Data and innovation: draft global strategy on digital health

Report by the Director-General

1. In May 2018, the Seventy-first World Health Assembly adopted resolution WHA71.7 on digital health. In the resolution, the Health Assembly, inter alia, requested the Director-General to develop, in close consultation with Member States and with inputs from stakeholders, a global strategy on digital health, identifying priority areas including where WHO should focus its efforts.

2. The WHO Secretariat developed a first draft of the global strategy through internal consultation and on 27 March 2019 presented the outline of scheduled consultations at an information session held for Member States in Geneva. The draft strategy document was made available online for global public consultation from 26 March to 3 May 2019, after which consultations with Member States were held between June and October, including a global consultation held on 26 July 2019 in Geneva and discussions during a number of regional committee meetings. The full draft strategy is available for review at the following link: https://www.who.int/DHStrategy.

PURPOSE

3. The purpose of the global strategy on digital health is to advance and apply digital technologies towards the vision of health for all. The draft global strategy sets out a vision, mission, strategic objectives and a framework for action to advance digital technologies for health, globally and in countries. It aims to encourage international collaboration and to support countries in their national digital health enabled programmes. It also aims to promote research, improve evidence and share information as well as best practices on digital health to assure its solid foundation.

4. The global strategy is expected to lead to concrete actions within the five-year time frame, from 2020 to 2024. As well, the strategic objectives aim to set the overall direction for the development of digital health in Member States for a longer period. The draft global strategy is based on several guiding principles. It:

   - acknowledges that the institutionalization of digital health in the national health system requires a decision and commitment by countries;
   - recognizes that successful digital health initiatives require a unified strategy;
   - promotes the appropriate use of digital technologies for health; and
   - recognizes the urgent need to address major impediments faced by least-developed countries implementing digital health technologies.
VISION

5. The vision of the draft global digital health strategy is to improve health for everyone, everywhere by accelerating the development and adoption of appropriate digital health solutions. The mission is to use digital health solutions to achieve the health-related Sustainable Development Goals and the triple billion targets of the Thirteenth General Programme of Work, 2019–2023.

6. Advancing appropriate digital health solutions has the potential to support equitable and universal access to quality health services; increase health systems sustainability and accessibility and the affordability of care; strengthen health promotion, disease prevention, diagnosis, management, rehabilitation and palliative care. Global collaboration on digital health encourages action on common opportunities and challenges that are relevant to all countries and stakeholders, regardless of the quality and level of development of their digital systems.

7. The draft strategy identifies four strategic objectives towards the achievement of the vision.

   SO1 – Promote global collaboration and advance the transfer of knowledge on digital health
   SO2 – Advance the implementation of national digital health strategies
   SO3 – Strengthen governance for digital health at global and national levels
   SO4 – Advocate for people-centred health systems that are enabled by digital health

8. The first strategic objective aims to develop partnerships at national, regional and global levels in order to align resources and investments that will ensure sustainability and growth of digital health. The second objective aims to stimulate and support every country to adopt, own, evolve and strengthen its digital health strategy in a way that best suits its vision, health situation, available resources and core values to advance implementation of the national digital health strategies. Strategic objective 3 focuses on creating sustainable and robust governance structures and capacity for digital health at global and national levels. The fourth objective places people at the centre of digital health through the adoption and use of digital health technologies in scaling up and strengthening health service delivery.

FRAMEWORK FOR ACTION

9. The framework for action aims to facilitate the implementation of the global strategy by providing an organized environment for collaboration. Working collectively towards shared objectives, local and global partners accommodate diversity and consider methodologies, funding and other resources to help advance the global development agenda and support countries in the development, utilization and evaluation of digital technologies as a means of promoting equitable, affordable and universal access to health for all.

10. The framework for action focuses on four major actions:

    • Commit – encourage countries, partners and other stakeholders to commit to the global digital health strategy;
    • Catalyse – create and sustain an environment and processes that will facilitate and induce collaboration towards implementing the global digital health strategy;
    • Measure – create processes for monitoring and evaluating the effectiveness of the strategy; and
• **Enhance and iterate** – undertake a new cycle of action based on what has been experienced, measured and learned.

11. The framework for action also proposes the creation of an international convening mechanism for validation of artificial intelligence and digital health solutions. This mechanism will enshrine the value of health data and associated digital health products as a global public health good and call for action to safeguard the anonymity of health data providers, mitigate challenges and ensure universal access to digital health products and technology.

**STRATEGY IMPLEMENTATION**

12. The draft global strategy on digital health, as led by the Secretariat, will support and respond to the growing needs of countries to implement appropriate digital technologies to address their health priorities and to advance progress towards universal health coverage and the health-related Sustainable Development Goals. Such support is in line with the Thirteenth General Programme of Work, 2019–2023.

13. The Secretariat will work closely with Member States, other bodies of the United Nations system, international partners and other stakeholders to implement the global strategy. The Secretariat will also engage the various stakeholders to take forward the strategic objectives at national, regional and global levels. The main stakeholder groups are intergovernmental and nongovernmental organizations; donors, aid agencies, foundations and development banks; academic and research institutions; health insurance groups and other health care funders; the private sector and technology developers; and the health care community, patients and the public.

14. Financing for implementation of the global digital health strategy will require specific action in the area of resource mobilization. For Member States, this implies developing investment strategies to allow for new capital expenditures, national digital health governance, enterprise architectures, capacity-building and solution development, in addition to reprogramming existing funds for maintenance and periodic updating of operating environments. The Secretariat will support the activities outlined within the global strategy through the establishment of a Department of Digital Health and Innovation and coordination of digital health activities across all departments and levels of the Organization (countries, regions, headquarters). This will be further coupled with resource mobilization at national level to support Member States in their implementation of the strategy.

**ACTION PLAN**

15. To meet the needs of Member States expressed during the consultative process, the draft global strategy on digital health includes an action plan that was designed as a “living document” that will allow for adaptation and continuous enhancements over time. This approach can accommodate changes that may arise due to the rapidly changing world of digital health and offers a mechanism to incorporate experience gained from practical implementation in countries. The action plan aims to facilitate the development and implementation of effective strategies and policies on digital health and achieve the objectives set out in national health policies, strategies and plans. The action plan will be reviewed yearly and updated as needed.

16. The action plan builds on the framework for action with impact targets, key policy options and a proposed set of actions by Member States, the Secretariat and partners. Policy options and proposed actions outlined for each of the strategic objectives are interdependent and are categorized into
short-term, medium-term and long-term implementation to help inform prioritization and planning by all stakeholders.

17. The figure below summarizes the action plan.

Fig. Implementing the global strategy

18. The strategy also calls for Member States and the Secretariat to monitor the level of development and quality of digital health technology, using a “maturity” model, and the implementation of digital health strategies through a set of standardized and agreed metrics. This includes both the status and performance of digital health interventions and the establishment of monitoring and evaluation frameworks to facilitate monitoring the contribution of digital systems to improving health system processes, health workforce processes, health indicators and thus to addressing the health needs of individuals.

19. Indicators and other measures should be identified and agreed upon by Member States as a basis for monitoring and evaluating progress in the adoption and use of digital health.

20. Below are some specific outputs aligned to the strategic objectives of the global strategy. These are provided to illustrate the type and nature of measures to be considered by Member States to monitor digital health implementation at the national level.
Strategic Objective 1: Promote global collaboration and advance the transfer of knowledge on digital health

Output 1.1: Digital health is prioritized at the global, regional and national levels through dedicated bodies and mechanisms for governance.

Output 1.2: Multistakeholder groups are convened on a regular basis to support digital health and innovation scale-up to accelerate health-related Sustainable Development Goals.

Strategic Objective 2: Advance implementation of national digital health strategies

Output 2.1: A national digital health strategy or equivalent strategic framework exists, is integrated in the national health strategy and is actively used to guide development and accelerate progress towards the health-related targets of the Sustainable Development Goals and in the context of digital transformation of health systems.

Output 2.2: Prioritization of national investment in digital health is made in support of primary health care and universal health coverage.

Strategic Objective 3: Strengthen governance for digital health at global, regional and national levels

Output 3.1: Governance exists, in accordance with Secretariat-led international health data regulation, that enshrines health data as a global public health good and outlines principles of equitable data-sharing and international digital health and artificial intelligence research collaboration and partnerships.

Output 3.2: A framework for regulating, benchmarking or certifying artificial intelligence and digital health medical devices has been implemented by Member States.

Output 3.3: Global guidance on planning, development and use of virtual hospitals and digital therapeutics is developed.

Output 3.4: A guideline on interoperability standards for digital health is developed and adopted in collaboration with key stakeholders.

Output 3.5: Global guidance is developed on ethics and governance of artificial intelligence in health.

Strategic Objective 4: Enhance people-centred health systems enabled by digital health

Output 4.1: Literacy in digital health tools and systems is prioritized and is accessible by all populations.

Output 4.2: A framework allowing person-centric feedback in validating the performance of digital health tools and services is implemented and used.

Output 4.3: Global minimum standards for electronic patient health records (ePHR) are established and adopted.

Output 4.4: Global guidance on personalized medicine is developed.
ACTION BY THE EXECUTIVE BOARD

21. The Executive Board is invited to consider the following draft decision.

The Executive Board, having considered the report on the draft global strategy on digital health, decided to recommend to the Seventy-third World Health Assembly the adoption of the following draft decision:

The Seventy-third World Health Assembly, having considered the draft global strategy on digital health decided:

(1) to endorse the global strategy on digital health; and

(2) to request the Director-General to report back on progress in the implementation of the strategy to the World Health Assembly in 2023.

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