



Advancing community health worldwide.

# COVID-19 Response Coordination Call

## Digital Technology Pt. 2

April 3, 2020



# Responding to COVID-19

## UNICEF experience with digital platforms

# Context

A **multi-disciplinary approach** with cross-functional collaboration including **Innovation + ICT4D + Communications for Development + Communication + Programme Health**

**Close coordination** through a Digital Platforms Working Group.

Today sharing these solutions at scale:

1. **COVID-19 Information Chatbot**
2. **Internet of Good Things** (IOGT) for COVID-19 Response

# COVID-19 Information Chatbot

**Validated content**, **crafted for digital messaging** and in plain and **accessible language** for ordinary community members, **translated** and continually **refined and expanded** and **localized content relevant to that country context**.

Uses **multiple channels** as appropriate for the country context, including SMS and digital and social messaging channels such as Viber, Facebook Messenger.

A user sends a message to opt in and can ask the chatbot questions about COVID-19; provide suggestions for content; and report rumors. The COVID-19 bot strengthens the ability to:

- assess needs
- tackle misinformation, and in partnership with governments;
- share reliable information on where communities can seek assistance.

Now working on implementation beyond the 68 countries that had U-Report platform in place; assess and measure secondary impact of COVID-19 and build a dashboard to ensure data is going to the right stakeholders and decision makers in a timely manner to support broader response efforts.


-----MAIN MENU-----

What would you like to learn?

A. What is Coronavirus, symptoms and how it spreads? 



B. Protect yourself and others 

C. Myths and Fake news 

D. Report a rumor spreading in your community 

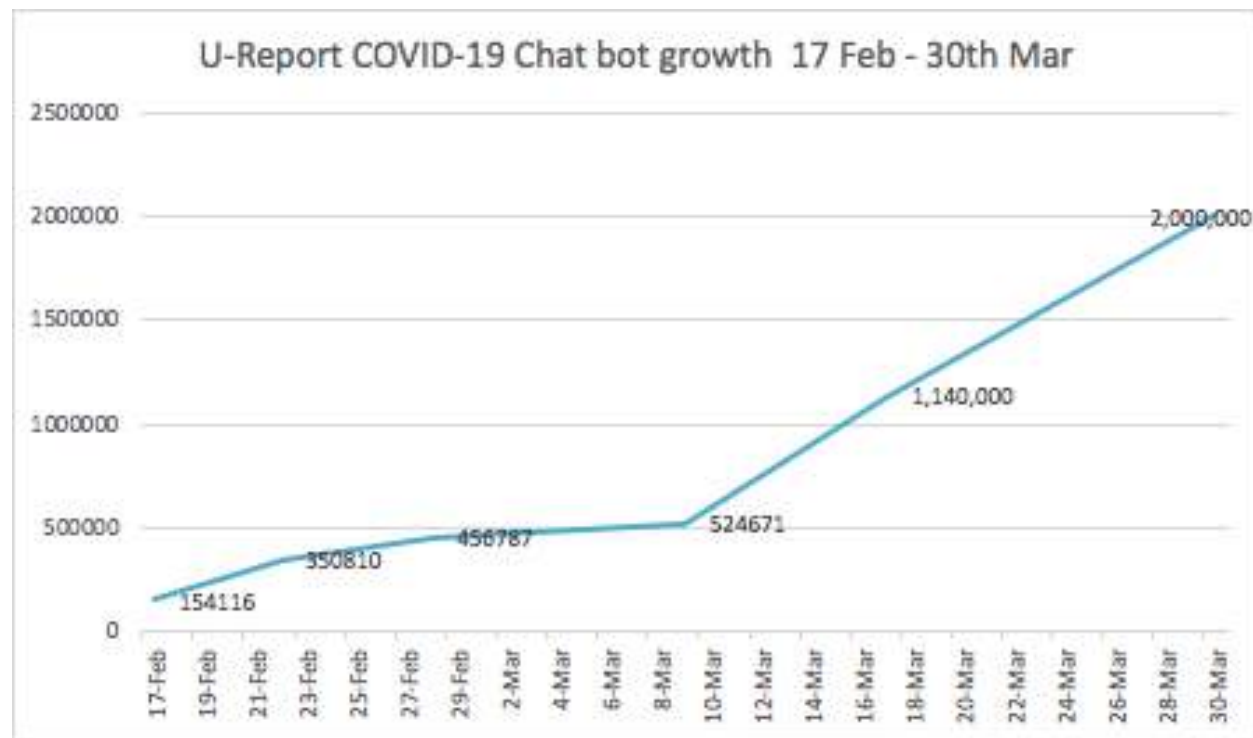
E. Other questions 

F. Share the information 

G. Sharing "facts not fear" and preventing stigma  

# COVID-19 Information Chatbot reach

Launched Feb 13 – Scale from 150,000 to 2 million users in three weeks

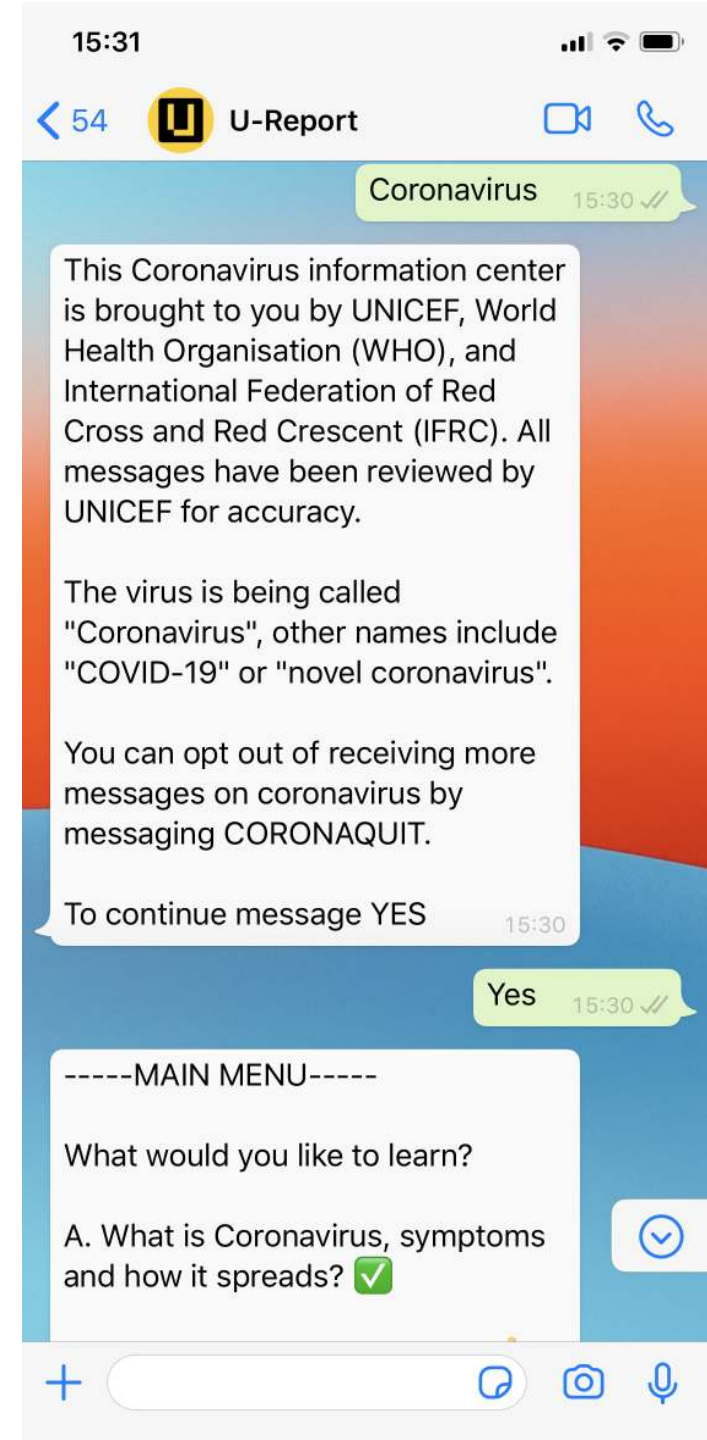


To develop the chatbot, we leveraged U-Report, a digital platform and UNICEF's flagship social messaging innovation used to reach and engage young people and their community. Currently being used by more than **10 million people in 65 countries**

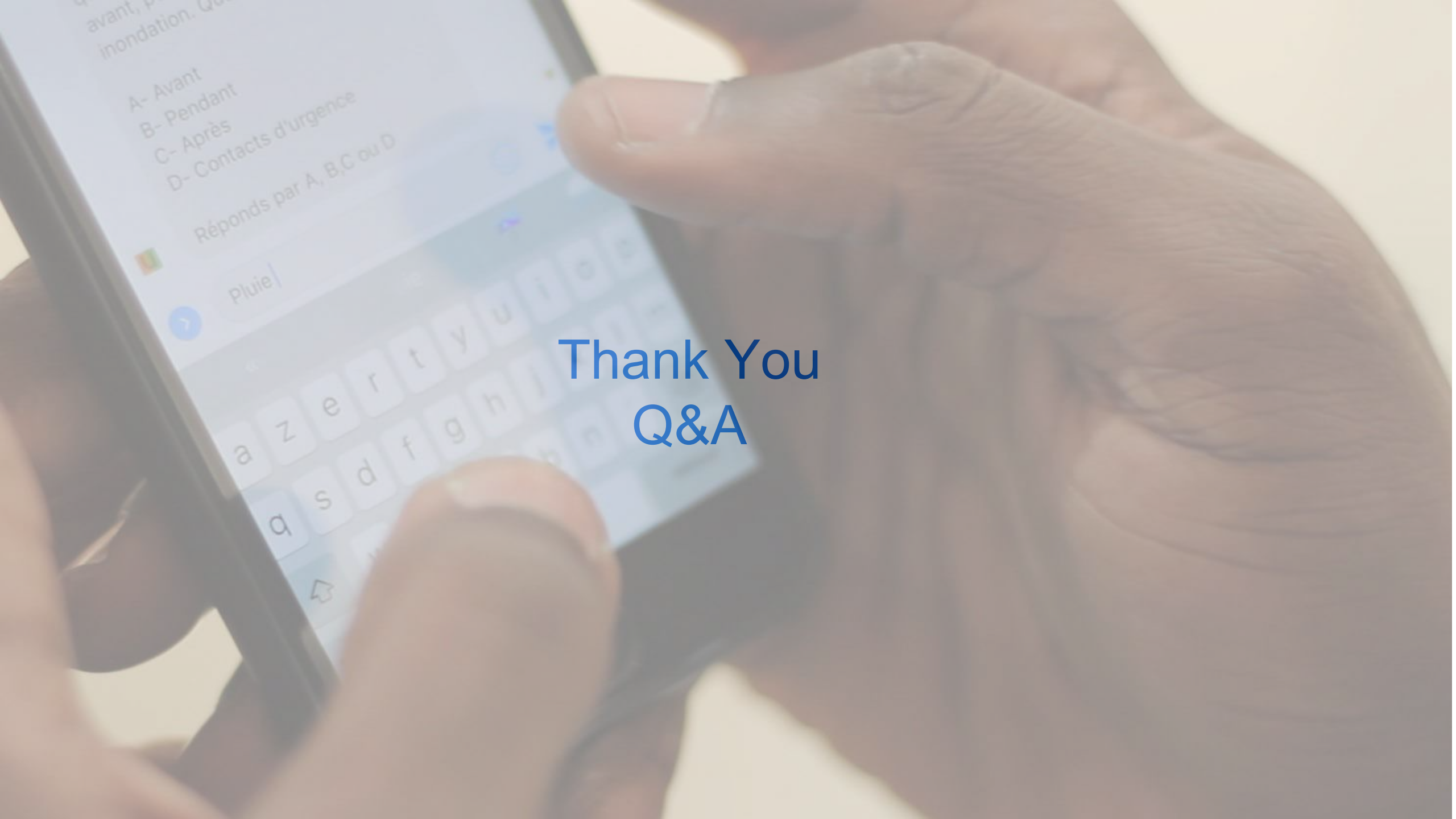
# Try it yourself!

Using Viber, WhatsApp or Facebook Messenger you can access the current version of the U-Report COVID-19 chatbot.

- **WhatsApp:** Send “CoronaVirus” to +66 80 024 9442.
- **Facebook Messenger:** Send ‘CoronaVirus’ using Facebook Messenger at <http://m.me/UReportGlobal>
- **Viber:** Follow ‘U-Report’ Public Account on Viber (Go to Discover), Send the message ‘CoronaVirus’







Thank You  
Q&A

# Mobile Solutions for COVID-19 Response





# What are we trying to achieve?

## Goal

### What is the goal?

Quickly communicate actionable COVID-19 response information (including prevention, diagnosis, treatment) at scale.

### What are the constraints?

- Rapid implementation
- Low/no literacy and language diversity
- Poor digital literacy
- Cost-effective at scale
- Rapidly adaptable
- Combating misinformation
- Social distancing

# Where do we work?

Viamo currently has programs and staff in the following countries. [Countries with an \(\\*\) have a live 3-2-1 Service.](#)

- Afghanistan\*
- Bangladesh
- Botswana\*
- Burkina Faso\*
- Cambodia\*
- Dem. Rep. Congo\*
- Ethiopia
- Ghana\*
- India
- Indonesia\*\*
- Haiti
- Kenya
- Madagascar\*
- Malawi\*
- Mali\*
- Mozambique\*
- Nepal\*
- Nigeria\*
- Niger\*
- Pakistan\*
- Rwanda\*
- Senegal
- Sierra Leone
- Tanzania\*
- Uganda\*
- Zambia\*
- Zimbabwe

\*\*Expected launch April 2020



# Who do we work with?

\*\*Expected launch April 2020

# Viamo's Approach to COVID-19

a global social enterprise improving lives via mobile | [Viamo.io](https://viamo.io)



# Module 1

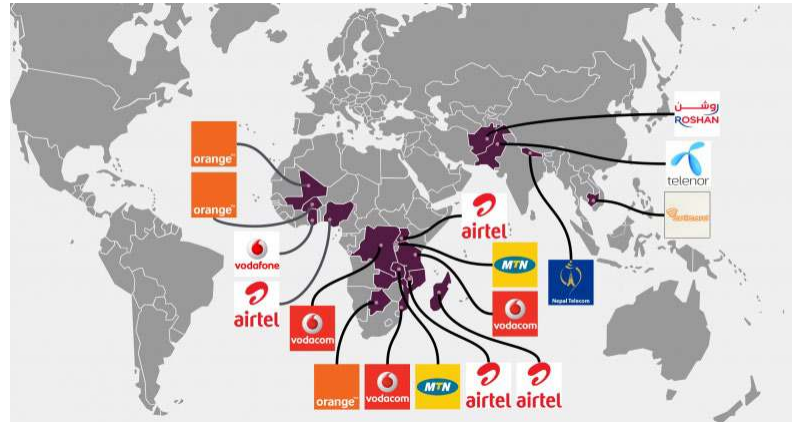
# The 3-2-1 Service

## Product:

- On demand livelihood information
- Dial “3-2-1” from simple phone, access oral content
  - Health
  - Agriculture
  - Civic engagement
  - Financial services
  - COVID19
- Free airtime
- Listen to live COVID-19 messages from Uganda’s “1-6-1 Service” by calling the demo line: **1-650-866-1481**
- [More Info Here](#)

## Where is it?

3-2-1 is accessible to >120 million people.



East and Southern Africa	West and Central Africa	Asia
<ul style="list-style-type: none"><li>• Botswana</li><li>• Madagascar</li><li>• Malawi</li><li>• Mozambique</li><li>• Rwanda</li><li>• Tanzania</li><li>• Uganda</li><li>• Zambia</li></ul>	<ul style="list-style-type: none"><li>• Burkina Faso</li><li>• DRC</li><li>• Ghana</li><li>• Mali</li><li>• Nigeria</li></ul>	<ul style="list-style-type: none"><li>• Afghanistan</li><li>• Cambodia</li><li>• Nepal</li><li>• Pakistan</li></ul>

## COVID-19

### Existing/Planned Basic Content

- What is Coronavirus?
- Hygiene
- Social distancing

### Areas For Collaboration

- Self-diagnostic quiz
  - Symptom-specific behavior change
  - Symptom cluster mapping
- Combating misinformation
- Reliable situation updates
- Games
- KAP questions



# Module 2

# Remote Training

## Product

Modules delivered by voice, SMS, or chatbot to the “flip phones” that people already have and use.

Delivered:

- On a schedule
- As requested by CHW
- As a content library

[More Info Here](#)

## Why?

- Rapid implementation
- Low cost per trained worker
- Integrated impact measurement with real time dashboard

## COVID-19

Training of:

- CHW's
- Frontline workers
- Community leaders





# Module 3

## Surveys

### Product

Interactive Voice Response (IVR) and SMS based mobile phone surveys.

[More Info Here](#)



### Why?

- Rapid implementation
- Low cost per response
- Accessible to no/low literacy
- No requirement to put field staff in danger

### COVID-19

#### Healthcare Access Monitoring

Monitor a country's access to healthcare, either from the perspective of the general population, or health workers.

#### Knowledge Surveys

Get insights into a general populations understanding of hygiene and social distancing.

# Other Tools

## **SMS-Based Contact Tracing**

SMS system to “flatten the curve” at scale when detailed investigations are not possible.

## **Chatbots**

Available on Whatsapp, Facebook, SMS, and more.

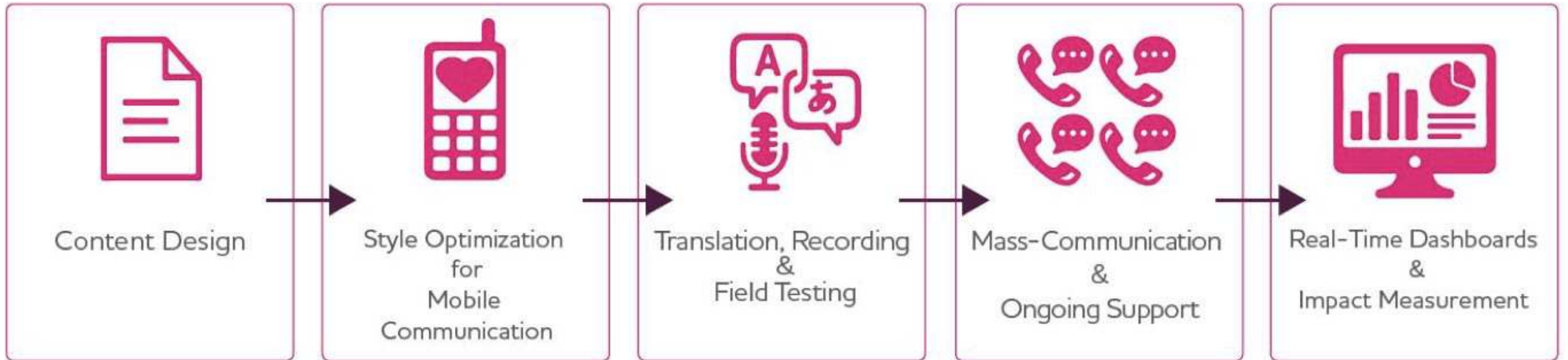
## **Call Center/Hotline**

Dedicated COVID19 hotlines with an IVR layer to reduce load on existing centers.

## **Targeted Mass Messaging**

Mass SMS & voice communications.

# Implementation Process



# Get in Touch!

Stephen Meyer

[stephen.meyer@viamo.io](mailto:stephen.meyer@viamo.io)

# SIERRA LEONE'S EXPERIENCE WITH EBOLA AND RESPONDING TO COVID- 19 USING DIGITAL TECHNOLOGY





## EBOLA-WHAT DID WE DO?

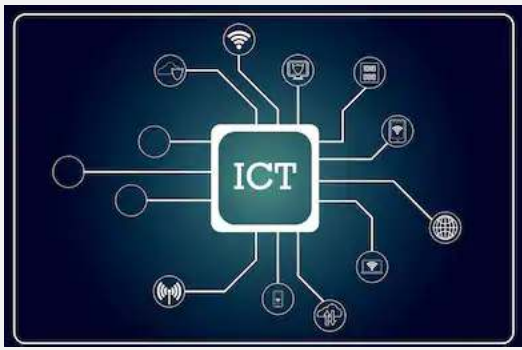
- **Initially**, very reliant on traditional means of communication to ensure safety measures (hand-washing, burials, social distancing)
  - ☐ FM Radio (Discussion Programmes, Jingles, Phone-ins etc.)
  - ☐ Hand Bills
  - ☐ Bill Boards
  - ☐ Small Community Sensitization Meetings
  - ☐ Public Address Systems (megaphones, public audio speakers etc.)





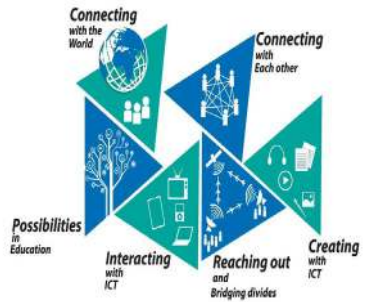
## WHAT DID ICT DO TO IMPROVE?

- After the traditional media failed to adequately contain the virus because of youth population) ICT was used through:
  - ☐ WhatsApp (short videos, messaging, gifs etc. )
  - ☐ Facebook
  - ☐ Mass Text Messaging
  - ☐ IVR messaging to conduct trainings and more sensitizations



## CHALLENGES DURING EBOLA

- ❑ **Mistrust:** Communities' lack of trust in health facilities, hence more people died from non-Ebola related conditions (Fear of infection by health workers)
- ❑ **Misinformation:** Disinformation and Misinformation (for political reasons, penchant to share on WhatsApp without crosschecking,
- ❑ **Questionable data ownership.** To date we don't have control over some EVD data, such as burial data
- ❑ **Late involvement** of some critical players (ICT, use of community structures etc.)



## WHAT HAVE WE DONE DIFFERENTLY WITH COVID-19?

- ☐ **Implemented a DHIS2 module**, for Contact Tracing, Case Management, Point of Entry
- ☐ **Disease Surveillance:** improve on the rapid collection of data using SMS
- ☐ **Website:** WhatsApp plug-in allows to automatically communicate with the public
- ☐ **Govt Info Management System (GIMS)** National Hotline (117) to respond to emergencies; redirects to calls to districts (DHMTs) and Government Ministries (MDA), as required

## NEXT STEPS

- **Proactive Messaging:** Beat Citizen journalists in disseminating Information in Realtime to dispel disinformation to build community trust
- **Data ownership:** All major data collection platforms must interoperate with national systems
- **Community Structures:** Use existing community systems such as CHW apps, local bylaws etc.
- **Partnership and Coordination:** Act early and act together (Governments, UN agencies and aid groups need to coordinate a truly global response that will protect all people.
- **ICT Innovation:** Use ICT innovation to improve health information systems to suits the context (epidemic or pandemic)

# Leap Mobile Learning Platform for COVID-19 Response

## Presentation to Core Group

Caroline S. Mbindyo  
AMREF ENTERPRISES  
April 03, 2020



# Leap Mobile Learning Platform



## Virtual Learning on any device

On-demand access to essential information, tools and services



## Evaluation through Quizzes and Assessments

Gamefication and instant performance feedback; measure and adapt quickly



## Direct access to learners, support, and supervision

Collaboration tools for knowledge sharing & support; build capacity of supervisors with richer content and supervision tools



## Collaboration over Group Chat

Promote peer-to-peer collaboration and mobilise communities

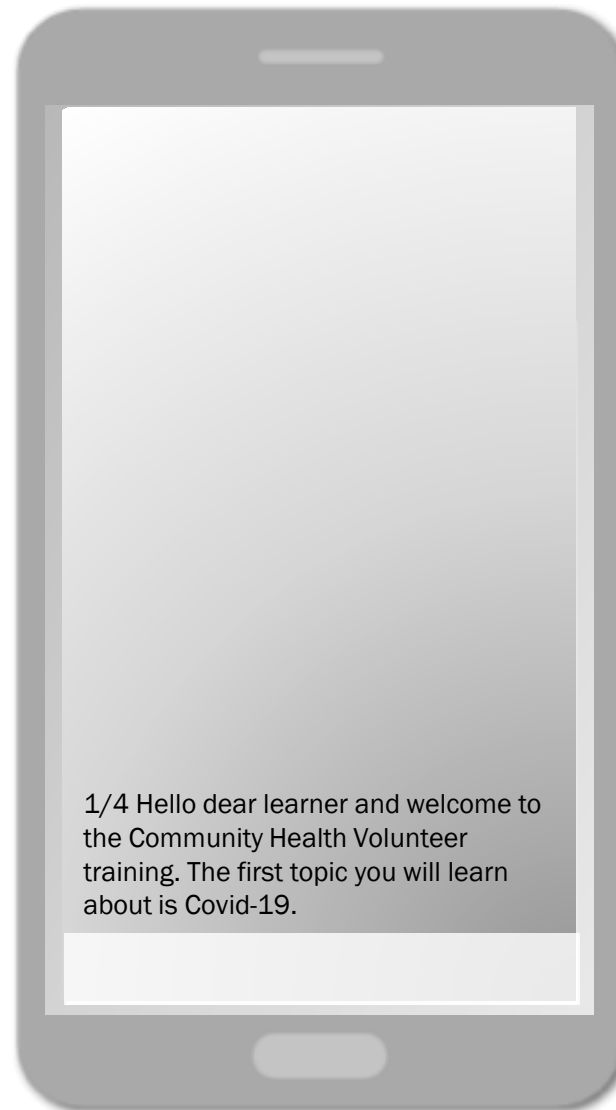


## Collect Digital Training Records

Connect health workers to the formal health system and capture digital records of their training and career development



# LEAP Demo 1: New Topic Role-play



# LEAP Demo 1: New Topic Role-play

1/4 Hello dear learner and welcome to the Community Health Volunteer training. The first topic you will learn about is Covid-19.

2/4 During the week you will receive SMS messages and listen to recorded phone stories and lectures all related to Covid-19

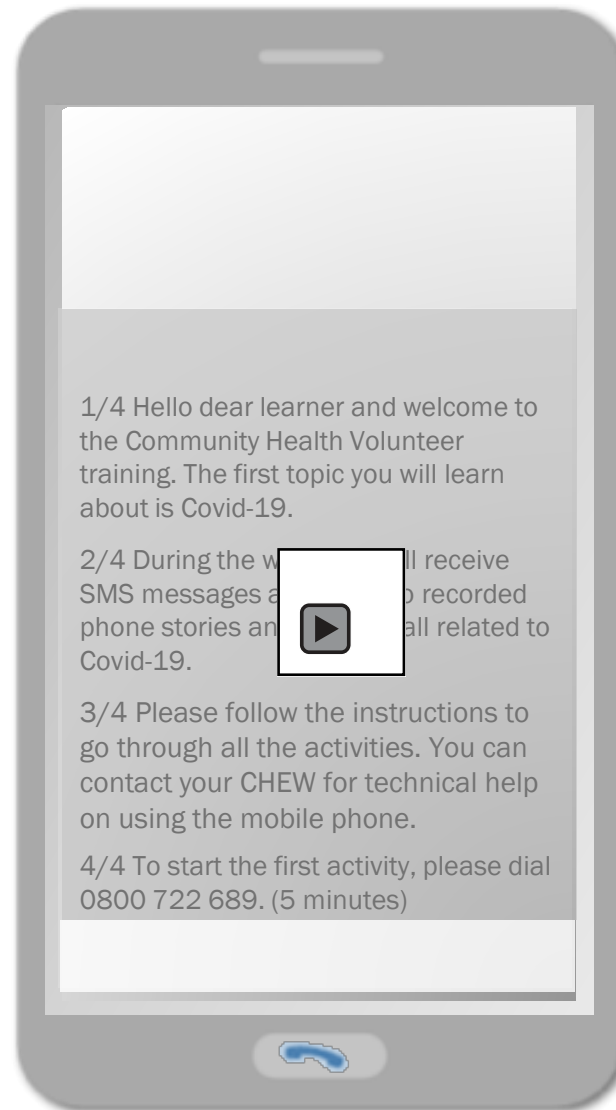
# LEAP Demo 1: New Topic Role-play

1/4 Hello dear learner and welcome to the Community Health Volunteer training. The first topic you will learn about is Covid-19.

2/4 During the week you will receive SMS messages and listen to recorded phone stories and lectures all related to Covid-19

3/4 Please follow the instructions to go through all the activities. You can contact your CHEW for technical help on using the mobile phone.

# LEAP Demo 1: New Topic Role-play



# Group Chat



I want 2thank AMREFF 4coming up with mlearning , which has made my cu to fully participate in everypart in the community & we ve made a schedule every chv has a topic to teach cliants who have come 4services at de facility , God bless AMREFF & KANCO-Joshua Kulova - Bungoma

You now have enough knowledge to empower your community members after mlearning. We are the eyes of the HF please report any disease outbreak to your HP for quick response. Save a life and God will bless you~Roseline Mukhwana Bungoma

OK unachukua lita tano au tatu ,unatoboa tundu kwa kifuniko chake ili uingiza kamba na hio kamba iwe mrefu chini yake ufunge kijiti.....badala ya tundu ya kutoa maji kua chini uieke juu then juu umehang hicho kibuyu kwenye mti mtu akitaka kuosha mkono anakanyaga kile kijiti na maji yanamwagika bila kushika popote to reduce infection~Owour Christine-Nairobi

Good evening good people..... this is where the creteria the topic of hand washing comes in.... let's go out and teach our HH members. Our loving father won't disappoint us.~Eric Odongo-Siaya

I am ready to serve my community. I support handwashing in markets, hospitals and churches, As a CHW I will work hard through my households for a safe Community~Evelyne-Bungoma

Amref/MOH Chvs learn the medical challenges from other counties on Corona virus some vulnerable households do not have the information prevention ways for lack of radios/Tvs/phones Mlearning is making us the do our role as Chvs is to pass the measures to them as per the WHO information~Marion -Nairobi

Thanks Amref Team and WHO in partnership with Kakamega County for the TB screening/ free chest Xray you conducted over the weekend at Sigalagala boundary of Ikolomani and Shinyalu Subcounties~Winfred Luyeku-Kakamega



Good evening good people..... this is where the creteria the topic of hand washing comes in.... let's go out and teach our HH members. Our loving father won't disappoint us.~Eric Odongo-Siaya

# CHWs in the Frontlines





# Contact Us

Pay us a visit, talk to us, send us feedback as we advance the health improvement agenda through empowering communities



**Website:**

[www.leaphealthmobile.com](http://www.leaphealthmobile.com)



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+254 721 242938



**Caroline Mbindyo**

[Caroline.mbindyo@amref.org](mailto:Caroline.mbindyo@amref.org)





**“Implementation of the Personal Health Record  
(PHR) as a tool for integration of migrants in health  
systems”**

<http://re-health.eea.iom.int/>

# WAY TO THE e-PHR

## Request by DG SANTE to IOM to:

Develop a resource for Health Professionals to perform HAs for new migrants in the EU/EEA, initially with a Handbook for Health Professionals.

Further to it a unified instrument and personal health record for health assessment for those arriving to the EU/EEA

## The Product:

- IOM- EC –DG SANTE (DGA) **Re-Health (2016- 2017)** and ECDC
- Initially Handbook, then e-PHR and electronic resource
- e-PHR is user-friendly, secure patient record management platform
- Interfaceable with domestic and international systems
- Handbook available in 9 EU languages and Arabic



# WHAT THE E-PHR CAN DO?

## It's a fully electronic patient record solution

- Secure in external use
- Permission tree: registration, medical forms, backend
- HCWs can access/ edit patient records across countries
- Data extraction with special permission – csv/ pdf
- Pre-formatted user interface for charts/ tables
- Communicates via xml outputs or other modalities to other systems
- Voted Sustainable Development Goals (SDGs) best practice at global level.

## User friendly interface – built in

- validation checks/ mandatory fields
- auto-calculations
- drop down lists/ standardized selection/ ICD-10 codes
- additional features such as uploading documents in multiple formats ( x-rays etc.)





# ARCHITECTURE

Electronic Personal Health Record



Country A

Data entry

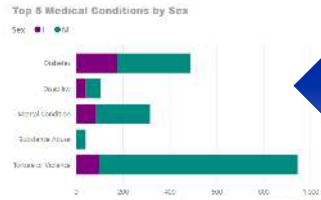
CLINICAL MEASUREMENTS	
Height (cm)	175
Weight (kg)	70
Heart rate (b/min)	72
Blood pressure (mmHg)	120/80
Glucose (mmol/L)	5.0
Cholesterol (mmol/L)	2.5
Triglycerides (mmol/L)	1.0
Urea nitrogen (mmol/L)	5.0
Creatinine (mmol/L)	0.8
Hemoglobin (g/dL)	13.0
Hematocrit (%)	38.0
White blood cells (x10 <sup>9</sup> /L)	7.0
Neutrophils (%)	65.0
Lymphocytes (%)	25.0
Monocytes (%)	10.0
Eosinophils (%)	0.5
Basophils (%)	0.5

Encryption



Data extraction

Analysis



Feedback



Country B



Country C



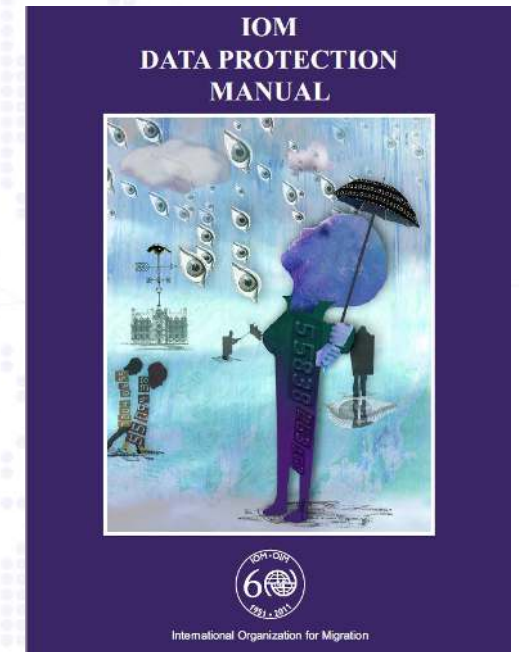
Country D

Access records

Access records

Access records

*“[...] contribute[s] to the EU Migration Agenda, the New Skills Agenda for Europe, and the Action Plan on the Integration of Third Country Nationals. It [...] also contribute[s] to the EU Digital Agenda, by consolidating the use of the PHR and the electronic version (e-PHR) as a single tool for refugees' and migrants' health assessments in EU countries.”*



Built in informed consent and data sharing form and in line with EU Data Protection (GDPR)

# CONSOLIDATION OF e-PHR USAGE



Electronic Personal & Health Record



## Bulgaria

Open center Ovcha Kupel  
National HP and mediators.



## Croatia

Reception centre for Asylum seekers in Zagreb; Dormitory in Karlovac;  
Dormitory in Rijeka; Dormitory in Ivanec, UNM in Rijeka.  
National HPs and IOM Mediators.



## Cyprus

Pournara and Limassol Shelters  
-Kofinou Reception Center  
National HPs and Mediators.



## Greece

Amaygdaleza pre-removal centre; Eleonas open camp; Chios and Samos Islands (Accommodation Refugee Shelters); Open Polyclinic MDM Greece (Pireos 33, Omonoia); Psychosocial Department (MDM Greece, Sappous 12, Omonoia); 4 Accommodation Shelters in Metaxourgeio  
IOM Mediators and 6 National Mediators. National HPs



## Italy

E-PHR under other action ATES: "Technical Assistance and support to the local health authorities of Sicily".



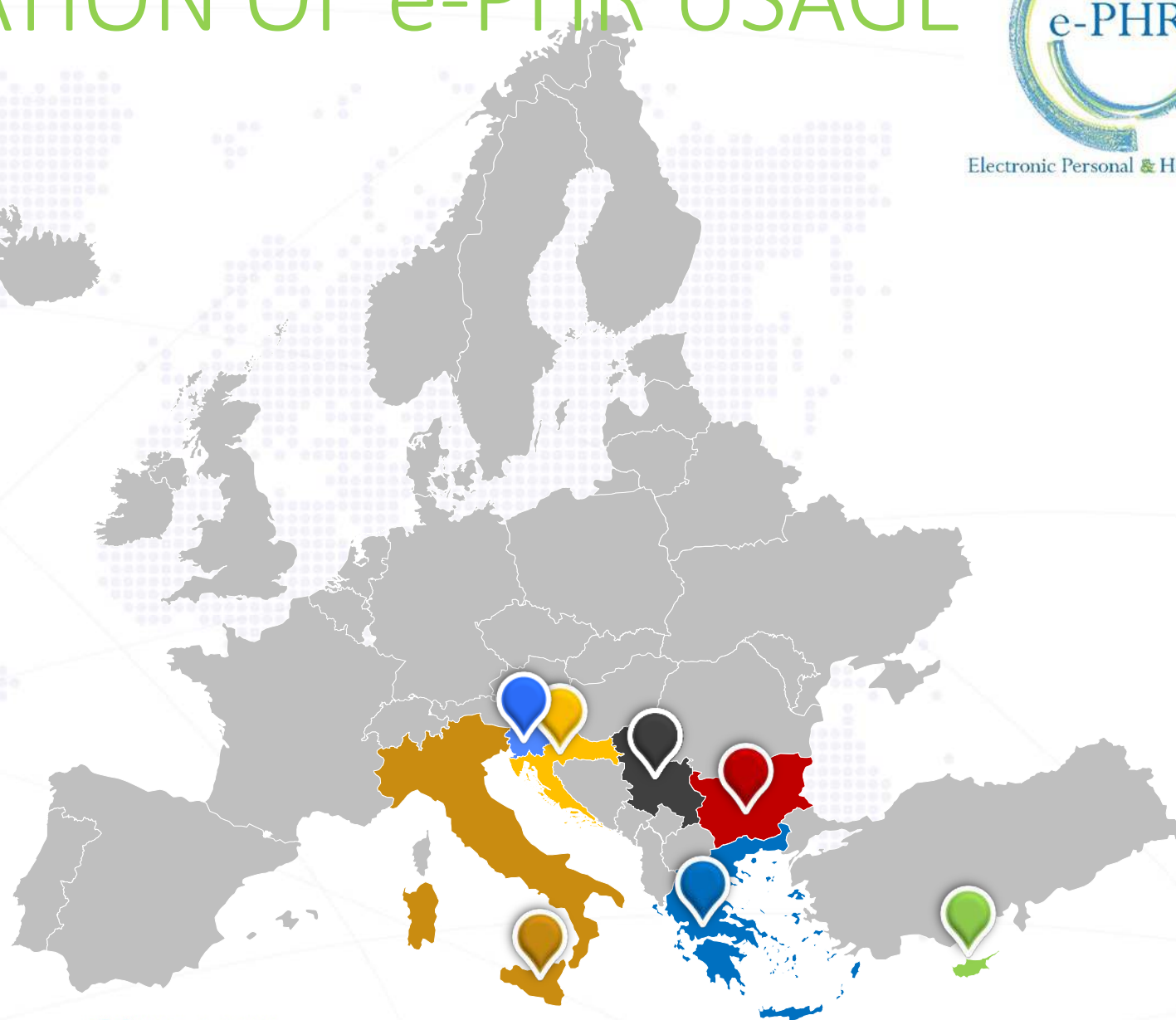
## Serbia

National Reception System in collaboration with Catholic Relief Services (CRS) and Danish Refugees Committee (DRC).  
National HPs and IOM Mediator.



## Slovenia

Asylum Center in Ljubljana – Kotnikova; Asylum Center Ljubljana – Vič  
National HPs and Mediators.





20,107

Migrants

26,753

Exams

## Source

REHEALTH

RELOCATION

## Year

2016

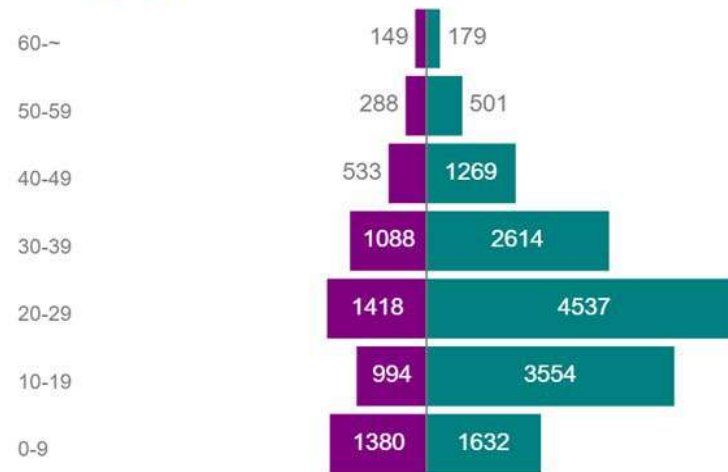
2017

2018

2019

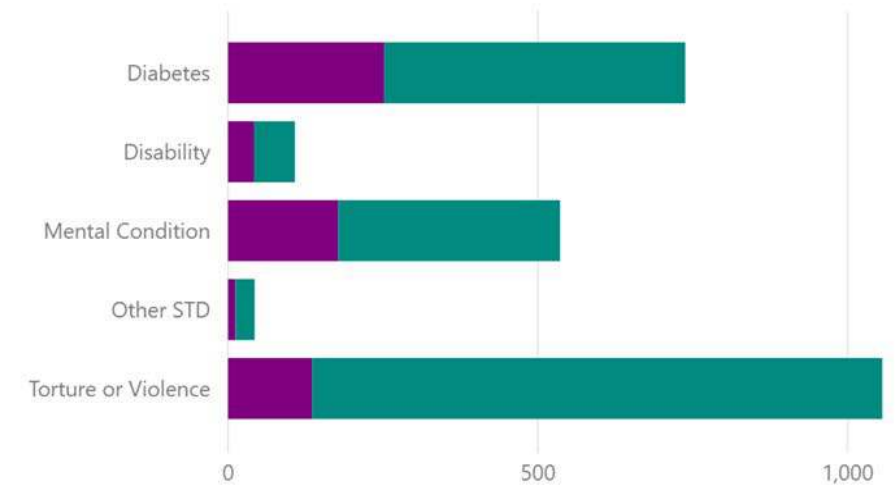
## Agregroups by Sex

Sex F M

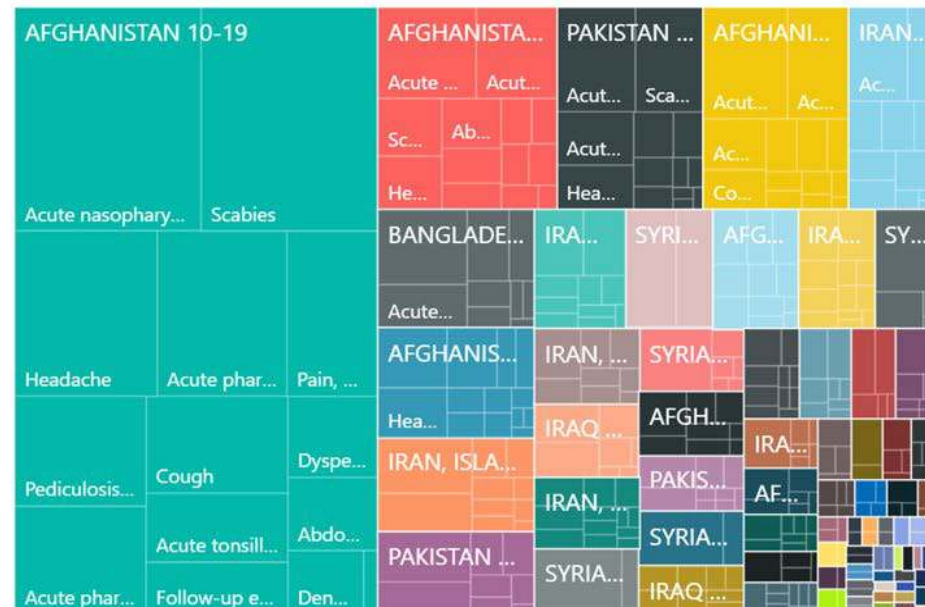


## Top 5 Medical Conditions by Sex

Sex F M



## ICD coded medical conditions by Nationality and Age



## ExamCountry

All



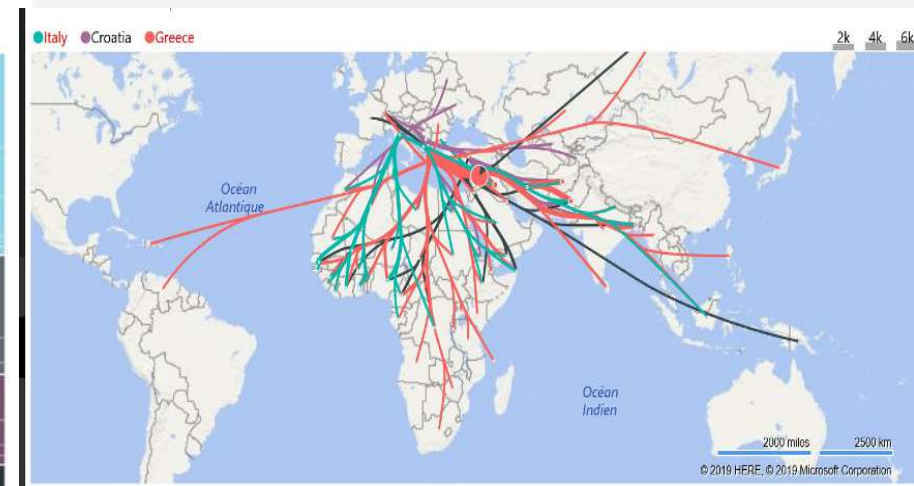
## Nationality

All



## Conditions

All







# Thank you!

千里之行，始於足下

*A journey of a thousand miles begins with a single step*

Lǎozǐ

IOM- Regional Office Migration Health [www.re-health.eea.iom.int](http://www.re-health.eea.iom.int); [ROBrusselsMHUnit@iom.int](mailto:ROBrusselsMHUnit@iom.int)



# AN INTRODUCTION TO BOOST

**Presented by:**

**Liz Kohlway**

**Manager, Community Building & Digital Engagement  
Sabin Vaccine Institute**

**April 3, 2020**



## Burnout and Fatigue

Sustaining engagement and interest in career advancement, in the face of complex systems.  
*Immunization professionals experience burnout, which leads to high turnover.*



## Complex Environments

Professionals are met with ambitious targets and little to no support or resources to achieve them.

*In many countries, decisions made at the highest level are political, not technical, making advocacy for immunization resources more difficult.*



## Isolation

Independent work settings, isolated from peers and mentors that could provide support.

*Sub-national EPI focal points report not having channels to communicate with peers working in other locations.*



Developed in close, ongoing collaboration with immunization partners, experts and professionals, Boost provides online and offline opportunities for immunization professionals to connect, learn and lead.





## MISSION

To foster a global community that enables immunization professionals to **connect** with peers and experts, **learn** skills that build capacity and advance careers and **lead** immunization programs in challenging contexts.

---

## VISION

A world in which every immunization professional is empowered to grow and lead in their careers and accelerate change in their communities.

# ACCOMPLISHING OUR MISSION

We've built an online platform, <https://boostcommunity.org> that connects immunization professionals to peers, supports and resources to learn and grow and equips professionals to lead in challenging situations.



## Connect

Boost is an on and offline community where immunization professionals can connect with peers and stakeholders and expand their professional network.



## Learn

Boost provides access to experts and resources to help immunization professionals learn skills to build capacity and advance their careers.



## Lead

Boost is designed to help immunization professionals lead immunization programs in challenging contexts.



**CONNECT**  
with fellow  
immunization peers  
and experts.

## Members

Browse our extensive list of Boost member profiles to connect with knowledgeable peers and experts. Narrow your search by filtering Boost members by region, job type and focus area to find those most valuable to you.

The screenshot displays the Boost website interface. At the top, the 'boost' logo is on the left, and a search bar with the placeholder 'Search for people' is on the right. Navigation links include 'Links', 'Welcome', 'Connect with Members' (highlighted), 'Learn & Lead', and 'Community Feed'. Below the navigation, it shows 'Results: 1256' and a 'Refresh results as I move the map' checkbox. The main content area features a grid of member profiles, each with a photo, name, and location. To the right of the grid is a map of Africa and the Middle East with colored circles indicating member density. A search filter overlay is visible on the map, showing options for 'First name', 'Last name', 'Type a keyword', and 'Type & select a location', along with a 'More filters' dropdown.

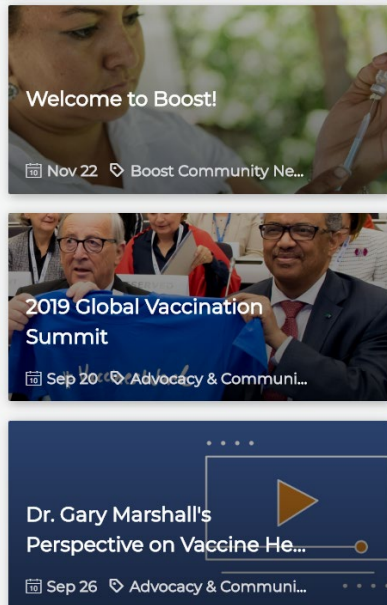
Name	Location
Christina Shaw	Baltimore United States
Nqobizitha Ndlovu	Kampala Uganda
BONAVENTURA...	Dar es Salaam Tanzania
Maya Rivera	Hanoi Vietnam
Hardeep Sandhu	United States
Alain Blaise Tatsinkou	Yaounde Cameroon
Thato Mokhehle	Lesotho
Yunis Mussema Abdella	Addis Ababa Ethiopia

# LEARN & LEAD

Access experts and resources to learn skills to build capacity and lead immunization programs with confidence.

## Curated Resources

Browse Boost Curated Resources to find webinars, news and videos on relevant immunization topics.



## Learning Groups

Boost Learning Groups provide learning opportunities on a variety of topics, such as Adaptive Leadership. Join an existing group or create your own to connect and learn from like-minded immunization professionals and experts.



## Live Events

Visit the Live Events page to find face-to-face convenings of immunization professionals in specific regions. Boost Members can also post their own events and invite others to join.



# BOOST COMMUNITY METRICS

**415** Activated  
Profiles



**85** Countries  
Represented



**120** Immunization  
Professionals working  
at the National & Sub-  
National Level



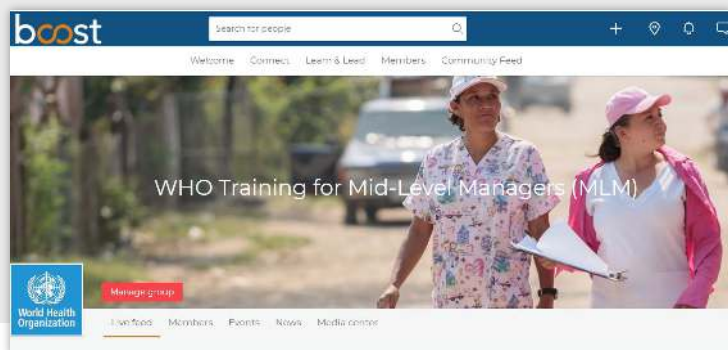


# PARTNER WITH BOOST

Boost considers and welcomes the entire immunization community as partners.

## Join Us

Share information and resources to support Boost members' learning while gleaning valuable insights directly from the field.



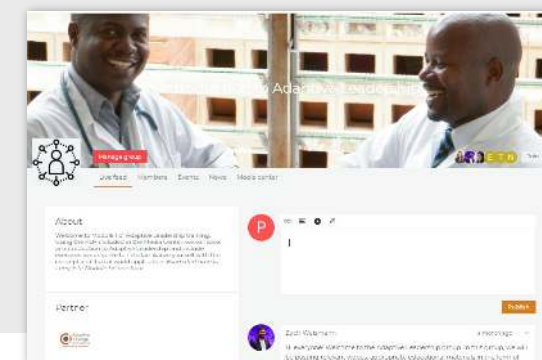
## Content and Community

Bring your existing immunization communities onto Boost and tap into an even larger, growing network of immunization professionals, experts and resources.



## Share Your Resources

Share your expertise with the next generation of immunization professionals on Boost. Deliver webinars, share resources and lead group discussions to support the global immunization community.



# THANK YOU

# Discussion



# Thank you!

*Please see our website for more information:*

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

