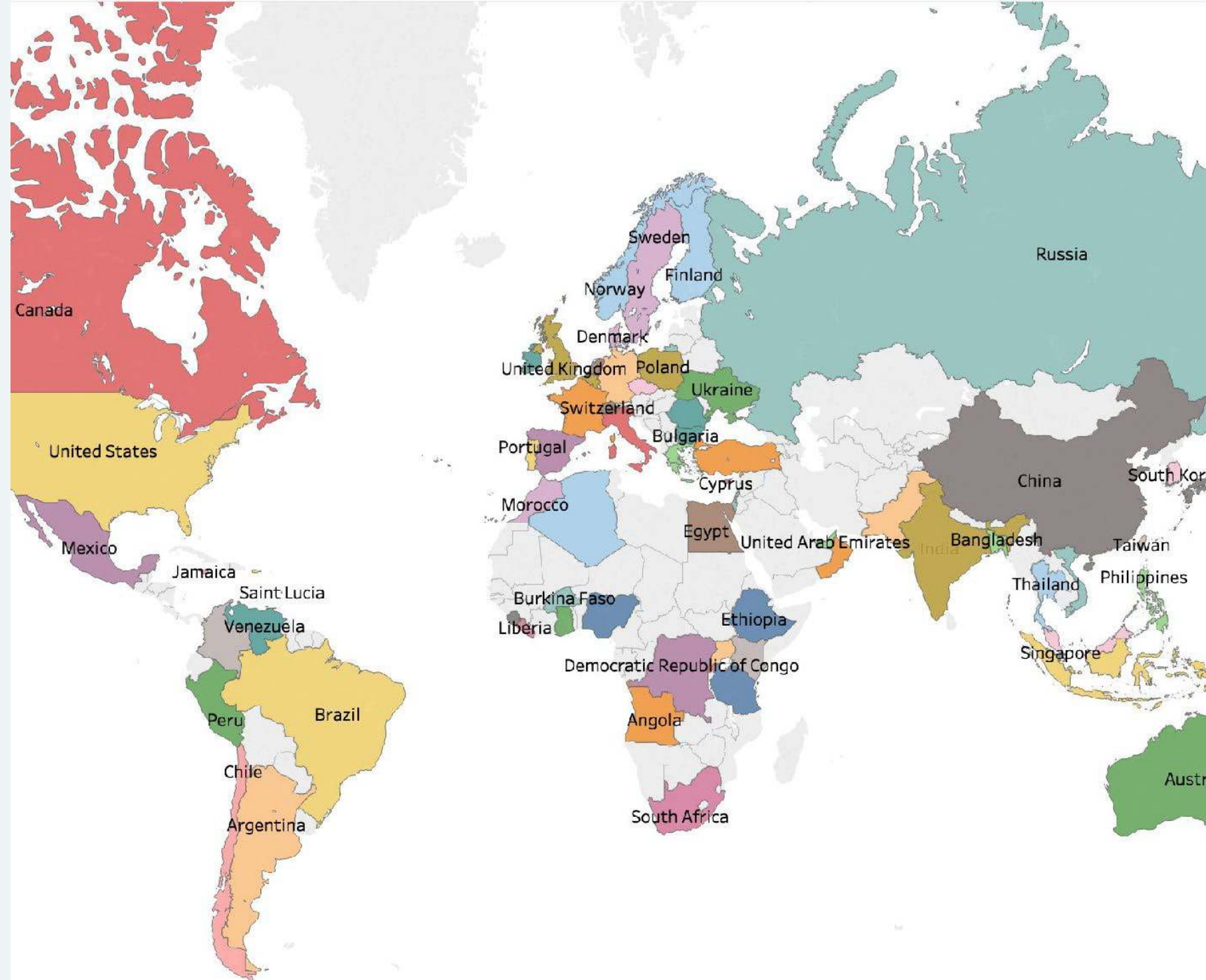
Submissions

**75+**

Countries  
Submitting

**400+**

Comments



# High Level Participant Overview

We saw the highest participation from individuals coming from these fields: Design, Communications, Business, Students, Engineering, Research, Technology, Health and Medical.



**Oje Ivagba**

Executive Director, Youth Empowerment Initiative, Lagos, Nigeria



**Emily Cai**

Supply Chain Management Expert, Shanghai, China



**Suzanne Spence**

Nurse and Educator, Stanford Medical School, United States



**Diogo Castro**

Bioinformation and Computational Biologist, Brazil

*We asked participants:*

**What populations or personas are not currently being addressed with today's COVID-19 information?**

*Here's who's missing:*

Digitally disconnected populations

Elderly

Homeless

People with disabilities

People who are undocumented

People that are new to a country

Low income

Low education

Rural/remote communities

Nomadic

Indigenous

Freelance and wage workers

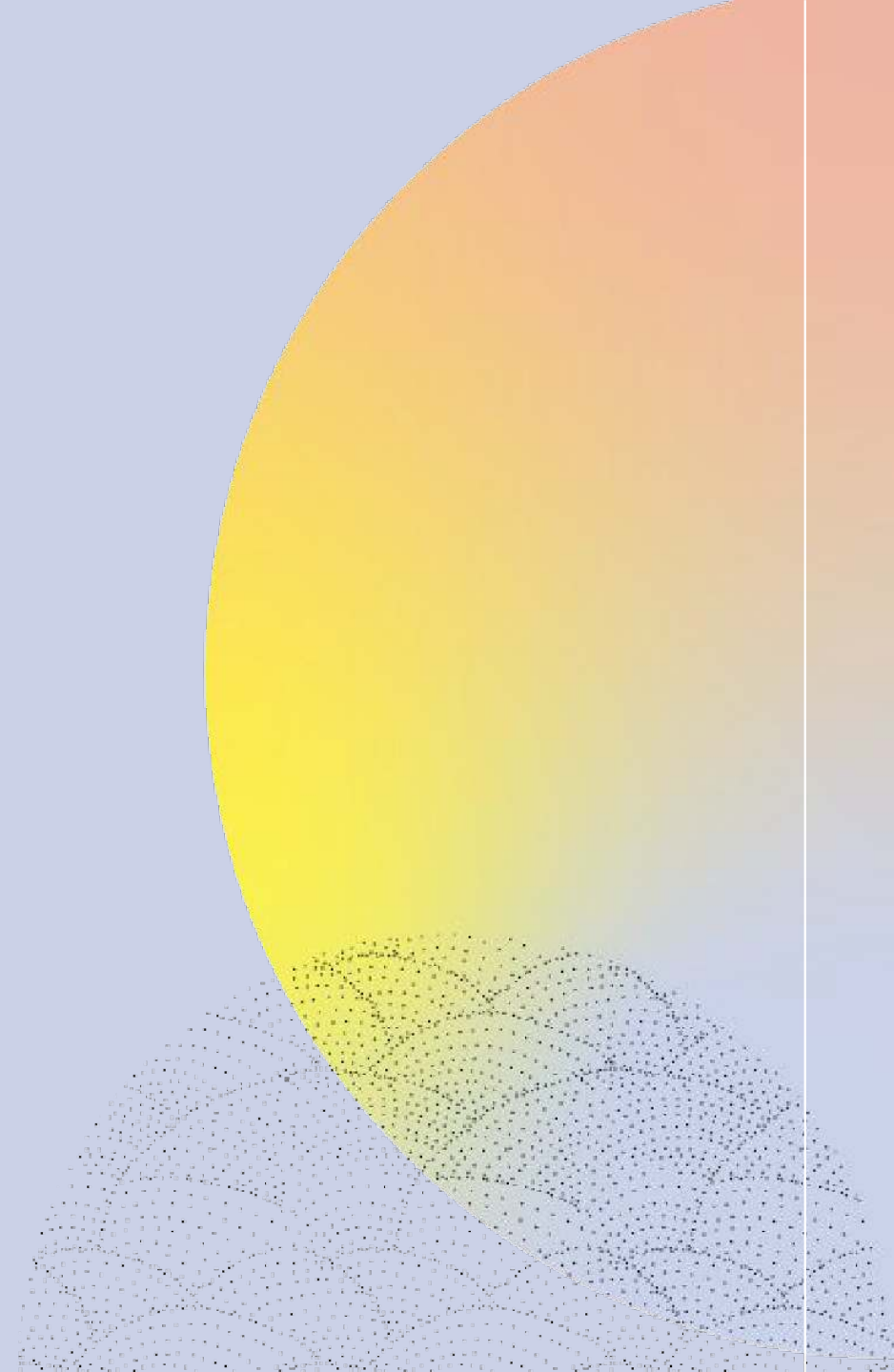
Young people and children

All people feeling socially isolated

# 3 Insights + Inspiration around Digital Communications

**Exploring resilience within  
communication systems**

3  
5



*Theme 1*

What's most forwardable is often not the most credible—how our emotions are interacting with our response

**Who do communities trust? It changes.**

“A 37-year-old boda boda operative from Bungoma has attracted praise for using loudspeakers mounted on his motorcycle to encourage residents to wash their hands and avoid handshakes. I saw that the media alone may not reach all the people in the county and I decided to help as I knew they would easily listen to me,” said the father of seven. This is because they know me and I have been working with them here.”

**—Rapudo Hawi, Governance and Security Consultant, Nairobi Kenya**

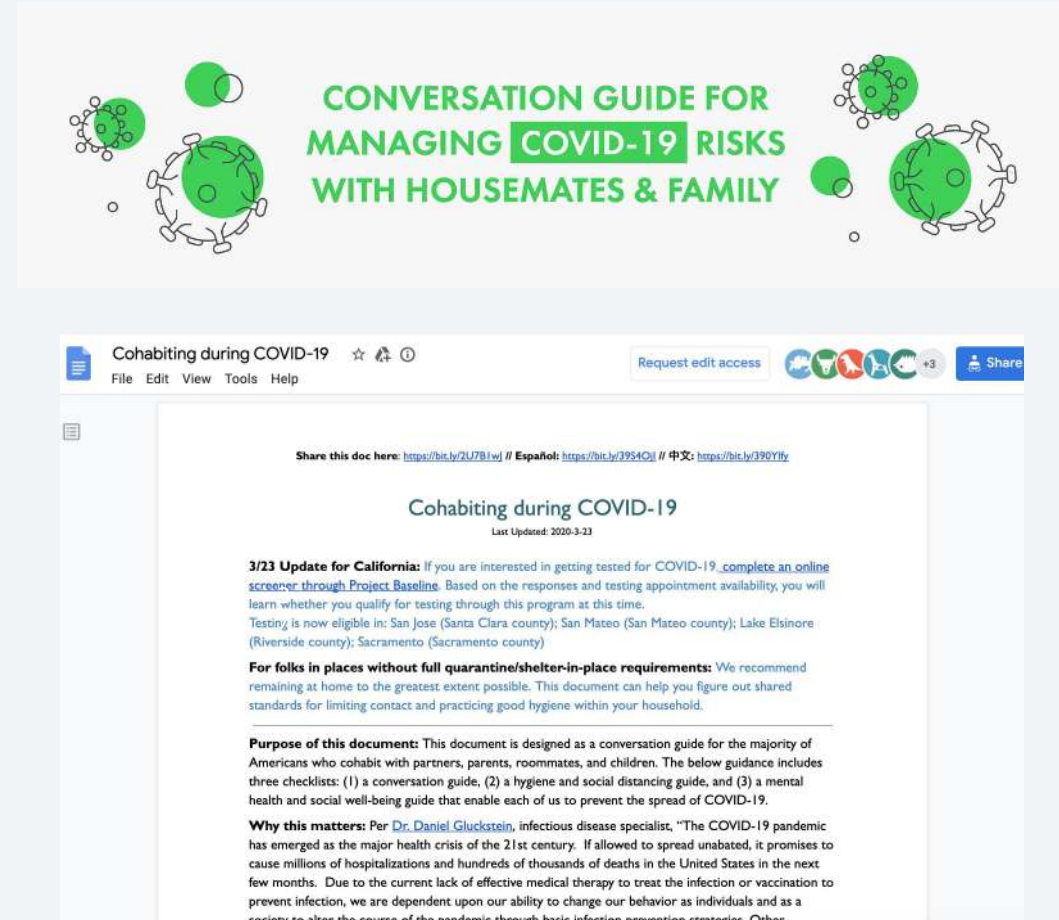




# Collaborative Translation+ Contextualization

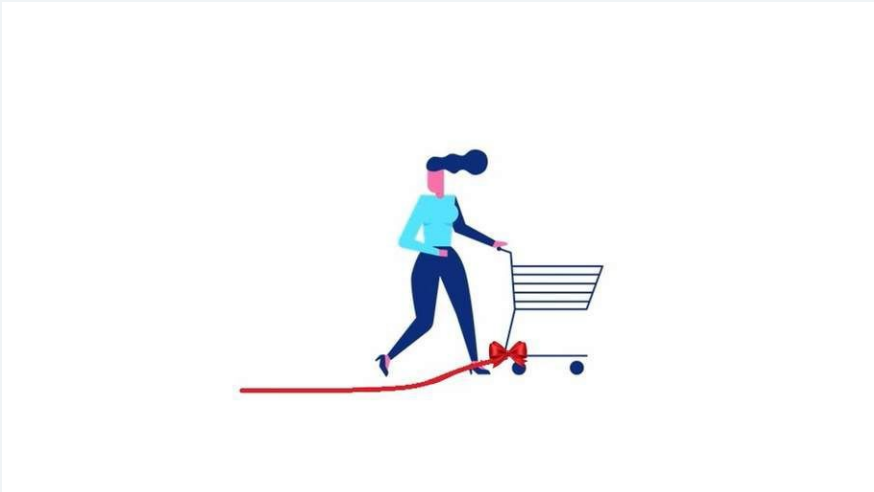
“As roommates, we knew we needed to talk about living together responsibly during a pandemic. So we created this conversation guide. We recently learned that our conversation guide is reaching people beyond the United States borders, so in addition to English, our guide is now available in Spanish and Mandarin.”

—We're a collaborative team of doctors, community connectors, and concerned cohabiters.



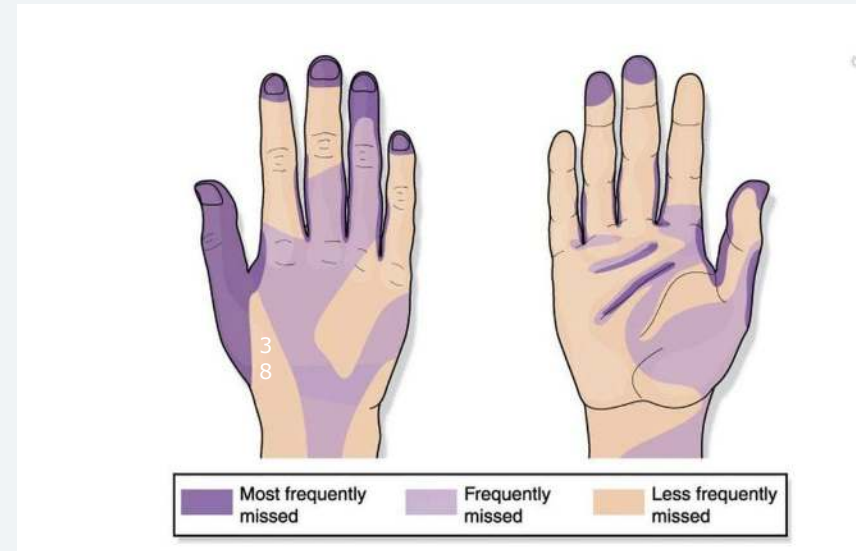
### ‘6 Feet of Ribbon’

“In the era of COVID-19 VIRUS, we are struggling to survive. Social distancing is getting important. In living life, the place where we cannot avoid people is grocery mart. We need to find the way to respecting social distancing. I suggest 'Six feet along' with little red ribbon on the leg of shopping cart. It is a campaign that let people know social distancing by visual aid. In this campaign, market visitors & managers tie six feet long red ribbon on the right side leg of shopping cart. By walking, six feet ribbon will visualize people about social distancing.” —용성 박, Student, South Korea



### Viruses are invisible

Jane Martin, Designer Researcher from the UK who worked at Comic Relief and Handicap International, was unclear around how to apply some of the digital resources shared with her. She took these materials and visualized them to be more effective for herself and others. (Help people wash their hands effectively by visualising germs –Jane Marten, International Development Consultant, London, UK



### ‘Getting specific and tactical’

Len was frustrated by what felt like over-politicized information, so he got raw data from the CDC and organized it in a way that felt more actionable and contextually-relevant, specifically to individuals in the military, which he then shared verbally– Len Hennessy, Writer, Officer, Georgia, US



Join us and continue the discussion April 7 for a webinar:

## COVID-19 Communication: Global Community Insights from an Open Call

3  
9

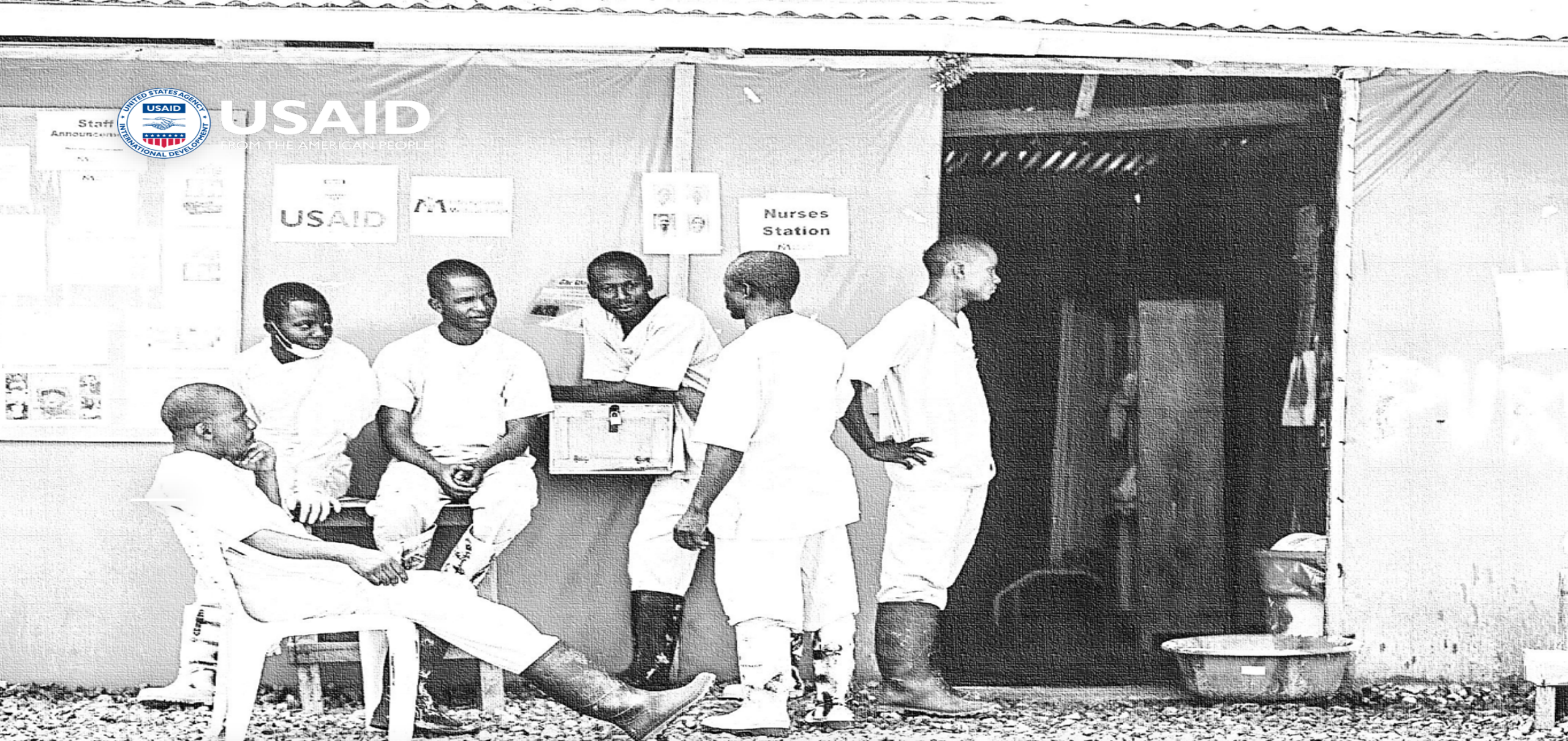
Sign Up and Get More Details:

**<https://ideo.in/covidwebinar>**





**USAID**  
FROM THE AMERICAN PEOPLE



**FIGHTING EBOLA WITH INFORMATION: Learning from the Use of Data, Information Flows, & Digital Tech in the West Africa Ebola Response**

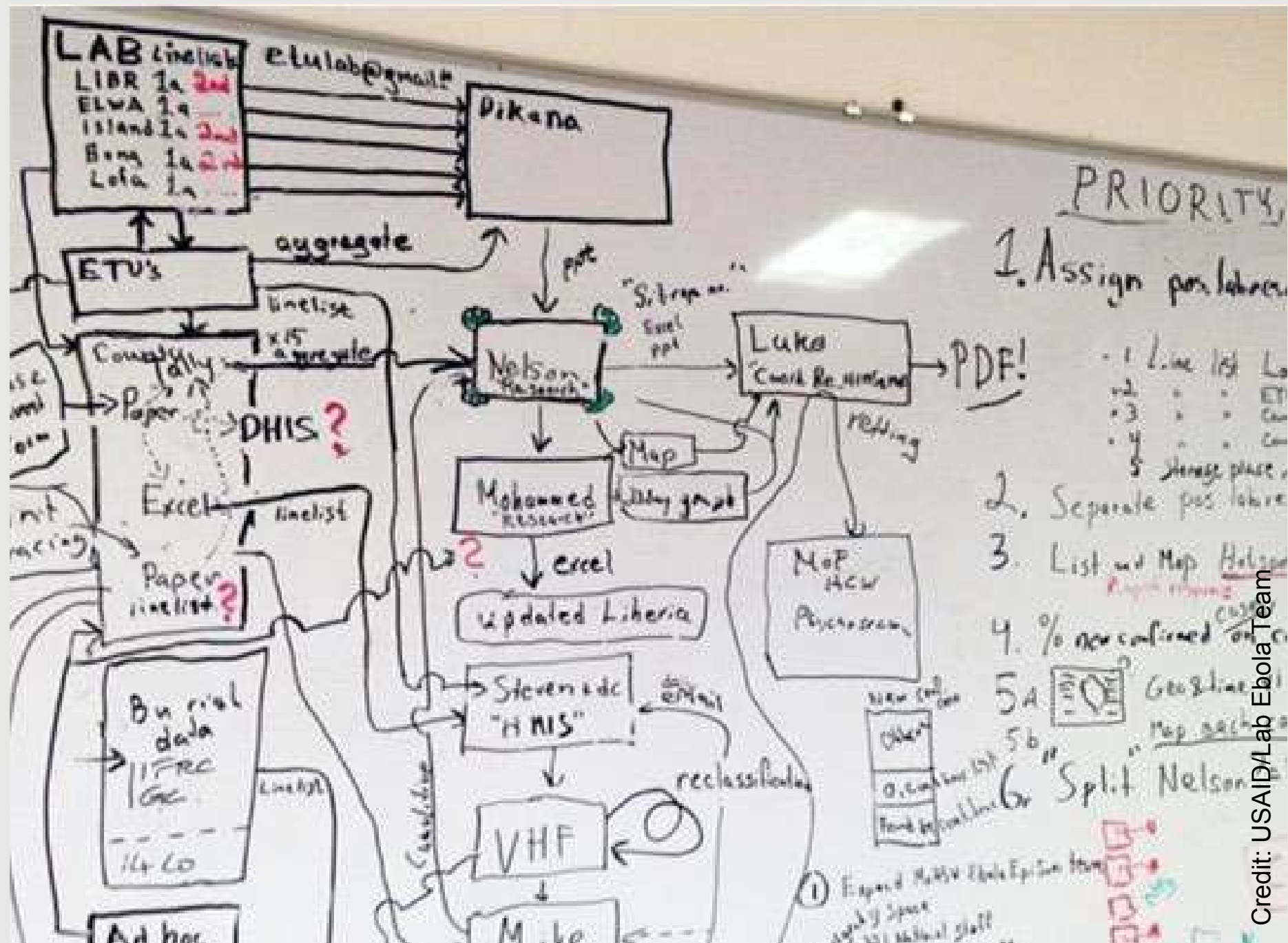


# Fighting Ebola with Information:

## *Learning from the Use of Data, Information Flows, & Digital Technologies in the West Africa Ebola Outbreak Response*

- **USAID report published in December 2016**
- **Research initiated at the request of former USAID administrator Raj Shah**, and looked at:
  - (1) how data and information flows were being used to support the response, and
  - (2) what role digital technologies were playing to support the response.
- **Commissioned by the USAID Global Development Lab**, co-authored by AAAS Fellow, Larissa Fast, and myself
- Between December 2014 and February 2016, we **interviewed around 130 people representing more than 60 organizations**--including governments, multilateral bodies, NGOs, and corporations
- Final report **extensively peer reviewed** by USAID offices in Washington and relevant field offices, as well as by the CDC
- **Foreword co-authored** by the heads of USAID's OFDA, Global Health, and the Global Development Lab





Credit: USAID/Lab Ebola Team

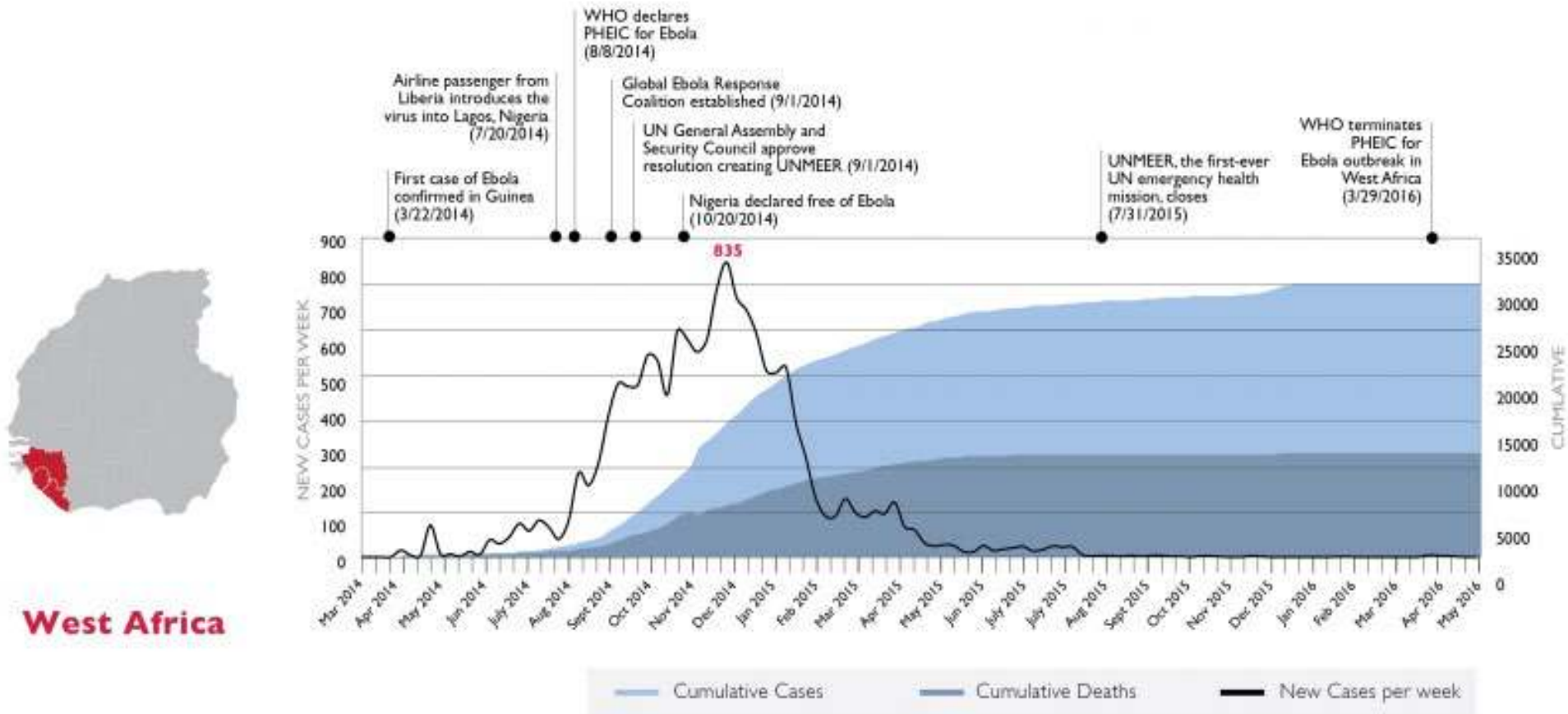


**USAID**  
FROM THE AMERICAN PEOPLE

Photography by Neil Brandvold for USAID

Credit: Neil Brandvold/USAID

**Figure 1: Timeline of Key Events, New Cases, and Cumulative Ebola Cases and Deaths (West Africa)**



Source: US CDC, based upon figures from the WHO together with the governments of Guinea (Ministère de la Santé Publique), Liberia (Ministry of Health, <http://www.mohsw.gov.lr>) and Sierra Leone (Ministry of Health and Sanitation, [http://health.gov.sl/page\\_id=583](http://health.gov.sl/page_id=583)). Note that these data reflect corrected figures and differ from earlier published reports, including WHO figures from March 2016.



# Lessons from the West Africa Ebola Outbreak

**"Information was critical** to the fight against Ebola. Both for **responders**, who needed detailed and timely data about the disease's spread, and for **communities**, who needed access to trusted and truthful information with which they could protect themselves and their loved ones.

Yet, as we now know all too clearly, **the technical, institutional, and human systems** required to **rapidly gather, transmit, analyze, use, and share** Ebola-related data frequently **were not sophisticated or robust enough** to support the response in a timely manner."

Photo credit: Garrett Mehl, WHO,  
Freetown February 2016



ANN MEI CHANG,  
Chief Innovation Officer and Executive Director, U.S. Global Development Lab, USAID

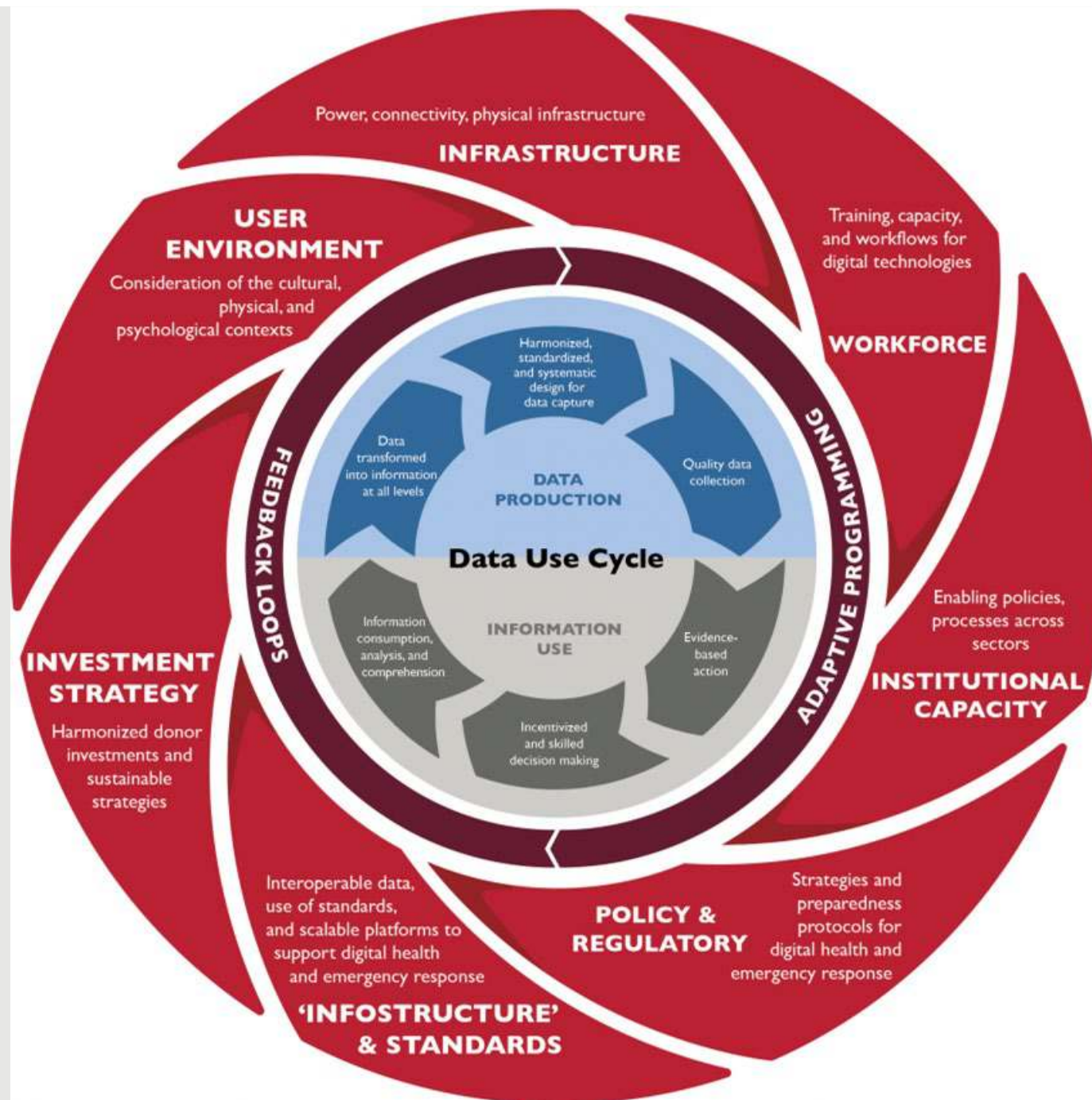
JEREMY KONYNDYK,  
Director, Office for U.S. Foreign Disaster Assistance, USAID

ARIEL PABLOS-MENDEZ,  
former Assistant Administrator, Global Health Bureau, USAID

# A Closer Look at Challenges with Ebola Case Data

- Existing digital systems were un- or under-prepared to deal with the volume and velocity of Ebola cases, and the corresponding needs of the response
- Digitization primarily through manual data entry at a district/national level, created errors, delays
- A proliferation of digital tools and systems were deployed, complicating data management and use
- Data often were released as non-machine readable PDF documents or aggregate statistics, complicating reuse
- Differing protocols and standards for the collection and management of case data lead to variations in reporting

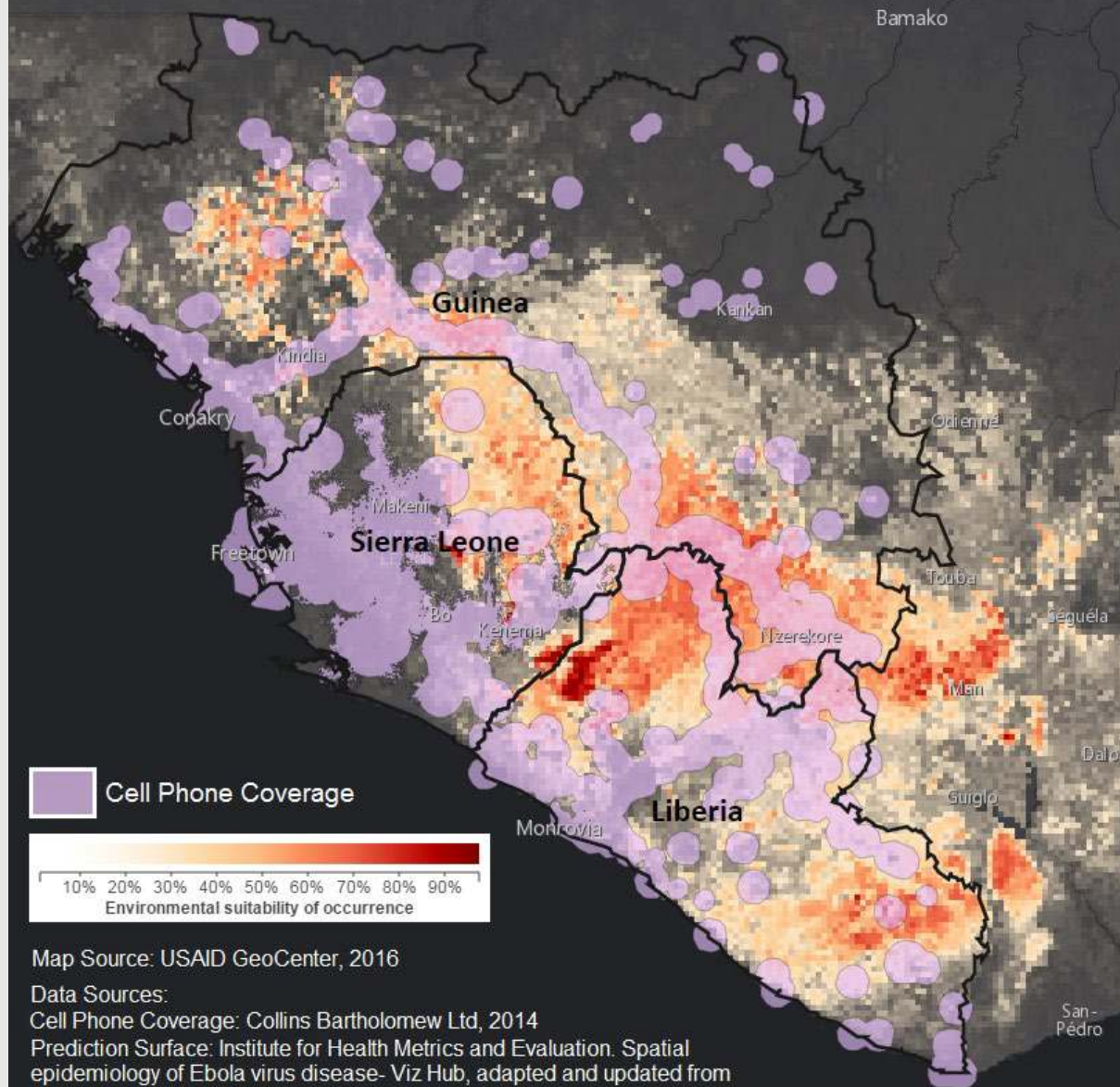
# Recommendations



Adapted with permission from the Data Use Cycle graphic created by PATH and Vital Wave®



## West Africa: Predicted Zoonotic Niche of Ebola Virus and Cell Phone Coverage



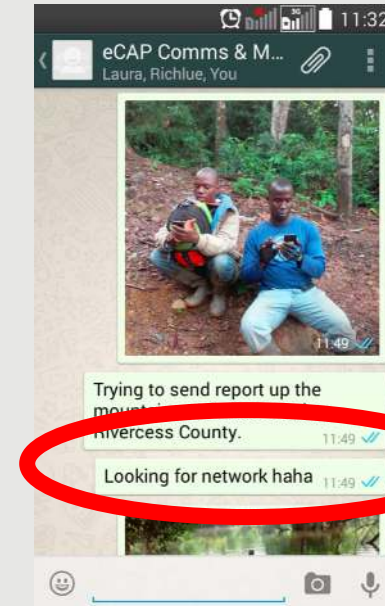
Map Source: USAID GeoCenter, 2016

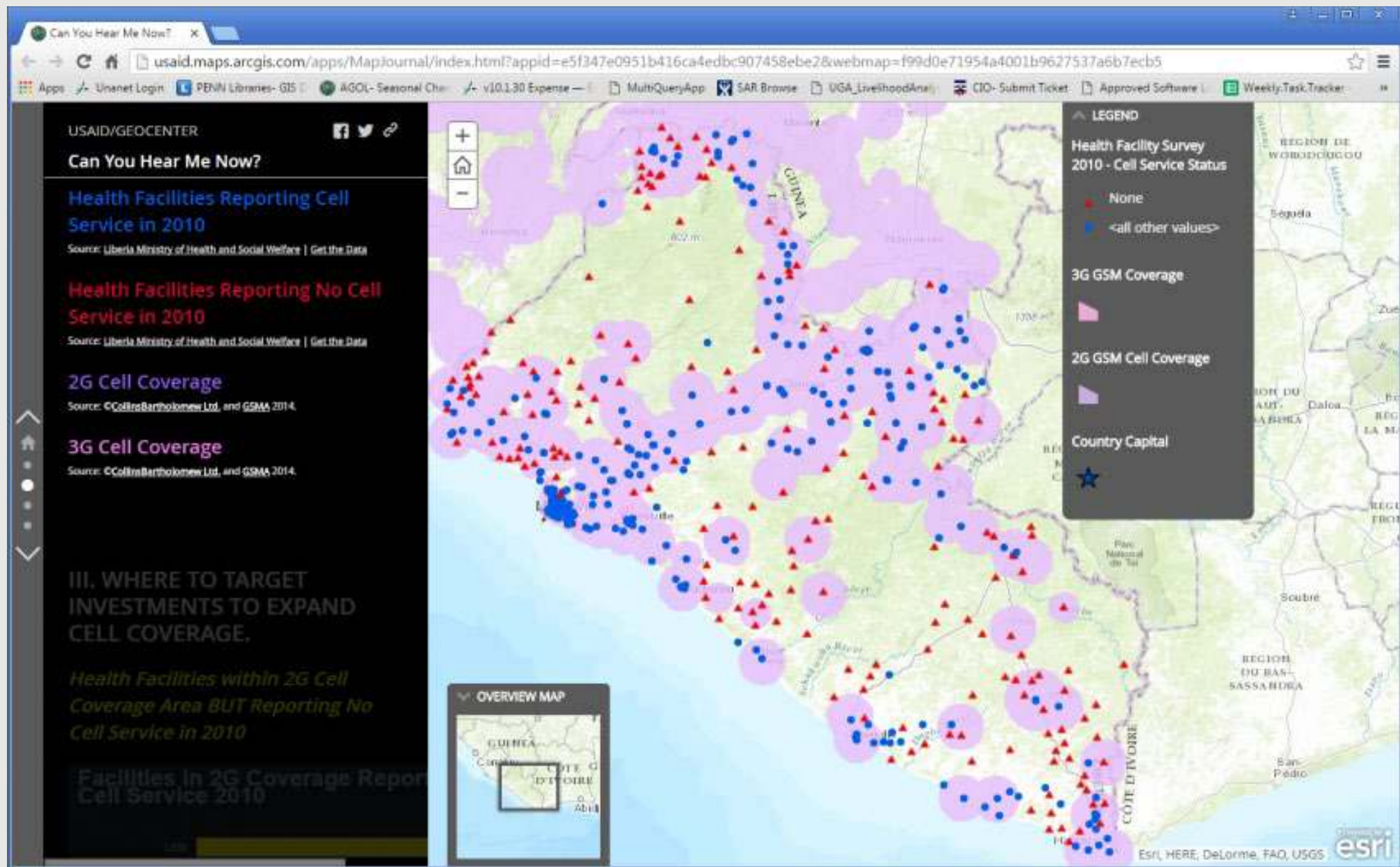
Data Sources:

Cell Phone Coverage: Collins Bartholomew Ltd, 2014

Prediction Surface: Institute for Health Metrics and Evaluation. Spatial epidemiology of Ebola virus disease- Viz Hub, adapted and updated from Pigott et al. (2014) published in eLife.

Name and boundary representations are not necessarily authoritative.









Adele Waugaman, Senior Advisor, Digital Health  
USAID/Global Health/CII  
[awaugaman@usaid.gov](mailto:awaugaman@usaid.gov)





# Q&A



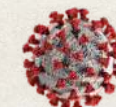


[www.thinkmd.org](http://www.thinkmd.org)

<https://covid19.thinkmd.tech/#/start>



**COVID-19 Personal Triage, Education and  
Surveillance Monitoring Tool**



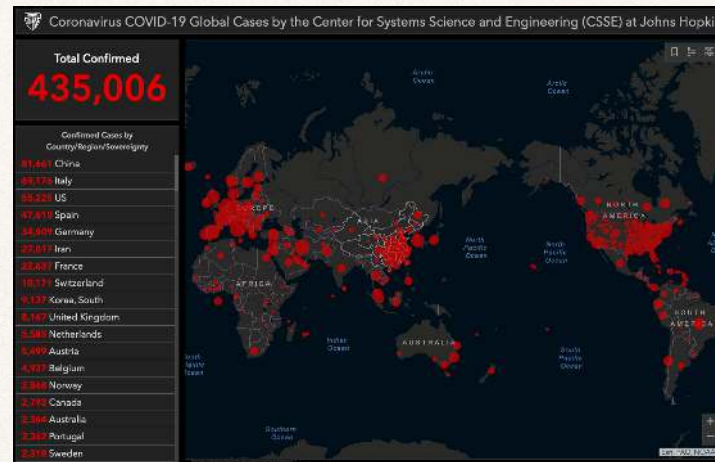


# Immediate COVID-19 Response Challenges

## Demands on clinics and hospitals



## Paucity of individual health data



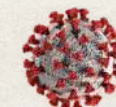
## Dissemination of Public Health info

How should I greet another person to avoid catching the new coronavirus?

To prevent COVID-19 it is safest to avoid physical contact when greeting. Safe greetings include a wave, a nod, or a bow.

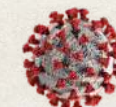
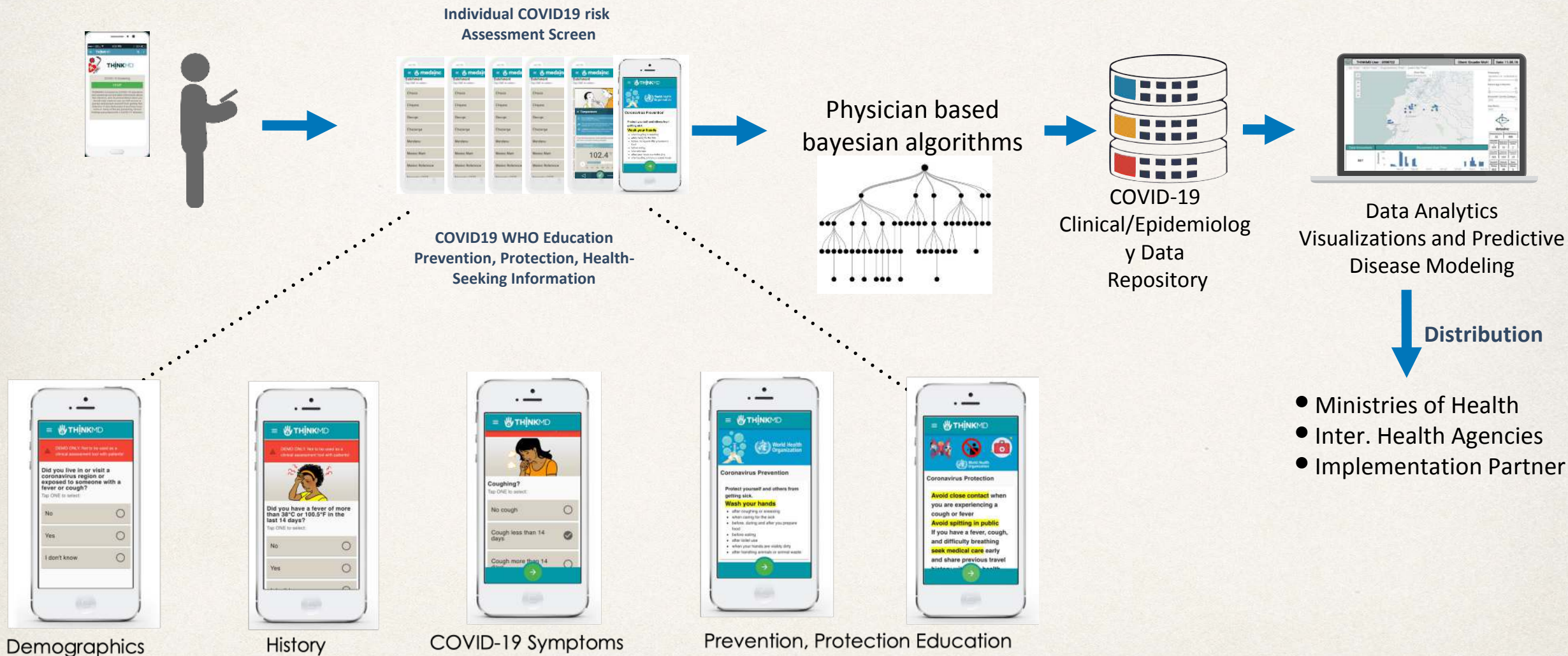
World Health Organization #Coronavirus #COVID19

9 March 2020



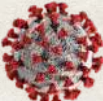
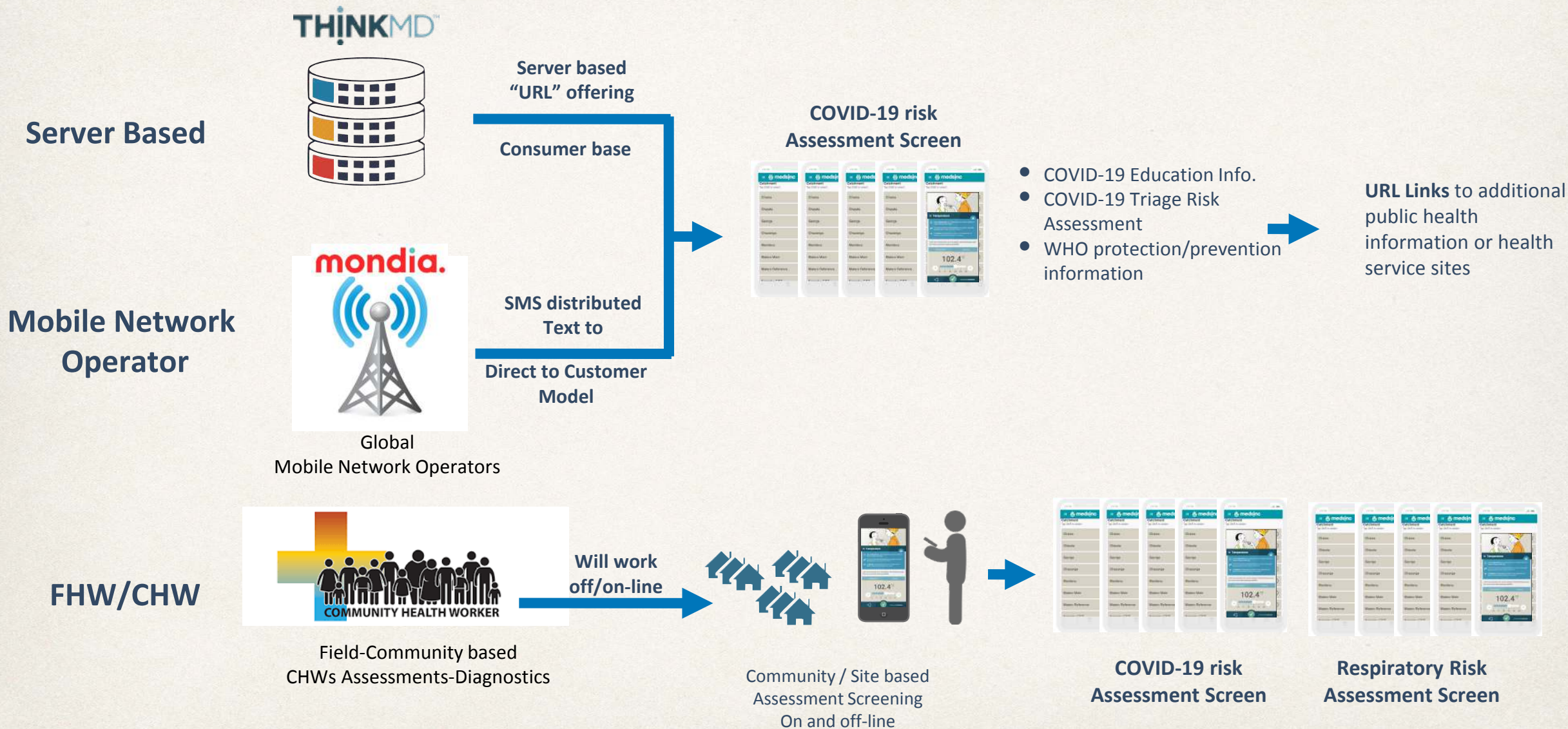


# THINKMD COVID-19 Personal Triage, Education and Disease Surveillance Monitoring Tool





# Distribution Models for THINKMD COVID-19 Triage and Education Tool

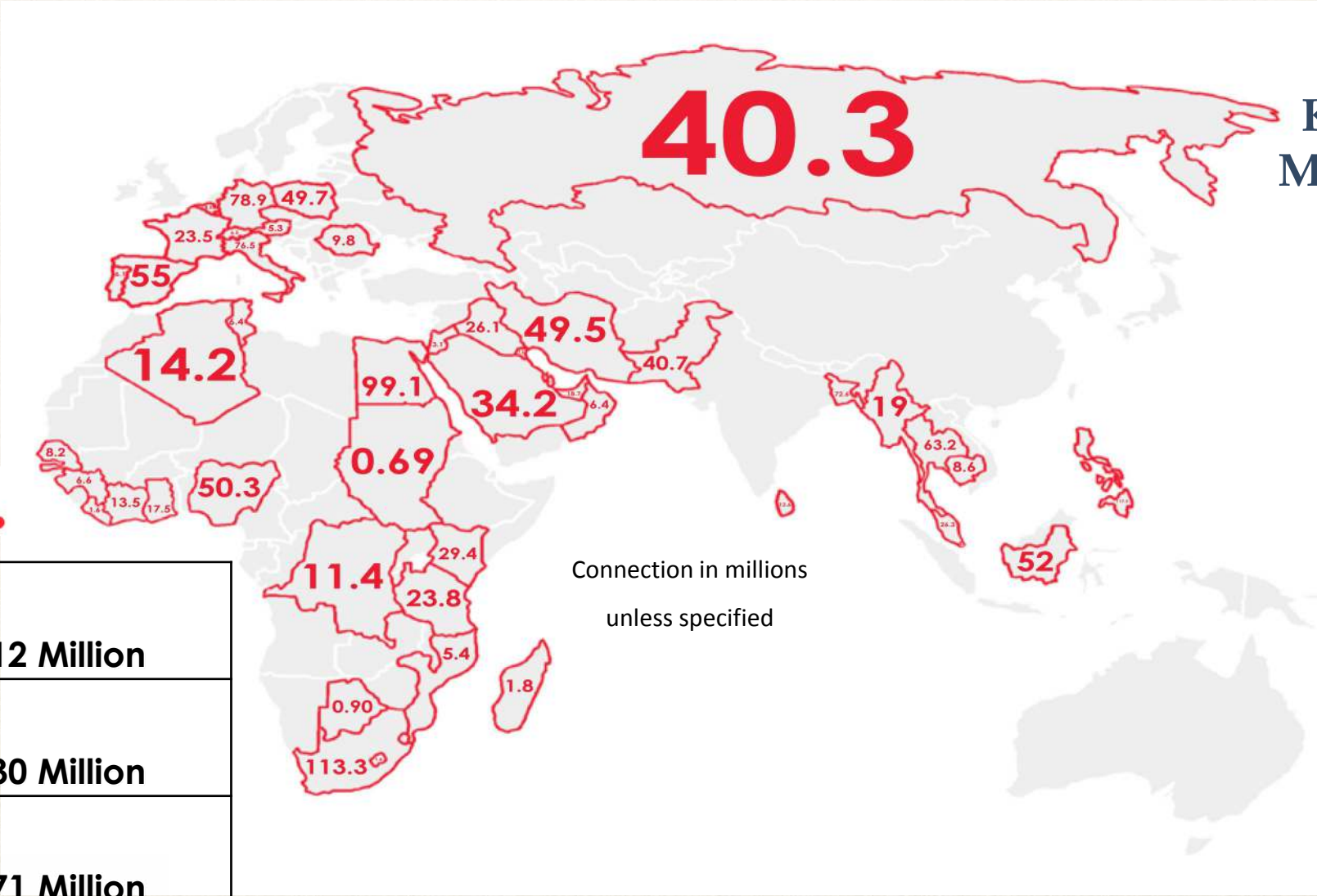




# Initial Mobile Network Operator Global Distribution

mondia.

Africa	412 Million
Asia Pacific	430 Million
Europe	371 Million



## Key Committed MNO Distributors

- India
- South Africa
- Egypt
- Nigeria
- Kenya
- Zambia
- UAE



# CommCare for COVID-19 Response



Gillian Javetski, Dimagi Chief of Staff  
[gjavetski@dimagi.com](mailto:gjavetski@dimagi.com)





*WHO Contact Tracing  
Template Application*



Patient Counseling



Health Worker Training



Real-Time Data Collection



Program M&E



Surveillance and Contact Tracing



Screening & Triage Protocols



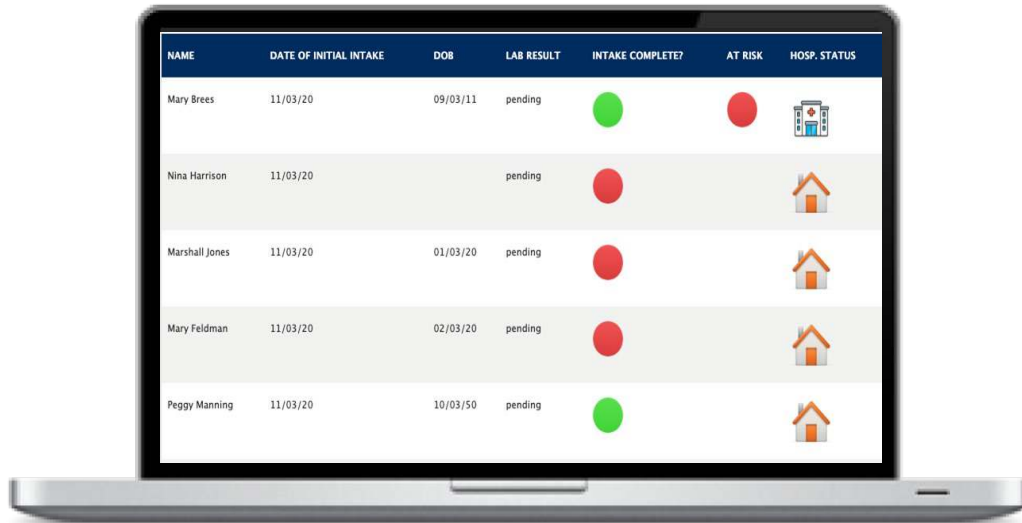
Sensitization & Information Dissemination



Diagnostics and Lab Tracking



Supportive Supervision



NAME	DATE OF INITIAL INTAKE	DOB	LAB RESULT	INTAKE COMPLETE?	AT RISK	HOSP. STATUS
Mary Brees	11/03/20	09/03/11	pending			
Nina Harrison	11/03/20		pending			
Marshall Jones	11/03/20	01/03/20	pending			
Mary Feldman	11/03/20	02/03/20	pending			
Peggy Manning	11/03/20	10/03/50	pending			

*Confirmed & Suspected Case List  
CDC Application being used in California*

## Activities from the last two weeks

- Pro Bono Software Subscriptions for COVID-19
- Template Application of WHO Contact Tracing Protocols in English, French, Spanish, and Portuguese
- Documentation, videos, demos, Users Forum, multimedia
- Live projects in Nigeria & with the CDC in California
- Agreements with various governments, including Sierra Leone and Assam India (so far)

[www.tinyurl.com/cc-covid19](http://www.tinyurl.com/cc-covid19)

*Live: Risk Monitoring  
and Triageing*



*Live: SMS Monitoring of  
Confirmed Cases*

*Developed: WHO  
Contact Tracing*



*Developed: WHO  
Contact Tracing*



*Live: PUI  
Management*



**Prevention &  
Education**

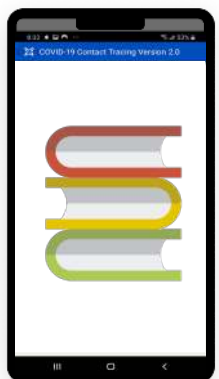
**Triage / Testing**

**Tracking &  
Tracing**

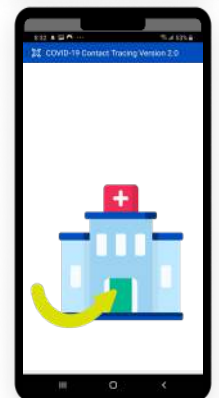
**Quarantine  
Management**

**In-Hospital  
Management**

**Post-care  
management &  
Prevention**



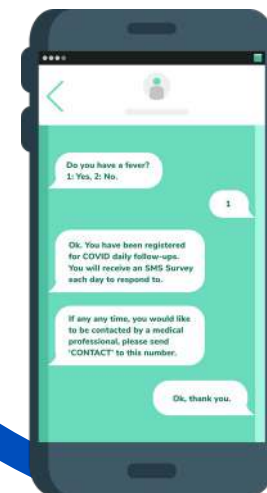
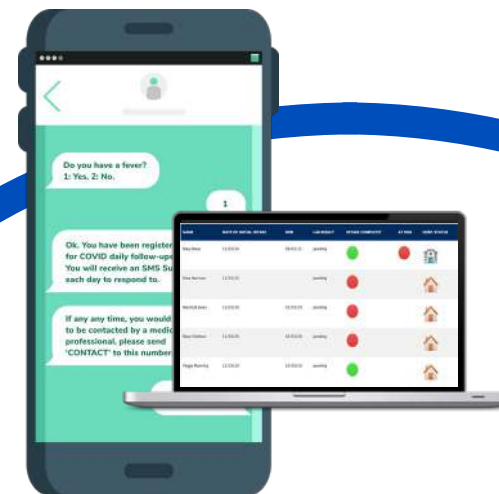
*Next Up:*  
Rapid Remote Training



*Next Up:* Facility  
Readiness & Supply  
Chain

*Next Up:* Community  
Members Under isolation

*Next Up:*  
Mental Health



**Prevention &  
Education**

**Triage / Testing**

**Tracking &  
Tracing**

**Quarantine  
Management**

**In-Hospital  
Management**

**Post-care  
management &  
Prevention**



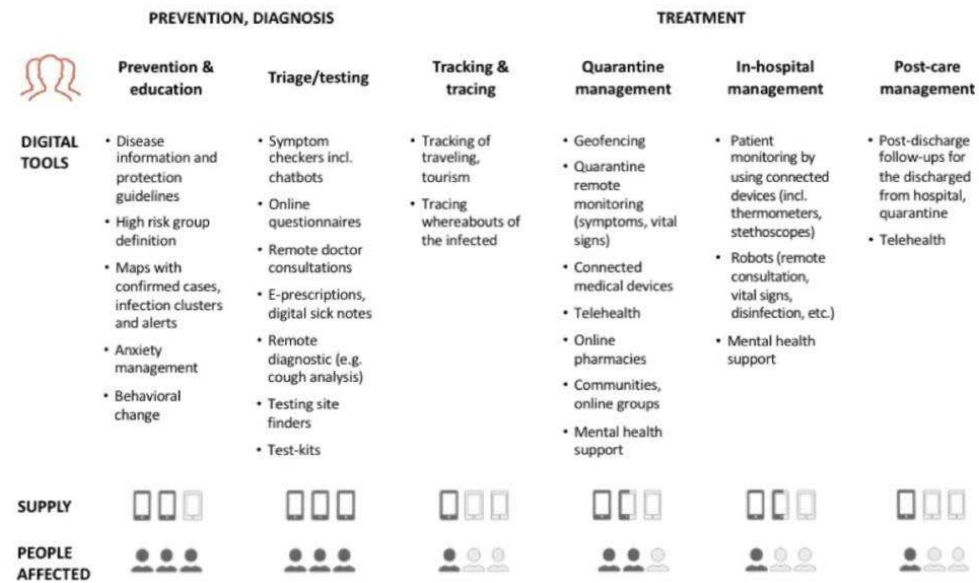


Thank you! Please feel free to email me: [gjavetski@dimagi.com](mailto:gjavetski@dimagi.com)

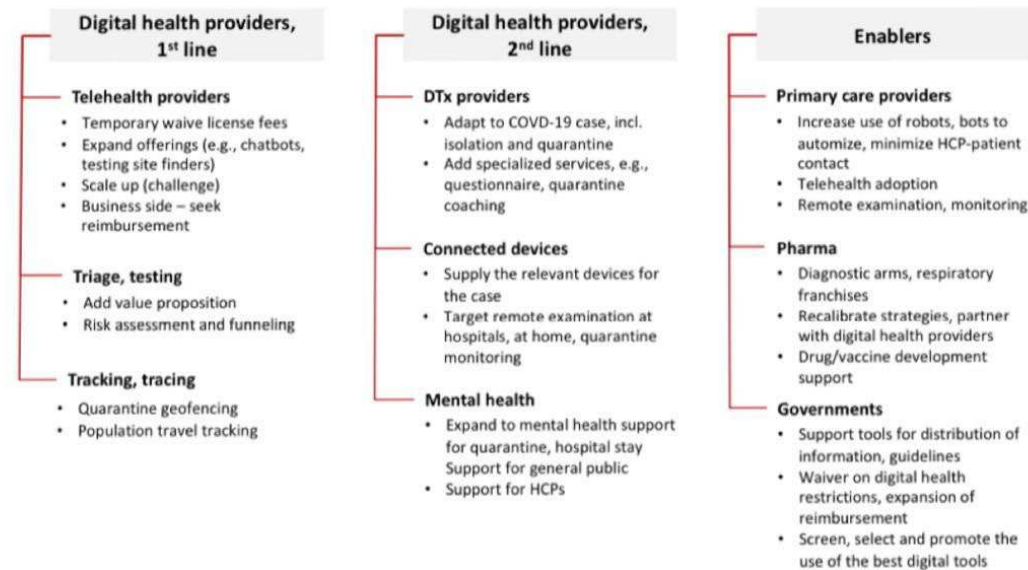




**Chart 1: Digital health applications for patient care during the Coronavirus pandemic**



**Chart 3: Actions to be taken by three major groups of healthcare players**



# COVID-19 Response

## Medic Mobile and The Community Health Toolkit

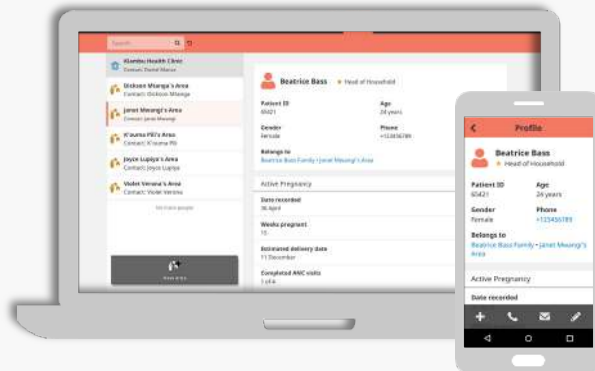


# Community Health Toolkit

The Community Health Toolkit (CHT) is a global public good and community of people advancing global health equity. Medic Mobile serves as the technical steward for the CHT. It includes:

## Tools

Open source software frameworks and applications



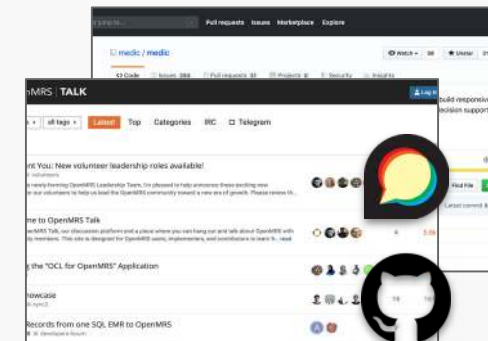
## Resources

Guides to help you design and use the framework



## Community

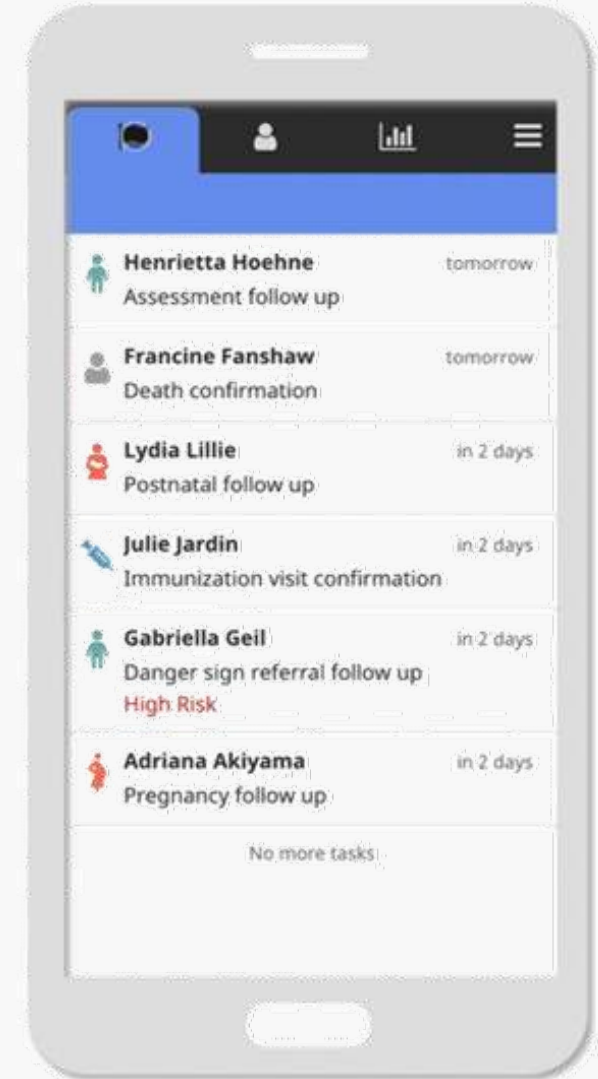
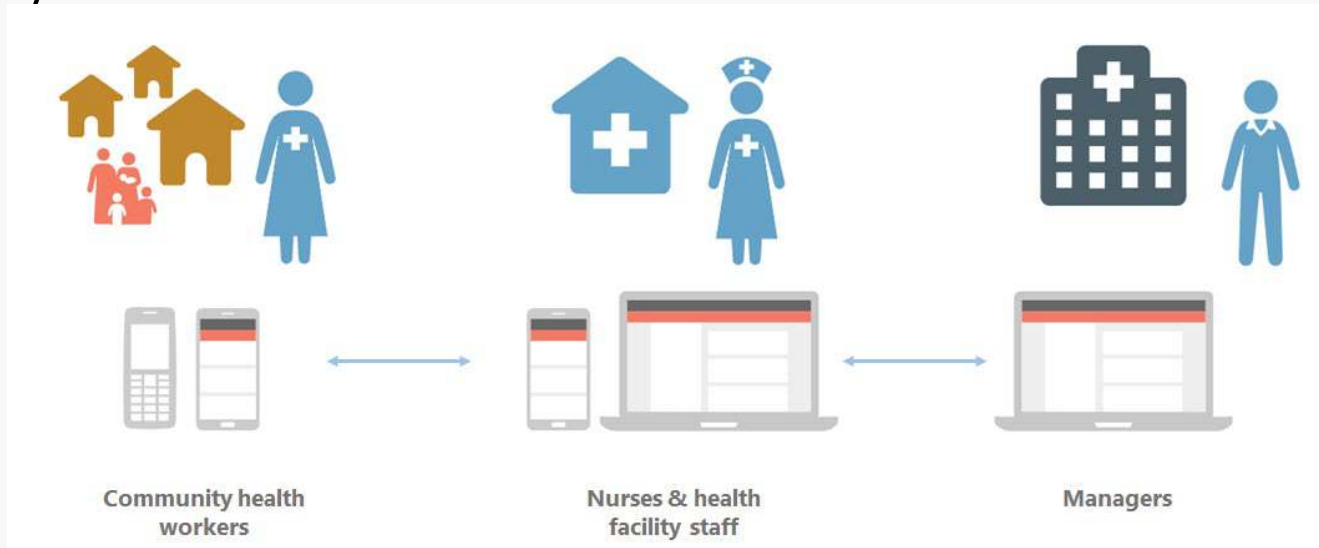
An active community for collaboration and support



# The Core Framework

CHT's Core Framework makes it easier to build scalable digital health apps that equip health workers to provide better care in their communities.

A highly configurable framework, it runs on a range of devices, supports multiple hierarchies and users in a health system with integrated care workflows, and is interoperable with other systems.



# Medic Mobile's COVID Response Strategy

Medic Mobile has been focused on supporting global response efforts in solidarity with the partners, health workers and communities that we serve in the following ways:

- Accompanying Ministries of Health through staff secondment to Health Emergency Operation Center (HEOC), Epidemiology and Disease Control Division (EDCD) units
- Evolving existing digital health systems to support COVID-19 prevention, detection and containment efforts
- Coordinating with the wider community health and digital communities of practice to harmonize our response





# COVID-19 CHT Use Cases

Based on priorities emerging from our partners and the broader global community, we're focused on exploring several critical use cases and workflows for COVID-19 response:

- **Surveillance**

- Port of entry screening
- Contact tracing
- Event-based surveillance in the community and facility
- Community-based symptom screening

- **Patient Assessment, Testing & Referrals to Care**

- Community-based assessments
- Rapid diagnostic testing
- Referrals to care
- Proactive messaging

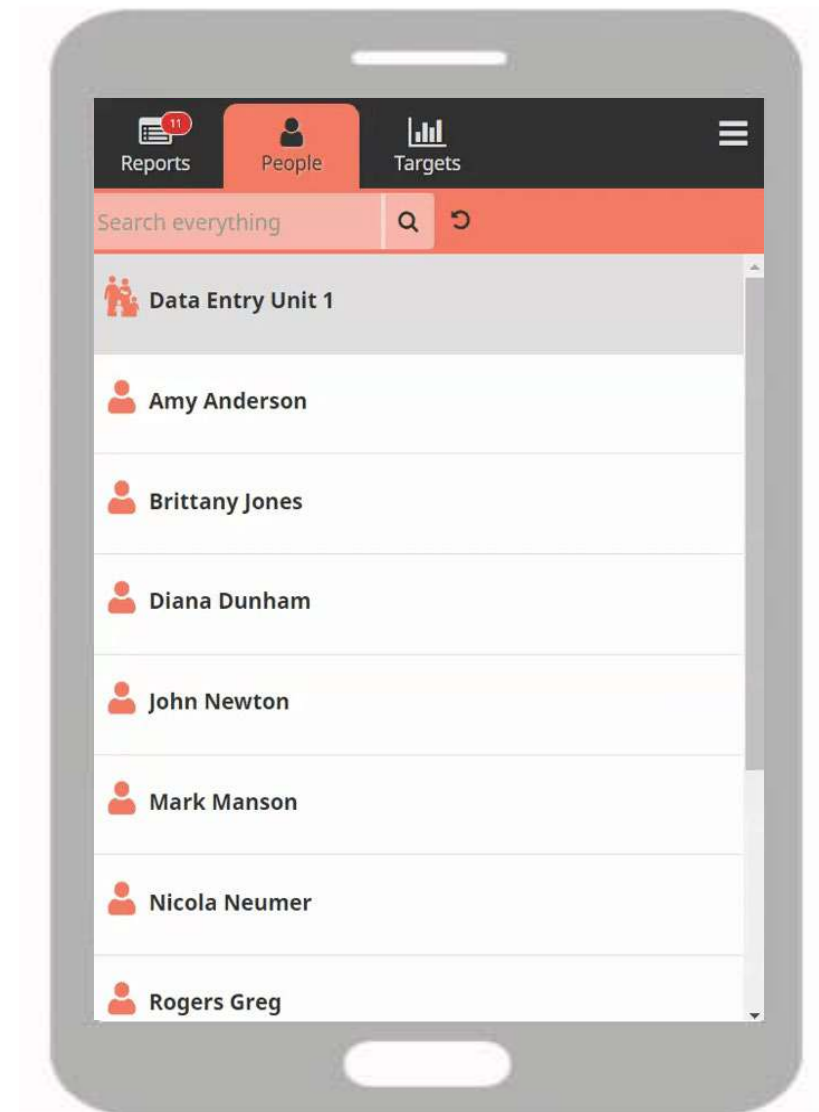
- **Support for Community Healthcare Workers**

- App-based CHW education & training
- Support for CHW mental health & wellbeing
- Modifications to existing PHC workflows



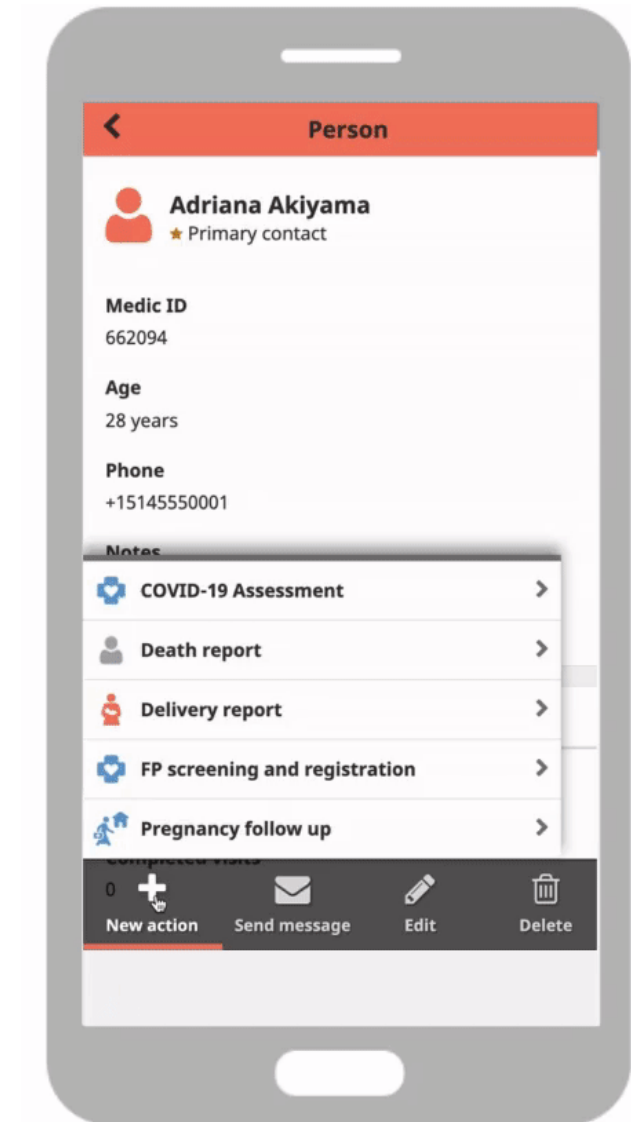
# COVID-19 Port of Entry Screening App

- Designed and launched in partnership with MoHP Nepal (HEOC and EDCD)
- Supports enrollment of all incoming travelers at ports of entry, Covid-19 screening, and follow up for the self-quarantined. Added functionality can include contact tracing workflows.
- Based on MoHP Nepal and [WHO guidelines](#)
- Currently exploring adoptions with MoH Kenya



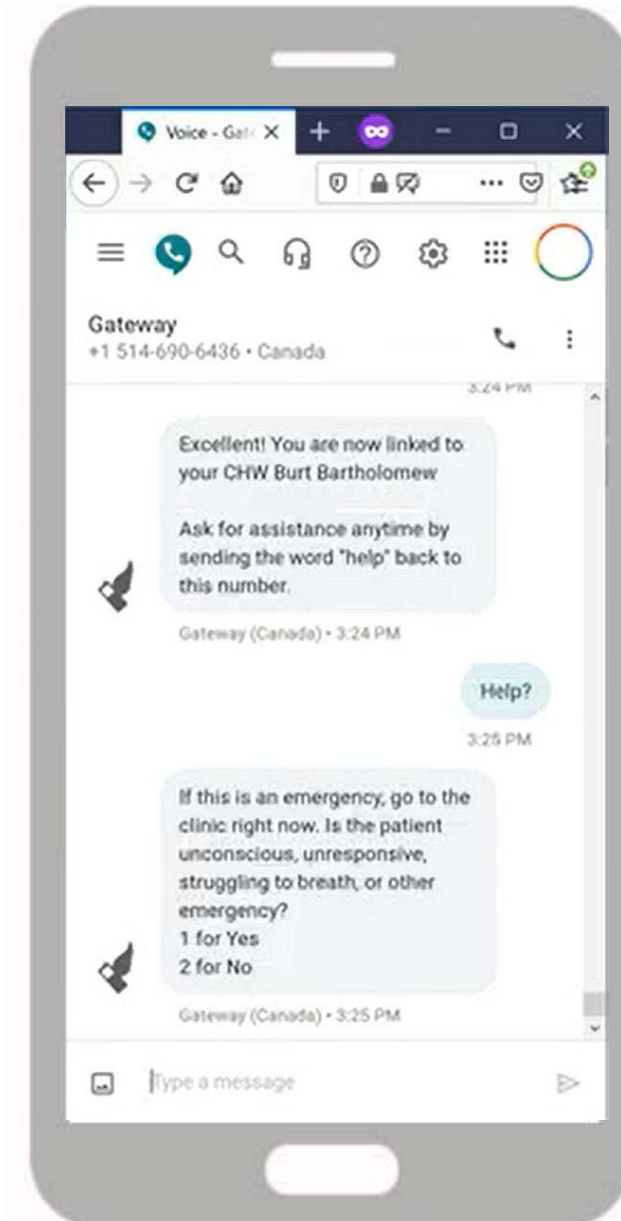
# COVID-19 Rapid Diagnostic Test App

- Supports rapid diagnostic testing for COVID-19 screening, detection, response and containment
- Based on [PIH's protocol](#) for the Antibody (IgM/IgG) test, but can be adapted for different rapid tests.
- Designed to:
  - Enable community symptom screening
  - Improve quality of testing and care
  - Help health workers stay safe
  - Improve patient follow-up
  - Support patient education
  - Be adapted as needed and integrated into existing apps and surveillance platforms.



# COVID-19 Self-Symptom Screening (coming soon)

- CHT integration with RapidPro for automated, interactive messaging support
- Supports identified at risk persons (e.g. CHWs, people in quarantine following port of entry screening or contact tracing)
- App-based automated daily messages asking for self-symptom screening, automated thanks and educational messages
- For people self-reporting symptoms, this flow helps triage symptoms and connects those experiencing symptoms with a health worker





## Questions or ideas?

[hello@medicmobile.org](mailto:hello@medicmobile.org)

[Forum.communityhealthtoolkit.org](https://forum.communityhealthtoolkit.org) (COVID-19 category)





# Communication to counter the COVID-19 'info-demic'

Core Group Covid-19 Coordination Call  
27 March 2020

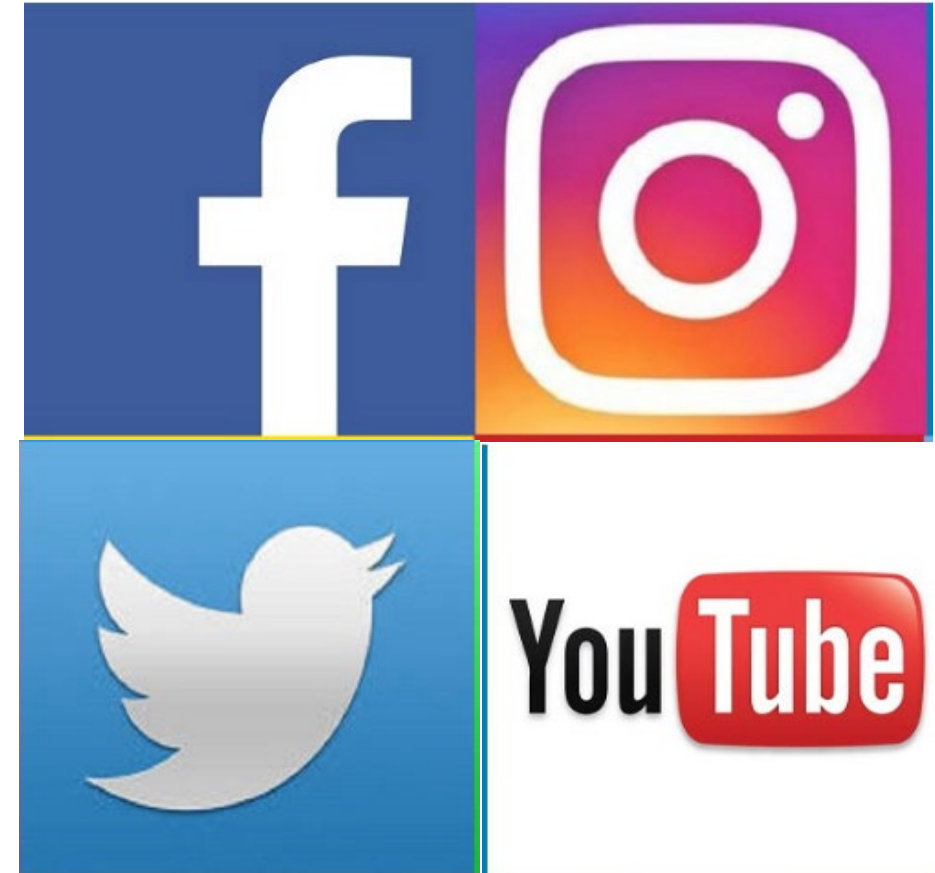
Yvonne MacPherson  
North America Director, BBC Media Action

# Phase I: Rapid response to the 'infodemic'

Focused on rapid and constant dissemination of social media content in Asia:

Bangladesh, Cambodia, India, Indonesia, Myanmar, Nepal.

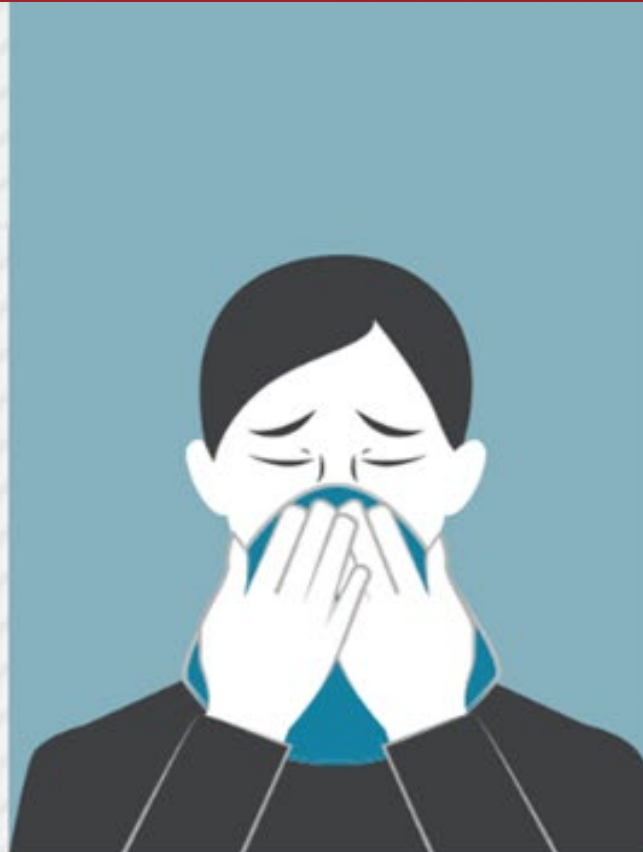
On our own social media platforms and shared with others



# Creation of generic content for wide dissemination



စနစ်တကျ  
လက်ဆေးပါ



အကာအကွယ်ဖြင့်  
နှာချေချောင်းဆိုးပါ



လက်နဲ့ မျက်နှာကို  
မထိပါစေနဲ့.





သတင်းတုတွေကို  
မယုံပါနဲ့.




# Content on our popular FaceBook pages

 Watch

Search videos 

 Home

 Shows

 Live

 Saved Videos

Your Watchlist 

 Latest Videos



**Klahan9**

929.5K followers

 Follow



Klahan9

## Latest Videos



2:27

ផ្ទះក្លាហាន9

12 hours ago · 2.6K Views



143



1:19

ការពារការឆ្លង Covid19

3 days ago · 23.6K Views



519



1:07

ការពារការឆ្លង Covid19

6 days ago · 38.4K Views

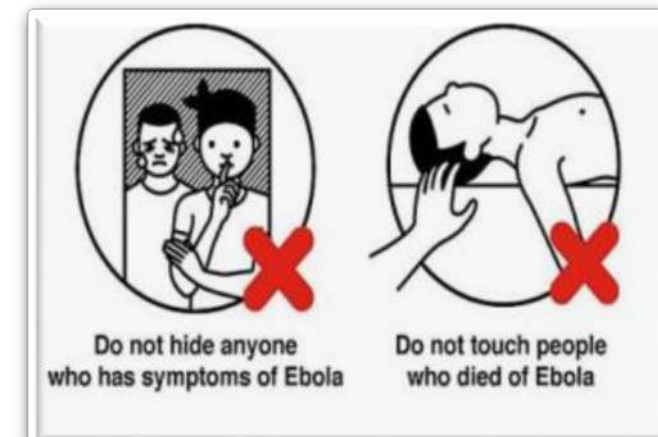


742



# Phase II: Scaling and expanding

- Scaling to the Middle East, North and Sub-Saharan Africa
- Expanding our digital learning (use of analytics)
- Adding messaging apps to our dissemination platforms
- Preparing for longer format programming on social, economic psychological effects of Covid-19



# Q&A



# Discussion





# Thank you!

*Please see our website for more information:*

[CORE GROUP COVID-19 Response Coordination Calls  
and Resources](#)

