



Growing up **2030** in a digital world

GOVERNING HEALTH FUTURES
THE LANCET & FINANCIAL TIMES COMMISSION

POLICY BRIEF

Digital health futures readiness

○ October 2021



KEY MESSAGE

Existing tools for measuring digital health readiness are insufficient for assessing the extent to which a country's approach to digital health can support the achievement of UHC and maximise the health and wellbeing of young people, now and in the future. The Governing Health Futures 2030 Commission proposes ten enablers for digital health futures readiness. It recommends that these enablers form the basis of a new way of assessing digital health readiness that encourages all actors in a digitally enabled health ecosystem to align their digital transformation efforts with their UHC and SDG goals.

At present, countries lack approaches to digital health that are grounded in the core principles of universal health coverage (UHC) and the Sustainable Development Goals (SDG) agenda, namely: equity, solidarity, and human rights. Digital health ecosystems are developing without adequately considering the unequal distribution of power and resources that affect an individual's or community's access to, engagement with, and ability to benefit from digital health technologies. The absence of a strong equity and rights analysis when designing, implementing, and evaluating digital health policies and programmes can lead to ignoring or exacerbating existing health inequities and other forms of discrimination, or even creating new ones.

Existing measurement tools overlook critical dimensions of digital health readiness

Digital health readiness refers to the extent to which individuals and countries have the capacity to use digital technology and data for improving their own, or their population's, health and wellbeing.

High digital health readiness at individual and societal levels are a prerequisite for harnessing

the benefits of the digital transformations in support of UHC. The ability of individuals, including young people, to harness digital transformation requires that they have the knowledge, skills, access, and agency needed to make free and informed choices and act independently in relation to the digital technology and data that is evolving around them and how it interacts with and influences their health and wellbeing. Similarly, governments (i.e. those policymakers responsible for digital transformation efforts both generally and within the health sector) need the political will, capacity, and resources to be able to exercise agency and ownership over their digital transformation process in the best interests of people's health and wellbeing, without undue influence from external actors.

One well-acknowledged aspect of digital health readiness is a country's overall level of digital development. Several initiatives have resulted in tools to measure digital readiness across countries.¹ Common indicators used include internet usage, mobile network coverage, and the number of fixed and mobile broadband connections. In all these indices, a clear digital divide is visible, with countries defined as 'least developed'—with high mortality rates and the largest shares of young people—ranking lowest, reflecting the

1 Such as those led by [Cisco](#), [GSMA](#), [ITU](#), [Portulans Institute and WITSA](#), [OECD](#), and [UNCTAD](#).

ability of countries with higher incomes to invest more in the foundational infrastructure and technology required for digital health.

A growing number of tools are being developed to assess digital health readiness more specifically, many of which are based upon the WHO and ITU's seven eHealth building blocks.² A promising tool for measuring digital health readiness is the Global Digital Health Index (GDHI), which allows countries to self-assess their level of digital health maturity.³ In an effort to extend the GDHI to more countries, Digital Square has identified proxy indicators based on the World Economic Forum's Networked Readiness Index.⁴

The Governing Health Futures 2030 Commission analysed existing tools for assessing a country's digital readiness and health readiness. It found that whilst some tools include indicators to measure equity outcomes, few indicators are disaggregated and principles of inclusion, equity, and rights are not fully embedded into the overall assessment of a country's readiness. Existing tools are therefore insufficient for assessing the extent to which a country's digitally enabled health ecosystem can support the achievement of UHC and maximise the health and wellbeing of young people, now and in the future.

Proposing a new approach to digital health readiness

To achieve UHC, an equity and rights-centred approach to digital health that prioritises those with the least power—such as children, youth, women, people with disabilities, minority groups, and marginalised communities—and that considers how

actions taken today will affect subsequent generations is required from the onset. The readiness of a country to harness digital transformations in support of UHC and better health futures should therefore be assessed through an equity and rights-based lens.

Enablers of digital health futures readiness

The Commission defines 'digital health futures readiness' as when *all* people and their communities, the health ecosystems they interact with, and the countries they live in are prepared, equipped, and empowered to use digital technology and data to meet personal health and wellbeing needs and to improve the health and wellbeing of the whole population. We emphasise *futures* since digital technology and data should be harnessed in support of more equitable health and wellbeing outcomes today, and also for future generations.

A new way of assessing digital health readiness is needed that encourages all actors in a digitally enabled health ecosystem to align their approach to digital transformation with their UHC and SDG goals. This necessitates an analysis of where control and power lie over matters of digital and technological development and who does not have a seat at the table. It also requires a deeper understanding of the intersecting forms of discrimination and inequalities that undermine the agency of people in relation to digital health. By identifying those people who are most left behind at all stages of design, implementation, and monitoring of digital approaches, policymakers can respond by addressing imbalances of power and structural barriers

2 WHO and ITU. [National eHealth strategy toolkit](#). Geneva: World Health Organization and International Telecommunications Union, 2012.

3 HealthEnabled and Global Development Incubator. [Global Digital Health Index](#). 2019.

4 Digital Square, [Market maturity methodology](#). 2020. (Accessed March 29, 2021).

that prevent everyone from benefitting equally from digital transformation in health.

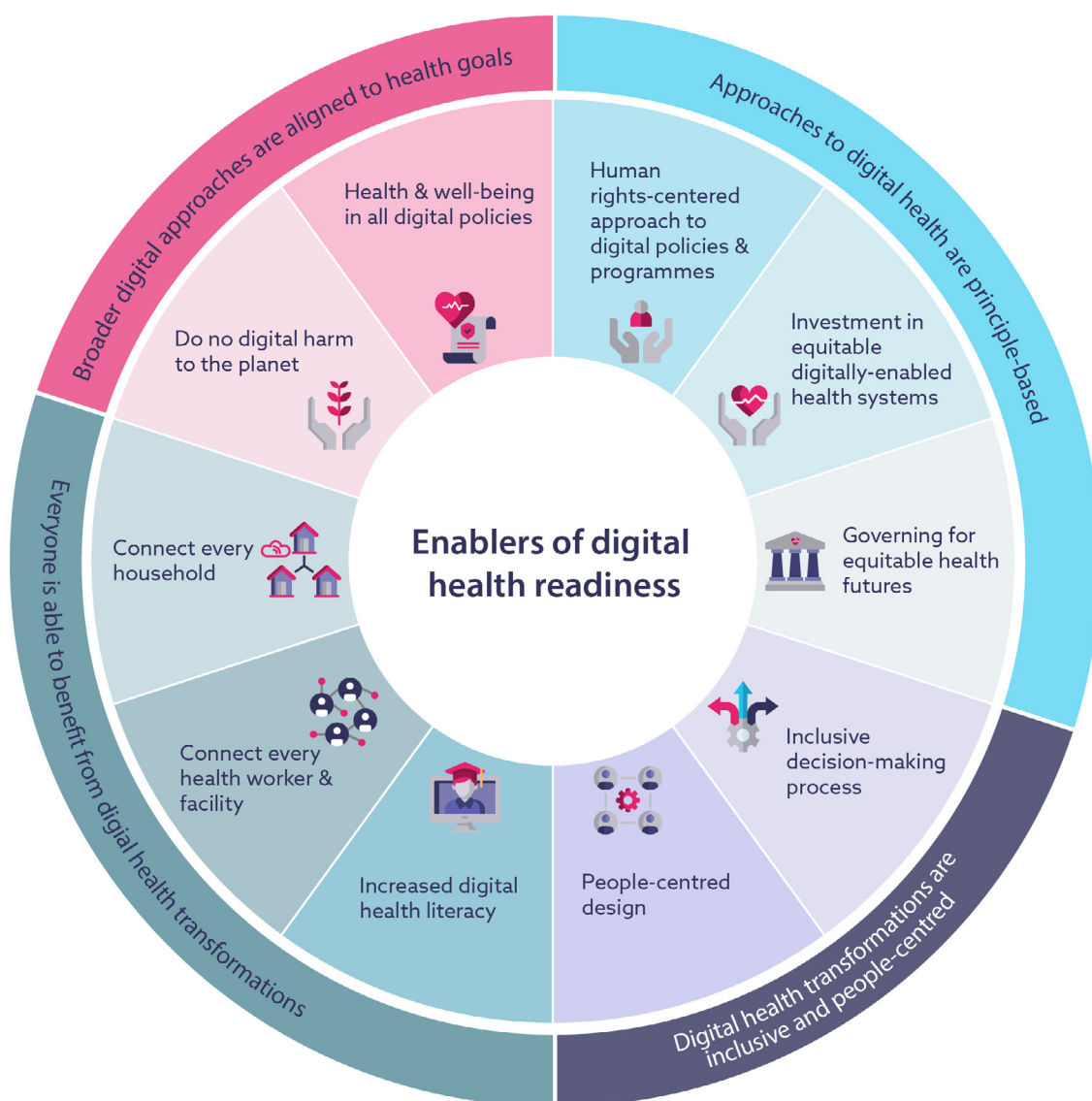
A new rights- and equity-centred readiness assessment tool should be developed that policymakers and implementers in the digital health ecosystem can use to guide and influence decision-making in support of an approach to digital health that leaves no one behind, and for young people and wider civil society to use in support of advocacy and accountability efforts. Such a tool should encourage

progressive realisation of UHC and human rights for all countries, regardless of their stage of development and digital maturity.

As illustrated in the following diagram, the Commission proposes a framework with ten key dimensions of digital health *future*s readiness. Each of these dimensions, or enablers, is described in detail in the table below. This framework, which was developed with young people, builds on existing tools and initiatives such as UNESCO's work on Internet Universality.⁵

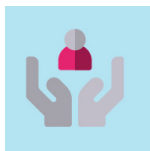
5 Souter D, van der Spuy A. [UNESCO'S Internet Universality Indicators: a framework for assessing internet development](#). Paris: UN Educational, Scientific and Cultural Organization, 2019.

A proposed framework for assessing digital health futures readiness



The ten enablers of digital health futures readiness

Promoting human rights on- and offline



Policies and programmes related to digital technology and data should be assessed from a human rights and child rights perspective to ensure that all rights are promoted and protected. Where such assessments cannot be conducted at the national level, periodic reporting to human rights treaty bodies offer an opportunity for countries to assess whether human rights obligations are being realised in the digital environment.

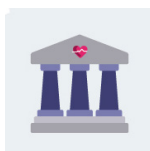
Children's entitlement to additional protections both on- and offline must also be realised. For example, governments should put additional measures in place to protect children's data and to safeguard children from online harms and commercial exploitation. Further ways to use technology and data to promote children's rights, including the right to health, should be explored.

Investing in equitable, digitally enabled health care



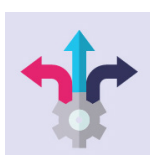
Governments, donors, and private investors should target and prioritise their investments in digitally enabled health systems and health care so that they contribute towards the realisation of UHC. Government stewardship of domestic and external investments should strive to achieve scale whilst prioritising primary health care and the needs of the poorest and most left behind. Governments and civil society should monitor whether equity and rights considerations are embedded within each of the digital health building blocks and to track whether progress is equal for different population groups.

Governing for equitable health futures



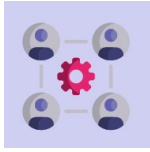
Building digital health futures where UHC is achieved and all young people flourish requires strong political leadership and collaboration across multiple sectors and stakeholder groups. Approaches to governance of digital technology and data must be grounded in equity and human rights so that the benefits of digital transformation can be realised, and the risks mitigated, for all. Governments should reflect the specific needs and views of children, youth, and other groups at risk of being excluded and oppressed in all relevant legislation, regulation, and governance frameworks. Civil society groups led by youth and marginalised communities should be resourced to independently assess whether governance frameworks reflect their needs.

Engineering inclusive decision-making processes



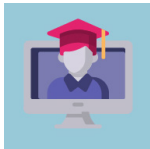
Inclusive and representative processes to develop and monitor strategies and plans related to digital transformation and health care are critical for promoting equity and human rights, empowering communities, and building trust. Children's, youth's, and marginalised communities' participation in decision-making should be a regular practice and fully resourced by relevant ministries and other digital health actors. Their engagement should be carried out in ways that are mutually beneficial, resourced, and built on recognition of young people's agency and capacity to participate in civic activities.

Prioritising all people in the design



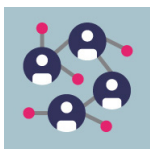
Digital technologies, initiatives, and services should be designed with and for all groups that may directly use or be indirectly affected by them. To tackle structural inequalities and biases, technology developers should implement design processes that place the voices and needs of the most vulnerable, marginalised, and oppressed at the centre. Digital health tools and services should be designed to be accessible, relevant, and appropriate for children, youth, and other groups who are traditionally overlooked and excluded from the design process. Developers should also include mechanisms to collect and incorporate user feedback so that digital tools and services can be updated in response to unforeseen issues or harms.

Increasing digital health literacy



Digital health literacy is essential for young people and other groups at risk of being left behind to fully benefit from digital transformation in health and to navigate the digital environment safely and effectively. Adequate digital health literacy empowers and enables individuals to seek, find, understand, and appraise the reliability of health information from electronic sources and apply the knowledge gained to addressing or solving a health problem. Digital health literacy requires greater domestic and international investment in multiple forms of literacy (e.g. health literacy, digital literacy and civil literacy) and in foundational knowledge and skills. Data on digital health literacy and ICT skills should be disaggregated by governments and international organisations, such as UNESCO, to identify equity gaps.

Connecting every health worker and health facility



Health facilities at all levels—from national hospitals to community clinics—should be connected through reliable digital infrastructure that is regularly maintained. Ministries of health and infrastructure should prioritise connecting local-level health facilities providing primary health care to underserved communities and putting measures in place to protect the security of critical infrastructure and data. All health workers, including community health workers, should have the tools, skills, and support needed to use digital technologies to assist their work in a manner complementary to the aims of quality care.

Connecting every household



The backbone infrastructure, hardware, and services required for reliable internet access should be available, accessible, and affordable to all. Governments, and the ICT companies they work with, should give priority to connecting the most underserved households. National and sub-national data on mobile and internet coverage, use, and quality collected by governments and international organisations like the ITU should be disaggregated to identify equity gaps between different geographical regions, age groups, genders, etc.

Doing no harm to the planet



Planetary and human health are inextricably linked. Industry and governments should harness digital technology and data to protect the health of our planet. Proactive measures should also be taken at local, national, and global levels to mitigate any negative environmental impacts of digital transformation through, for example, use of renewable energy sources for data storage, responsible management of e-waste, and sustainable production of digital devices.

Embedding health and wellbeing in all (digital) policies



Building on the Health in All Policies approach, governments, international organisations, and other digital health actors should consider the potential benefits and risks for health systems, determinants of health, and individual health and wellbeing in all digital and data-related policies and programmes. Particular consideration should be given to the potential benefits and harms for children, youth, and other vulnerable groups. Policymakers should also consider how to reduce inequalities and tension points that may emerge or be magnified within the population by digital transformation and explore the opportunities of digital technology to build greater social cohesion.

Implications for policymakers

To fully harness digital transformations in support of UHC and equitable health futures, **policymakers and other stakeholders should use the ten key enablers proposed by this Commission when assessing their level of digital health readiness.** These enablers should guide all government departments responsible for digital technology and data, as well as regulation of private sector activities in this field.

National digital health strategies should incorporate the ten enablers proposed by the Commission and be co-designed with diverse stakeholders and communities, including children and youth. Global and regional **normative agencies, including**

the WHO and ITU, should update their guidance on the development of digital health strategies and approaches to digitalisation of health systems to support countries in strengthening an equity- and rights-based approach to digital health.

An inclusive, multi-stakeholder group should be created to **develop this framework for digital health futures readiness into a practical measurement tool** that encourages deeper analysis of existing approaches to digital transformation and catalyses action towards a more equitable digital health future where all young people flourish. Existing readiness measurement tools such as the Global Digital Health Index should also be updated to incorporate the ten enablers.

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