Digital transformation can strengthen health systems, helping to ensure the right information is available for the right person at the right time. Unlocking this system-strengthening potential requires understanding and investing in the digital health enabling environment, a topic that is explored in the first technical guidance note in this series. This second technical guidance note focuses on how the U.S. Agency for International Development (USAID) can support country governance of digital health effectively by advancing its partner countries’ national digital health strategies.

This note includes:

- An **Overview** that explains the definition and importance of national digital health strategies
- **Recommended actions** aligned to the [USAID Program Cycle](https://www.usaid.gov)
- **Country examples** and illustrative personas demonstrating how USAID staff can align activities with recommendations
- A **Summary checklist** to support USAID staff and partners with implementing the Digital Health Vision

**FIGURE 1.** Four strategic priorities of the Digital Health Vision

OVERVIEW

Advancing National Digital Health Strategies

A national digital health strategy outlines government-identified priorities for health sector data and digital systems. It is a critical corollary to country health plans, articulating how digital technologies and data systems will be designed, managed, and used to meet country health sector goals. This unifying strategy and its accompanying costed implementation plan are essential for guiding relevant investments into digital systems that are interoperable, scalable, and aligned with country priorities. National digital health strategies can provide the basis for coordination across different health focus areas and partners. Recognizing the foundational role national digital health strategies can play both for country planning and partner coordination, these national planning documents are highlighted as priorities in the World Health Organization’s (WHO’s) Global Strategy on Digital Health 2020–2025, endorsed by the Seventy-third World Health Assembly, and the Digital Investment Principles, endorsed by 30 major global health funders, including USAID.

What Is a National Digital Health Strategy?

A national digital health strategy identifies a common vision for how to address health priorities through the coordinated and strategic use of interoperable digital technologies. It expands upon country health plans by articulating how digital technologies and data systems will be designed and used to meet country health-sector goals. Components of a national digital health strategy typically include:

- **Vision** — Frame what a country desires to achieve with its digital health strategy.
- **Objectives** — Identify short-term and long-term objectives over the strategic plan period.
- **Country digital health enabling environment landscape** — Summarize information on the current state of the country’s digital health enabling environment.
- **Governance structure and stakeholders** — Describe relevant governance groups, their structures, roles, responsibilities, and participating stakeholders.
- **Strategic priorities** — Identify important focus areas with recommended sequencing and actions that provide guidance and direction for investments.
- **Projects** — Describe activities that will be implemented to execute the objectives and strategic priorities.
- **Timeline** — Estimate time frames for achieving desired outcomes for strategic priorities, projects, and activities.

This note is part of a Technical Guidance Note Series designed to help operationalize the four strategic priorities of the USAID Digital Health Vision (Figure 1). The primary audience for this technical guidance note is USAID staff working on health teams at both headquarters and USAID Missions, including Agreement Officer’s Representatives (AORs), Contracting Officer’s Representatives, activity managers, and technical advisors. For more information, see the Series Overview and Technical Guidance Note 1: Strengthening Country Digital Health Capacity.

1 Strategy and investment represent one of the building blocks of the digital health enabling environment. For more, refer to Technical Guidance Note 1 in this series.
Why Invest in a Country’s National Digital Health Strategy?

National digital health strategies and costed implementation plans are important guiding documents that USAID can use to align its investments to country-identified priorities. By aligning investments to and supporting the development or update of a country’s national digital health strategy and costed implementation plan, USAID can:

- **Bolster locally led development** by supporting partner countries to own and manage their digital health journey, advancing their health system priorities.

- **Build consensus and align stakeholders to promote coordination** that better meets country needs and reduces duplicative, siloed investments.

- **Achieve better outcomes** over time by adapting, scaling, and improving coordination of existing, sustainable digital systems.

- **Advocate for standards and digital solutions that enable interoperability and scalability** to support integrated care.

- **Invest in activities that strengthen the whole of the digital health enabling environment** to enable greater sustainability for digital systems. Mobilize USAID human and financial resources to support country digital health needs.

- **Improve access to data for decision-making** for country leaders.

By bolstering local ownership, coordinating digital system costs, and improving access to data for decision-making, this approach can help USAID achieve its health goals and improve health outcomes. The remainder of this technical guidance note provides suggested actions and considerations to support all USAID staff in advancing national digital health strategies throughout the USAID Program Cycle (Figure 2).
Country and Regional Strategic Planning

Advancing national digital health strategies can help ensure that USAID’s work supports country priorities and bolsters locally led development.

USAID’s country and regional planning processes provide an important opportunity to articulate a strategic vision for how USAID funding will contribute to health-sector digital transformation within a particular geography and to align with country priorities. Where national digital health strategies and costed implementation plans exist, they can serve as guiding documents for USAID’s national and subnational strategic planning. When national digital health strategies do not yet exist or need updating, USAID planning processes offer an important opportunity to build pathways toward developing or refreshing a strategy.

Marin Khan is a fictitious Global Health Security Advisor in Country C. Her story shows how USAID staff can advance national digital health strategies through their work. This persona is illustrative and has been created for use in this technical guidance note.

See page 7 for her story.
RECOMMENDED ACTIONS

- **Participate in national digital health governance groups (e.g., working groups, steering committees), and engage in government-led coordination and collaboration with a broad range of partners.** This can help to prevent duplicative, siloed digital health investments and align USAID’s efforts with government-led decisions on the development, implementation, and assessment of the national digital health strategy.
  - If USAID and its implementing partners confirm there is no relevant country digital health governance structure, then identify relevant individuals and organizations via stakeholder mapping activities with the government, considering roles, partnerships, assets, and engagement strategies.
  - If needed, explore how USAID funding, in collaboration with other partners, can provide support to convene stakeholders.
  - Partners for coordination and collaboration can include: relevant USAID country, regional, and global offices and programs, other U.S. government stakeholders, and other major global health funders; academic institutions, learning networks and collaboratives, and civil society groups; and private-sector actors such as mobile network providers and other technology partners, associations including medical, informatics, and other industry groups; and other local, private-sector organizations.

- **Align investments with the national digital health strategy and other relevant strategies.**
  - Where a national digital health strategy and costed implementation plan do not yet exist or need updating, USAID can work through national digital health governance groups to consider how USAID can provide support for developing or updating these documents. USAID should leverage digital health enabling environment assessments to inform strategy creation or updating.

BRIGHT SPOT

**India’s Collaborative Governance Process to Define Strategic Priorities**

India showcases a strong example of a country-led governance process that engaged with key stakeholders collaboratively to develop digital health strategic plans and a costed implementation plan. The *Ayushman Bharat Digital Mission* (ABDM) outlines the country’s vision to move toward integrated data, infrastructure, and technology services to improve care delivery and outcomes and to support universal health coverage. To further define digital health country priorities, the National Health Authority led a multi-year collaborative process with key stakeholders, including the Mission Steering Group, the Empowered Committee, states, donors, partners, and citizens, to develop the *National Digital Health Mission: Strategy Overview of 2020*. Chaired by the Secretary of Health and Family Welfare, the Empowered Committee coordinates across government ministries and agencies. The Mission Steering Group oversees the strategy implementation and includes representation across key government ministries and agencies.

The Strategy Overview outlines strategic priorities and estimated implementation costs of approximately $19.2 million (around Rs. 114 Crores) to support digital infrastructure and systems, human resources, and change management activities. As India works to implement its digital health priorities, USAID continues to provide support through tuberculosis (TB) and other health programs and funding for capacity strengthening, governance, and technical support in alignment with the Mission, Blueprint, and Strategy Overview. For example, USAID offers technical assistance currently for the migration of a legacy TB information system to become ABDM compliant.
• Where national digital health strategies do exist, review and align USAID strategic planning and funding with the national digital health strategy and costed implementation plan to help meet country needs and priorities.

• Where relevant, available, and appropriate, review and align with subnational and supranational (regional) digital health strategies.

• Leverage existing digital health enabling environment assessments to identify opportunities and country needs to support national digital health strategy creation or update processes. If no assessment exists, consider supporting one.

▶ Work with relevant USAID Bureaus, operating units, implementing partners, and country governments to ensure digital health investments draw from and contribute to broader country digital-transformation efforts, beyond the health sector. For example, leverage investments in country digital systems that have relevance to the health sector (e.g., digital infrastructure, such as identity management and digital financial services). Consider how health-sector digital-transformation experiences and lessons learned can benefit and inform other development sectors. USAID’s Digital Ecosystem Country Assessments can provide cross-sectoral information on national digital enabling environments.

▶ Track investments in the country’s digital health enabling environment to facilitate coordination efforts. Understanding the landscape of existing country digital health investments and systems can help prevent duplication of work, facilitate collaboration with stakeholders, and identify gaps that USAID can help fill. WHO’s Digital Health Atlas can provide insights into existing country digital health investments.

BRIGHT SPOT

The U.S. PEPFAR’s Digital Health Inventory to Track and Coordinate Country Digital Health Investments

The United States President’s Emergency Plan for AIDS Relief (PEPFAR) officially launched the Digital Health Inventory (DHI) as a module in the Data for Accountability, Transparency, and Impact Monitoring (DATIM) system. The DHI reports details of PEPFAR-funded digital health systems and investments, including information on estimated budget, deployment status, geographic scale, system-specific details, and data security. Through the DHI, PEPFAR and its implementing agencies—including USAID—can gain a sharper understanding of the program’s digital health investments, which allows partners to better serve countries with improved coordination. The DHI aligns with the Digital Investment Principles’ emphasis on investment tracking to help stakeholders understand what digital systems investments already exist in a country, which can improve donor coordination. In the future, PEPFAR intends to use DHI data to populate the publicly available Digital Health Atlas, enabling country governments and other stakeholders to also access this information. This can help prevent duplication and enable PEPFAR, USAID, and other global health stakeholders to gain insight across implementations on promising approaches to digital health investments.
Marin is a USAID Global Health Security advisor who has been providing technical expertise on the COVID-19 outbreak response while monitoring her portfolio of other infectious disease projects in Country C.

ILLUSTRATIVE PERSONA

**Marin Khan**
Global Health Security Advisor

**CONTEXT**

The Minister of Health in Country C requests a meeting with Marin and the USAID Mission health team to explore whether the COVID-19 vaccination registry could be expanded into a routine immunization registry and whether USAID could help fund the process.

**ADVANCING NATIONAL DIGITAL HEALTH STRATEGIES IN ACTION**

To prepare for the meeting, Marin reviews the Country C Digital Health Strategy to better understand national priorities and checks the WHO Digital Health Atlas to understand what relevant digital health investments may already exist in country. She also references USAID’s Digital Health Vision and the USAID Primer on Digital Solutions for COVID-19 Vaccination Service Delivery to remind herself of key considerations for supporting effective digital investments. She then consults with the Mission health team and implementing partners to understand what digital health systems USAID has funded in country and to discuss key considerations for scaling COVID-19 digital investments to strengthen health systems and prepare for future outbreaks.

Marin and the Mission health team meet with the Country C’s Minister of Health, Immunization Program team, and Digital Health team to discuss the request further. During the conversation, Marin and team learn about quarterly governance meetings being held to coordinate partners and implement the Country C Digital Health Strategy. Marin and the team ask to participate in the quarterly governance meetings to ensure alignment. They also outline next steps to develop a proposed workplan for assessing whether the COVID-19 immunization information system could satisfy the country’s routine immunization registry needs and how it could help advance the national digital health strategy.
Design and Implementation of Projects and Activities

The recommendations below help enable USAID projects and activities to advance national digital health strategies and costed implementation plans. The Bureau for Global Health offers central mechanisms specialized in digital health that can offer technical expertise to help meet country requests as needed.

RECOMMENDED ACTIONS

- Support implementation of the national digital health strategy in collaboration with the country government and partners.
  - Coordinate with partners to align projects and activities with government-led strategy and implementation plans, and avoid duplicative investments.
  - Assist country governments and partners with developing plans such as workplans or roadmaps to help implement the national digital health strategy.
    - Consider the enabling environment to ensure plans are responsive to gaps and requirements. For example, consider workforce capacity needs, and comply with country and local laws and policies regarding privacy and data sharing.
    - Align with or support the creation of a national digital health architecture plan, including consideration for standards specifications to advance system interoperability.
    - Review implementation plans with country-led governance groups and stakeholders to ensure decisions are aligned with strategic priorities and support standards and interoperability.
    - If there is no costed implementation plan, consider supporting the government-led creation of one.

- Support alignment of subnational, supranational, and national digital health strategies, where appropriate.
  - For subnational strategies, work with local governance groups and partners to develop or update local plans to implement national priorities where appropriate. USAID staff can help support local leaders with developing action plans and implementation approaches to facilitate alignment.
  - For supranational strategies, where appropriate, ensure funding supports both national and regional digital health strategies and priorities, such as around data portability and sharing, and institutional and workforce capacity strengthening.

- USAID can support the country-led creation or refresh of a national digital health strategy in collaboration with stakeholders, if no digital health strategy exists or if the current one requires updating or strengthening. Leverage assessments of the digital health enabling environment (see Technical Guidance Note 1) to assess strengths and gaps to be addressed in national digital health strategy planning.

Ambra Cadare is a fictitious Health Officer in Country D and Violeta Krasniqi is a fictitious AOR at USAID headquarters. Their story shows how USAID staff can collaborate to help ensure that USAID activities advance Country D’s national digital health strategy. These personas are illustrative and have been created for use in this technical guidance note.

See page 10 for their story.
Consider change management and capacity strengthening needs to implement digital health investments effectively and plan appropriate training, communications, and technical support.

- This includes cross-sector capacity strengthening within government ministries (e.g., Information and Communications Technology, Health, and Finance) for staff—ranging from analysts to directors—to cultivate buy-in and to support and sustain digital-transformation efforts.

Align with applicable country privacy and security policies and regulations as well as global best practices to protect against inappropriate access to and misuse of information.

- Assess cybersecurity risks and address vulnerabilities in digital health systems to mitigate potential harms. For more, consult USAID’s Cybersecurity Primer.

Link to broader digital transformation and development objectives, prioritizing equity and a rights-based approach that protects human rights and civil liberties.\(^5\) Investigate ways to advance USAID priorities, such as climate change, gender equality, and youth engagement.

- Integrate gender-equality priorities into strategy development and implementation to help eliminate gender disparities in health outcomes, address the gender digital divide, and increase women’s and girls’ agency. For more, consult USAID’s 2023 Gender Equality and Women’s Empowerment Policy.
- Determine how to leverage digital health strategies to improve youth access to and participation in the health system. For more, consult USAID’s Youth in Development Policy.
- Consider how the national digital health strategy can support health system resilience in the face of climate risks, support adaptation, and contribute to mitigation. For more, consult USAID’s Climate Strategy 2022–2030 and Considerations to Integrate Climate Change Mitigation and Adaptation into Health System Strengthening Programming.
- Assess how the national digital health strategy can create links with other sectors to address social determinants of health.\(^6\)

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\(^5\) For example, refer to the human rights and inclusivity principles of the Pan American Health Organization’s 8 Principles for Digital Transformation of Public Health.

\(^6\) Refer to information from WHO on the social determinants of health.

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**BRIGHT SPOT**

**Plans for an Integrated Digital Health Ecosystem in Tanzania**

The Tanzania Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC), in collaboration with the Tanzania President’s Office–Regional Administration and Local Government, is committed to developing an integrated, scalable, and sustainable digital health ecosystem. To accomplish this, the MOHCDGEC, in collaboration with stakeholders, including the National Digital Health Steering Committee, developed the National Digital Health Strategy 2019–2024. The Strategy outlines priority investments to continue health system digital transformation. The Digital Health Strategy 2019–2024 builds on the accomplishments of its predecessor, the National eHealth Strategy 2013–2018 and aligns with the Tanzania Development Vision 2025 as well as the Health Sector Strategic Plan 2015–2020.

To advance planning, MOHCDGEC worked with stakeholders to create the unified Digital Health Investment Roadmap 2019–2024. The Roadmap recommends 34 investments from the Digital Health Strategy and estimated their total costs around US$109 million. By outlining information on key considerations and estimated costs for human resources, software development and support, equipment, training, and more, MOHCDGEC helped partners, including USAID, to coordinate and align work to the Digital Health Strategy.

USAID is supporting Tanzania’s implementation of strategic plan priorities, including support for digitizing community health services. USAID, through Digital Square, developed a unified community system using OpenSRP that enables providers at communities and facilities to share client information and engage in referral management and other communications.
ILLUSTRATIVE PERSONAS

Ambra Cadare and Violeta Krasniqi
Health Officer and AOR

CONTEXT
Ambra is planning an activity through a Washington, D.C.-managed USAID cooperative agreement. Ambra is familiar with USAID policies and strategies but has limited experience with digital health interventions. In reviewing the implementing partner's workplan, she notes there are numerous digital health activities, and she is not sure how they are related or what their intended impact might be.

ACTIVITY DESIGN AND IMPLEMENTATION IN ACTION
Ambra connects with Violeta, the AOR for the agreement, for support. After reviewing the country’s digital health strategic plan and related national health strategy documents together, they schedule a call with the implementing partner and a USAID Bureau for Global Health Digital Health Advisor to discuss further.

During the meeting, Ambra and Violeta ask for more information on the proposed digital health activities, including how they support the country’s digital health strategic plans and meet the country’s systems strengthening needs without duplicating efforts of other partners. After the conversation, Ambra and Violeta ask the partner to restructure two elements of the workplan to better align with the country’s digital health strategic plan and request that the partner participate in an upcoming National Digital Health Steering Committee to further coordinate work.
Monitoring and Evaluation

USAID project and activity-level monitoring and evaluation (M&E) plans can support tracking progress on digital health strategy implementation and provide valuable inputs to future strategy iterations. Country national digital health strategies may have associated M&E plans that USAID can leverage in its own plans to enhance coordination and alignment.

The recommendations included in this section outline ways to leverage USAID M&E in support of national digital health strategy M&E plans. However, USAID staff may also wish to incorporate project- or activity-level M&E focused on understanding how digital health tools contribute to program outcomes.7

RECOMMENDED ACTIONS

▪ Align USAID project and activity theories of change with relevant national digital health strategy goals and objectives, when available and appropriate.8 When developing a project or activity theory of change, USAID can look for opportunities to support the vision and priorities outlined in the country’s digital health strategy.

▪ Identify alignment opportunities between the country’s digital health strategy M&E plans and USAID’s project or activity M&E framework, including potential common indicators. As part of this process, establish an approach for sharing relevant findings with the country government to help inform country activities.

▪ Support periodic, rapid country assessments against the national digital health strategy to understand progress and inform future strategic-planning efforts. These assessments can identify challenges, learnings, and opportunities to accelerate progress with future investments. This can also support the development of subsequent national digital health strategies. USAID can use these findings to inform future USAID-specific country strategic planning.

▪ Use enabling environment assessments like the Global Digital Health Monitor (GDHM) to support milestone-setting. USAID projects and activities can set goals and measure progress by benchmarking against the indicators captured in the GDHM.

7 Consider using WHO’s The MAPS Toolkit and Monitoring and Evaluating Digital Health Interventions as resources.
8 See the Data Use Partnership Theory of Change for an example of how theories of change can help clarify the role digital health can play in improving health outcomes.
Collaboration, Learning, and Adapting

Strategic collaboration with stakeholders and continuous learning—facilitated by project and activity M&E efforts—can lay the foundation for effective adaptive management to support and strengthen national digital health strategies. Leveraging collaboration, learning, and adapting (CLA) approaches can boost effectiveness of digital health work within individual countries and provide vital input to strengthen USAID’s overall approach to digital health investments.

RECOMMENDED ACTIONS

- **Ensure evidence and best practices are captured and disseminated widely.** Prioritize collecting and sharing lessons, best practices, challenges, and other evidence to advance the field of digital health and development. For example, projects and activities can reserve funding to support content development, communications plans, and journal publication. USAID can also participate in knowledge-sharing forums to encourage cross-country learning and support USAID staff and partners to incorporate lessons learned and best practices. Sharing knowledge about challenges and successful approaches can help ensure stakeholders around the world have the evidence they need to inform and implement national digital health strategies.

- **Incorporate feedback loops into activity and program design to support adaptive management.** The digitalization of health system management or workflows may create confusion, uncertainty, or resistance if not paired with a change management plan. Some national digital health strategies may include guidelines for supporting digitalization change management plans. As digitalization progresses, it is vital to manage planning, programs, and activities adaptively—using accurate, timely data for continuous improvement.
RECOMMENDED ACTIONS CHECKLIST

This checklist captures key actions to consider when investing in and supporting country digital health capacity, aligned with the USAID Program Cycle.

Country and Regional Strategic Planning

- Participate in national digital health governance groups and coordinate with a broad range of stakeholders to prevent duplicative or siloed digital health investments.
- Align investments with the national digital health strategy and other relevant strategies.
- Work with relevant USAID Bureaus, operating units, partners, and country governments to ensure that digital health investments draw from and contribute to broader country digital-transformation efforts beyond the health sector.
- Track investments in the country’s digital health enabling environment to facilitate coordination efforts.

Design and Implementation of Projects and Activities

- Support the implementation of the national digital health strategy in collaboration with country government and partners. Where needed, support the development or renewal of a country’s national digital health strategy and corresponding implementation plans.
- Consider change management and capacity strengthening needs to implement digital health investments effectively and plan appropriate training, communications, and technical support.
- Align with applicable country privacy and security policies, regulations, and global best practices to protect against inappropriate access to and misuse of information.
- Link USAID investments to broader digital transformation and development objectives, prioritizing equity, access, inclusivity, and a rights-based approach that protects human rights and civil liberties.

Monitoring and Evaluation

- Align USAID project and activity theories of change with relevant national digital health strategy goals and objectives, when available and appropriate.
- Identify alignment opportunities between the country’s digital health strategy M&E plans and USAID’s project or activity M&E framework, including potential common indicators.
- Support periodic country assessments against the national digital health strategy to understand progress and inform future strategic-planning efforts.
- Use enabling environment assessments, like the GDHM, to support milestone-setting and progress tracking.

Collaborating, Learning, and Adapting

- Ensure evidence and best practices are captured and disseminated widely.
- Incorporate feedback loops into activity and program design to support adaptive management and consider supporting digitalization change management plans.