

DRAFT FOR EXTERNAL CONSULTATIONS

Accelerating the Journey to Self-Reliance through Strategic Investments in Digital Technologies:

A Digital-Health Vision for Action from the U.S. Agency for International Development

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Executive Summary

This Digital-Health Vision for Action charts a course to sharpen the investments in digital technologies by the U.S. Agency for International Development (USAID) to unlock significant gains for health institutions, health workers, citizens, and host governments in low- and middle-income countries (LMIC) alike. Consistent with USAID's *Digital Strategy*, the goal of this Vision is to move the Agency beyond an era of funding characterized by fragmented pilots and siloed, program–specific information-technology systems, and toward a future shaped by investments in health strategies led and managed at the country level, and in systems that host governments and their local partners can operate, expand, and sustain independently over time. This Vision, and the strategic shift in approach it signals, is essential to enabling the Journey to Self-Reliance1 in USAID's partner countries in a digitally enabled 21st century.

What Is Digital Health?

Digital health is the application of information and communications technologies, and the data they generate, to support informed decision-making and engagement by individuals, health providers, and health systems to increase demand, access, coverage, quality, and affordability of health and wellness for all.²

The Classification of Digital-Health Interventions₃ published by the World Health Organization (WHO) identifies over 80 digital technology use-cases for strengthening health institutions and systems, and groups them by primary target user-groups, which include the following:

- **Client-oriented technologies**, such as those that provide compliance reminders for appointment and treatment, transmit health-event alerts, and/or transmit payments or vouchers;
- Health-care provider-oriented technologies, such as that support the identification and registration of clients; clients' health records; communications and decision-making for health-care providers; referrals; planning and scheduling; training; and the management of laboratory tests and results, diagnostics, and imaging;
- Health systems managers-oriented technologies, such as those that support the management of human resources, supply-chains, notifications of public health events, civil registries and vital statistics, public- and private-sector health funds, and facilities; and
- **Data services-oriented technologies**, such as those that enable the collection, management, analytics, and use; data coding; location mapping; and data exchange and

²Definition developed by the Key Terms and Theory of Change small working group of the Digital Health and Interoperability Working Group in 2019.

¹ USAID, under the leadership of Administrator Green, identified support for countries' ability to solve their own development challenges--also referred to as a country's 'Journey to Self-Reliance'--as a critical component of its work.

³ http://www.who.int/reproductivehealth/publications/mhealth/classification-digital-health-interventions/en/

interoperability.

As described in the draft 2020–2024 WHO Digital Health Strategy₄, the term "digital health" refers to "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, health informatics, telemedicine, telehealth and mHealth, as well as data-analytics, big data, and artificial intelligence. USAID understands digital health to be relevant to all aspects of strengthening health institutions, including health-management information systems, and to encompass the use of digital financial services, including banking, insurance, and payment services accessed through mobile phones, electronic cards, and vouchers.⁵

This Vision builds from established best practices, such as those articulated in USAID's *Digital Strategy* and the USAID-endorsed <u>Principles for Digital Development</u> and <u>Principles of Donor</u> Alignment for Digital Health. It assumes that digital health interventions should be:

- framed by country-identified health goals and needs,
- integrated as appropriate relative to the use environment6,
- aligned with the principles of the Astana Declaration on Primary Health Care of 20187 and,
- designed to strengthen health institutions by overcoming persistent bottlenecks to health information and the delivery of care that, in turn, can support improved measurable health outcomes₈.

This Vision details four strategic priorities for USAID's future planning, procurements, and programming to advance a new generation of strategic digital-health investments. Accompanying the USAID inaugural *Digital Strategy*, it interprets that guidance in the context of health-sector priorities and needs. It refers back to the *USAID Digital Strategy* for guidance on risk-mitigation factors—such as the need to resist malign influence, prevent the misuse of health and genetic data by authoritarian regimes, and contain corruption in securing contracts and purchasing digital technology—as well as on security measures, such as investing in cyber security, protecting patient confidentiality, and adequately safeguarding data.

USAID's Digital-Health Vision At-a-Glance

USAID envisions a world in which people have safe and secure access to the information and services they need to live healthy and prosperous lives. To reach this goal in an increasingly

4https://extranet.who.int/dataform/upload/surveys/183439/files/Draft%20Global%20Strategy%20on%20Di gital%20Health.pdf p2

5https://www.usaid.gov/documents/15396/role-digital-financial-services-accelerating-usaids-health-goals 6The Principles for Digital Development stress the importance of designing with and/or by the user in order to understand and address the nuances of the sector and digital/data use environment. The latter includes consideration of factors such as digital and data literacy, the reach and reliability of digital connectivity, and data ownership, privacy, and security requirements, to name a few.

7 https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf

8 Mehl, Garrett and Alain Labrique, "Prioritizing integrated mHealth strategies for universal health coverage" in Science Vol 345, Issue 6202, 12 September 2014

http://science.sciencemag.org/content/345/6202/1284 Last accessed November 15, 2018.

interconnected 21st-century society, this inaugural USAID Digital-Health Vision outlines four strategic priorities to which USAID will align₉ its investments in health, consistent with the Agency's *Digital Strategy*:

1. Country-Level Capacity in Digital Health

Investments in country-level¹⁰ capacity in digital health—including in leadership and governance, and institutional and workforce capacity—are essential to enabling investments in digital tools and systems to succeed.

2. National Digital-Health Strategies

Strong national digital-health strategies and costed implementation roadmaps provide an organizing framework that align funders' investments in digital tools and systems to country-identified health priorities and plans.

3. National Digital-Health Architectures

National digital-health architectures provide an organizing framework, including through the use of standards, to identify country-specific technology requirements, prioritize interoperability between national digital-health systems, and streamline future investments. In turn, these frameworks can lower the financial and management burden of competing digital systems; strengthen national health institutions and the provision of health care overall; and promote the effectiveness, reach, and cost-efficiencies of digital investments.

4. Global Goods

"Global goods" include content (knowledge products) and software tools, which frequently are open-source,11 that are adaptable and reuseable to meet the diverging needs of various geographic or thematic contexts. These can include reference guides; reusable digital components, such as identification or messaging systems deployable across sectors; as well as software tools specific to the health sector. Their use supports the scaling of tested tools built to meet common use-environments in LMICs and efficiencies that can promote cost-savings and sustainability.

USAID's Digital-Health Vision for Action calls for all of the Agency's staff to take dedicated steps to ensure our related investments align with, and provide support to, these priority areas. This Vision is the product of numerous consultations with USAID staff at headquarters and in the field.

Introduction

9 We use the term "align" to mean that future USAID planning, funding, and activities should at a minimum not be discordant with the four strategic priorities identified in this Vision, and ideally directly support the country-level implementation of these priorities.

10 Throughout the Vision, the word "country" does not mean "government"; USAID recognizes that the ecosystem for health in a nation includes civil society, the public, and the private sector as well.

11 USAID recognizes that open-source software are not "free of cost" to adapt, maintain, or implement, nor are they always "free of intellectual-property rights (IPR)."

This document is written first and foremost for USAID's staff—whether at headquarters or in the field, and whether in the Bureau for Global Health (GH) or in other parts of the Agency that touch on, and make investments in, global health. It is designed to give them the following:

- An interpretation of key priorities for action from the perspective of the global health sector, in line with USAID's *Digital Strategy*;
- Awareness of the four strategic priorities for health-sector investments in digital technologies that USAID will implement upon the launch of this vision;
- The ability to link and use these strategic priorities to inform USAID's programming and facilitate the Journey to Self-Reliance in our partner countries;
- A shared familiarity with key digital-health terminology and concepts; and
- **Resources and reference tools** to support the implementation of this Vision.

This Vision provides a new way to frame USAID's ongoing and future investments. It calls for all USAID staff—including those involved in creating Country Development Cooperation Strategies (CDCSs) and planning under the Agency's Program Cycle, as well as procurement officers, Agreement Officer's Representatives/ Contracting Officer's Representatives (AORs/CORs), Activity Managers for programs, and others—to ensure related investments align with, and provide support to, these priority areas.

Finally, while this Vision will guide USAID's investments in digital technologies that support the health sector, many aspects of it are relevant to the other development sectors USAID funds. Likewise, USAID's global activities in health will align with those managed by other development and humanitarian colleagues who seek to leverage and advance common, reusable digital building blocks to enable governments, civil society, and the private sector in our partner countries to meet their citizens' needs as seamlessly and sustainably as possible.

Parameters of the USAID Digital-Health Vision

This Vision focuses on digital technologies that receive Program funding from USAID deployed in countries to support health activities, regardless of whether governments, the private sector, or civil-society partners manage them. As stated in the definition provided above, the term "digital health" refers to the planning for, study, and use of digital systems and the data they generate to strengthen health systems and outcomes through improved health information and delivery of care.

This Vision is not relevant to the following:

- General office use of information and communication technology (ICT) (*e.g.*, funding for desktop computers in the offices of a Ministry of Health or non-governmental implementer);
- **USAID-managed digital systems**, or investments therein, designed to meet the data needs of the U.S. Government, or to any software deployed behind USAID's firewall (*e.g.*, GLAAS, internal systems for monitoring and evaluation or analyzing data or the Agency's financial-tracking system);
- The use of digital tools by USAID's programs and partners to support their external communications (*e.g.*, websites) or internal data needs, (*e.g.*, the use of a mobile data tool to collect project-level data for monitoring and evaluation), unless such tools connect to and support country-levels data systems; or

• **Digital tools deployed solely for research purposes**. (*e.g.*, a custom application to test a digital intervention).

Context

Managers and policy-makers within partner-country governments and other stakeholders seek greater coordination among donors to streamline investments into scalable tools and interoperable systems that facilitate the access and use of health data. A growing number of global health funders who endorse the Principles of Donor Alignment for Digital Health and produce strategy and vision documents for digital health such as this one are amplifying this call for rationalization. The emergence of a new "digital-health agenda"₁₂—a global consensus that a more coordinated and country-led approach to investments in digital-health technologies is necessary—finds support in a number of reports published by development, industry, and government entities.

As a first step in responding to this growing call to action, the U.S. Government articulated its position on digital health at the meeting of the WHO Executive Board in January 2018.

The U.S. Government Statement on Digital Health

At the meeting of the WHO Executive Board that took place between January 22–27, 2018, at WHO headquarters in Geneva, Switzerland, the U.S. Department of Health and Human Services presented this common U.S. Government statement on digital health with input and approval from across the Federal interagency process:

"To overcome challenges of fragmentation and duplication of digital health systems around the world, greater coordination is needed, including among public and private funders. Recommendations include:

- First, that countries create and support the implementation of a digital health strategy reflecting priorities identified in the countries national health strategies;
- Second, financiers align their efforts on digital health with national digital health strategies. Where country-focused digital health strategies do not yet exist, their development should be prioritized;
- Third, that countries strengthen a digital health-enabling environment including support for capacity building and governance with a focus on privacy, accessibility, use of data and data systems;
- Fourth, that investments align with a country's progression along the digital health continuum--starting with moving from paper to digital, culminating with a country's transition to independent management of digital health technologies; and

¹² An excerpt from remarks by a representative of the Government of India in welcoming the May 2018 WHO digital health resolution.

Fifth, that digital health can be a powerful tool for public health surveillance. It is
important to understand a host nation's infrastructure and capacity to implement
effectively and manage these technologies, and to use the data that they produce.
mHealth should be used appropriately depending on the context of an emergency,
noting that in some situations, use of mobile technologies could put healthcare workers
at increased risk, due to security issues."

Subsequently, the U.S. Government contributed to the development of, and then endorsed, the <u>Principles of Donor Alignment for Digital Health</u>. These Principles identify ten priorities that funders of country-level digital-health systems should take into account in their operations and investments.

| The Principles of Donor Alignment for Digital Health | | | |
|--|---|---|--|
| Wł Dig exi do | nile adhering to the Principles for gital Development and working through sting global and regional efforts, nors will do the following : Collaborate to align investments to national digital-health strategies | and donors will invest in the following: The creation and evolution of a country's national digital-health strategy, policies, and regulatory framework. Strategies include components, such as architecture, standards, investment frameworks, and privacy protection, and detailed operational and monitoring plans. | |
| • | Invest in national plans that incorporate "digital global goods" and avoid bespoke systems. | • Systems at a level appropriate to a country's progress along the digital-health maturity continuum. | |
| • | Engage early to determine and quantify the long-term costs of operating, maintaining, and supporting digital-health systems for sustainable country ownership. | Sustainable country capacity for digital-health leadership, governance, implementation, oversight, global good adoption, and donor coordination. Scalable, sustainable, accessible, interoperable, and evidence-based digital-health global goods that meet | |
| • | <i>Track investments</i> , progress, learning, and successes in digital- health systems in a transparent manner. | Diverse stakeholder information-sharing and peer- learning networks at the country and regional levels to foster the coordination and alignment of implementation | |
| • | Strengthen donor technical skills and core capacities, including awareness of the Principles for Digital Development. | activities. | |

The movement for coordination in digital health culminated in the passage by the World Health Assembly (WHA) of Resolution WHA 71.12.4, Digital Health, in May 2018₁₃.

¹³ http://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_ACONF1-en.pdf (PP7)

"The Seventy-first World Health Assembly [...] urges Member States: (1) to assess their use of digital technologies for health, including in health information systems at the national and subnational levels, in order to identify areas of improvement, and to prioritize, as appropriate, the development, evaluation, implementation, scale-up and greater utilization of digital technologies, as a means of promoting equitable, affordable and universal access to health for all, including the special needs of groups that are vulnerable in the context of digital health [...] *Resolution WHA 71.12.4, Digital Health - May 2018*

Vision

USAID's Digital-Health Vision for Action charts a path to weave its principles into the Agency's work through the following four strategic priorities to which our global, regional, and country-specific investments in digital technologies for health will align:

- 1. Assess and advance national capacity for digital health, in particular that of in leadership and governance14:
 - <u>What is it</u>? An assessment of the use-environment can describe national digitalhealth capacity. As defined by the *National eHealth Strategy Toolkit* produced by the WHO and the International Telecommunication Union (ITU), the digital-health enabling environment consists of the "building blocks" (leadership and governance; strategy and investment; services and applications; standards and interoperability; infrastructure; legislation, policy, and compliance) whose effective functioning is necessary for the success and long-term sustainability of digital-health interventions₁₅.
 - What should USAID do? Benchmarking₁₆ and periodically updating the evolution of the enabling environment in each partner country is critical to ensuring that USAID's investments leverage the strengths and address the weaknesses of national enabling environments for digital health as part of our funding for health care and public health.
 - <u>Why is this a priority</u>? Investments in a country's digital-health use-environment, and, in particular, its leadership and governance, are essential to enabling our investments in digital systems to reach their intended development outcomes. Investments in national capacity ensure that governments, civil society, and the private sector are adequately positioned to support systems-level activities such as: multi-stakeholder governance, regulatory structures to protect patient data or enable cross-border data sharing, and technical working groups that prioritize and oversee

¹⁵ WHO-ITU National eHealth Strategy Toolkit, Geneva, 2012, pages 8-9.

https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-E_HEALTH.05-2012-PDF-E.pdf Last accessed September 6, 2018.

¹⁶ Two tools that are emerging as standards for country digital health ecosystem assessments. These include the Digital Health Index (<u>www.digitalhealthindex.org</u>) for an assessment of enabling environment, 'building blocks', and the Digital Health Atlas (<u>www.digitalhealthatlas.org</u>) for the landscaping of digital systems in use in country. At the time of publication of this Vision, conversations were underway to surface data across the two platforms for more seamless use.

¹⁴ Accomplishing this goal requires strong partner country leadership commitment.

interoperability among digital tools. These critical aspects of the implementation of digital health frequently are underfunded.

2. Support the development of, and align investments to, national and, where appropriate, regional digital-health strategies:

- <u>What is it</u>? Called for in the draft *WHO Digital-Health Strategy*₁₇ for 2020–2024, national digital-health strategies identify a common vision for how to address health priorities through the coordinated and strategic integration of digital technologies.
- <u>What should USAID do</u>? USAID's digital investments (*e.g.*, in applications or services) must align to national digital-health strategies and their costed implementation roadmaps, and should support the implementation of these strategies. Where national digital-health strategies are weak or do not exist yet, USAID's planning and investments should support their development.
- <u>Why is this a priority</u>? Investments in country-based digital-health technologies in the absence of larger, national-level organizing frameworks have led to a proliferation of duplicative and fragmented systems that burden health workers and health institutions, and are unsustainable over the long-term. Creating strong, national digital-health strategies and associated costed implementation plans provides an organizing rationale that can ensure funders' investments align to national priorities and plans.

3. Support the development of, and align investments to, a national digital-health architecture:

- <u>What is it</u>? "National digital architectures," sometimes also referred to as "digitalhealth platforms,₁₈" are blueprints that establish the types of software applications and services in which governments, the private sector, non-governmental providers, and donors will invest; who will use what; and how to exchange data safely and securely across digital applications and services.
- What should USAID do? USAID should help fund and provide technical support for country-level planning for, and the development and implementation of, national digital architectures. Furthermore, USAID's investments in digital systems, tools, applications, and services should align to, and meet the requirements of, these national digital-health platforms. USAID also must guard against the abuse of digital technology, and avoid helping to create or support systems that could allow governments to use citizens' genetic or health data against them.
- <u>Why is this a priority</u>? Aligning USAID's digital-health investments with a national digital-health architecture will aid in strengthening the maturation and effective functioning of health systems and lower the financial and management burden of competing digital tools. Digital-health architectures defined at the country level also

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https://extranet.who.int/dataform/upload/surveys/183439/files/Draft%20Global%20Strategy%20on%20Dig ital%20Health.pdf

¹⁸ International Telecommunications Union. *Investing in Digital Health Platforms*. Unpublished draft.

enable the identification of common, reusable digital components (*e.g.*, services for digital payments, messaging, and identification) that address the needs of multiple sectors (*e.g.*, agriculture, education, and health)₁₉.

4. Adapt, re-use, and, where needed, provide support to global goods:

- <u>What are they?</u> "Global goods," including software and knowledge products (such as assessment models or reference guides), are adaptable and reuseable to meet the diverging needs of various geographic or thematic contexts. They are often, but not always, open-source; however, "open-source" does not always mean "free of cost" or "free of intellectual-property rights (IPR)." In the global health context, they are tools collaboratively developed, funded, and implemented by multiple parties to meet the needs of use-environments in LMICs and deployed at scale.
- <u>What should USAID do</u>? Particularly in our investments in digital technologies (*e.g.*, mobile applications, data systems), by default USAID should assess the availability of existing software for adaptation and re-use. Where the Agency makes investments in new software, whenever possible that source code should be open-source and publicly available for further adaptation and reuse. Where USAID contributes to the development of knowledge products, we should do so in collaboration with the community₂₀, and provide those tools for their broadest-possible uptake, adaptation, and re-use, translated into local languages.
- Why is this a priority? Whenever possible, USAID should invest funding from U.S. taxpayers in publicly available tools that are improveable and adaptable for further re-use. This is not to say, however, that the Agency does not invest in proprietary products or those that have IPR attached to them. USAID should streamline our investments, leverage a variety of financing across development sectors and funding sources, and strengthen a holistic approach to paying for digital architecture and services that national governments and other partners can sustain reasonably over the long term.

Benefits of Focusing on These Four Priorities

Attention to, and investment in, these four priority areas will facilitate the transition from digitalhealth approaches led by external donors to ones funded and managed by national-level actors, which will have the following multiple benefits:

- Harmonizing USAID's investments in digital-health to national contexts and needs, which will further progress on the Journey to Self-Reliance;
- Optimizing the conditions for the gathering, sharing, storing, analysis, and use for decision-making of digital-health data, which will improve the timeliness, quality, and

¹⁹ International Telecommunications Union and Digital Impact Alliance. SDG Digital Investment Framework, September 2018, p.9.

20 See for example the Digital Health & Interoperability Working Group https://wiki.digitalsquare.io/index.php/Digital_Health_%26_Interoperability_Working_Group availability of these data; ensure that health workers and managers have access to the data they need to run their programs; and ultimately create the potential for more targeted and expedient delivery of life-saving care and diagnostic services—particularly across different health fields and co-morbidities;

- **Creating cost-savings and other efficiencies**, such as by reducing the number and burden of fragmented digital systems, and accruing savings like those enabled by the establishment of interoperability layers that replace costly system-to-system integrations;
- Supporting a nuanced understanding of the digital-health enabling environment, which allows for the self-identification of strengths and weaknesses at the national level, and supports targeted, precise investments;
- Increasing the sustainability of digital-health systems through cost-efficiencies garnered through the centralization of investments in re-usable software tools whenever possible, which can lower costs associated with maintenance; training; and the exchange or comparison of data across multiple, disconnected, digital systems; and
- **Transforming health institutions and networks** to deploy information systems that are less-hierarchical and more oriented to the needs of practitioners and patients, and that empower citizens and providers with the data and information they need to make the best-informed decisions.

Looking Forward

Integrating USAID's Digital Health Vision will require a cultural shift in the way the Agency operates. This will require the deepening of existing and the on-boarding of new technical expertise, a cross-cutting and integrated approach to the use of digital technologies in our programs, and new thinking about the relevance of digital tools to existing country-level activities across all phases of USAID's program lifecycle.

In addition to the internal work USAID must undertake, the Agency will reach out to our external partners—including host-country governments, civil society, patients groups, other donors, implementing partners, and private-sector stakeholders—to share this Digital-Health Vision and seek collaboration in translating it into action. USAID will advance this engagement by encouraging these actors to engage in a shared approach to digital health, as well as by listening to, and learning from, external partners. Notably, USAID will seek close and continued engagement with national governments, and with other endorsers of the Principles of Donor Alignment for Digital Health that are undergoing related change-management processes.

Preparing USAID to Deliver

In conjunction with strategic reforms that accompany USAID's *Digital Strategy*, the Agency will conduct internal assessments to create detailed recommendations that can guide the implementation of this health-sector Vision. Specific aspects of USAID's operations that require further reform as this work moves forward include the following:

• **Policies and processes** as they relate to the funding and implementation of digital technologies in our partner countries, including to safeguard against the abuse by

governments and others of the systems in which USAID invests;

- Procurement, including to ensure that USAID's planned investments conform to established good practice, such as those articulated in the Principles for Digital Development and the Principles of Donor Alignment for Digital Health, and align to national and/or regional digital-health strategies and architectures where they exist (or support their development and strengthening as needed);
- **Partnerships**, including with host governments, civil society, non-governmental providers, patient groups, other donors, multilateral organizations, multinational corporations, and local private-sector actors, as well as academic and research institutions, and the community of implementing partners through which the vast majority of USAID's funds flow;
- **Organizational capacity**, including through an analysis of USAID's existing digitalhealth capacities, and an assessment of related coordination, guidance, and oversight needs, to determine how best to join these capacities and functionalities within the Agency underneath the larger *Digital Strategy*;
- **Technical capacity of our staff**, including that of existing employees, to determine where additional capacity is needed, whether through dedicated trainings and/or the recruitment of new technical staff;
- **Tracking of investments**, to identify where and how the Agency should create a clear and transparent accounting of our digital-health investments;
- **Monitoring and evaluation**, to ensure the Agency rigorously applies standard-setting practices and best evidence for digital-health programming and interventions;
- **Knowledge-management** to understand how the Agency's staff experience, access, and share learning about strengthening health outcomes with digital technologies, and how to enrich these experiences; and
- **Communications and advocacy** capacities, to build and deliver on a strategic plan to raise the awareness and understanding of, and engagement in, this functional area across USAID's Bureaus, Independent Offices, headquarters, and field staff.

Finally, USAID must reflect on how to share lessons-learned in global health with other development and humanitarian actors within the Agency, and vice versa. This collaborative approach is essential to aligning USAID's investments in sustainable, interoperable digital systems that empower the Journey to Self-Reliance, including through the independent management, funding, and governance of digital systems and the data they produce over time. This collaboration should include an exploration of aligned investments in shared digital services used across sectors.

Conclusion

"Wisely and widely used, digital health can bolster access to healthcare, raise the quality and diminish the costs of providing it and empower patients to take more responsibility for the management of their own health." - Broadband Commission for Sustainable Development₂₁

USAID's inaugural Digital-Health Vision charts a course for more strategic, systems-level planning for, support to, and use of digital technologies; the data they produce; and their enabling environments. It provides an opportunity to strengthen health institutions and measurable outcomes while making the most-efficient use of scarce public resources, aligning to national priorities and needs, and accelerating the Journey to Self-Reliance in our partner countries.

A future state informed by the implementation of this Digital-Health Vision is open for crafting. The benefits of strengthened health institutions and providers supported by well-planned and interoperable digital systems are vast. They include the long-sought-after goals of enabling the longitudinal tracking of patients throughout the continuum of care, and linking population-level data to other sources of information to yield richer insights for health-sector decision-making. The strategic integration of digital technologies also can empower people—from frontline health workers to national health policy–makers to patients to those who might be beyond the current reach of formal health care. In an era marked by global goals that seek to reach everyone, everywhere, with an equitable, high quality of care, this potential is ever more important to realize—particularly as it enables individuals to assess, monitor, and promote their own well-being more proactively.

USAID believes this Vision will shepherd a new generation of investments that empower partner-country stakeholders more fully and more strategically leverage the transformative potential of digital technologies. The publication of this Digital-Health Vision for Action marks the beginning of this journey; a journey we will take together .

²¹ Broadband Commission for Sustainable Development. *Executive Summary to Digital Health: A Call for Government Leadership and Cooperation between ICT and Health*, February 2017, p. 2. Via http://www.broadbandcommission.org/Documents/publications/WorkingGroupHealthExecutiveSummary-2017.pdf Last accessed June 19, 2018.

Glossary

| Digital Ecosystem | A digital ecosystem comprises the public and private stakeholders, systems, and enabling environment that together empower communities to use digital technology to access services, engage with each other, or pursue economic opportunities. Key components of a healthy digital ecosystem include the following: A foundation of inclusive digital infrastructure and government policy; Digitally enabled public- and private-sector institutions that advance a country's development priorities; and Digitally empowered individuals who can take full advantage of these opportunities and influence the digital economy.²² |
|--------------------------------|--|
| Digital-Health Architecture | An overview or blueprint used to design and describe how different digital applications (software and systems for information and communications technology) and other core functionalities will interact with each other within a given context |
| eHealth | A very broad term that covers health-care practice(s) supported by electronic processes and communication. Currently, it is commonly thought of as health-care practice through the Internet. ²³ |
| eLMIS | Electronic logistics-management information system, a system of records and reports used to aggregate, analyze, validate, and display data used to make logistics decisions and manage health supply-chains. |
| Global Goods | Digital health tools adaptable to different countries and contexts. There are three types of global goods: software, services, and content. Global goods are frequently, but not always, open-source. ²⁴ |
| HMIS | Health-Management Information System |
| ІСТ | Information and Communications Technology: All equipment, applications, and services that involve communication. Computers, cellphones, televisions, radios, and satellite systems are all part of ICT. |
| Interoperability | The ability of multiple ICT systems and software applications to communicate with one another, exchange data, and use the information exchanged. |

22 USAID Digital Strategy https://www.usaid.gov/usaid-digital-strategy

- 23 Global diffusion of eHealth:making universal health coverage achievable. Report of the third global
- survey on eHealth. Geneva: World Health Organization; 2016
- 24 Digital Square

https://wiki.digitalsquare.io/index.php/What_are_Global_Goods#What_is_a_Global_Good.3F

| mHealth | Most commonly used in reference to health applications and programs that use mobile devices. ²⁵ |
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| | |

mHealth: new horizons for health through mobile technologies. Geneva:
 World Health Organization; 2011 (Global Observatory for eHealth series, volume 3; http://www.who.int/goe/publications/goe_mhealth_web.pdf, accessed 24 May 2018).