



CLOSING THE DIGITAL DIVIDE:

MORE AND BETTER FUNDING FOR THE DIGITAL TRANSFORMATION OF HEALTH

The Role of National Governments

The world's health systems are changing rapidly, driven by the introduction of digital technologies, artificial intelligence and the use of large data sets. The digital transformation has the potential to expand access to health care and accelerate progress towards the Sustainable Development Goal target of reaching universal health coverage by 2030. We have reached a stage in the digital health journey where we need to think beyond enhancing health systems through the introduction of individual digital technologies to instead consider the digital transformation of health systems in its broader sense.

Governments have the core responsibility to deliver on the right to health of their populations. They hold the key to the digital transformation of their health systems. Based on Transform Health's report, *Closing the digital divide: More and better funding for the digital transformation of health*¹, this policy brief explores the role of national governments, with recommendations to guide their investments and action towards health for all in the digital age.

Current outlook

The potential of digital technologies to provide improvements and efficiencies in health care has been evident for at least 20 years. Their uptake, however, has been relatively slow, uneven, unsystematic and mostly limited to individual products, services and processes, and has typically been spearheaded by a specific disease response. Along with a large number of pilot projects that do not progress to a system-wide or national scale adoption, this has led to a fragmented landscape and approach to the digitalisation of health systems.

A country's capacity for digital transformation depends on its levels of connectivity, penetration of digital tools in the population, digital literacy and financial resources. In 2021, the International Telecommunication Union estimated that 95% of the world's population was within broadband coverage, with Africa, the continent with the lowest coverage, reaching 82%. The situation, however, is not matched by usage. Despite living in areas with broadband coverage, a large part of the global population is still not online because they do not have

¹ Transform Health. Closing the digital divide: More and better funding for the digital transformation of health. Basel: Transform Health; 2022. bit.ly/digital-health-funding

access to digital tools. An estimated 2.9 billion people are offline, including 1.7 billion people in the Asia-Pacific region, 29.1% of the population of China and 50% of the population of India. In Africa, 738 million people remain offline – that's two out of three people unconnected, which increases to around five out of six people in rural areas. However, the main and long-entrenched barrier to getting people online is the same factor that prevents people from accessing health services in the first place: financial hardship.

Closing the funding gap

Closing the digital divide: More and better funding for the digital transformation of health estimates that an investment of US\$ 12.5 billion is needed to support the digital transformation of health systems in low- and lower-middle-income countries over the next five years, or an average of US\$ 2.5 billion a year. This is based on funding for nine priority digital health investments areas in these countries. The true investment requirement will ultimately be determined country by country, based on costed plans, and will need to be complemented by additional investment to increase digital connectivity and usage among the population, as well as investments to address the wider enabling environment.

The total projected cost represents approximately 1% of the annual government health spending of the group of low- and lower-middle-income countries. It is not unreasonable to assume that, on average, 60–70%² of this amount can be met from national resources, with the remainder to be externally supported. While national governments must take the lead in funding their health system, in many resource-constrained contexts, donor agencies, philanthropic organisations and the private sector are also critical. National governments' share of funding for digital health transformation will vary from country to country, based on national income level, access to donor and concessional funding and level of digital maturity.

The critical role of national governments in financing and enabling digital health investments

National governments have a primary role in financing their own public health system and in attracting other resources to cover the gaps. They must commit adequate domestic funding to digital health and through their actions, strategies and policies, encourage and enable bilateral, multilateral and private sector investment. A well-articulated digital health strategy, a comprehensive costed road map enabling legal and regulatory frameworks, and high-level political leadership and commitment are requisites to attracting investment, both from the national budget and from international funders. Governments are therefore both investors and enablers of greater investment, as part of health system investment and in relation to the broadband infrastructure that supports all digital health services.

Developing a digital health strategy and an associated investment road map, as an integral part of health and health systems' strategies, should be national government priorities. Governments must be in the driver's seat of this complex, fast-moving and challenging process, with other stakeholders aligning with and supporting their plans. However, in many low- and lower-middle-income countries, there is insufficient funding and political support to develop these strategies and road maps, which can lead to national health Ministries not being able to draw in the latest technical expertise and advice that would enable them to optimise their health systems. Many countries also lack the legislative and policy environment necessary to guide the development of digital health strategies.

² This is an illustrative estimate based on the proportion of domestic spending to international aid spending in low- and lower-middle income countries health spending from WHO Global Health Expenditure database, and domestic investment proportions from the Global Fund 7th Replenishment projection of available resources.

An all-of-government responsibility

The digital transformation of health must be an all-of-government endeavour. Health Ministries must work with Ministries of finance, planning and information and communication technology to ensure sufficient allocation of financial resources to the digital transformation of health systems. These Ministries might, in many countries, have a significant budget for digital transformation, a proportion of which should be made available for the health sector. If there is no prioritised costing of the digital health investment needs through national digital health strategies, it is unlikely that allocations for such plans will feature in national budgets. This will undermine the prospects of securing funding from non-health ministries.

Inclusive governance

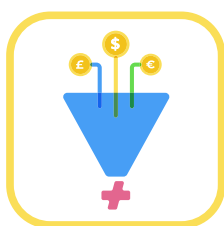
An inclusive governance structure and processes that are transparent, ensure the meaningful engagement of diverse stakeholders and include strong accountability mechanisms will shepherd a digital transformation that responds to the concerns, expectations and perspectives of a broad spectrum of stakeholders. This includes engaging civil society and communities, including representatives of the most marginalised and vulnerable persons, as well as health workers, among others, in the digital transformation. They must be empowered to contribute to this change and to hold decision-makers accountable. This would also help safeguard against unwarranted or unanticipated exclusions or negative consequences of that digital transformation.

Recommendations for national governments

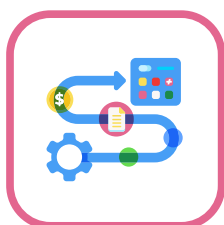
Closing the digital divide: More and better funding for the digital transformation of health outlines the amount, focus and nature of the investments needed to support the equitable, inclusive and sustainable digital transformation of health systems in low- and lower-middle-income countries. It makes the following recommendations for national governments.



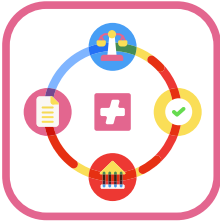
Recommendation 1 - More investment. National governments should prioritise investing in a digital health transformation that is equitable, inclusive, sustainable, and protective of people's interests, their right to health, their privacy, and their capacity to participate in its governance. They must make this a political priority and reflect it in national budgets. Health Ministries must prioritise digital health within the national health budget as part of wider health system strengthening. Ministries of finance, planning and information and communication technology will already have budgets for digital transformation, a proportion of which should be made available for the health sector.



Recommendation 2 - Better coordinated and aligned investments. National governments should ensure smooth and transparent coordination among national stakeholders and international donors. A national coordinating body, under the leadership of a senior government official should be established and empowered to define the purpose, goals, and direction for the digital transformation of health. Each government must refer partners to its national strategies or to opportunities to support the development of its digital transformation.



Recommendation 3 - A costed digital health strategy and investment road map. National governments should develop an inclusive digital health strategy as an integral component of their universal health coverage and health system strengthening agenda. Such strategies must be aligned with the country's digital health maturity level, and they must promote interoperable solutions for connectivity, capital investment, data governance, legislation and regulation, literacy, and workforce. The strategies should be developed in an inclusive and participatory manner, with sufficient time for consultation with different stakeholders, including civil society, communities and health workers. They also need to be costed and be accompanied by a prioritised and sequenced investment road map that lays out the different sources of funding, as well as the gaps. Health Ministries should lead the development and regular updating and monitoring of national digital health strategies and their costing, including publishing them and regularly and transparently reporting on progress.



Recommendation 4 - A robust regulatory framework and policy environment. National governments must prioritise establishing a regulatory framework and the necessary policies to guide the digital transformation of their health system so that it is equitable, inclusive and sustainable. This process must be based on a multistakeholder engagement and broad participation of civil society, including youth, women, older people, people living with disabilities and marginalised and hard-to-reach communities. This needs to lay the legal foundations in terms of health data use, privacy, digital literacy, and the policies for what kind of digitised health system a country needs to ensure universal health coverage.



Recommendation 5 - Mechanisms for meaningful multistakeholder engagement. National governments must set up inclusive processes to plan, implement and oversee the digital transformation. The processes should meaningfully engage and empower civil society, young people, women, and marginalised communities to participate in the relevant forums and in all stages of planning, implementation, and oversight. Such participation needs to be supported financially to ensure that communities across all strata of society are represented and can hold decision-makers and service providers accountable.



Recommendation 6 - Improved digital connectivity. National governments must prioritise strategic, targeted, and coordinated actions to close the divide in digital access to ensure that digital health technologies do not deepen exclusion. This can be achieved through: lowering prices for entry-level broadband; providing incentives to encourage network build-out that ensures equitable coverage, including in less commercial areas and communities; taking an active role in defining the design of digital solutions for health care to ensure that they respond to the needs of the end users, taking into account age, language, literacy and physical and mental abilities; and ensuring that the end users, including health workers and communities, are meaningfully engaged in the digital transformation processes.