Digital Square’s unique role in supporting COVAX and country distribution

Digital Square serves health leaders by connecting them with resources necessary for digital transformation, including adaptable, reusable digital global goods that can be harnessed for vaccine readiness and deployment. Through existing partnerships with WHO, UNICEF, and a host of donors in the digital health ecosystem, we are well-positioned to support digital readiness for COVAX introduction.

Specifically, Digital Square can offer:

- Rapid procurement supporting global goods
- Co-investment opportunities with our network of investors and partners
- Digital health technical expertise including interoperability of digital health solutions
- Responsiveness to country priorities through direct country engagement.

Digital Square has relationships with over 30 global good partners and supports deployment of global goods across more than 130 countries. Global goods are already active in 55 out of the 57 GAVI AMC countries, and 12 global goods have developed functionalities specifically for COVID-19 vaccine roll-out.

Digital Square’s broader COVID-19 capabilities across donor alignment and coordination, support for global goods and interoperability standards, and country support can be found here.

Background

The Coalition for Epidemic Preparedness Innovations (CEPI), Gavi, and the World Health Organization (WHO) launched the COVAX facility in April 2020 as a global solution to end the ongoing pandemic by facilitating equitable access to coronavirus vaccines. By the end of 2021, the facility aims to deliver 2 billion doses, including over half a billion doses to 57 Gavi Advance Market Commitment (AMC) countries.

In June 2021, COVAX received an additional dose-sharing commitment of 870 million doses following the G7 summit, increasing availability of vaccines in 2021 and 2022. However, as countries prepare for vaccination campaigns, there remains a lot to be done to ensure that health systems are truly ready to distribute, administer, and track vaccines for their populations.

The WHO’s Country Readiness Core Indicators (RCI) dashboard presents summaries of country-level data on several areas including national coordination for vaccine introduction, cold chain capacity, and health worker training – critical factors in rolling-out any new vaccine at scale. The 57 Gavi AMC countries have an average RCI score of 32.04/100, indicating a lack of preparedness in terms of safety, demand, and regulatory approvals needed for COVAX roll-out. In contrast, countries that are self-financing the vaccine have an average RCI score of 55.42/100.
To ensure equitable distribution of a vaccine, COVAX is applying lessons learned from routine vaccination programs and emergency vaccine introductions such as against polio: **build on existing systems and rely on strong partnerships at all levels.** The WHO too, in its guidance on developing a national deployment and vaccination plan, highlights **the role of digital tools** in planning, deploying, and monitoring roll-out of a vaccine.

Effectively deploying digital tools can help countries deliver a vaccine quickly and efficiently, saving lives and substantially speeding up the end to the global disease outbreak. Digital tools and data from those systems can be used to help countries plan vaccine distribution, especially when a limited number of vaccine doses will be available and when a vaccine could be introduced in phases. Once a vaccine is ready for administration to recipients at health facilities, digital tools can aid in the management of individual recipients, support health worker training, and streamline efficiencies in the supply chain, reducing wastage of these essential commodities.

**Global goods and COVID-19 adaptations**

Digital Square-supported global goods are designed to be affordable and effective in low-resource settings, offering features such as offline functionality and the incorporation of SMS data inputs. Several global goods have already developed modules to support COVAX introduction across use-cases. More information on these adaptations and supporting resources can be found on Digital Square’s **COVID-19 Adaptations Wiki** as well as in this resource created to map use-cases for the lifecycle of a vaccination campaign and beyond.

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<td>Community mobilization supporting demand generation and communication for vaccination campaigns</td>
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<td>Logistics Management Tools for Procurement, Delivery, Cold Chain Monitoring including to the last mile</td>
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Tracking and follow up reminders for patient and health worker administration of the vaccine

| Monitoring | Tracking tools to monitor quality of vaccine delivery and safety for potential adverse effects | CommCare, DHIS2, OpenSRP, SORMAS |
| Digital Vaccine Certificates | CommCare, DHIS2, working with WHO on a Product Registry (Product Catalogue Management Tool) and Terminology Services (OCL) |

Across these use-cases, global goods are aiding countries in successful COVAX roll-out. For example, DHIS2’s COVID-19 Vaccine Delivery Toolkit has been deployed in Sri Lanka, helping the Ministry of Health register clients for immunizations and manage vaccine stocks. SORMAS, which has developed and tested a vaccine module for polio vaccination campaigns in Afghanistan, is working with the Ministry of Health to generate demand among the population for coronavirus vaccine campaigns. For a full list of the digital health global goods, please download the [Global Goods Guidebook Version 2.0](#) that was released in March 2021.

Digital Square has mapped the existing functionality of approved global goods to all the COVID-19 use-cases, from contact tracing and surveillance to laboratory systems and interoperability tools, through a USAID-funded project called [Map and Match](#). Global goods grouped by those that have already been adapted to match a COVID-19 use-case and those that could be adapted to match a use-case are presented in this [document](#).

Additionally, Digital Square’s [Digital Applications and Tools Across an Epidemiological Curve (DATEC)](#) framework helps visualize these use-cases across different stages of an epidemic. Developed as part of the Map and Match project, it shows how countries can prepare for vaccine roll-out and use digital tools and analytics to ensure safe and fair deployment of vaccines. The section on ‘Utilization of outbreak control tools’ specifically depicts how vaccines are deployed, distributed, and scaled as a crucial outbreak control tool during an epidemic.

**Digital Square coordination with DICE**

Many countries do not have fully functioning digital systems or solutions required to address health and information systems priorities in the context of the COVID-19 pandemic, as well as post-pandemic health system needs. Digital Square and the newly formed UNICEF/WHO COVID Digital Health Center of Excellence (DiCE) are proactively looking for opportunities to collaborate to support countries looking to invest in sustainable and scalable deployments of carefully chosen digital solutions for COVID-19 pandemic response plans.

DiCE is committed to supporting countries to harness appropriate digital public goods, many of which are mature and already integrated into national systems, to provide substantial multilayered support to the COVID-19 pandemic using a health system strengthening lens –
from planning distribution of commodities and vaccines, tracking supplies, surveillance and case detection, monitoring coverage of services, and communicating to generate demand and reduce misinformation. Digital Square’s mission is to connect health leaders with the resources they need for digital transformation. Through collective partnership, DiCE aims to not only support country needs now, but also to help country leaders build stronger, more sustainable digital systems, which will improve health outcomes beyond the current pandemic.

If you would like to get involved, or learn more about the COVID DICE, contact us at contact@digitalhealthcoe.org