



FACTSHEET

June 2021

Swiss Agency for Development
and Cooperation SDC

LEVERAGING DIGITAL HEALTH FOR ADVANCING UHC IN LMICS: SDC GLOBAL PROGRAMME HEALTH PRIORITIES AND INITIATIVES



openIMIS digital registration process © SDC/Olivier Praz

the use of digital technologies is expected to improve the quality, efficiency and safety of healthcare processes, as well as patient health literacy and empowerment. The development of tools powered by artificial intelligence is further re-shaping the healthcare landscape.

Digital technologies are being harnessed to support the public health response to COVID-19 worldwide, for example in population surveillance, case identification, and contact tracing. On the one hand, the pandemic has been an enabler for digital health. On the other hand, it has also exposed many shortcomings and gaps, highlighting the need for greater government leadership in supporting digital technologies. The pandemic has indeed showed that there is an **urgent need for alignment of international strategies for the governance, regulation, evaluation and use of digital technologies** in order to strengthen pandemic management and future preparedness for infectious diseases. While digital technologies offer tools to support the pandemic response, they are not a silver bullet. Rather, they play an important role in a more comprehensive response to outbreaks and pandemics and must be seen as complementary to conventional public health measures.

Harnessing the potential of digital health and mitigating risks

Health and healthcare in the 21st century are increasingly dependent on innovation and technology to meet complex needs, strengthen health systems, achieve Universal Health Coverage (UHC) and advance the Sustainable Development Goals (SDGs). Over the last decade, the use of digital health solutions has increased globally, addressing challenges faced by both high-income countries (HICs) and low- and middle-income countries (LMICs) in providing accessible, cost-effective, and high-quality healthcare. Information and communication technologies, including smartphones, enable information to be collected, processed and disseminated rapidly. As health data becomes increasingly available in digital form,

The deployment of these technologies is all too often **fragmented and uncoordinated**, with individual countries and companies implementing stand-alone pilot projects. In order for these digital technologies to achieve optimal adoption, scale and utility, **many challenges** must be overcome. These include legal and regulatory frameworks, knowledge silos, capacity-building of providers and users, as well as sustainable economic models. In addition, **ethical and human rights risks** arising from the application of these technologies in public health should also be considered. While the digital future should be embraced, the principles of non-discrimination in access to health services and the right to privacy are just two areas that risk being diminished in the name of technological progress.

Switzerland as a digital health hub

The Global Innovation Index has ranked Switzerland as the **world's most innovative country** for the 10th year running, which is also reflected in the health sector. At global level, Switzerland has a **leading role in medical technology**. In no other country in the world does medical technology contribute as much to GDP as it does in Switzerland. At country level, Geneva, Basel and Zug are considered hubs of innovation in digital health.

With its strong ecosystem of organisations to advance global health, many of which use innovation and technology, and the anchoring and close collaboration with international organisations, **Switzerland has the potential to become a leader in responsible digital health** development, use and integration.

SDC approach, priorities and initiatives

In line with the 2030 Agenda, Switzerland's International Cooperation Strategy 2021–24 aims to use the full potential of new technologies in poverty reduction and sustainable development. Switzerland's Foreign Policy Strategy 2020–23 also identifies digitalisation as a priority, with the aim of positioning Switzerland as an international hub for digital governance. Digitalisation is also a priority of the Swiss Foreign Health Policy 2019–24, the SDC Health Guidance 2020–30 and the SDC Global Programme Health Framework 2021–24.

Understanding the contribution, impact and challenges, and unlocking the potential of technology for health and health system strengthening requires preliminary **conceptual clarity and accurate definitions**. To this end, the SDC commissioned a study, with a view to mapping and assessing Swiss and international initiatives on technologies for health and health system strengthening. A stakeholder analysis was also provided, which identified key partners among donors, policymakers, private sector entities and NGOs. The findings and recommendations contributed to sharpening the SDC's strategic focus and positioning, and facilitated informed, related investment decisions.

The SDC is convinced that if the risks and challenges are managed effectively, with strong collaboration and governance mechanisms in place, new innovations and technologies will accelerate the pace of change and create new opportunities in helping healthcare systems in LMICs to respond to the complex and evolving challenges.

In its approach to digital health, the SDC

- › fosters a **global health governance system** that can better manage risks and seize opportunities offered by digitalisation in health;
- › promotes a **systemic approach** to digital health. It does not consider technologies as isolated tools but as part of concerted efforts and comprehensive packages to **strengthen health systems** and **reduce the digital divide** between LICs and LMICs;
- › fosters innovations in digital health that respond to **real need and demand**, as these investments will be more cost-effective in the end.

With the overall goal of helping to **defragment the digital health space, foster alignment and complementarity, and unlock the potential of digitalisation while mitigating its risks**, the SDC Global Programme Health has developed various initiatives in the field of digital health. They can be grouped into the following strategic orientation and priorities:

1. Policy and advocacy: promoting good governance in digital health and bridging the digital divide

Digital governance is a development issue. Sustainable economic models are required to ensure that access to digital technologies and, in particular, to cost-effective and evidence-based digital solutions, is equitable and does not contribute to a growing digital divide. The main barriers for LMICs include the limited reach of technical infrastructure, misalignment of financial incentives, uncertain policy environments and scarce technical capacity. People with a lower level of education struggle to keep up with technological advancements. **Digital health literacy is one of the biggest drivers of inequity**: people who are digitally health literate can take a more active role in achieving their health potential.

Bridging the data divide and addressing inequities in digital data literacy is of particular importance. The emergence of a highly lucrative health data economy and weak and/or inappropriate governance models pose serious **risks to patient data security and privacy protection**, especially in LMICs. Special categories of personal data are protected in the EU under the General Data Protection Regulation¹ (GDPR, Article 9 para. 1, e.g. genetic and biometric data, sex life or sexual orientation). But there is still room for potential misuse (data exploitation or marketing, secondary use of personal health data). Without appropriate oversight, data protection cannot be guaranteed, especially in LMICs. A fitting and often referenced metaphor for this space is the 'wild west', which describes the rampant commercialisation and

Policy framework – digitalisation as a priority

Foreign Policy Strategy 2020–23



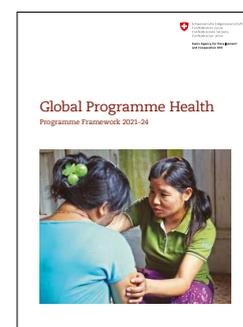
Switzerland's International Cooperation Strategy 2021–24



Swiss Foreign Health Policy 2019–24



SDC Global Programme Health Framework 2021–24

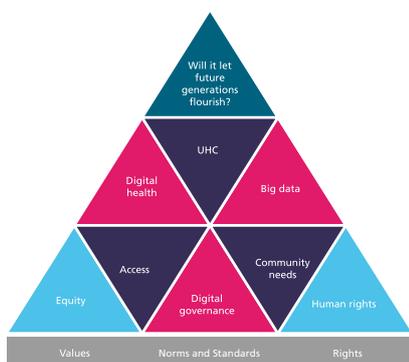


¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN#d1e6537-1-1>

weak regulation in the field of digital health, challenging the ideal of digital public goods capable of reducing inequalities, and also captures the tension between expansion and innovation versus standards, data protection, and reproducible evidence.

The SDC strongly advocates for bridging the digital and data divide in order to leave no one behind and to build robust regulations and frameworks for the responsible use of digital technologies and health data. To this end, it is involved in developing and negotiating key resolutions and strategies, such as the new WHO Strategy for Digital Health or as part of the Road to Bern process in preparation for the UN World Data Forum (2021). The SDC applies the 10 principles of donor investment in digital health² of the Digital Impact Alliance (DIAL).

In addition, the SDC supports the work of The Lancet & Financial Times Commission, 'Governing health futures 2030: Growing up in a digital world'³, with a specific focus on its youth component. The Commission aims to explore how to ensure that digital development helps improve the health and wellbeing of all at all ages, especially children and young people; examine integrative policies for digital health, AI and UHC that are being developed around the world to identify which have the greatest potential to improve health and wellbeing and maximise health equity in resource poor settings, while ensuring human rights; and deliver a clear set of recommendations on the governance of digital health, AI and UHC, taking full account of geopolitical, economic and social factors.

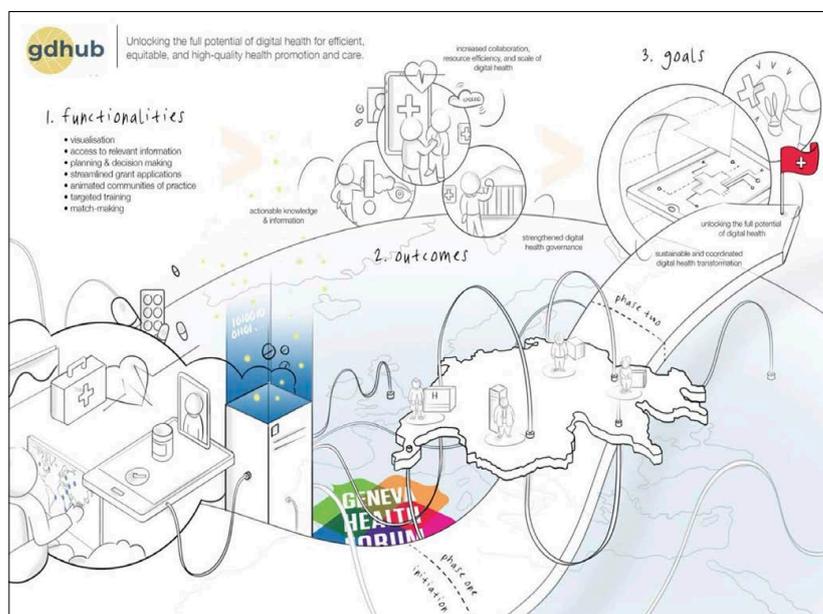


The Lancet & Financial Times Commission *Growing up in a digital world: Governing futures 2030*

2. Coordination and alignment: defragmenting the digital health space

Digital innovation can no longer be separated from health service delivery. However, the use of digital solutions to overcome barriers to health service delivery encounters **difficulties in achieving scale and ensuring interoperability**, which has led to a **fragmented, non-communicative landscape**. Indeed, detailed data and metadata on past and on-going projects, initiatives, stakeholders, outcomes, standards, lessons learnt, and knowledge in digital health are only captured in a fragmented manner. This impedes the ability to have an accurate and reliable picture of what is exactly happening and thus evidence-based decision-making. If this information were easily accessible and actionable, it would be possible to access determinants of success and failure while having a clear understanding of the global context. Hence, the implementation of digital health solutions in LMICs could be significantly facilitated, while ensuring coherence and sustainability with respect to the broader health system. Continuing with the status quo risks increasing health inequity and further widening the digital divide between LICs and LMICs.

Based on a preliminary assessment of gaps in the current global digital health landscape, the SDC set up the **Geneva Hub for Global Digital Health (GDHUB) in LMICs** in collaboration with the University of Geneva, Geneva University Hospitals and WHO. The GDHUB is intended to overcome fragmentation. It will federate and connect Swiss digital health and international expertise, knowledge and stakeholders, foster and streamline collaboration processes, and develop a registry providing a reliable overview of the global digital health ecosystem and its implementation in LMICs. The registry will



Geneva Hub for Global Digital Health, GDHUB

2 <https://digitalimpactalliance.org/>

3 <https://www.governinghealthfutures2030.org/>

collect and connect implementations, information, knowledge and stakeholders, and will use advanced data analytics modules and knowledge management tools to transform gathered information into actionable insights to enhance effective governance and coordination. Dashboard visualisations will, for example, provide relevant insights for community/platform members, investors or technologists, and track evolving geographic reach, partnerships, and impact. The GDHUB has the potential to facilitate matchmaking between needs and solution providers, to promote collaboration between stakeholders of the digital health ecosystem and to guide rational investments for meaningful and sustainable digital health projects in LMICs.

ment adherence; analysis of digital tools being used by young people for sexual networking and developing digital tools for sexual health or engaging youth.

The SDC's core contribution to **HRP**⁴ also included, for example, the development of the *Digital Health Atlas*⁵ which is a WHO global technology registry platform that aims to strengthen the value and impact of digital health investments, improve coordination, and facilitate institutionalisation and scale. The *Atlas* offers governments, technologists, implementers, and donors a platform of tools and guidance to improve the use of and plan coordination for digital information systems for health, and knowledge management.

However, this support within ongoing initiatives has been somewhat **ad hoc and sporadic** to date, with no proper reflection on expansion and more substantial and long-term investment opportunities. Following a process of internal reflection and documentation of digital health workstreams, approaches, solutions and tools within existing initiatives, the **SDC intends to leverage their potential and to better connect them**, thus fostering enhanced alignment and using resources efficiently.



openIMIS enrolment, Tanzania, 2013 © SDC/Olivier Praz

3. Scaling up digital solutions for health system strengthening

Both at bilateral and global levels, the SDC supports **innovative health technologies and ICT solutions for health** (apps, health information systems, etc.). The **openIMIS** (Open Insurance Management Information System), for example, is an open-source software that seeks to provide a comprehensive system linking patient, provider and payer data. As it is open-source, anyone can copy, modify and distribute the source code, which will be managed and continuously improved by the open-source software community. To date, this tool has been successfully introduced in Nepal, Cameroon, Kivu, Chad, Myanmar (test), and Gambia.

Within the core contribution to **UNAIDS**, the SDC supports the Health Innovation Exchange Platform, which was established to identify challenges faced by countries in delivering healthcare, and addressing these through innovations, including digital health solutions. The platform has helped bring digital health solutions, e.g. the use of AI for tuberculosis screening and more recently for COVID diagnosis; mapping of digital tools for health including treat-



SDC's digital health initiatives grouped into three strategic orientation and three priorities

4 UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), a co-sponsored programme executed by WHO, <https://www.who.int/reproductivehealth/hrp/en/>

5 www.digitalhealthatlas.org

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