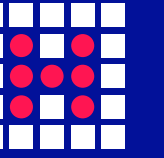# HealthTech Hub Africa

2024 Innovation Challenge Report

HEALTHTECH HUB

EXECUTIVE SUMMARY

Executive Summary

The HealthTech Hub Africa (HTHA), a pan-African innovation platform committed to advancing impactful healthtech solutions across the continent, ran its 2024 Innovation Challenge with catalytic funding of $400,000 from the Novartis Foundation and the Global Fund. The challenge aimed at supporting startups addressing key public health priorities: improving access to care, enhancing quality of services, and promoting client-centeredness of health services. Seven companies – **Helium Health** (Nigeria), **Emergency Response Africa** (Nigeria), **eFiche** (Rwanda), **Afya Intelligence** (Tanzania), **MedTrack** (Ghana), **Aurora Health Systems** (Kenya), and **HealthX Africa** (Kenya) – were selected to demonstrate their solutions in public health systems. Six companies received $50,000 and one received $100,000 to implement their winning solutions.

To evaluate real-world impact, HTHA conducted a survey capturing the achievements, experiences, and feedback of the selected companies. The results demonstrated significant progress: 96.57% of milestones were met, with solutions collectively reaching 905,172 patients, 2,865 healthcare providers, and 1,811 public health facilities. Twenty-six public and thirty private partnerships were established, and $1,947,042 in new funding was raised. These results align with public health needs, demonstrating the effectiveness of HTHA's support and the potential of healthtech solutions within the public health system.

However, the survey also revealed persistent challenges that hindered market entry, scalability, sustainability and integration of healthtech solutions within the public health system. These include bureaucratic delays, regulatory ambiguity, infrastructure gaps, and funding unpredictability. While existing policies moderately facilitate market entry and scalability, they hinder sustainability and integration due to implementation gaps. These gaps include: complex, lengthy, and unclear healthtech licensing processes; limited access to health data; data insecurity; limited integration of healthtech systems; and poor coordination, partnerships, and collaborations across stakeholders.

To address these issues, the report calls for stronger value-driven collaborations between governments and key stakeholders within the healthtech ecosystem, streamlined licensing frameworks, improved data governance, and more robust support for public-private partnerships. The HealthTech Hub Africa Policy Blueprint, a playbook developed through multi-country consultations, desk research, and stakeholder validation, supports decision-makers by outlining overall policy directions, specific actions, and practical examples to accelerate healthtech in Africa and ensure the sustainable development, testing, and scaling of healthtech innovations. Notably, although none of the seven companies contributed to the development of the healthtech Policy Blueprint, their collective real-world experiences closely reflect the Blueprint's priorities and validate its recommendations, while also highlighting critical implementation gaps that require attention. Emerging recommendations from the winning companies, such as the establishment of a HealthTech Liaison Office within Ministries of Health, seek to strengthen coordination, reduce inefficiencies, and create an enabling environment for healthtech innovation in Africa.

Download the Policy Blueprint here:

https://thehealthtech.org/the-policy-program/#DownloadBlueprint

96.57%
of their milestones reached

905,172
patients reached

2,865
healthcare providers reached

1,811
public health facilities supported

Key recommendations for policymakers, funders, investors, and innovators

For Healthtech innovators:

Engage early with public stakeholders:
Build consistent relationships with government agencies and community leaders to align solutions with public health needs.

Align with national health strategies:
Align solutions with national health strategies and implementation plans.

Invest in user-centred and integration:
Co-create with end-users to ensure usability, acceptance, and sustained engagement.

Prioritize evidence generation:
Collect and analyze data to influence policy and attract investors.

Explore strategic partnerships:
Collaborate with key ecosystem actors to improve scale and resilience

For Policymakers:

Strengthen multi-stakeholder dialogue platforms:
Establish regular, structured engagement mechanisms to strengthen collaboration in the healthtech ecosystem.

Streamline and digitize licensing processes:
Implement transparent, digitized licensing platforms with clear guidelines, real-time tracking, and regulatory sandboxes.

Enhance data governance and interoperability:
Enforce harmonized data standards (e.g., HL7 FHIR, ICD, SNOMED) and develop data co-creation forums to improve access, hosting, and interoperability.

Establish HealthTech Liaison Offices:
Create dedicated offices within Ministries of Health to improve coordination, reduce administrative delays, and provide expert guidance.

## For Funders and Investors:

Provide flexible, long-term funding:
Offer multi-year, adaptable funding to support startups transitioning from pilot to sustainable scale.

Invest in data and analytics capacity:
Support infrastructure for advanced analytics and interoperability (e.g., APIs, blockchain-based records) to overcome limitations in predictive modelling and data interpretation.

Support the creation of outcome-tracking tools:
Fund dashboards to monitor health outcomes, adoption, and impact, enhancing accountability and investment readiness.
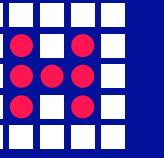
WINNING COMPANIES'
DESCRIPTION

HTHA Innovation Challenge 2024 Winning Companies

A summary of the HTHA IC 2024 winning companies: their solution, innovation challenge project, goal of funding and key achievements during the challenge period

Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
Helium Health **Received $100,000**	Nigeria	Helium Health tackles the high burden of HIV, TB, and diabetes in Nigeria, where limited access to specialists, fragmented care coordination, and inadequate patient empowerment hinder effective management of these leading causes of mortality. The company's HeliumDoc AI solution seeks to improve access, quality, and client-centeredness by connecting patients with providers, enabling risk stratification, and facilitating seamless referrals. Helium Health's impact addresses critical gaps in Nigeria's public health system, where chronic diseases strain resources. By leveraging AI to enhance access and care coordination, the company improves health outcomes for underserved populations, strengthens provider capacity, and generates evidence for scalable digital health solutions. This is in line with national priorities, paving the way for sustainable integration into public health systems and informing policy on technology-driven care delivery.	Evolving HeliumDoc AI from a patient booking app into a patient-centered engagement solution, integrating AI and algorithms to focus on early detection of the three leading causes of death in Nigeria (HIV, TB, and Diabetes) especially the youths in Delta State.	Enhance HeliumDoc functionality, improve accessibility, and scale Helium Doc AI for integration into Nigeria's public health sector.	— Reached 2,747 patients, 206 healthcare providers, 51 facilities — Established 10 public and 8 private partnerships (e.g., Delta State Ministry of Health and Nutrition Society of Nigeria) — Secured additional funding amounting to $322,042 — Increased patient onboarding by 346.2% since July 2024 after the IC period, compared to Jan-Jun 2024 period — Created 39 new jobs

Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
Emergency Response Africa (ERA) **Received $50,000**	Nigeria	ERA confronts the high maternal and child mortality rates in Nigeria's Ogun State, where 70% of maternal deaths result from delays in seeking, reaching, and receiving care due to inadequate emergency transport. ERA's maternal transport model integrates technology-enabled dispatching of community first responders to ensure timely hospital access for mothers and babies. ERA's work directly reduces preventable maternal and child deaths, addressing a critical public health priority in Nigeria. By enhancing emergency response systems, ERA improves access to care in underserved areas, fosters community trust, and builds sustainable partnerships with public health systems. This model offers a scalable blueprint for addressing the "three delays" across Africa, supporting policy discussions on emergency medical services	Integrating community first responders for timely maternal transport in Ogun State	Scale maternal transport model and improve emergency response systems	— Reached 600 pregnant women across 10 primary healthcare Centers and 3 secondary health facilities — Established 1 public and 5 private partnerships — Raised $40,000 in additional funding — Created 45 new jobs — Integrated into 13 public facilities — Demonstrated a viable, scalable emergency response model through community trust-building and targeted service delivery in resource-limited setting

| Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
eFiche **Received $50,000**	Rwanda	eFiche addresses the digital divide in Rwanda's primary healthcare, where fragmented data systems, limited specialist access, and overworked staff hinder care delivery in remote areas. Its solution combines interoperable electronic health records, telemedicine, AI diagnostics, and data analytics to empower patients, maximize workforce efficiency, and strengthen public health surveillance. eFiche's impact bridges healthcare gaps in Rwanda's underserved regions, where 80–95% of patient interactions occur at the primary care level. By improving data exchange and access to care, it enhances health equity and resilience, supporting Rwanda's digital health priorities. The evidence generated informs national resource allocation and outbreak prediction, offering a model for scalable, patient-centred HealthTech solutions across Africa.	Transforming primary care with system upgrades, mobile app enhancements, and telemedicine/AI integration	Enhance system functionality, scale to more facilities, and integrate with national health systems	— Reached 480,725 patients and engaged 621 healthcare providers. — Formed 3 private partnerships — Raised $400,000 in additional funding — Integrated into 140 facilities including 138 public facilities — Created 10 new jobs

Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
Afya Intelligence **Received $50,000**	Tanzania	Afya Intelligence tackles medicine scarcity and inefficient resource allocation in Tanzania's healthcare facilities, exacerbated by inadequate forecasting and poor data utilization. Its AI-powered predictive analytics, integrated with the electronic Logistics Management Information System (eLMIS), optimizes supply chain forecasting for critical health priorities like HIV, malaria, and non-communicable diseases. Afya Intelligence's work ensures the continuous availability of essential medicines, addressing a fundamental barrier to healthcare access in Tanzania. By enhancing supply chain efficiency, it improves care quality and informs policy on data-driven resource allocation. This impact strengthens Tanzania's public health system, offering a replicable model for other African countries grappling with supply chain challenges.	Integrating Afyalytics with eLMIS for optimized medicine forecasting by aligning healthtech solutions with public sector priorities, catalyze scalable solutions, foster partnerships, support real-world demonstrations, generate regulatory insights, and promote collaborative learning	Enhance the application (software development and integration), procuring servers (infrastructure upgrades), and scaling to more facilities (training and onboarding new facilities)	— Reached 1,250 health facilities — Established 1 public and 2 private partnerships — Incorporated application into MoH's training programs, leading to broader usage across health facilities — Raised $50,000 in additional funding — Created 3 new jobs — Strengthened integration and credibility through government alignment

Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
MedTrack **Received $50,000**	Ghana	MedTrack addresses inefficiencies in Ghana's public health data management, where limited connectivity and fragmented systems hinder operational efficiency and continuity of care. Its interoperable, offline-capable platform enhances patient and provider data utilization, collaborating with the Ghana Health Service to serve over 320,000 people in the Gomoa East District. MedTrack's impact improves data-driven decision-making in Ghana's public health sector, particularly in low-connectivity settings. By enhancing care continuity and operational efficiency, it supports equitable access to quality healthcare. The evidence of scalability and adoption strengthens Ghana's digital health ecosystem, providing a model for resource-constrained environments and informing policy on interoperable health systems	Enhancing data platform for public health facilities in Gomoa East District	Expand platform adoption and improve interoperability	— Reached 6,100 beneficiaries — Established 2 public and 1 private partnerships — Raised $35,000 in additional funding — Created 4 new job — Integrated into 5 public health facilities — Demonstrated a scalable, viable model for delivering care in limited-connectivity setting

Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
Aurora Health Systems Received $50,000	Kenya	Aurora Health Systems confronts the fragmented data systems and limited accessibility faced by chronic kidney disease (CKD) patients in Kenya, which reduce quality of life and strain public health resources. Its digitized CKD data collection tool, integrated into existing health information systems, standardizes patient records and enhances care coordination across public and private providers. Aurora's work transforms CKD management in Kenya, improving patient outcomes and reducing healthcare costs through better data integration. By empowering providers and informing policy, it strengthens Kenya's digital health infrastructure. The evidence generated supports national reimbursement models and healthcare worker training, offering a scalable solution for chronic disease management across Africa.	Integrating CKD data tool into public and private health systems	Scale tool adoption, enhance interoperability, and secure additional partnerships	— Reached 400,000 patients, 2,000 healthcare providers, and 200 health facilities — Established 6 public and 6 private partnerships (e.g., Ministry of Health Kenya, Qualcomm) — Raised $100,000 in additional funding — Integrated into 32 public health facilities

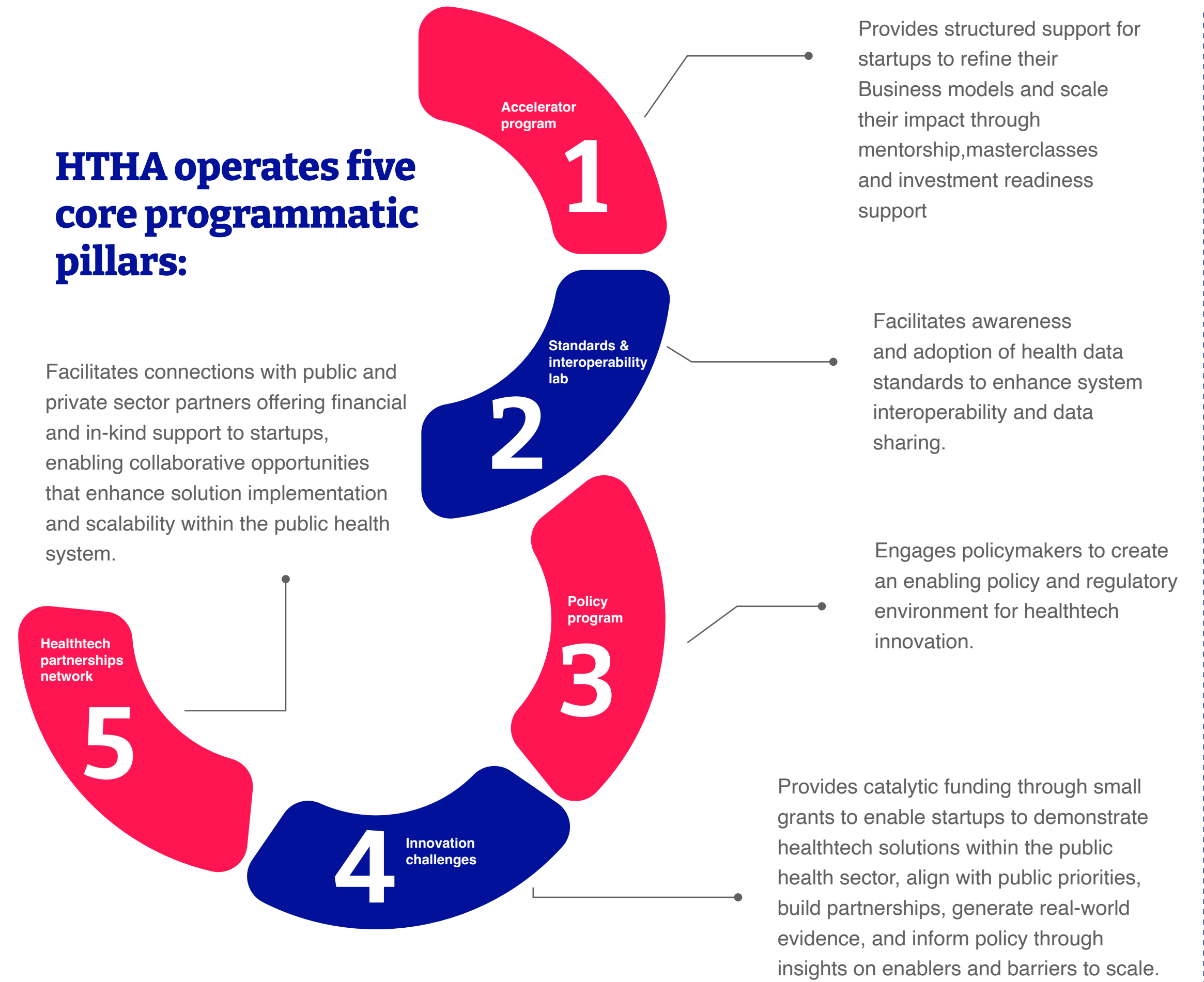| Company	Country	Solution	Innovation Challenge Project	Goal of Funding	Key Achievements
HealthX Africa **Received $50,000**	Kenya	HealthX Africa addresses the limited access to affordable, high-quality care for chronic disease patients in Kenya, where complex public health systems and geographical barriers hinder service delivery. Its telemedicine platform, targeting level 4 and 5 hospitals, enhances patient consultations and provides training to deliver client-centred care. HealthX's impact expands access to specialized care in Kenya, reducing disparities and improving chronic disease outcomes. Its partnerships with county governments and private players like Starlink demonstrate a scalable model for public-private collaboration. The evidence of cost-effectiveness and community acceptance informs Kenya's digital health strategy, offering a blueprint for integrating telemedicine into public health systems across Africa	Expanding telemedicine to level 4 and 5 hospitals for chronic disease care	Scale telemedicine platform, train providers, and expand county partnerships	— Directly managed 2,363 chronic disease patients — Enabled over 10,00 patient consultations — Worked with 157 healthcare facilities (level 4 and 5 hospitals across sub-counties) — Trained 85 clinical officers, nurses, and community health workers in telemedicine — Raised $1,000,000 in additional funding — Integrated into 3 public health facilities — Projecting $500,000 in revenue projection — Demonstrated potential of healthtech solutions in complex public health systems through effective public-private partnerships and strong community acceptance

Table 1: Description of Winning Companies
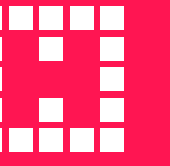
BACKGROUND

Background

HealthTech Hub Africa (HTHA) is a pan-African innovation platform dedicated to advancing impactful healthtech solutions across Africa. With three primary goals – supporting local startups, serving as a launchpad for scalable solutions, and shaping forward-looking policies – HTHA is positioned as a driving force for healthtech transformation in Africa.

HTHA operates five core programmatic pillars:

Facilitates connections with public and private sector partners offering financial and in-kind support to startups, enabling collaborative opportunities that enhance solution implementation and scalability within the public health system.

1 Accelerator program

Provides structured support for startups to refine their Business models and scale their impact through mentorship, masterclasses and investment readiness support

2 Standards & interoperability lab

Facilitates awareness and adoption of health data standards to enhance system interoperability and data sharing.

3 Policy program

Engages policymakers to create an enabling policy and regulatory environment for healthtech innovation.

4 Innovation challenges

Provides catalytic funding through small grants to enable startups to demonstrate healthtech solutions within the public health sector, align with public priorities, build partnerships, generate real-world evidence, and inform policy through insights on enablers and barriers to scale.

5 Healthtech partnerships network

Accelerator program **1**	Standards & interoperability lab **2**	Policy Program **3**	Innovation Challenges **4**	Healthtech partnerships network **5**
Annual Cohort	Training on data standards	Intergovernmental working Group	Catalytic funding and in-kind support for use cases in public health	More than 30 private and public sector partners
10 month innovation & investment readiness program	Interoperability testing environment	Policy blueprint leveraging insights gained from startup use cases		
Mentorship	Connectathons			
HealthTech Summits				
Expert sessions & meetups				
Co-working space in Rwanda				
Partnership design and facilitation				

Figure 1: *The five programmatic pillars of HTHA*

HTHA Innovation Challenges

Africa's private health sector is nascent and most health services across the continent are delivered by the public sector, which bears the greatest burden of ill health and represents the largest potential market for healthtech innovation. HTHA's goal is to support innovations that can scale in public health systems. Every year, HTHA runs one or more Innovation Challenges, providing catalytic funding through small grants to enable startups to demonstrate their solutions within the public health sector. These grants support implementation in real-world settings, requiring startups to align their solutions with public sector priorities, engage with public stakeholders, and begin building the partnerships needed for scale. Through these demonstrations, startups can generate new public sector evidence on feasibility, acceptability and health outcomes, attract additional funding, and test B2G business models suited to public health contexts. As they implement, HTHA promotes collaborative learning across the cohort of winners and observes and documents their experiences to better understand the barriers and facilitators startups face when entering the public sector, using these insights to inform its broader policy and advocacy agenda.

The 2024 HTHA Innovation Challenge

In 2024, with funding from the Novartis Foundation and the Global Fund, HTHA ran its annual Innovation Challenge. A total of $400,000 was available for the Challenge. Applicants were required to apply under one of two funding tracks, with up to six awards of $50,000 available for early-stage demonstrations and one award of $100,000 available for scaling of a solution.Applicants were required to have solutions that addressed one or more of the following three public health priorities:

Access	Quality	Client-centeredness
Improving affordability and availability of care for underserved populations	Addressing key drivers of healthcare quality such as provider training, referral systems, and data management	Focusing on patient experience,empowerment, and personalized care

Applicants were drawn from the HTHA enterprise cohorts covering 2022-2024 and represented a diverse set of countries, including Kenya, Nigeria, Uganda, Tanzania, Rwanda, South Africa, Ghana, Cote d'Ivoire, Ethiopia, Guinea, Cameroon, and DRC. Among the seven companies, one was a scaleup — which is an established innovation company that has demonstrated viability and its actively expanding its reach and operations — while the other six were startups, that is, early-stage enterprises focused on validating their solutions and achieving product-market fit.

The 2024 HTHA Innovation Challenge Survey

To capture key results and experiences from participating companies, HTHA conducted a survey as part of the 2024 Innovation Challenge. This survey was designed to evaluate the real-world impact of the winning companies' innovations in the public health sector, capturing valuable feedback and insights to inform HTHA's program design and policy dialogue. By gathering this data, HTHA aims to refine future Innovation Challenges, enhance policy discussions, and contribute to the iteration of the Policy Blueprint, strengthening its recommendations with evidence from the survey findings. The survey, assessed the companies' reach across patients, providers, and facilities; milestone achievement; partnerships established; funding raised; revenue and job growth; and integration into public health facilities. It also assessed their familiarity with regulatory environments and related challenges; experiences with government engagement; stakeholder involvement and its influence on their success; and their capacity for evidence generation and data collection to inform policy, scale and sustainable growth.
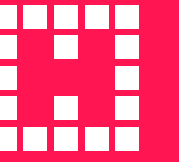
SURVEY FEEDBACK
ANALYSIS

Survey Feedback Analysis

A. Evaluation: Participating Companies Achievements

The seven participating companies showed strong overall progress, achieving an average of 96.57% of their milestones. This reflects both the effectiveness of HTHA's catalytic support and the ability of HealthTech startups to develop scalable, sustainable, and impactful solutions addressing real-world public health needs.

Some companies faced implementation challenges that influenced the pace of milestone achievement. While progress was made in areas such as integration with national health systems and regulatory recognition, procedural complexities and evolving government engagement strategies presented challenges. In certain instances, the absence of formal Memoranda of Understanding (MoUs) and extended timelines for establishing public-private partnerships affected implementation, even when solutions were aligned with national public health priorities. To sustain momentum, some companies adapted by shifting focus to alternative segments such as private or primary healthcare. In other contexts, administrative processes and institutional coordination influenced the speed of integration, highlighting the need for clearer and more consistent public-private partnership frameworks, particularly for digital health solutions operating within government ecosystems, as further discussed in Section F when discussing government interaction.

Amid these dynamics, the companies demonstrated the ability to refine and apply business models that were both innovative and sustainable. For instance, Helium Health integrated its solution into HeliumDoc, serving over 310,510 paying users, including patients, providers, and facilities. Its hybrid approach—combining subscription fees for facilities, commissions on patient bookings, and consultation fees—represents a layered revenue model with cross-sector viability. In public settings, it is currently grant-funded, with efforts underway to co-develop a sustainable payment model with government actors.

Similarly, Emergency Response Africa (ERA), B2G model stands out as another innovation in sustainable financing. The Ogun State Ministry of Health pays a retainer to ERA for services like emergency transport coordination and responder training, fully covering operational expenses. This structure enables ERA to offer its services free of charge to pregnant women in need of emergency care, while anchoring long-term viability in public sector financing through mechanisms such as the National Emergency Medical Services and Ambulance System (NEMSAS) fund. Moving to a different model, eFiche operates a B2B model. Its primary client, the Society for Family Health (SFH-Rwanda) pays an onboarding fee per facility and a recurring monthly subscription for each health post using the platform and additional uptake comes from private clinics and faith-based providers under similar subscription or project-based licensing and support contracts. MedTrack operates on a transaction-based model, charging facilities a fee per patient record processed. In the public health sector, MedTrack has implemented a different approach. Through an MOU with the Gomoa East District Health Directorate, the platform is deployed across 31 public facilities under a 3-year pilot during which transaction fees are waived. Instead, MedTrack provides infrastructure support such as devices and connectivity while focusing on demonstrating improvements in health outcomes and operational efficiency. To ensure long-term sustainability, the company is exploring government funding, grant opportunities, and the introduction of a scalable payment framework based on proven return on investment. Aurora Health is finalizing a B2G and B2B model for its CKD Digital Tools platform, which has been successfully piloted across five counties and the Ministry of Health, engaging 350 clinicians and managing over 28,000 active patients. The company has a strong pipeline and is in advanced discussions with county governments for public procurement and integration into the national health system. Their revenue strategy includes government procurement, annual health facility licensing based on facility level, and partnerships with professional bodies such as the Kenya Renal Society, which has shown willingness to pay.

Highlight:
HealthX Business Model

HealthX has been in operation for over 4 years and has had over 25k paying customers during this period. These customers are a mix of insurance companies, county governments, corporates & SMEs as well as retail customers.

It is currently being paid for its solution by end-users (patients) and healthcare providers/facilities. Insurance companies, corporates, and direct retail customers are the major payers. Payment through the national Social Health Authority is also a payment option that has been opted in especially for public sector.

The initial expectation was that county governments would pay a subscription fee for residents.
This eventually evolved to an availability model. However, due to the learnings from Murang'a, HealthX is currently trialing a direct-to-consumer county model in Bomet county. Payment in this case is hybrid i.e. a mix of cash and through the national Social Health Authority.

HealthX has secured new government/public sector engagements since the end of the innovation challenge. It is currently trialing the Bomet county direct- to-consumer model. Murang'a county built their own telehealth call center; however,
HealthX is exploring the availability model in Kitui and Machakos counties.

"

We've encountered procedural hurdles, as the current framework seems to prioritize formal agreements with organizations like NGOs that transition their work to the government, leaving private sector partnerships like ours in an unclear formalization process.

- Emergency Response Africa (Nigeria)

"

"

We maintain good relationship with the ministry. However there has been delays in getting the MoU signed

- Helium Health

"

Collectively, the companies reached thousands of patients and healthcare providers, and hundreds of health facilities, demonstrating meaningful integration into public health systems. During the nine months, they forged a combined 26 public and 30 private partnerships, averaging 3.71 and 4.29 per company, respectively.

These collaborations were instrumental in unlocking new opportunities for scale and sustainability. In total, the companies raised $1,947,042 in additional funding and reported revenue growth, with standout examples such as **HealthX Africa's** estimated $500,000 in projected revenue from projected county expansions, underscoring both market validation and demand for their solutions.

Company achievements during the Innovation Challenge period

Company	Additional new funding raised/ leveraged	Patients reached	Healthcare Providers reached	Healthcare facilities reached	Public partnerships established	Private partnerships established
HealthX Africa Ltd	$1 000 000	15000	38	157	6	6
MedTrack Technologies	$35 000	6100	0	0	2	1
eFiche	$400 000	480725	621	140	0	3
Helium Health	$322 042	2747	206	51	10	8
Afya Intelligence	$50 000	0	0	1250	1	1
Aurora Health Systems	$100 000	400000	2000	200	6	6
Emergency Response Africa	$40 000	600	0	13	1	5
TOTAL	**$1 947 042**	**905 172**	**2 865**	**1 811**	**26**	**30**

Table 2: Company achievements during the Innovation Challenge period

B. Challenges, Barriers, and Opportunities as experienced by the Innovation Challenge 2024 Winners

Implementation experiences of the seven companies under the Challenge highlighted both the potential opportunities and persistent barriers that healthtech startups face at market entry, and when scaling and maintaining sustainability within public health sector environments across Africa. Despite the notable achievements highlighted previously, these successes were not without significant barriers to them. However, the challenges also unveil opportunities that can be leveraged by governments, startups, investors, and other key players in the healthtech ecosystem to drive long-term, sustainable improvements in Africa's public health system.

Kenya
Bureaucratic hurdles, lack of calrity information & limited availability of support

Ghana:
Bureaucratic hurdles & limited availability of support

Nigeria:
Bureaucratic hurdles & lack of clarity information

Tanzania
Limited availability of support

Rwanda
Bureaucratic hurdles, lack of clarity information & limited availability of support
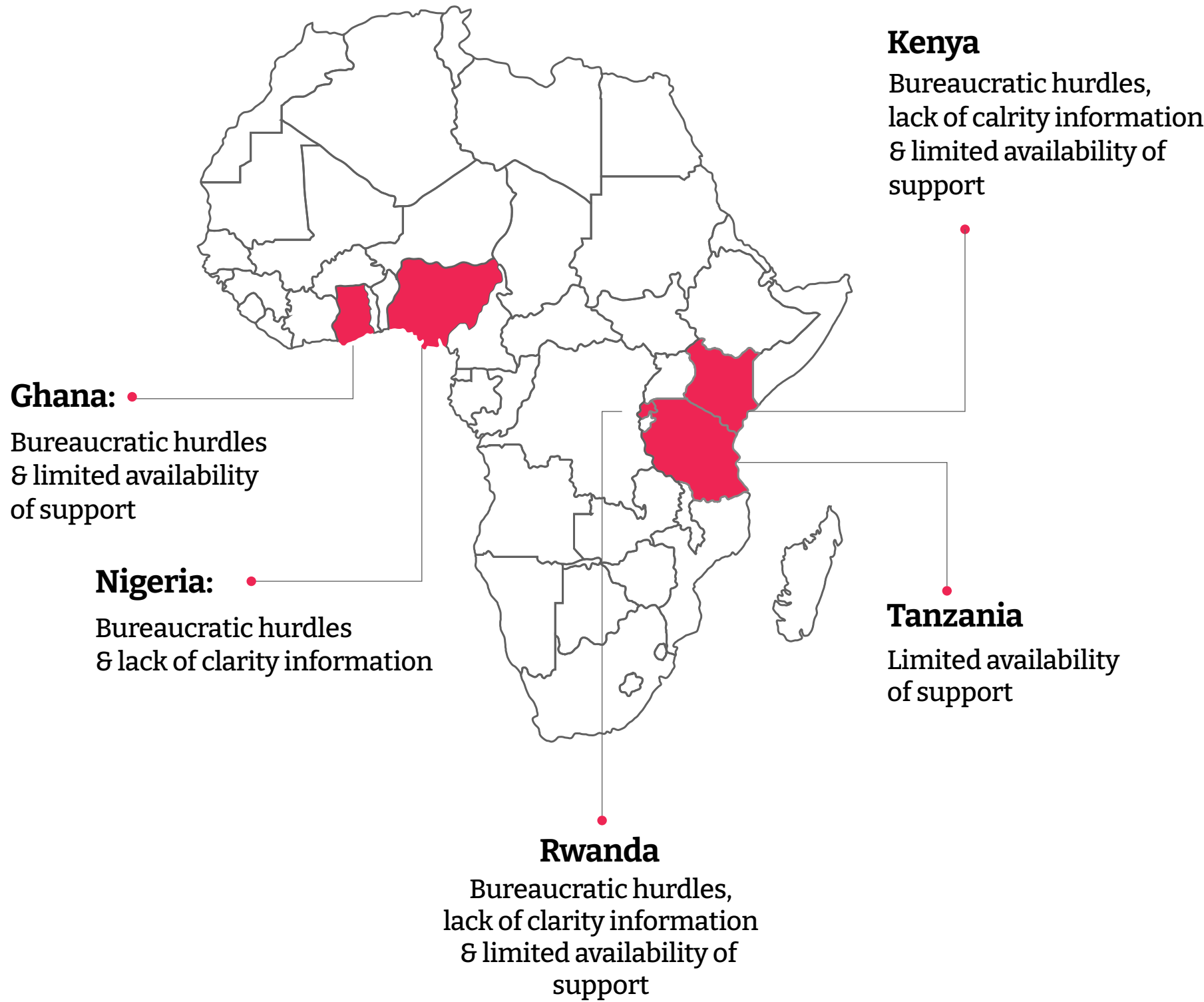
Figure 2: Challenges, Barriers, and Opportunities as experienced by the Winning Companies

Persistent barriers

Bureaucratic Delays

Many companies identified bureaucratic delays as a major obstacle to progress. HealthX Africa cited ongoing issues with onboarding to government-supported platforms and systems, conducted by national and local health authorities, finalizing agreements, and navigating government processes, while Helium Health faced similar challenges with approvals and permissions. These delays created significant bottlenecks, slowing project implementation and highlighting the urgent need for more responsive and agile governance structures to support the fast-paced nature of healthtech innovation.

Regulatory Ambiguity

Companies cited regulatory ambiguity as a key barrier to scaling in the public health system. Unclear regulatory frameworks, particularly in countries like Nigeria and Tanzania, were identified as a major obstacle to integrating healthtech solutions into public health systems. This uncertainty led to delayed approvals, inconsistent policy application, and challenges in complying with evolving regulations, all of which slowed the integration of their solutions. As digital health policies continue to evolve across various African markets, the ongoing complexity and lack of clarity regarding these policies remains a major obstacle, hindering the effective scaling and integration of innovations that could address urgent public health needs.

> "
> The lack of structured regulatory frameworks for digital health in Nigeria continues to hinder integration into public systems
>
> **- Helium Health (Nigeria)**
> "

🚧 Infrastructure Limitations

Similarly, infrastructure challenges, especially in rural and underserved areas, were prevalent across the board. Companies highlighted unreliable electricity, poor internet connectivity, and inadequate road infrastructure as critical barriers, particularly in remote health facilities.

These infrastructure limitations not only delayed the rollout of their solutions but also made it difficult for companies to scale their efforts in regions that would benefit the most. As a result, the pace of integration into public health systems was hindered, demonstrating the urgent need to address infrastructure gaps to maximize the impact of healthtech tools across Africa.

> "
> Lack of stable electricity and internet connectivity in rural areas
> **- MedTrack (Ghana)**
> "

> "
> Inconsistent electricity and slow internet access in health facilities
> **- Aurora (Kenya)**
> "

> "
> Unreliable internet and poor road infrastructure
> **- Emergency Response Africa (Nigeria)**
> "

🚧 Funding delays and unpredictability

Funding delays and unpredictability were another key challenge that many companies encountered. Several companies faced slow disbursement processes, which hindered their ability to implement projects with the necessary agility. Aurora, for example, described the challenge of "long delays in accessing committed government funding," which affected their ability to scale their solutions on time. These delays in funding not only created bottlenecks but also compounded the difficulties posed by regulatory and infrastructure challenges, creating a multi-layered barrier to timely market entry and long-term sustainability.

Opportunities

🎯 Market Entry & Impact

Despite the challenges encountered, the companies identified meaningful opportunities for market entry, scalability, and long-term impact. By leveraging strong public-private partnerships and aligning with national health strategies, they effectively navigated systemic complexities and achieved smoother integration into public health systems. Collaborations with governments, Ministries of Health, local authorities, and telecom operators were pivotal in strengthening credibility, accelerating adoption, and refining solution design.

🎯 Stakeholder engagement

Robust stakeholder engagement, as demonstrated by various companies, enabled faster iterations and better alignment with health system needs. **eFiche** Integrated its solution into 140 facilities through collaboration with the public sector. In Tanzania, **Afya Intelligence** adapted data tools and training to address poor data quality. **Aurora** leveraged Kenya's Digital Health Strategy for co-design and testing, while **Helium Health** refined its tool through continuous user feedback. This illustrates the importance of aligning innovations with national policies, incorporating user feedback, and continuously refining solutions for achieving successful scaling, integration, and lasting impact.

🎯 Evidence Generation and investment readiness

Lastly, there is an opportunity in evidence generation for key players in the healthtech ecosystem, as highlighted by the experiences shared. HealthX, for example, secured $1M in funding by demonstrating cost-effectiveness and service impact, while Afya Intelligence used data-driven insights to gain support from both facility-level users and national policymakers. These efforts strengthened investment readiness, by building an evidence base, positioning innovations for greater financial support and potential investor interest.

C. Policies, laws, and regulations and their influence on the seven companies

Survey responses from all seven companies show a strong understanding of the policies, laws, and regulations that shape their work, 100% reported knowing them "very well." However, while these frameworks are often well-aligned with health priorities, their influence on market entry, scalability, sustainability, and integration into public health systems is uneven across countries. These variations are often due to implementation gaps, with companies repeatedly pointing to bureaucratic delays, regulatory complexity, slow approvals, and lack of clear guidance. These challenges are not uniform but reflect country-specific administrative realities and evolving institutional landscapes.

Companies in Nigeria, **Helium Health** and **Emergency Response Africa,** referenced policies such as the National Digital Economy Policy and the Health ICT Strategic Framework as key enablers. Helium Health shared that these frameworks significantly facilitated market entry and scalability, with moderate support for sustainability and integration. However, the company added that "frequent government changes and administrative reshuffles disrupt consistency", especially in public-sector engagement

Which of the challenges do you face while complying with current policies, laws and regulations?
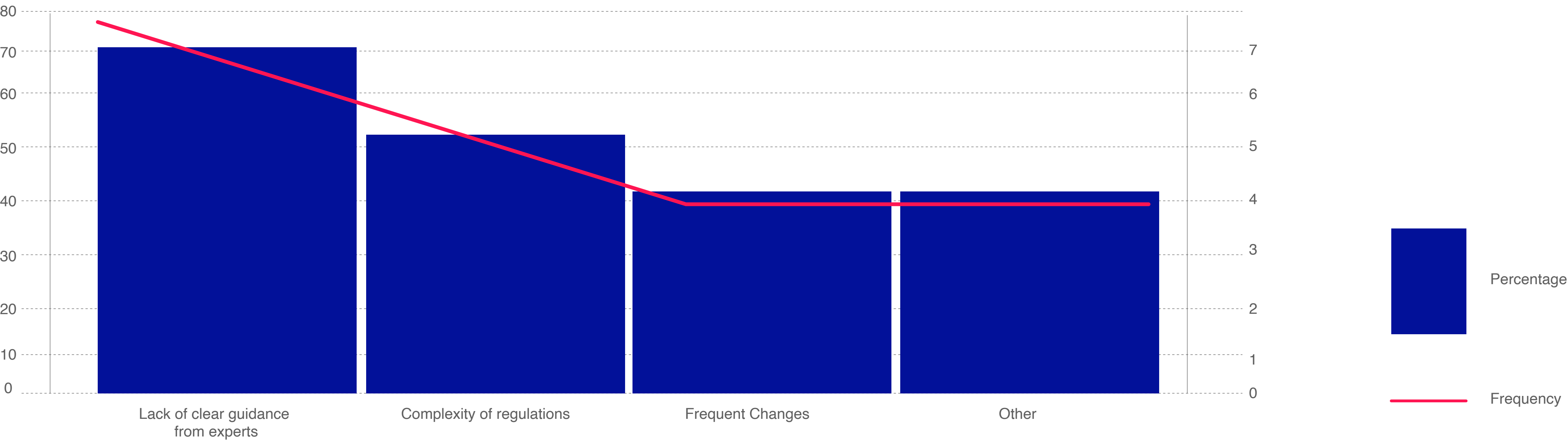

Figure 3: *Challenges Faced in Complying with Current Policies, Laws, and Regulations*

Emergency Response Africa described similar experiences, citing "extensive stakeholder engagement" as necessary due to a lack of clear policy in the evolving Emergency Medical Services System framework. Both companies emphasize that while Nigeria's policies provide a strong foundation, frequent regulatory changes, complexity, and inconsistent enforcement hinder long-term sustainability and integration.

In Rwanda, **eFiche** reported that existing data governance policies have been moderately facilitative across most dimensions and significantly supportive of integration, particularly through collaborations with the Ministry of Health and the Health Information Exchange (HIE) and District Health Information Software 2 (DHIS2). Despite this, the company reported delays in execution due to a lack of clear guidance and pending Memoranda of Understanding (MoUs).

In Tanzania, **Afya Intelligence** shared that policies moderately facilitate market entry and scalability, with their local provider status offering an advantage. However, sustainability and integration are moderately hindered by government policies, particularly by the government's preference for in-house systems. This preference poses a long-term threat to scalability and sustainability, despite Afya Intelligence's position as a local provider. While the policies themselves are generally supportive, the lack of clear guidance and limited feedback from the government suggest gaps in navigating regulatory complexities. Afya Intelligence's experience underscores that while favourable policies exist, implementation challenges may arise as the government seeks to replicate certain functionalities.

MedTrack Technologies from Ghana reports that existing policies, laws, and regulations have moderately hindered the company's innovation across market entry, scalability, sustainability, and integration. The company attributes this to bureaucratic delays, inadequate financing incentives, and the lack of interoperability regulations, further noting that integration is slowed by the absence of mandatory health data-sharing policies. However, MedTrack suggests that the issue lies more in poor implementation than in the policies themselves, highlighting the absence of expert guidance as a key compliance challenge and emphasizing the need for streamlined processes and comprehensive legislation to enhance operational efficiency. Despite having a strong understanding of Ghana's regulatory environment, MedTrack struggles with practical compliance due to unclear guidance and regulatory complexity.

In Kenya, the ongoing digital health transformation is evident, with HealthX Africa Ltd and Aurora Health Systems reporting that policies such as the Digital Health Strategy 2025-2028 have played a role in facilitating market entry, scalability, sustainability, and integration of healthtech innovations. Yet, their operations are slowed by regulatory complexity and systematic issues such as bureaucratic delays, slow approvals, and infrastructure gaps.

HealthX Africa highlights that the Kenya Health Information System (KHIS) has experienced regular downtime, limiting interoperability. Meanwhile, the National Health Information Exchange (NHIE) is not yet fully operational, creating uncertainties around long-term integration. Aurora Health Systems notes that unclear reimbursement models and regulatory inefficiencies further hinder sustainability. Both companies emphasize that regulatory complexity and a lack of clear guidance make compliance difficult, indicating that while Kenya's policies align with national priorities, inconsistent implementation limits their full potential.

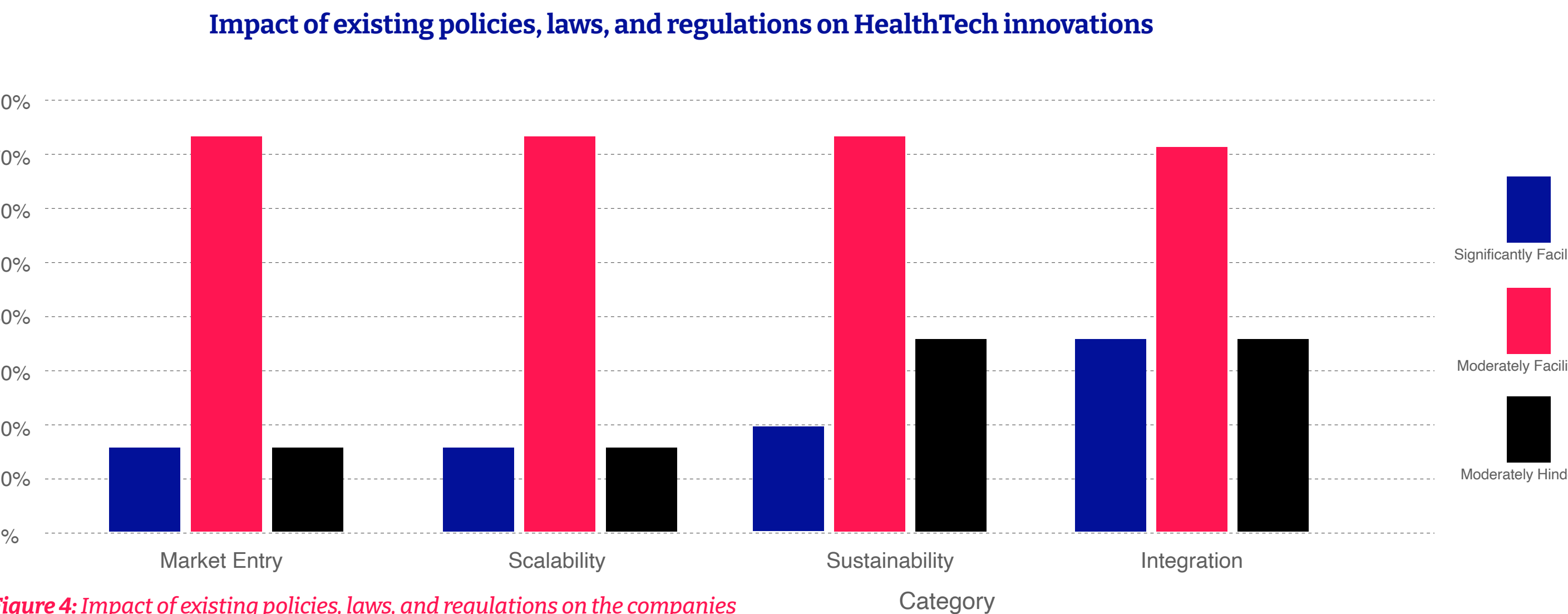**Impact of existing policies, laws, and regulations on HealthTech innovations**

Figure 4: Impact of existing policies, laws, and regulations on the companies

While these five countries do not reflect all regulatory contexts across Africa, the responses offer early insight into broader opportunities and constraints facing healthtech innovation. In nearly all cases, companies noted that implementation gaps, more than policy design, slow progress. Without clear guidance, streamlined processes, or functional infrastructure, the full potential of healthtech innovation remains unrealized.

Summary Box: Additional Insights and Recommended Actions

Company	Country	Quoted feedback	Action points based on company feedback
MedTrack Technologies	Ghana	The issue lies more in poor implementation than in the policies themselves.	— Provide expert guidance and procedural support for navigating complex policies, laws, and regulations.
HealthX Africa Ltd	Kenya	Uncertainty remains around financial investment and compliance.	— Accelerate infrastructure rollout, including national health information exchanges and data sharing frameworks.
Aurora Health Systems	Kenya	Unclear reimbursement models and regulatory inefficiencies further hinder sustainability.	— Clarify reimbursement models and standardize approval timelines for regulatory compliance.
Helium Health	Nigeria	Frequent government changes and administrative reshuffles disrupt consistency.	— Ensure administrative continuity in public-sector collaborations.
Emergency Response Africa	Nigeria	The evolving Emergency Medical Services System framework lacks clear policies, slowing implementation.	
eFiche	Rwanda	Pending MoUs create operational uncertainties.	
Afya Intelligence	Tanzania	The government's preference for in-house systems poses a long-term threat to scalability.	

D. Company experience with licensing procedures

Licensing experiences across the seven companies highlight both shared and unique barriers across different countries. Key licensing-related challenges include complexity and lack of awareness, time-consuming procedures and other systemic issues such as fragmented processes and regulatory volatility as shown in figure 5 below. While the nature and severity of these challenges vary by regulatory context, their cumulative impact is clear: increased compliance costs, delayed market entry, and strained organizational resources.

What has been your experience regarding licensing for your innovation?
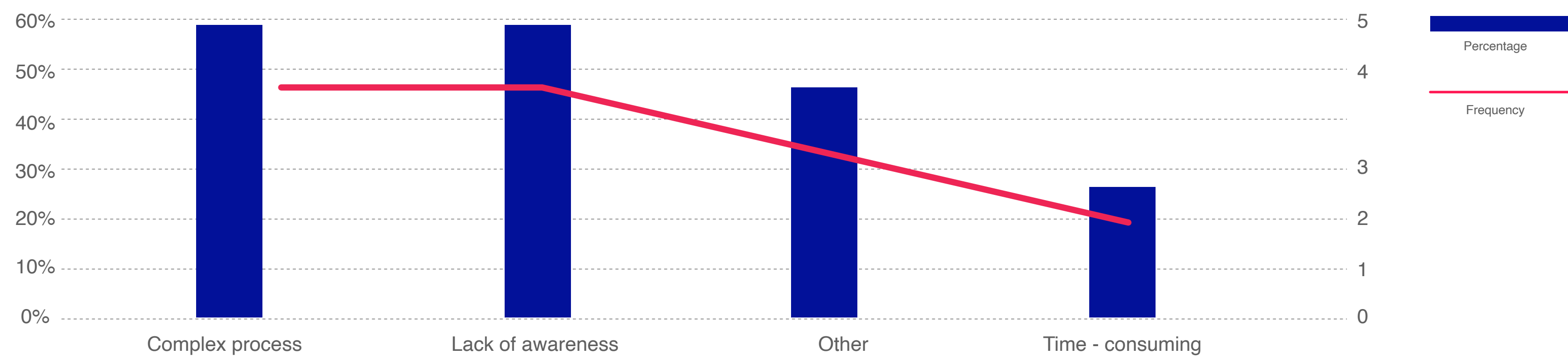
Figure 5: Companies' experience with licensing

Case Study:
MedTrack Technologies, Ghana

Emphasizing registration delays that increase operational costs and delay market entry. These factors limit scalability especially for a resource-constrained startup.
The licensing process is time-consuming, opaque, and difficult to navigate, further complicating operations. As a result, MedTrack is often forced to navigate ambiguous standards without clear guidance from experts.

The lack of interoperability regulations further complicates MedTrack's licensing experience. Without standardized frameworks for data sharing and system integration, it struggles to align its solution with Ghana's healthcare ecosystem, limiting its scalability. The company emphasizes that, "Policies, Laws, and Regulations" in Ghana have moderately hindered MedTrack's operations in the healthcare ecosystem by creating bureaucratic delays through fragmented registration and licensing processes, limiting scalability due to the absence of mandatory interoperability regulations, reducing sustainability because of insufficient public financing incentives for digital health, and slowing integration by lacking explicit policies mandating interoperability between healthcare providers".

To address these challenges, the company advocates for:

A unified, streamlined licensing process for healthtech companies .	Establishing a regulatory "sandbox" for testing digital health innovations before live deployment,	Introducing national interoperability standards for seamless data sharing.	Enacting comprehensive digital health legislation clarifying scope, responsibilities, liabilities, data privacy, and governance frameworks to effectively support healthtech innovation.

These recommendations highlight the need for clearer pathways to compliance and more supportive regulatory frameworks to strengthen healthtech innovation. By addressing thesebarriers, Ghana could unlock the potential of healthtech startups like MedTrack to deliver scalable, sustainable solutions.

Summary Box: Additional Insights and Recommended Actions

Company	Country	Quoted feedback	Action points based on company feedback
HealthX Africa Ltd	Kenya	Uncertainty around evolving laws adds to the complexity of the licensing process.	— Simplify and clarify licensing procedures for digital health solutions, especially in emerging sectors like telemedicine.
Emergency Response Africa	Nigeria	Licensing complexity and inefficiencies drain resources despite some policy support.	— Increase regulatory awareness through targeted guidance and outreach to startups.
Helium Health	Nigeria	Persistent standardization issues call for stronger governance during scaling.	— Streamline approval timelines and reduce administrative delays.
eFiche	Rwanda	Complex licensing process poses operational delays.	— Develop standardized digital health frameworks to support interoperability and compliance.
Aurora Health Systems	Kenya	Slow approvals and limited telemedicine guidance hinder integration and scalability .	— Strengthen governance structures to improve consistency and support scale-up efforts.
Afya Intelligence	Tanzania	Lack of awareness may delay compliance, though local status offers some flexibility.	

E. Data Governance

Data governance use, access, and privacy, is a key yet challenging element for healthtech startups across Africa, significantly influencing their capacity to innovate, scale, and integrate within public health systems.

Case Study: eFiche

eFiche, based in Rwanda, identifies data-governance related challenges: compliance with evolving data regulations, unclear data ownership in public-private collaborations, interoperability barriers, and the lack of standardized registries for medicines, ICD codes, and procedures. Additionally, in-country hosting requirements significantly increase costs, posing a financial burden on healthtech solutions. These issues delay the company's ability to fully utilize data for real-time analytics and predictive insights, critical for enhancing patient care and public health surveillance.

The company notes that, "while regulations are in place, their implementation can often be delayed without clear reasons, creating challenges for companies like ours. For example, despite eFiche being recognized by the relevant health authorities and successfully integrating with national health systems, we have yet to formalize a memorandum of understanding (MoU)." This lack of formal agreements and procedural clarity exacerbates operational uncertainties, particularly in data governance.

The absence of standardized frameworks for data sharing and integration further complicates eFiche's operations. Despite its integration with Rwanda's Health Information Exchange (HIE) and ongoing DHIS2 integration, interoperability barriers and lack of standardized registries hinder seamless data exchange, limiting scalability and integration. The company notes that, Amidst the challenges, eFiche recognises opportunities that can be leveraged to accelerate health tech adoption in Rwanda:

Leveraging anonymized data for predictive analytics	Enhancing patient care through AI-driven insights and improving efficiency via integration with national health platforms.	Establishing standardized health data registries and frameworks for secure, cost-effective hosting

Summary Box: Additional insights and recommended actions

Company	Country	Quoted feedback	Action points based on company feedback
HealthX Africa Ltd	Kenya	Regular downtime for systems like KHIS and NHIE limit data accessibility and interoperability .	— Operationalize national health infrastructure to remove barriers to data access and enable real-time, secure information exchange.
MedTrack Technologies	Ghana	Fragmented regulations and absence of interoperability standards, impede scalability and system integration. The absence of clear patient consent models and comprehensive data protection mechanisms further complicates trust-building and regulatory compliance in a cross-sectoral innovation ecosystem	— Develop interoperability standards
Helium Health	Nigeria	Constrained by disjointed data governance, ambiguous data ownership in public-private collaborations, and unstable regulatory environments that frequently shift with political changes. .	— Clarify data ownership and access rights within public private partnerships
Emergency Response Africa	Rwanda	Absence of standardized health data regulations and interoperable frameworks, which significantly restrict seamless data exchange and integration across platforms	— Reduce compliance burdens by streamlining process and making them transparent
Aurora Health Systems	Kenya	High compliance costs linked to Kenya's Data Protection Act (2019), which mandates strict data localization and consent protocols. Simultaneously, challenges while accessing KHIS and NHIE create critical data silos, hampering real-time health data flow, cybersecurity assurance, and broader innovation potential in the digital health space.	— Enhance data protection standards

E. Government Interaction: Collaboration, Challenges and Opportunities

The seven companies reported engaging with government agencies or policymakers, demonstrating the key role of public sector collaboration in healthtech innovation. These interactions were evaluated as either positive or negative, reflecting a mix of opportunities and challenges arising from these interactions. Five of the seven companies reported positive experiences when interacting with government agencies, but two companies reported mixed experiences.

Case Study:
Helium Health and Emergency Response Africa (ERA)

Helium Health and the Emergency Response Africa (ERA) both based in Nigeria illustrate how healthtech innovators leverage government collaboration to advance their solutions to align their solutions with national health priorities and to influence policy; however, they continue to face challenges in securing formal agreements. ERA collaborates with the Rivers State Ministry of Health to align its maternal transport model with state priorities. This partnership has facilitated integration into 13 public health facilities, including 10 primary health centres and 3 secondary-level facilities, supporting scalability and community trust. However, ERA faces challenges, including bureaucratic hurdles which slow this collaboration. Helium Health engages with both the State Ministry of Health and Federal Ministry of Health to secure ethical approvals and align with national health goals. This collaboration has enabled partnerships with 10 public and 8 private entities, supporting scalability across 51 health facilities. Despite the positive outcomes from these interactions and collaborations, Helium Health reports experiencing limited availability of support, exacerbated by frequent changes in government or administration, which disrupt consistency and delay integration into public health systems.

Both companies highlight how government interactions are instrumental in aligning their solutions with national health priorities, integrating with public health systems, and influencing policy discussions. Government support plays a crucial role in integrating healthtech innovations within public health systems, a key factor for sustainability. While both companies acknowledge partnerships, networking opportunities, and technical assistance as forms of government support as shown in figure 7, they identify a critical gap in receiving funding in the form of grants from governments, thus having to rely on external donors. Nigeria's National Digital Economy Policy allocate financial support, but the limited funding available hinders sustainability for healthtech startups which are often forced to prioritize market entry over long-term viability.

> ❝ Helium Health engages with the State Ministry of Health and the Federal Ministry of Health to secure ethical approvals for HeliumDoc and align with state and national health priorities for chronic disease management ❞
>
> **- Helium Health**

> ❝ Our collaboration with the Rivers State Ministry of Health has been instrumental in integrating our maternal transport model into the state's emergency response framework. We have worked closely to secure ethical approvals and ensure alignment with state health priorities, enabling scalability across local government areas. integrating our maternal transport model into the state's emergency response framework. We have worked closely to secure ethical approvals and ensure alignment with state health priorities, enabling scalability across local government areas. ❞
>
> **- ERA**

What government resources or support have been most beneficial to your innovation?
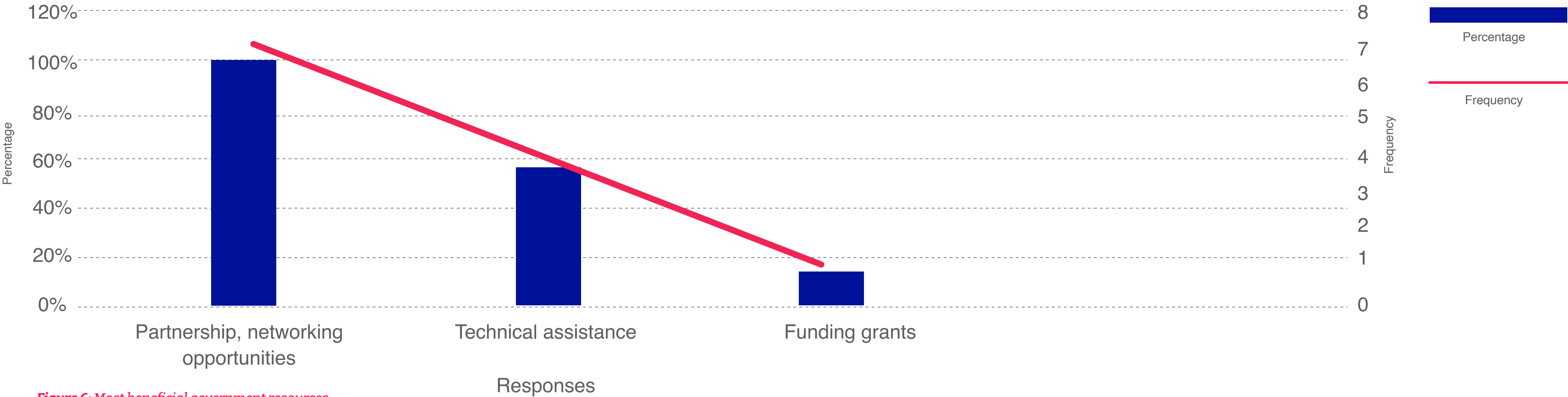
Figure 6: Most beneficial government resources

G. Role of Stakeholder Engagement in Healthtech Innovation

Stakeholder engagement is essential to healthtech innovation, as it informs design, validates solutions, and influences adoption by end users. All seven companies demonstrated a strong understanding of their stakeholders, with 100% identifying healthcare providers and investors/funders as primary stakeholders. 57.14% of the companies mentioned patients, while only 14.29% cited government agencies and other technical partners as shown in figure 5. These actors play distinct yet interconnected roles: healthcare providers offer frontline clinical insight, investors facilitate scale and sustainability, patients ensure usability and relevance, and governments facilitate alignment and sustainability within national public health systems.

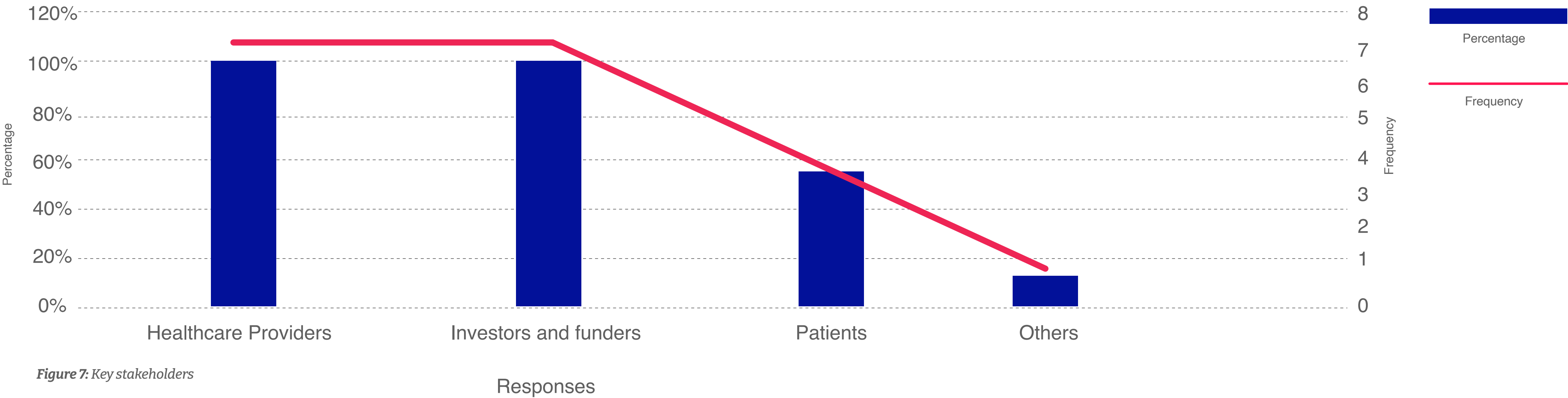### Who are the key stakeholders involved in your innovation?

Figure 7: *Key stakeholders*

All seven companies demonstrated proactive engagement practices. The most common methods being regular meetings and workshops (85.71%), followed by surveys (71.43%) and innovative approaches (28.57%) like immersive data tools. These methods reflect tailored engagement aligned to each company's context.

What strategies do you use to engage stakeholders?

Other 28,57%
Regular meeting 85,71%
Surveys 71,43%
Workshops 85,71%
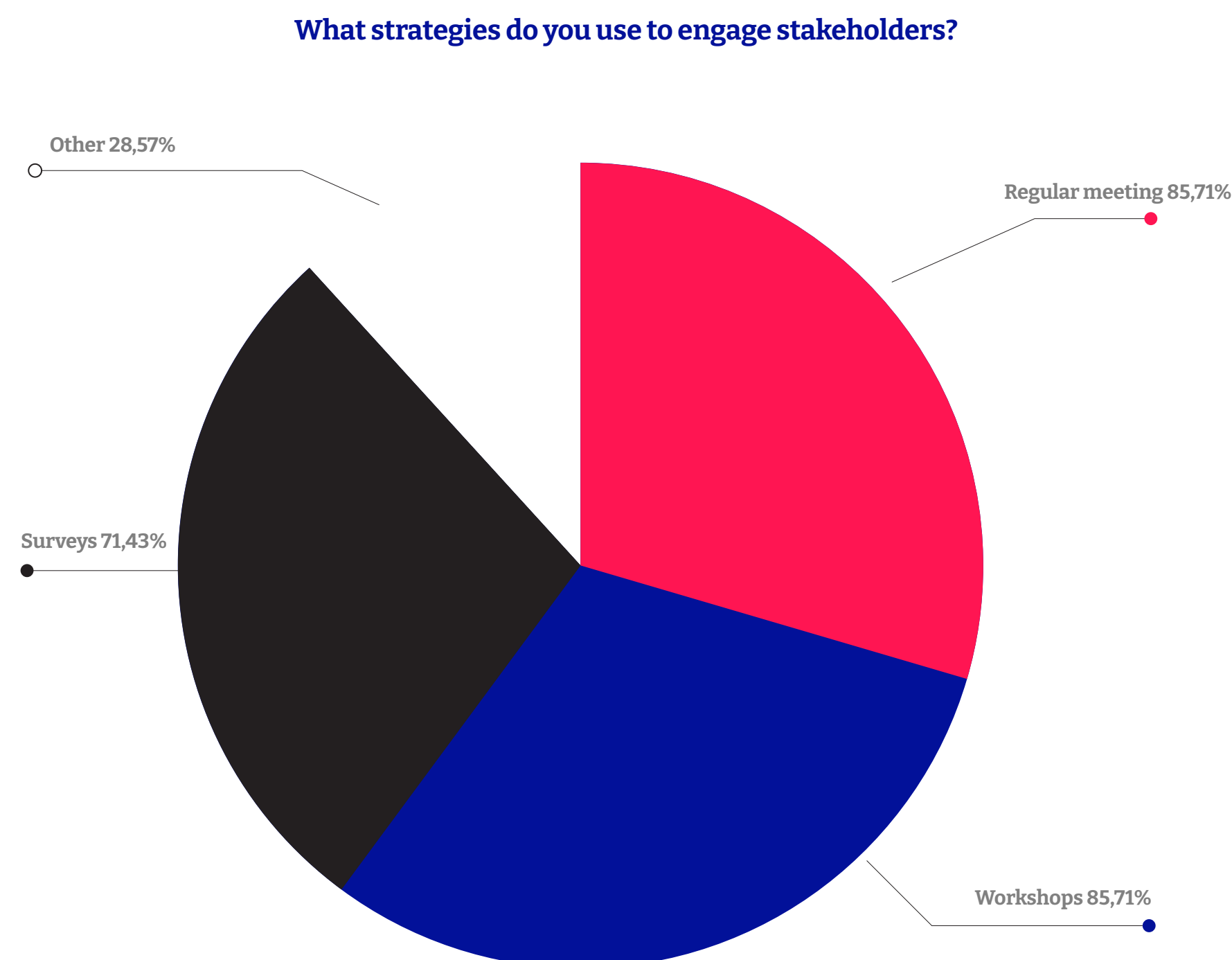
Figure 8: *Strategies used to engage stakeholders*

Case Study: Afya Intelligence

The experience shared by Afya Intelligence based in Tanzania demonstrates the important role of stakeholder engagement in healthtech innovation. By leveraging workshops to gather feedback from healthcare providers and the Ministry of Health, Afya Intelligence notably enhanced its Afyalytics platform, leading to widespread adoption across 1,250 public health facilities in Tanzania. This engagement drove further access, as reflected by the company.

The company's proactive engagement with stakeholders, including investors like InSupply Health and GHSC Project, ensured the platform met user requirements, driving scalability and alignment with national health priorities. This collaborative approach not only refined the product but also secured government buy-in, demonstrating stakeholders as key co-creators of innovation. However, this intuitive, relationship-driven approach has been effective at the local level, but the absence of structured mapping may hinder coordination and clarity during scale-up or regional expansion. Introducing formal stakeholder analysis tools presents a clear opportunity to support alignment, prioritization, and strategic engagement during scale-up.

We have leveraged feedback from user's requirement and feedback sessions to enhance the product, this has led to great uptake after enhancement. We were able enhance the application based on user requirements leading to better acceptability by MoH. We were able to procure servers for hosting Afyalytics and MoH system. MoH incoporated the application in training of health facilities that has led to scale the use of the application

- Afya Intelligence

"

Summary Box: Additional Insights and Recommended Actions

Company	Country	Insights
HealthX Africa Ltd	Kenya	Stakeholder engagement significantly shaped their innovation. The County Governor's influence and community involvement drove adoption, while collaboration with healthcare providers and HTHA ensured sustainable implementation, leading to over numerous patient consultations
MedTrack Technologies	Ghana	Health provider feedback helped prioritize a user-friendly, intuitive platform tailored to local needs. Continuous collaboration guided the development of interoperability and offline capabilities for seamless workflow integration. Engagement with investors and funders, including WFP Innovation Accelerator and HTHA, provided financial backing, strategic government engagement, and market expansion opportunities, accelerating growth and enhancing sustainability.
Helium Health	Nigeria	Healthcare providers and patients provided critical feedback, enhancing HeliumDoc's clinical utility and usability. Government collaboration aligned the solution with health priorities, driving adoption across diverse user groups.

Company	Country	Insights	Action points based on company feedback
Emergency Response Africa	Nigeria	Engagement with healthcare workers and investors refined their maternal transport model, enabling scalability beyond pilot locations and addressing real-world challenges through stakeholder feedback.	— Need for healthtech innovators to utilize power-interest grids to select their stakeholders and clarify their roles and leverage their influence along their scaling journey
Aurora Health Systems	Ghana	Health provider feedback helped prioritize a user-friendly, intuitive platform tailored to local needs. Continuous collaboration guided the development of interoperability and offline capabilities for seamless workflow integration. Engagement with investors and funders, including WFP Innovation Accelerator and HTHA, provided financial backing, strategic government engagement, and market expansion opportunities, accelerating growth and enhancing sustainability.	— Leverage investor networks for scalability
Helium Health	Kenya	Built a diverse network with regulators, healthcare providers, and medical associations through regular meetings and pilot testing, aligning CKD tools with national priorities and ensuring interoperability.	

H. Role of Evidence Generation in Driving Healthtech Innovation

Across the seven companies, evidence generation was identified as foundational to their operations and solutions. All of them noted that they actively collect and utilize a variety of data, which is essential not only for refining their products and scaling their solutions but also for gaining the trust of stakeholders. This ongoing process of generating evidence enables continuous improvements, ensuring that their solutions effectively address real-world public health challenges and align with national priorities.

The companies reported the different methods they use to analyse, monitor, evaluate, and visualise the data they collect as show in the table below. Six out of seven companies employ monitoring and evaluation experts, reflecting a strong emphasis on impact assessment and data evaluation. Five of these companies reported that they use data analysts who focus on identifying trends and optimising service delivery. However, only four companies have data scientists, suggesting a gap in advanced analytical capabilities like predictive modelling. Three companies leverage other roles such as full-stack developers or external support to enhance their data visualisation and interpretation efforts.

Capacity of team to analyse, interpret, monitor, evaluate and visualize data collected
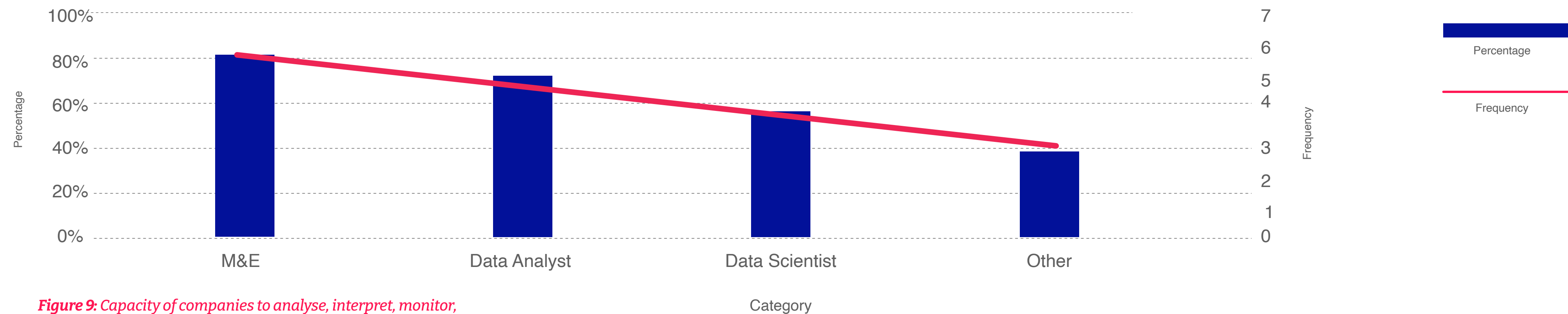

Figure 9: Capacity of companies to analyse, interpret, monitor, evaluate and visualise data collected

Case Study: Aurora Health Systems

Aurora Health Systems in Kenya highlights the role of evidence generation in driving healthtech innovation through its comprehensive approach to data collection and utilization. The organization collects clinical and usability data from over 400,000 chronic kidney disease (CKD) patients, incorporating lab results and dialysis records into its health ecosystem. This robust dataset not only supports CKD management and informs national health policies but also contributes directly to National Health Insurance Fund (NHIF) reimbursement models.

The clinical data they collect includes patient demographics, medical histories, lab results, dialysis records, and medication histories—crucial for tracking disease progression and assessing treatment outcomes.
In addition, Aurora gathers digital literacy and readiness data to evaluate healthcare workers' skills, identify barriers to technology adoption, and capture perceptions of digital tools. This is done through structured questionnaires, including those deployed at the largest referral hospital in the country, Kenyatta National Hospital (KNH) Dialysis Unit. Furthermore, system usability and health information access data are collected to examine workflow efficiency, data security, and the interoperability challenges of Aurora's solutions with Kenya's Health Information System (KHIS) and Health Information Exchange (HIE).

To manage and analyze this data, Aurora employs a range of tools, including Electronic Health Records (EHR), mobile health applications, cloud-based data management systems for secure storage and interoperability, and survey instruments for assessing digital literacy and patient outcomes.

Aurora uses this data in several critical ways such as:

Enhancing CKD diagnosis and treatment, the data is leveraged to track disease progression, predict risks, and personalize treatment plans.

Improving healthtech adoption, insights from digital literacy assessments are used to improve digital health adoption by identifying training gaps and informing the development of user-friendly tools.

Optimising health information systems, findings from system usability assessments support optimization of health information systems by enhancing integration with KHIS and HIE.

Influencing policy and health financing, the data influences policy and health financing by supporting NHIF reimbursement models and national CKD registries.

Empowering patients and providers, the collected evidence empowers both patients and providers by improving continuity of care and enabling better self-management.

At a system level, Aurora's data supports healthcare worker training and strengthens CKD diagnosis efforts, aligning with Kenya's Digital Health Strategy (2019–2023) and the NCD Strategic Plan (2021–2025).
Pilot testing at KNH and Kajiado Sub-County Hospital has further refined interoperability with national systems, paving the way for nationwide implementation. To build and maintain trust among stakeholders, Aurora collaborates closely with the Ministry of Health (MOH), the Kenya Renal Association, and the Kenya Renal Patients Association. These partnerships ensure clinical accuracy, regulatory compliance, and a patient-centred design. Importantly, Aurora's clinical validation data has played a pivotal role in influencing NHIF integration and informing policy discussions—demonstrating how evidence generation creates trust with government stakeholders and secures support for scalability.

Despite the commitment to data collection, many of these companies encounter persistent challenges in fully maximizing the potential of their evidence generation efforts. One of the primary barriers is access to public health datasets and integration into national health information systems (HIS). For example, Aurora, highlighted the difficulty of accessing CKD registries and the challenge of securing faster regulatory approvals to integrate with Kenya's health system (KHIS).

Summary Box: Additional Insights and Recommended Actions

Company	Country	Summary Insight	Shared challenges
HealthX Africa Ltd	Kenya	Uses SQL, PowerBI, and Excel to analyze non-clinical, demographic, and financial data for predictive analysis and healthcare optimization.	— Data access limiting their ability to scale analytics and fully leverage collected data.
MedTrack Technologies	Ghana	Uses feedback and stakeholder logs to refine services. Seeking financing for expanding data interpretation.	— Only 4 companies employ data scientists, creating limitations in predictive modelling and advanced interpretation.
eFiche	Rwanda	Uses Datasphere to analyze patient data in real-time. Seeking data scientists to support predictive analytics and AI-driven analysis.	— Limited financial resources to support large-scale data collection and analysis.
Helium Health	Nigeria	Uses HeliumDoc for health data collection and M&E dashboards. Faces delays in data-use agreements that limit scalability.	
Afya Intelligence	Tanzania	Uses facility usage and cost data to drive government engagement and enhance health system scalability.	
Emergency Response Africa	Nigeria	Uses tools like KoboToolbox and Google Spreadsheets to identify high-risk areas and support maternal health policy interventions.	

Action points based on company feedback

Governments	Investors	Healthtech Companies
Improve access to public health data	**Offer Sustainable Financing for Evidence Generation**	— Invest in hiring data scientists.
— Facilitate streamlined, time-bound data-use agreements to enable secure access to national datasets.	— Offer blended finance, challenge funds, or innovation grants to support scalable data initiatives	— Build trust through strategic partnerships.
— Establish standardized APIs for seamless integration with national systems		— Build Investor Confidence with Data
— Create regulatory sandboxes for testing digital innovations under real-world compliance oversight		— Enhance advanced analytics capacity
Enhance Data Governance and Drive System-Level Impact		
— Develop and enforce national health data privacy regulations to enable ethical and secure data sharing.		
— Promote patient-centred health record systems such as blockchain-based models.		
— Provide tax incentives to startups that comply with data protection standards		

I. HTHA Innovation Challenge Winners' Experience in Relation to HTHA Policy Blueprint v. 1

The experiences shared by the seven companies offer valuable insights that provide strong validation for the Policy Blueprint priority areas (licensing; data governance; value-driven collaborations; and public private partnerships), while highlighting the gaps and opportunities for refinement.

i. Policy Blueprint Recommendation One: Establishing or strengthening mechanisms for dialogue and coordination among Healthtech stakeholders

The Policy Blueprint emphasizes the importance of establishing or strengthening mechanisms for dialogue and structured engagement platforms between governments, innovators, and other key actors. This collaborative approach promotes problem- solving and ensures that innovations align with national health priorities. As demonstrated by the seven companies, such collaboration leads to more effective and impactful public health interventions.

The challenges faced by these companies highlight the need for improved coordination mechanisms. To address this, the Blueprint recommendation for multi-stakeholder engagement platforms could be made more actionable through the introduction of regular, scheduled platforms with clear participation from key healthtech stakeholders. Additionally, establishing a Healthtech Liaison Office within Ministries of Health would serve as a central coordination point, addressing communication barriers and reducing bureaucratic inefficiencies, in line with the Blueprint's vision for coordinated development.

ii. Policy Blueprint Recommendation Two: Reviewing and refining policies regarding access to, hosting, and interoperability of health data

Issues with health governance are also deeply reflected in the experiences shared by companies. The Blueprint identifies limited clear, comprehensive, and enforceable data governance frameworks as a significant barrier to innovation and health system strengthening.

Positive examples show the potential of well-developed policies, such as enabling integration with national systems and strengthening infrastructure. However, many companies still face persistent challenges, amidst the presence of existing policies. This reinforces the Blueprint's observation that while data policies exist, inefficient implementation and enforcement often undermine the policies intended goals. Challenges related to unclear data ownership, limited interoperability, and siloed systems further highlight the need for policies that move from drafting to active application and oversight.

To address these issues, the Blueprint recommends adopting harmonized data structures like HL7 FHIR, with specific timelines for implementation within public systems. Additionally, establishing data co-creation forums involving startups, regulators, and public institutions will help develop context-specific protocols for data sharing.

iii. Policy Blueprint Recommendation Three: Establishing a streamlined and transparent Healthtech licensing process at country and regional levels

The Policy Blueprint highlights the need for a streamlined and transparent Healthtech licensing process at both country and regional levels as essential to unlocking innovation, enabling scale, and facilitating cross-border collaboration. Licensing was consistently flagged as a major barrier, significantly limiting the speed and efficiency with which innovations can scale within the public health systems.

At the country level, the Blueprint calls for clear, digitized processes with defined guidelines to reduce the resource burden on innovators and ensure predictability. While some countries are relatively supportive, most startups encounter significant procedural challenges which mirror the Blueprint's assessment. Companies addressed the need for clearer information, structured engagement, and tools to better navigate the system.

To address these issues, the Blueprint recommends digitizing licensing platforms and enhancing them with real-time application tracking, comprehensive FAQs, and interactive guidance portals. The creation of regulatory sandboxes would allow companies to engage with regulators, co-define licensing criteria, and support iterative policy development through technical committees. At the regional level, the Blueprint envisions aligned regulatory frameworks and a "regional passport" for healthtech licensing to support scale and cross-border operations.

The Blueprint's proposal for a regional working group could be strengthened by including startup representatives to ground policies in operational realities. A value metrics dashboard could also be developed to track performance, adoption, and outcomes, supporting evidence-based policy alignment.

Taken together, these experiences affirm that licensing must be treated not as a one-time task but as a continuous process of alignment, collaboration, and reform. While the Blueprint offers a strong foundation, full implementation will require active engagement, shared accountability, and the deployment of practical tools. By combining digitized systems, regulatory sandboxes, regional policy alignment, and multi-stakeholder co-creation, Africa's health systems can move toward enabling, scalable, and interoperable licensing environment.

iv. Policy Blueprint Recommendation Four: Advancing Public–Private Partnerships to Strengthen National Healthtech Systems

The Policy Blueprint identifies the advancement of public–private partnerships (PPPs) as a critical lever for strengthening national systems and promoting scalable healthtech solutions. The experiences of the seven companies affirm this, while also highlighting the limitations of fragmented and uncoordinated national approaches. This reflects the Blueprint's emphasis on PPPs in supporting implementation, improving service delivery, and aligning innovation with national health priorities while also underscoring the uneven maturity of such partnerships across different contexts.

These disparities reinforce the Blueprint's recognition that coordination gaps and the absence of formal PPP frameworks limit the sustainability and scalability of healthtech solutions. Despite interest from government stakeholders, companies reported challenges that highlight the need for transparent pathways and access to technical counterparts within public institutions. To make this recommendation more actionable, the Blueprint's call for structured PPPs could be strengthened through the formalization of partnership pathways at the country level. This may include establishing healthtech focal points within Ministries, clear public-sector engagement guidance, and regular dialogues between health authorities and solution providers.

The reported success in entering public systems and forming partnerships reinforces the potential of PPPs as a delivery mechanism. When effectively structured, PPPs enable access to infrastructure, support ongoing iteration, and promote shared accountability. This makes it essential to accelerate healthtech integration into broader health systems, strengthening efforts, as envisioned in the Policy Blueprint.
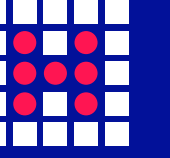
CONCLUSION

The 2024 HealthTech Hub Africa Innovation Challenge illustrated the critical role that healthtech innovation can play in strengthening public health systems across Africa. The progressive achievements of the seven selected companies, Helium Health, Emergency Response Africa, eFiche, Afya Intelligence, MedTrack, Aurora Health Systems, and HealthX Africa, offer clear evidence of the value of catalytic support, public-private partnerships and alignment with national health priorities.

Collectively, the companies reached 905,172 patients, 2,865 healthcare providers, and 1,811 public health facilities across five countries, Nigeria to Rwanda, Tanzania, Ghana, and Kenya. Achieving 96.57% of their milestones and raised $1,947,042 in additional funding from both private and public partnerships established during the innovation challenge period. These results highlight not only strong progress on access, quality, and client-centeredness but also the capacity for real-world integration and evidence generation when startups are given structured support and opportunities for demonstration.

Yet the report also brings out persistent and significant challenges like bureaucratic delays, regulatory ambiguity, infrastructure gaps, and unpredictable funding cycles continue to create barriers to market entry, scalability, sustainability, and integration into public health systems. The experiences shared by the companies confirm a boarder pattern: existing policies, while often supportive in design, fall short in implementation. Across all seven companies, survey responses indicated that healthtech innovators are well-versed in relevant policies, laws, and regulations, yet still encounter systemic inefficiencies, unclear approval processes, and inconsistent engagement from regulatory bodies. These implementation gaps and not policy design itself, remain the greatest barrier to sustainable progress.

The findings also reinforce the relevance of the HTHA Policy Blueprint. The seven Companies' real-world experiences reflect and validate the Blueprint's priorities, including the need for streamlined licensing frameworks, stronger data governance, value-driven collaboration, and formalized public-private partnerships. The call for digitized platforms, regulatory sandboxes, interoperability standards, and dedicated HealthTech Liaison Offices within Ministries of Health directly aligns with the companies' recommendations and reinforces the need for shared accountability and structured engagement mechanisms.

To enable scale and sustainability, urgent action is needed. Policymakers must prioritize the creation of enabling environments by digitizing regulatory systems, improving administrative continuity, and operationalizing national health infrastructure. Funders and investors must provide flexible, multi-year support while investing in systems for data analytics and outcome tracking. Healthtech innovators must continue to engage early with public stakeholders, align national strategies, co-create with users, and invest in generating evidence for scale and policy influence.

Together, these actions can unlock healthtech innovation, reduce inefficiencies, and strengthen public health systems across Africa. The achievements of the 2024 Innovation Challenge winners provide a strong foundation for progress and a compelling case for continued investment, reform, and collaboration in Africa's healthtech ecosystem
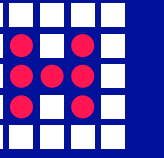
905,172 patients served

2,865 healthcare providers reached
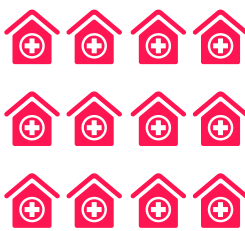
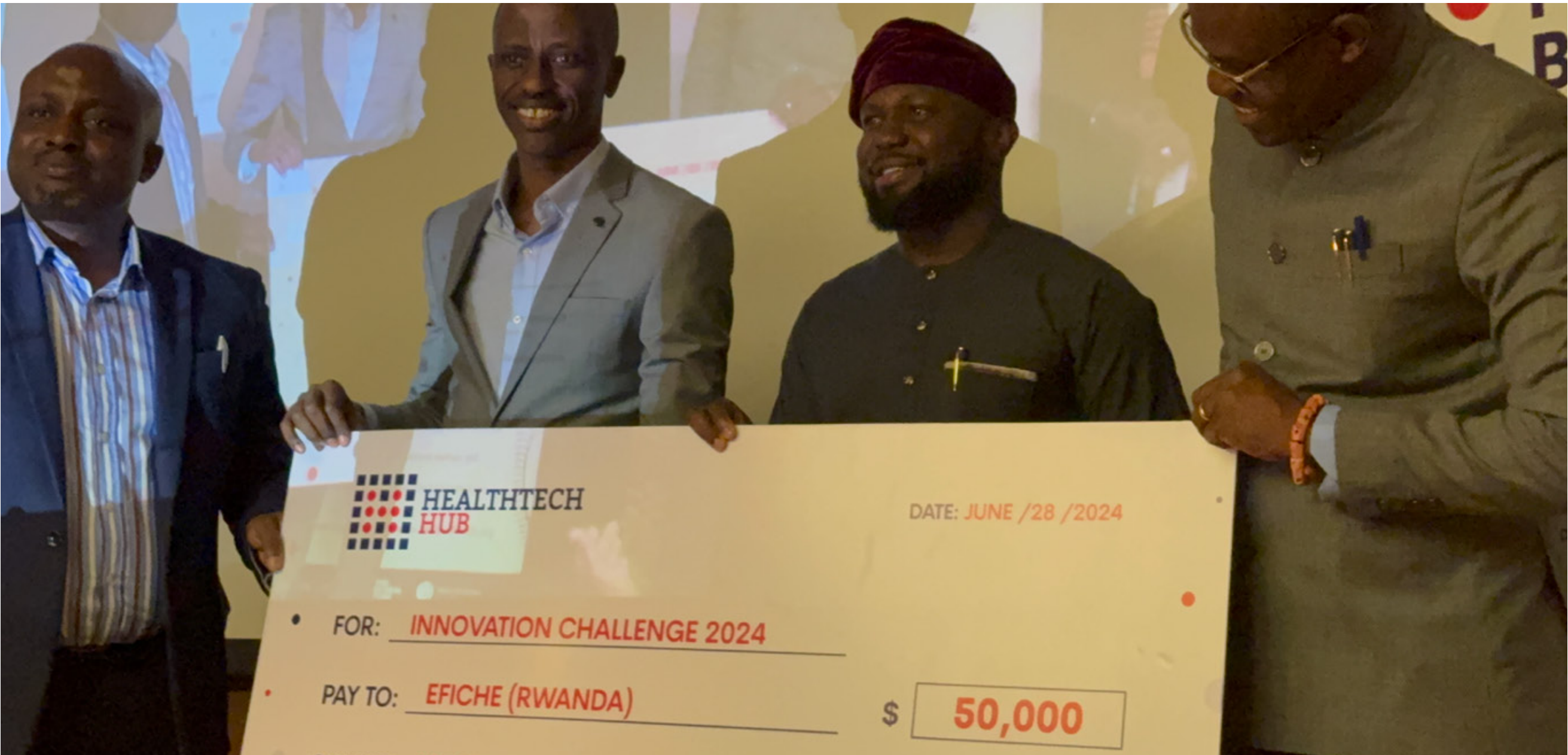**1,811 public health facilities supported**

96.57% of their milestones achieved
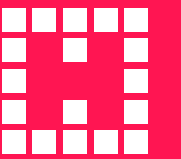
$1,947,042 raised
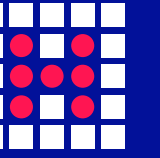
WINNERS OF HTHA 2024 INNOVATION CHALLENGE

THANK YOU

ANNEX: SURVEY QUESTIONNAIRE

HealthTech Hub Africa - Innovation Challenge

This survey is seeking to document key results and learnings of the 2024 HTHA Innovation Challenge. The data will be used to inform HTHA programme design as well as the policy dialogue within the HTHA constituency in support of the policy blueprint, implementation and IWG discussions. The data collected will solely be used for this purpose only.

Please enter your organization name

Please enter your name and surname

Policies, Laws and Regulations

How familiar are you with policies, laws and regulations that impact your innovation in your country?

○ Very well

○ Somewhat

○ Not well

To what extent have existing policies, laws, and regulations impacted your innovation's *market entry*

○ Significantly Facilitated

○ Moderately Facilitated

○ Had No Impact

○ Moderately Hindered

○ Significantly Hindered

○ Not sure

To what extent have existing policies, laws, and regulations impacted your innovation's *scalability*

○ Significantly Facilitated

○ Moderately Facilitated

○ Had No Impact

○ Moderately Hindered

○ Significantly Hindered

○ Not sure

To what extent have existing policies, laws, and regulations impacted your innovation's *sustainability*

○ Significantly Facilitated

○ Moderately Facilitated

○ Had No Impact

○ Moderately Hindered

○ Significantly Hindered

○ Not sure

To what extent have existing policies, laws, and regulations impacted your innovation's *integration*

○ Significantly Facilitated

○ Moderately Facilitated

○ Had No Impact

○ Moderately Hindered

○ Significantly Hindered

○ Not sure

Please briefly elaborate on your answers to the previous questions

Which of these challenges do you face while complying with current policies, laws and regulations?

☐ Complexity of regulations

☐ Lack of clear guidance from experts

☐ Frequent changes

☐ Other

Please specify what other challenges you face while complying with current policies, laws and regulations

What changes or new policies, laws and regulations would you like to see implemented to better support health tech innovations?

What has been your experience regarding licensing for your innovation

☐ Time-consuming

☐ Complex process

☐ Lack of awareness

☐ Other

Please specify what other experience/s you faced regarding licensing for your innovation?

What challenges or opportunities do you see regarding data use, access, and privacy within the innovation sector?

What course corrections/actions would you recommend regarding data use, access, and privacy in your health tech innovation

_____

Government Involvement

Have you had any interactions with government agencies or policymakers regarding your innovation?

○ Yes

○ No

If so, how would you rate this interaction/engagement?

○ Positive and/or Progressive

○ Negative and/or No progress

○ Both

Please elaborate on your interactions with government agencies or policy makers

_____

What were the reasons for not engaging or interacting?

_____

What government resources or support have been most beneficial to your innovation?

☐ Funding grants

☐ Technical assistance

☐ Partnership, networking opportunities

☐ None

☐ Other

Please specify what other government resources or support have been most beneficial to your innovation

_____

What barriers have you encountered in accessing government support?

☐ Bureaucratic hurdles

☐ Lack of clarity information

☐ Limited availability of support

☐ None

☐ Other

Please specify what other barriers you have encountered in accessing government support

_____

How do you provide feedback to government entities about regulations or policies affecting your work?

☐ Formal submissions

☐ Informal discussions

☐ Public forums

☐ Do not provide feedback

☐ Other

Please specify what other methods you use to provide feedback to government entities

_____

Please elaborate on why you do not provide feedback to government entities about regulations or policies affecting your work

_____

What specific areas of collaboration with government do you see as most beneficial for your innovation?

☐ Policy development

☐ Funding opportunities

☐ Regulatory processes guidance

☐ Other

Please specify what other areas of collaboration with government are most beneficial for your innovation

_____

Stakeholder Engagement

Who are the key stakeholders involved in your innovation?

☐ Patients

☐ Healthcare Providers

☐ Investors and Funders

☐ Others

Please specify other stakeholders involved in your innovation

_____

What roles do these stakeholders play?

_____

What strategies do you use to engage stakeholders?

☐ Regular meetings

☐ Workshops

☐ Surveys

☐ Other

Please specify what other strategies you use to engage stakeholders

_____

How much has stakeholder engagement influenced the development and success of your innovation?

◯ Significantly

◯ Moderately

◯ Somewhat

Please elaborate on how stakeholder engagement has influenced the development and success of your innovation

_____

Evidence Generation

Do you currently collect data, insights or market information related to your product/innovation?

◯ Yes

◯ No

What kind of data do you collect?

_____

Please specify what data collection tools you utilize
e.g. KoBo, RedCap, CommCare, MS Forms or physical paper tools etc.

_____

How do you put this data you have collected to use?

_____

Do you have the capacity within your team to analyse, interpret, monitor, evaluate and visualize the data you collect?

◯ Yes

◯ No

If so, please confirm the capacity of your team

☐ Data Analyst

☐ M&E

☐ Data Scientist

☐ Other

Please specify what other capacity you have within your team

_____

What suport do you require for collecting data, insights or market information related to your product/innovation?

_____

Evaluation

How many direct beneficiaries (patients, healthcare providers, facilities, etc.) has your innovation impacted during the Innovation Challenge period?
Patients = ???; Healthcare providers = ???; Facilities = ???? etc

_____

What percentage (%) of your Innovation Challenge award milestones/goals have been achieved?

_____

How many _public_ partnerships have been established as a result of being a winner of the Innovation Challenge 2024?

_____

How many _private_ partnerships have been established as a result of being a winner of the Innovation Challenge 2024?

_____

If applicable, please list the new partners established as a result of being a winner of the Innovation Challenge 2024 (both public and private)

_____

What additional new funding have you raised/leveraged since receiving the Innovation challenge award?
_in US $_

_____

Do you believe that Innovation challenge award has led to an increase in revenue? If so, please elaborate and specify the increase in revenue

_____

How many new jobs have been created due to the implementation of your innovation?

_____

Is your innovation currently integrated within public health sector?

◯ Yes

◯ No

Please briefly provide reasons for your innovation not currently being integrated within the public health sector

_____

In how many public health facilities is your innovation integrated?

_____

At what level is your innovation currently being implemented?

☐ Local

☐ Provincial/State/County

☐ National

☐ Multi-Country

One a scale of 1 to 5, how would you rate the success of your innovation adoption/utilization in the public health sector

○ 1 - Not successful

○ 2

○ 3 - Average

○ 4

○ 5 - Very successful

What are the main implementation challenges you faced during the Innovation challenge award period?

_____

What are the main success factors that you feel strongly contributed to your impact?

_____

On a scale of 1 to 5, how likely are you to recommend the HTHA Innovation Challenge program to other health tech startups?

○ 1 (Not recommended)

○ 2

○ 3 (Neutral)

○ 4

○ 5 (Strongly Recommended)

Thank you for your feedback and willingness to answer these questions.

_____