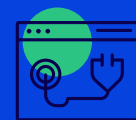


State of the art digital health projects build on existing evidence, and normative guidelines, frameworks, and tools in various areas, ranging from software development to financing and equitable programing. In the context of the GIZ Digital Innovation in Pandemic Control (DIPC) Initiative, the Robert Koch Institute, Germany, has conducted a comprehensive analysis on key digital public health definitions and concepts, and on 75 normative resources for digital health programing across 11 digital health topics, published between 2012 and early 2024 [\[link\]](#). Findings from the report have been summarized in form of 20 easy to use Factsheets.

The current factsheet (19/20) summarizes the findings on the identified **Guidelines, Frameworks and Tools for Digitizing Immunization Programs** that are to facilitate the digital transformation of immunization programs, focusing on data quality, integration, and equitable vaccine distribution.

Factsheet 19

Guidelines, Frameworks and Tools for Digitizing Immunization Programs



Target Audience

Primary Users: Government Bodies, Ministries of Health, DH implementers, Healthcare Providers

Secondary Users: Developers, donors

Relevance

Guidelines for digitizing immunization programs are essential for addressing challenges like costing, target population identification, delivery strategies, and workforce management. They help stakeholders select appropriate digital tools and ensure effective, context-specific implementation.

By leveraging behavioral science and evidence-based approaches, normative resources can provide structured, user-centered frameworks to streamline processes and enhance immunization program outcomes.

Findings

Number of resources identified: 8

The COVID-19 pandemic catalyzed the largest vaccination campaign in history, accelerating the adoption of digital health DH tools, particularly in LMICs. Numerous guidelines were developed to support the digitalization of vaccination programs, addressing critical elements like planning, delivery, monitoring, and integration into broader health systems.

While these resources provide valuable frameworks for selecting and implementing digital tools, key takeaways emerged:

- **Holistic Approaches:** Guidelines emphasize not just technical solutions but also governance, planning, and integration to ensure sustainability and adaptability in national immunization programs.
- **Interoperability and Public Goods:** Emphasizing the use of interoperable systems and digital public goods ensures that DH solutions can integrate seamlessly with broader health system infrastructures.
- **Demand Generation and Equity:** Strategies to increase vaccine uptake, such as leveraging behavioral science and addressing “zero-dose” populations, are central to these resources.

Guideline

Guidance on the use of digital solution to support COVID-19 national deployment and vaccination plans

A guideline provides a framework to facilitate equitable access to and distribution of COVID-19 vaccines across countries, particularly in low- and middle-income settings.

Published by: DICE

Year: 2021

Language: English

Primer on Digital Solutions for COVID-19 Vaccination Service Delivery

A practical guide to support those directly engaged in vaccination efforts with strategies for effectively using digital health tools and data to enhance vaccine distribution and administration beyond the COVID-19 pandemic.

Published by: DICE

Year: 2022

Language: English

Digital Health Information Interventions for Immunization Demand Generation: A guide for selecting appropriate tools and technologies

A guideline to assist national immunization program managers, social and behavior change specialists, and immunization implementing partners in selecting and planning digital technologies to increase the demand for routine childhood immunization using a step-by-step approach.

Published by: GAVI

Year: 2022

Language: English

Electronic Immunization Registries

A briefing guide to improve immunization data quality and use, exemplified on Tanzania and Zambia.

Published by: PATH

Year: 2017

Language: English

Electronic Immunization Registry: Practical Considerations for Planning, Development, Implementation and Evaluation

A guide to aid in the development, implementation, and evaluation of EIRs, aimed at health decision-makers and program managers in PAHO Member States.

Published by: PAHO

Year: 2018

Language: English, Spanish, French

Frameworks

Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines

An interim guide aimed at assisting national and sub-national health authorities and immunization program managers in planning and executing COVID-19 vaccination strategies.

Published by: WHO & UNICEF

Year: 2020

Language: English, French

Digital Applications and Tools Across an Epidemic Curve

A strategic guide for using digital tools in various stages of pandemics and outbreaks. It's designed for governments, health organizations, and investors, focusing on integrating digital technologies into epidemic responses.

Published by: Digital Square & GIZ

Year: 2021

Language: English

Considerations for integrating COVID-19 vaccination into immunization programmes and primary health care for 2022 and beyond

A guide to provide strategies for incorporating COVID-19 vaccination into existing health systems, designed for public health planners and immunization program managers.

Published by: WHO & UNICEF

Year: 2022

Language: English, Spanish, French, Portuguese



This is based on "[Navigating the Digital Health Ecosystem: A Review of Key Guidelines, Frameworks, and Tools](#)"

Read the full report [here](#) or scan the QR code

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