

BRIEF

Data Governance creating an enabling environment for tanzania's digital future



The Data Use Partnership (DUP) is a Tanzanian Government–led initiative that is improving the national health care system through better digital health systems and the use of health information. DUP aims to strengthen digital health and build local capacity so that everyone—from government officials to health workers to patients—can take more informed action to improve health, leading to a healthier Tanzania. DUP is currently focused on three investment areas: strengthening governance and policy, improving the use of information in primary care and supervision, and designing and implementing a digital health framework.

Background

An effective digital health system requires the collection, processing, and interpretation of vast amounts of complex data. As Tanzania's health sector increasingly generates large volumes of health data, it will need to design and implement data governance structures that build upon privacy and security commitments, address data sharing standards and collaboration, and anticipate future trends and demands within the health sector.

Data governance refers to the process of safeguarding and harnessing digital technologies and the information they contain across the data lifecycle—from the moment a patient's information is first entered in the system and throughout his or her entire life. Data governance is an approach to managing data that balances the need to collect and secure information, get value from that information, and ensure that Tanzania's health strategic plan, operations, regulatory, legal, risk, and environmental requirements are met.



AZIZA'S

Aziza is a nurse in Arusha, Tanzania, where she used to juggle multiple digital health tools at once, often using a combination of digital and paper-based systems during each patient visit. She used one system for immunization records, another for maternal and child health, and yet another for monitoring and managing essential medicines and supplies. Sometimes, Aziza had to enter the same information multiple times. The lack of awareness about existing systems and digital health initiatives led to duplicative and siloed health data, while burdening Aziza and other health workers with extra data collection responsibilities. Sometimes, because the systems were not interoperable, when Aziza attempted to share health data, she risked security breaches and patient safety.

Under DUP, the Government of Tanzania is working to strengthen data governance, including enhancing interoperability between data systems, so that health care workers like Aziza do not have to toggle between different data collection tools. Aziza now feels greater ownership over the data she collects, and she is empowered to use it to direct patient care.

DUP is working to establish strong governance structures to manage data, establish data quality, and facilitate data use to advance better health outcomes. If DUP is successful, a true tipping point will occur. With access to better-quality data and decision-support tools, health workers will be more empowered to act on the information available to them, resulting in improved health outcomes and healthier families and communities.

The Challenges

For data in Tanzania's health information system to be used reliably, efficiently, and securely, it must be architected and safeguarded to ensure different actors, at different levels, have appropriate access to different types of health data.

Through DUP, the Government of Tanzania (GoT) is working with a range of stakeholders to identify the country's most critical data governance challenges. Based on key informant interviews and a review of existing policies, strategies, and guidelines in April 2018, these challenges include:

- A National Healthy Policy (2007) that does not sufficiently emphasize data
- Multiple strategies and documents to guide data systems, quality, supply, and use, which lack harmonization.
- Limited analytical capacity and planning skills at all levels of the health workforce, which prevents providers from using data to inform evidencebased clinical care and health planning.
- A Monitoring and Evaluation department that lacks a strong mandate and clear staffing and roles.
- A need for greater emphasis on data collection, instead of data use within existing directorates, technical working groups, and health policies.
- Unreliable data quality, which makes it difficult for health providers to use data.
- Parallel, uncoordinated digital health structures, which have poorly defined roles and responsibilities within the broader health sector.

Data governance is paramount to ensuring the functionality of Tanzania's health information systems so that health workers and decision-makers have access to the right information, at the right time, and in the right form.

Approach and Progress

DUP is working to strengthen governance processes, structures, and policies to improve the use of health information and to create better digital health systems. For instance, DUP is collaborating with Muhimbili University of Health and Allied Sciences to renew Tanzania's eHealth Strategy (2019–2024), based on an assessment of Tanzania's existing strategy, World Health



RECOMMENDATIONS FOR IMPROVING DATA GOVERNANCE IN TANZANIA

Based on stakeholder interviews and an assessment of current policies, strategies, and guidelines, DUP identified several opportunities to strengthen Tanzania's data governance. These include:

- Establish clear linkages between digital health and other health structures to ensure proper coordination and guidance.
- Clearly stipulate the government's commitment tto data use within health policy to promote awareness, resource allocation, and enforcement.
- Harmonize guidelines on data systems and use.
- Assess, restructure, and build the capacity of the government's Monitoring and Evaluation department so it serves as a proactive arm of the health sector, providing alerts about potential outbreaks, health trends, and other key events.
- Develop and enforce health planning skills at all levels of the health sector to facilitate evidence-based decisions and allocate resources according to the highest priorities and needs, as demonstrated by data.

Organization guidelines, and the experiences of other countries. The new strategy will help Tanzania accelerate its progress and leadership in digital health, ensuring that the country continues to digitalize health care and foster a culture of data use.

DUP is also designing an online eHealth inventory and library to track and coordinate Tanzania's data systems and data use initiatives, promote knowledge management, and increase visibility into health policies, guidelines, and tools. The inventory will help avoid duplicative investments, enhance collaboration between government and nongovernmental actors, and facilitate learning from previous digital health initiatives.

A Way Forward

DUP is working to create an enabling environment for the success and sustainability of Tanzania's national digital health system. In 2019, the GoT, through the DUP initiative, will develop and update a series of policies, guidelines, and strategies in support of this vision, to determine who can take what action, upon what data, in what situations, and using what methods. This will include guidance on Tanzania's eventual transition to a paperless primary health care system and a Data Use Toolkit to foster a health system in which data is valued and used for day-to-day decision-making.

A focus on governance is critical to ensure that the GoT is able to mobilize and direct available resources toward a cohesive implementation plan, avoid duplicative investments, effectively prioritize programming and resourcing, and ensure relevant policies on topics, such as privacy and data-sharing, are in place. It is also important to ensure that governance structures and policies are accessible and available to health workers and other stakeholders.

