

Digital health and digital engagement for COVID-19 preparedness and response

Digital solutions have direct value in health emergencies, specifically where they have been deployed and scaled for surveillance and contact tracing, data collection, remote health worker training/motivation, risk communication and community engagement (RCCE), and demand generation. However, given the need to respond quickly, international aid organizations, governments and in-country institutions commonly rely on external agency support for digital solutions due to lack of capacity. With multiple agencies involved, in many instances, this has led to lack of coordination and ad-hoc adoption of untested solutions designed for the short term. Often this result in missed opportunities of health system strengthening to address long-standing challenges, and fail to sufficiently consider participatory approaches and feedback mechanisms as well as strengthen system capacity to respond to future emergencies.

In light of the above, UNICEF country teams have supported governments and partners to apply digital health solutions for health systems strengthening, using [existing guidance](#). Focus has been on embedding digital health into community and primary health care programmes to increase and monitor access to quality services for children and their families. There has also been targeted support for national digital health strategies and action plans, governance frameworks, and aligning solutions to existing [global guidance from WHO](#).

In the context of the COVID-19 pandemic, countries must develop and deploy strategic action plans, which can benefit explicitly from digital health and digital engagement solutions. Plans should, where possible, be consistent with UNICEF Health's COVID-19 strategy "[Saving lives, maintaining services and strengthening systems](#)".

To support countries in this regard, country offices should consider:

1. **Reviewing and mapping their Digital Health and Digital Engagement ecosystem as a response to the COVID-19 outbreak**, including mapping and identification of solutions with capabilities to support preparedness, response and recovery strategies and activities. For example, existing national solutions could be modified to support frontline health worker communication, training and data collection, RCCE, and demand generation. A country mapping of relevant digital technologies for COVID-19 response can be found [here](#) and country mapping of implementing partners who support country governments to in the deployment of digital health platforms can be found [here](#).
2. **Using Digital Engagement solutions for targeted risk communication** initiatives to reduce transmission of the virus, identifying and tackling misinformation, or surveys to estimate existing knowledge, risk perceptions, misconceptions and rumours. UNICEF has in the past deployed Digital messaging initiatives using [RapidPro](#), [U-Report](#), WhatsApp and other platforms that support client communication. Where already deployed, they can be easily used to inform pregnant women, adolescents, and their families on how to prevent COVID-19 spread and where to seek assistance. Global Coronavirus information chatbots which countries can adapt for local context, such as UNICEF's [U-Report](#) and [HealthBuddy](#), or WHO's [HealthAlert](#), are now deployed in > 50 countries and work with SMS, Facebook Messenger, WhatsApp, Viber, and other channels. Where digital platforms are not yet deployed, country teams can look to partner with [local institutions](#) who have systems, platforms and processes in place that can be leveraged. Also, platforms like [Viamo](#), with whom UNICEF has a global LTA, for interactive voice recording (IVR) are present in many countries and

can be leveraged for health messaging. Country offices are encouraged to:

- **Activate, modify and use these solutions as channels to adopt the [COVID-19 RCCE strategy](#), the [Global C4D resource package](#) and the [UNICEF Health strategy guidance](#)** that provide frameworks, content and messaging for the general public and specific risk groups to address infection prevention, illness management, care seeking and how to flatten the curve of spread.
 - **Ensure programmatic collaboration across teams and integration across Digital Engagement platforms**, e.g. between U-Report, RapidPro, [Internet of Good Things](#) (IoGT) and other Digital Health solutions in use, and define common workflows between the tools for defined uses as well as seek synergies and leveraging of platforms developed or supported by other agencies.
3. **Deploying Digital Health solutions for frontline health workers**, for example; in coordination with government and partners establish or update health worker registries with contacts, qualification / capacity and geolocation, and connect these with platforms like RapidPro, CommCare, OpenSRP or Community Health Toolkit to provide remote training/e-learning, information gathering for case surveillance, and collection of data for [monitoring of impact of the COVID-19 pandemic and its response on routine health services for women and children](#). Country offices are encouraged to support governments to activate, modify and use these solutions for:
- **Targeted communication, using chatbots if appropriate, with frontline health workers on new [guidelines for community-based health care in context of the COVID-19 pandemic](#)** for patient management, disease presentation, high risk groups, the importance of continuing routine care and to promote health workers' wellbeing, morale, and self-care.
 - **Collecting data on COVID-19 routine health services and continuity of care**, by reporting weekly on suggested [core indicators](#), to identify disruption in health and related services
 - **Supporting tracking of rumours and misinformation in the community**, provide accurate information on COVID-19, impact on mental health and stigma, and provide feedback on efficiency and effectiveness of services to help improve delivery
 - **Where applicable, support collecting data for surveillance**, such as number of suspected COVID-19 cases, number of confirmed cases and number of deaths among confirmed cases.
4. **Enable government Health Management Information Systems (HMIS)** to collect, analyse, map, manage and respond to public health emergencies data and secondary impacts. Regional and country offices are encouraged to:
- **Establish systems for data sharing** between frontline health worker reporting tools and national data warehouses, such as DHIS2, to inform decision making.
 - **Set-up public health emergency and secondary impact dashboards**, GIS hot spot mapping and data visualisation functions to monitor during the outbreak in line with [UNICEF GIS guidance](#).
 - **Where applicable, support surveillance with the [DHIS2 COVID-19 Digital Data Package](#)**. UNICEF has a global LTA with the university of Oslo that can be leveraged for this activity.
 - For more information on promising practices, modalities for support, and experiences sharing please reach out to the [HQ Digital Health team](#) and your respective [ICT4D Business Analysts](#).

Contacts for support in UNICEF:

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