Navigating the Digital Health Ecosystem: a Review of Key Guidelines, Frameworks and Tools Part 1: The Digital Health System



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 key 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 (01/20) summarizes findings on the topic of **Key Definitions in Digital Health.** It introduces essential definitions in the evolving field of digital health, covering its subdomains and their contributions to modern healthcare systems.

Factsheet 01

Key Definitions in Digital Health



Digital Health (DH)

The field of knowledge and practice associated with any aspect of adopting digital technologies to improve health, and incorporates the subdomains of eHealth, medical informatics, telemedicine, telehealth and mHealth, as well as data-analytics, big data, and artificial intelligence. (WHO, 2021.)

Electronic Health (eHealth)

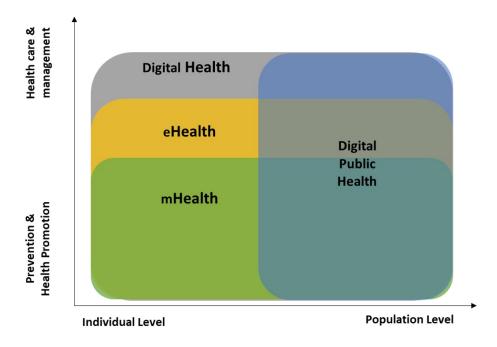
The use of information and communications technology in support of health and health-related fields. (WHO, 2019.)

Mobile Health (mHealth)

The use of mobile and wireless technologies to support the achievement of health objectives. (WHO, 2015.)

Digital Public Health (DiPH)

DiPH focused on integrating digital technologies in health services and the potential of these technologies to improve health outcomes of populations and communities, rather than on tools that, for instance, assist individual users to take better care of aspects of their health (e.g., tracking of physical activity, diet, weight, or sleep). (Iyamu et. al, 2022).



Field of action and target groups of eHealth, mHealth, digital health and digital public health. (Adopted from Wienert et. al, 2022)





The figure (Wienert et al., 2022) illustrates the core field of action and target group levels of mHealth, eHealth, digital health and digital public health and showcases the earlier mentioned considerable heterogeneity and interrelation between these commonly used terms in digital health.

Digital Public Health Intervention (DPHI)

Any intervention addressing at least one essential Public Health function through digital means. Applying a framework for functional classification and stratification categorizes its interaction level with the user. The developmental process of a digital public health intervention includes the user perspective by applying participatory methods to support its effectiveness and implementation with the goal to achieve a population health impact. (Wienert et. al, 2022)

Digital Health Intervention (DHI)

A discrete technology function designed to achieve a specific objective addressing a health system challenge in order to improve a health program process and help strengthen the overall health system. (WHO, 2023)

EXAMPLE OF DPHI INITIATIVE

Digital Innovation in Pandemic Control Program (DIPC) initiated by GIZ, aims to establish interoperable digital vaccine delivery solutions in five LMIC countries (Ghana, Malawi, Sierra Leone, Tanzania, and Peru) in collaboration with implementing partners (Digital Square, PAHO, UNICEF, and Regenstrief Institute). The goal is to facilitate disease prevention targeting communicable diseases through vaccine distribution and clinical services, and to contribute to the advancement of digital ecosystems in these countries to establish more resilient health systems by:

- Establishing interoperable digital vaccine delivery solutions and/or strengthening existing digital solutions to improve vaccine distribution processes and pandemic prevention efforts
- Improving interoperability between existing digital solutions for better data exchange and workflow by supporting the workforce through:
 - Training health and IT professionals on the effective use of strengthened digital tools.
 - Providing access to an open-source e-learning course

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This is based on <u>"Navigating the Digital Health Ecosystem:</u>
A Review of Key Guidelines, Frameworks, and Tools"

Read the full report <u>here</u> or scan the OR code

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