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ABCHealth

10TH ANNIVERSARY
6TH MEMBERSHIP INDUCTION

ABCHealth PANEL Session

Abuja, Nigeria.

THEME:

Collaborative Strategies for Scaling Up Digital Health Solutions for NCDs

OUTCOME REPORT

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Aigboje Aig-Imoukhuede is the Founder and Chairman of Africa Initiative for Governance (AIG), a not-for-profit organisation, established to be a catalyst for high public sector performance in Africa by bringing proven private sector innovation, leadership and funding to the public sector in a private-public partnership to attract, inspire and support future leaders of Africa's public sector.

Mr. Aig-Imoukhuede is also the Founder and Chairman of Coronation Capital Limited, an Africa-focused private equity and proprietary investment firm established in 2014. Prior to this, he was Group Managing Director and Chief Executive Officer of Access Bank Plc, where he led the transformation of the bank to rank amongst Africa's leading banks. Commander of the Order of the Niger "CON", conferred by the Federal Republic of Nigeria, for his contributions to the development of banking and finance, and Ernst & Young Entrepreneur of the Year (West Africa).

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Aliko Dangote is the founder and president/chief executive of the Dangote Group, the largest conglomerate in West Africa. The Group currently has a presence in 17 African countries and is a market leader in cement on the continent. One of the Group's subsidiaries, Dangote Cement Plc, is the largest listed company in West Africa and the first Nigerian company to join the Forbes Global 2000 Companies list.

The Group has diversified into other sectors of the Nigerian economy including agriculture and is currently constructing the largest petroleum refinery, petrochemical plant and fertilizer complex in Africa.

Internationally, Dangote sits on the board of the Corporate Council on Africa and is a member of the Steering Committee of the United Nations Secretary-General's Global Education First Initiative, the Clinton Global Initiative, the McKinsey Advisory Council, and the International Business Council of the World Economic Forum.

ABCHealth

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Foreword

The epidemiological transition underway across Africa has profound implications for health systems, economic productivity, and sustainable development. Non-communicable diseases (NCDs) now represent a rapidly growing share of morbidity and premature mortality, exerting long-term pressure on health systems that were largely structured to address acute and communicable conditions. This shift necessitates a fundamental reorientation of health system design—one that prioritizes prevention, early detection, continuity of care, and data-driven population health management.

Digital health presents a critical enabling framework for this reorientation. Advances in mobile connectivity, data systems, and digital platforms offer the potential to extend the reach of health services, strengthen primary healthcare delivery, and improve the availability and use of health data for decision-making. However, across much of the continent, digital health interventions for NCDs remain fragmented, pilot-driven, and insufficiently embedded within national health architectures. The absence of interoperability, sustainable financing mechanisms, and coherent governance frameworks has limited their contribution to system-wide impact.

ABCHealth convenes this panel session on 'Collaborative Strategies for Scaling up Digital Health Solutions for NCDs.' The session is positioned as a strategic forum to examine how coordinated action across policy, finance, technology, and service delivery can unlock scale and sustainability. The focus is not on isolated innovation, but on the conditions required to integrate digital health solutions into national NCD strategies and routine health system operations.

ABCHealth's mandate is anchored in mobilising private sector leadership, investment, and expertise in support of public health priorities. The private sector brings critical capabilities in innovation, capital mobilisation, operational efficiency, and analytics; yet these capabilities must be effectively aligned with public policy objectives, regulatory oversight, and equity considerations. Meaningful progress in digital health for NCDs will depend on structured collaboration, where governments provide strategic direction and stewardship, while private actors and development partners contribute complementary resources and expertise.

This session therefore emphasises five core domains essential to scale: interoperable digital infrastructure; multi-sector governance and accountability; sustainable and blended financing models; robust data governance and evidence generation; and sustained investment in human capacity and change management. Collectively, these domains constitute the foundation for transitioning digital health from discrete projects to integrated, resilient systems capable of supporting long-term NCD prevention and care.

As ABCHealth marks this milestone, this convening reflects our continued commitment to advancing practical, system-level solutions for Africa's health challenges. The discussions and partnerships emerging from this session are intended to inform policy reform, guide investment decisions, and catalyse coordinated action across sectors. Through deliberate collaboration and disciplined execution, Africa can harness digital health not as an adjunct, but as a core pillar of effective and equitable NCD management.

Dr. Mories Atoki
CEO, ABCHealth

Executive Summary

The ABCHealth Panel Session, convened as part of the 10th Anniversary, 6th Membership Induction, and 2025 Conference of the Academy of Public Health, in collaboration with the West African Institute of Public Health (WAIPH), addresses one of Africa's most urgent and structurally complex health challenges: the accelerating burden of non-communicable diseases (NCDs) and the fragmented deployment of digital health solutions to manage them.

Where NCDs account for over a third of all deaths in Africa and health systems remain largely oriented toward acute and communicable conditions, the session positions digital health as a critical system enabler rather than a standalone innovation. While mobile penetration across the continent exceeds 80%, digital health interventions for NCDs continue to operate as isolated pilots, constrained by weak interoperability, regulatory uncertainty, limited financing, and insufficient integration into national health systems.

This panel, led by ABCHealth, provides a high-level, multi-sectoral platform to move the digital health agenda for NCDs from experimentation to sustainable scale. The session focuses on aligning policy, technology, financing, and governance frameworks to support continent-wide deployment of interoperable, data-driven digital solutions for NCD prevention, early detection, long-term management, and continuity of care.

Technically, the session interrogates four interdependent pillars required for scalable impact. First, it emphasizes the development of robust digital infrastructure and interoperable platforms that enable real-time data exchange across providers and health systems, supporting coordinated care and population-level surveillance. Second, it advances multi-sector partnerships and governance models that clearly define roles, accountability, and alignment between governments, private sector innovators, academia, civil society, and investors. Third, the session addresses data governance, privacy, and evidence generation as foundational requirements for trust, ethical deployment, and policy uptake. Finally, the panel underscores capacity building and human-centered implementation, recognizing that digital transformation depends as much on workforce readiness, digital literacy, and change management as on technology itself.

The expected outputs of the session include actionable recommendations for governments and partners, a collaborative roadmap for integrating digital health tools into national NCD strategies, and a scalable blueprint for leveraging technologies such as telemedicine, mobile health, AI, and predictive analytics to improve health system responsiveness and equity. Collectively, the session aims to catalyze a shift from fragmented pilots toward integrated, resilient digital health ecosystems capable of delivering sustained improvements in NCD outcomes across Africa.

Background

Overview and epidemiological context

Non-communicable diseases (NCDs) are now the dominant cause of death and disability globally and are rapidly rising in Africa. In the WHO African Region, NCDs caused roughly 2.8 million deaths in 2019, representing about 37% of all deaths in the region, up from ~24% in 2000, driven primarily by cardiovascular disease, cancers, chronic respiratory disease and diabetes. These trends reflect both demographic transition (ageing and population growth) and shifting exposure to behavioural, metabolic and environmental risk factors.

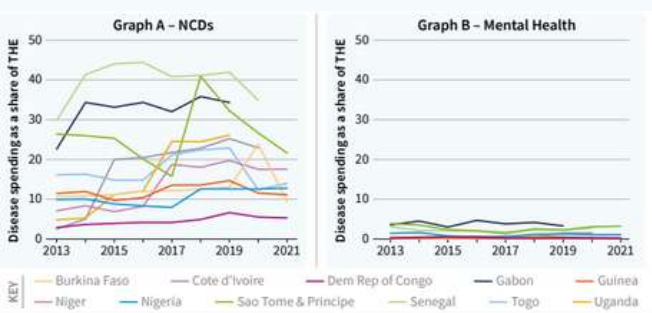
Globally, NCDs killed over 43 million people in 2021, with approximately 18 million premature deaths (ages 30–69) occurring that year; the majority of these premature deaths (≈82%) take place in low- and middle-income countries (LMICs). The global and regional burden of premature mortality from NCDs represents a major loss of productive life years and a high economic burden on households and health systems.

Breakdowns by cause emphasize the imbalance: cardiovascular diseases account for the largest share of NCD deaths, followed by cancers, chronic respiratory disease and diabetes. The distribution and drivers vary by country and sub-region: urbanization, dietary transitions (higher processed food, salt and saturated fat consumption), increasing sedentary behaviour, tobacco use, harmful alcohol use, obesity and rising air pollution exposures are changing the risk profile across African populations.

Health systems readiness and gaps for NCD care

Most African health systems were designed and resourced to manage acute infectious disease outbreaks and maternal–child health needs; they are generally less prepared for long-term, integrated chronic care models required by NCDs. Key structural gaps include:

- Limited primary care capacity for continuous NCD screening, long-term pharmacological management and follow-up.
- Fragmented financing: high out-of-pocket costs for chronic therapies and diagnostic monitoring, creating adherence and access barriers.
- Weak health information systems for longitudinal patient tracking and cohort management — many systems still rely on paper-based registries or disparate electronic systems that do not interoperate.



Trends in expenditure on NCDs (Graph A) and mental health (Graph B) in selected countries. Source: Data are from the WHO Global Health Expenditure Database. Note: Expenditure is expressed as the share of total health expenditure (THE) allocated to these conditions.

- Workforce shortages and limited chronic care training for nurses, community health workers and primary care clinicians in NCD management.

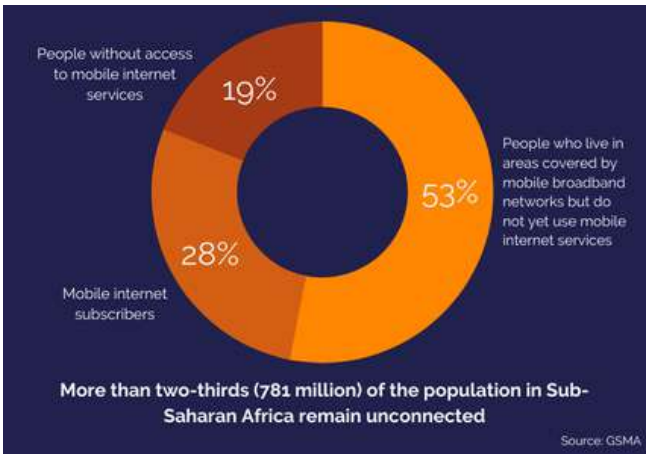
These limitations impede early detection, continuity of care, medication adherence, and population-level surveillance — collectively contributing to late presentation, higher complication rates and catastrophic household expenditure. (Synthesis supported by WHO/Africa regional analyses).

Rationale for digital health as a system enabler for NCDs

Digital health interventions (telemedicine, mobile health apps, electronic medical records, remote monitoring devices, decision-support systems and analytic platforms) can transform NCD prevention, detection and long-term management by enabling:

- Task-shifting and remote follow-up (teleconsultations, mobile SMS reminders, remote blood-pressure and glucose monitoring), improving retention and adherence.
- Longitudinal patient records and registries that enable cohort management, multi-visit tracking and clinical decision support.
- Real-time data collection and dashboards that facilitate surveillance, resource allocation and performance monitoring.
- Patient engagement and self-management through tailored messaging, lifestyle coaching and digital therapeutics.
- Analytics and predictive modelling to stratify risk, prioritize outreach, and target interventions for high-risk cohorts.

These functions are particularly relevant in Africa where geographic access barriers and health workforce shortages are common. However, the potential of digital health to deliver population-level NCD impact depends on scale, interoperability, regulatory alignment and financing.



Current digital penetration and infrastructure (opportunity & constraints)

Mobile telephony and mobile internet represent the primary digital platforms for scalable interventions in Africa. Recent industry analysis shows:

- By end-2023, Sub-Saharan Africa had ~527 million mobile subscribers and mobile internet penetration ~27%, though subscriber coverage and effective internet use vary widely by country and urban/rural status. Mobile sector

contributions to GDP are large (e.g., GSMA estimated the mobile industry generated ~US$220 billion in economic value for Africa in 2024). The growth of smartphone ownership and mobile broadband is a critical enabler for mHealth and connected devices, but a significant "usage gap" remains: many people have basic mobile access without reliable mobile internet or smartphones.

- Internet use and connectivity differ across countries; World Bank indicators show marked variation in internet penetration across African countries and sub-regions, constraining uniform digital health rollouts where broadband is weak.

Thus, while device penetration creates a foundation, heterogeneous access (device, data cost, network quality) must be explicitly addressed in deployment strategies — e.g., fallbacks to SMS/USSD, offline data collection, edge compute and hybrid models.

Policy and governance landscape for digital health

The institutional and policy environment strongly conditions scale. The WHO Global Strategy on Digital Health (2020–2025) provides an international policy framework advocating for national digital health strategies, standards, and governance to ensure safety, equity and interoperability. Yet, many African countries have only nascent digital health policy or fragmented plans:

- Global assessments and indexes indicate that a relatively small proportion of African countries have robust, budgeted national digital health strategies or mature digital health governance, with reported gaps in standardization, legal frameworks, interoperability standards and budgeting for digital health initiatives. Some analyses have cited figures around ~27% of countries having national policies or mature planning for digital health (estimates vary by index and year). This uneven policy maturity impedes cross-country harmonization and scale.

Regionally, institutions such as Africa CDC and the African Union are prioritizing strengthening NCD surveillance and integration of NCD indicators into national information systems (e.g., Africa CDC NCD strategy 2022–2026), but operationalizing this at country level remains a major task.

Common failure modes of digital health pilots for NCDs

A review of deployments and program evaluations reveals recurrent failure patterns when pilots attempt to scale:

1. **Lack of interoperability** — products are vendor- or project-specific, with proprietary data formats and no common APIs or adherence to national health information exchange standards. This creates data silos and duplicate workflows.
2. **Unsustainable financing** — pilots funded by short-term grants or donor programs lack transition pathways into national financing instruments or commercial models (reimbursement, subscription, inclusion in essential digital services).
3. **Weak evidence on cost-effectiveness and outcomes** — many pilots provide usage or feasibility data but not rigorous impact evaluation (effect on BP control, HbA1c, hospitalizations or DALYs), reducing buy-in from payers.
4. **Regulatory and privacy uncertainties** — absent or incomplete data protection legislation and unclear rules for medical device/AI regulation deter investment and limit public trust.
5. **Human factors and workflow mismatch** — technologies that are not co-designed with frontline workers or patients increase friction and reduce adoption. Overcoming these failure modes requires an explicit, programmatic approach to interoperability standards, financing roadmaps, rigorous evaluation and inclusive governance.

Financing pathways and business models for scale

To shift from pilots to national programs requires diversified financing strategies and credible business models:

- Public financing & budget integration: incorporating digital NCD interventions into recurrent health budgets and insurance/reimbursement packages (NHIS, strategic purchasing) secures long-term operating funds.
- Public–private partnerships (PPPs) and blended finance: concessional capital, development finance institution (DFI) guarantees, or outcome-based contracts can reduce investor risk and link payments to performance.

- Pay-for-outcomes models: reimbursement tied to measurable clinical outcomes (e.g., % uncontrolled hypertension achieving target BP) can align incentives for vendors and providers.
- Subscription & enterprise models: digital platforms sold as services to providers, payers or employer groups (with attention to equity considerations) can generate recurring revenue streams.
- Economically, the large size of Africa's mobile/digital economy underscores potential private sector interest, but public stewardship is necessary to maintain equity and public-health goals.

Data governance, privacy, and evidence generation

High-quality, trusted data ecosystems are central to scale:

- Data protection and consent frameworks: clear rules on data ownership, consent, cross-border transfer and secondary use are needed to secure public trust and lawful analytic pipelines.
- Interoperability and standards: adoption of standards (HL7 FHIR, ICD/LOINC mappings, agreed terminologies) enables system integration and analytics.
- Real-world evidence and economic evaluation: randomized and quasi-experimental studies that measure clinical outcomes (BP control, glycaemic control), health service utilization (hospital admissions avoided), and economic outcomes (cost per DALY averted, ROI) are necessary to justify scaling and mobilize payers and investors.
- Privacy-preserving analytics: federated learning, de-identification and secure multiparty computation offer technical approaches where legal frameworks lag.

WHO and allied actors emphasize that strengthening data governance is a precondition for using AI and predictive analytics responsibly in health systems.

Human-centered design, capacity building and change management

Digital health success depends on people and processes as much as technology:

- **Workforce training**: clinicians, CHWs and program managers need continuous digital competency development (EMR use, data interpretation, telehealth etiquette).
- **Patient digital literacy**: digital interventions targeting self-management require programs to build users' skills and confidence (mobile phone use, interpreting readings, privacy awareness).
- **Co-design and contextual fit**: solutions must align with existing clinical workflows, local language and cultural norms; design that neglects this causes abandonment.
- **Organizational change management**: leadership, incentives and process redesign at clinics and ministries are required to integrate digital workflows sustainably.

Technical architecture and interoperability considerations

A pragmatic, scalable technical architecture for NCD digital ecosystems typically includes:

- Tiered architecture — edge/clinic EMR + middleware interoperability layer + cloud analytics platform + national health information exchange (HIE).
- Standards adoption — HL7 FHIR for APIs, ICD for diagnosis codes, LOINC for lab results, SNOMED where available, and OpenHIE architectural patterns for country deployments.
- Identity and patient matching — robust patient identifiers or probabilistic matching to support longitudinal care across facilities.
- Offline-first capabilities — mobile and remote settings require apps that operate offline and sync when connectivity permits.
- Security, encryption and audit trails — to meet basic confidentiality and regulatory expectations. Achieving these requires national technical architecture blueprints, conformance testing and a certification pathway for vendors.

Monitoring, evaluation, and learning (MEL) frameworks

Scaling digital health for NCDs must be guided by measurable, health-oriented indicators, including:

- Coverage & access: number and proportion of target NCD patients enrolled in digital management programs; geographic spread.
- Clinical outcomes: proportion with controlled hypertension; mean reduction in systolic BP; mean HbA1c reduction for diabetes cohorts.
- Utilization & equity: outpatient follow-up rates, hospital admissions for complications, and disaggregation by socioeconomic status/region/gender.
- Economic metrics: cost per patient per year, incremental cost-effectiveness ratios, budget impact analyses.
- System metrics: uptime, interoperability events, data timeliness, and clinician satisfaction.

Regional coordination and standardization opportunities

Given cross-border movement and shared technical constraints across African countries, regional coordination can accelerate scale through:

- Common standards and regulatory harmonization (regional guidance on data protection, medical device/AI regulation).
- Shared procurement & pooled purchasing for devices and platform licenses to reduce unit costs.
- Regional benchmarking and shared analytics for surveillance and policy learning.
- Africa CDC, WHO regional offices and African Union initiatives (including the Africa CDC NCD Strategy 2022–2026) provide mechanisms to convene standard-setting and capacity building at regional scale.

Country-Level Indicators for Digital NCD Scale-Up

Indicator Category	Indicator Name	Operational Definition	Measurement Unit	Data Source	Policy / Program Relevance
Coverage & Access	Digital NCD Enrollment Coverage	Proportion of diagnosed NCD patients (e.g., hypertension, diabetes) enrolled in a nationally approved digital health platform	% of eligible NCD patients	National HMIS, digital health registries	Measures reach and equity of digital NCD services
Service Continuity	Digital Follow-Up Retention Rate	Percentage of enrolled NCD patients completing at least one documented digital follow-up (teleconsultation, SMS, remote monitoring) within the last 6 months	% of enrolled patients	EMR, telehealth platforms	Tracks continuity of chronic care and patient engagement
Clinical Outcomes	NCD Control Rate (Condition-Specific)	Proportion of patients with controlled disease outcomes (e.g., BP <140/90 mmHg for hypertension; HbA1c <7% for diabetes) among digitally managed patients	% of monitored patients	EMR, facility reports	Core indicator of clinical effectiveness
System Integration	Interoperability Compliance Score	Percentage of digital NCD platforms compliant with national interoperability standards (e.g., FHIR-based APIs, national HIE integration)	% of platforms compliant	National digital health authority audits	Assesses system readiness and scale potential
Data Quality & Timeliness	Real-Time Reporting Completeness	Proportion of digital NCD facilities submitting complete patient data within national reporting timelines	% of reporting facilities	National HMIS dashboards	Supports surveillance and evidence-based planning
Financial Sustainability	Cost per Digitally Managed NCD Patient per Year	Average annual public and/or pooled expenditure per NCD patient receiving digital-supported care	Local currency or USD	Health accounts, program budgets	Informs budgeting, reimbursement, and value-for-money analysis
Equity & Inclusion	Digital NCD Access Equity Index	Ratio of digital NCD enrollment between lowest and highest income or rural–urban quintiles	Equity ratio or index	Disaggregated HMIS, surveys	Ensures scale-up does not widen health inequities

The Session

The session brought together multi-sectoral stakeholders to address the urgent need for scalable digital health solutions for non-communicable diseases (NCDs) across Africa. Non-communicable diseases, including cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes, are rapidly overtaking infectious diseases as Africa's leading cause of death and disability, accounting for 37% of all deaths in the WHO African Region in 2019. Despite this growing burden, health systems across the continent remain largely designed to respond to acute conditions, with limited capacity for integrated NCD management and long-term care.

The session focused on exploring collaborative strategies to harness digital health innovations—including mobile health applications, telemedicine platforms, AI-driven diagnostics, and interoperable electronic medical records—to strengthen prevention, monitoring, and management of NCDs. Key themes included digital infrastructure, multi-sector partnerships, sustainable financing, data governance, human-centered design, and policy integration.

Session Flow and Speakers

Guest Speaker

- Prof. Muhammad Ali Pate – Minister of State for Health and Social Welfare of Federal Republic of Nigeria

High-Level Interview Session

- Dr. Ahmed Ogwell (FAPH) – CEO, VillageReach Africa

Panel Discussion Speakers:

- Dr. Adeniyi Oyeyemi – Manager, Disease Prevention & Monitoring, eHealth
- Dr. Olufunke Fasawe – Vice President, Integration; Country Director, Nigeria, Clinton Health Access Initiative (CHAI)
- Dr. Anshul Govila – Chief Operating Officer (COO), African Medical Centre of Excellence (AMCE)
- Dr. Olajide Adebola (FAPH) – Chief Technology Officer / Partner, Home Plus Medicare Services Limited
- Dr. Olayinka Badmus – Technical Director, Afrihealth for Social Development & Impact (ASDI); Global Health Strategist & Public Health Specialist

Moderator:

- Dr. Mories Atoki – CEO, ABCHealth

The session concluded with clear and actionable insights aimed at transforming the landscape of digital health for NCD prevention, monitoring, and care across Africa. Participants outlined practical recommendations to guide the scale-up of digital health solutions, ensuring they move beyond isolated pilots to achieve broad, system-wide impact. The discussions emphasized the creation of collaborative pathways that integrate digital platforms and strategic investments directly into national health strategies, fostering alignment between innovation and policy. Roadmaps were developed to support sustainable financing models, promote equitable access, and encourage locally-led digital health initiatives that respond to community-specific needs.

Event Opening

At the 10th Anniversary, 6th Membership Induction and Conference of the Academy of Public Health 2025, Prof. Muhammad Ali Pate, Coordinating Minister of Health and Social Welfare, provided insights from the public-sector perspective on how Nigeria's health system is leveraging digital transformation to address the growing burden of non-communicable diseases. He emphasized that digital health is a strategic component of broader health systems strengthening, requiring alignment across federal, state, and local levels. Under his leadership, the Federal Ministry of Health has launched initiatives such as the Nigeria Digital in Health Initiative (NDHI), focusing on interoperability, workforce digital capacity, data-driven decision-making, and integration of digital tools into primary healthcare.

- The Federal Ministry of Health is advancing a whole-of-government approach that aligns federal, state, and local health systems around unified priorities, fostering coordinated scale-up of digital and service delivery platforms for NCDs.
- Health sector reform under Prof. Pate prioritizes evidence-driven, data-integrated decision-making, strengthening national health information systems to support real-time analysis and response for NCD prevention and care.
- The Federal Government has inaugurated the Nigeria Digital in Health Initiative (NDHI) to transform national health architecture and expand digital health access, with commitments to equip millions of health workers and digitize hundreds of facilities.
- Prof. Pate's leadership emphasizes integration of emergency, surveillance, and routine service delivery systems into unified digital platforms to improve responsiveness and continuity of care for chronic conditions including NCDs.
- The Ministry's reforms emphasize strengthening primary healthcare (PHC) functionality and connectivity, which improves frontline detection, referral, and long-term management of NCDs through digital tools linked to national systems.
- Under this administration, sector-wide performance monitoring has strengthened accountability and resource allocation, enabling more systematic adoption of digital solutions tied to measurable health outcomes, including for NCD services.
- The Ministry is pursuing multisectoral partnerships, including with technology providers, development partners, and subnational governments, to bridge infrastructure constraints and expand sustainable digital health deployment at scale.

Prof. Muhammed Ali Pate
Coordinating Minister of Health & Social Welfare
Guest Speaker

> Nigeria is leveraging digital health as a strategic component of health system strengthening, integrating interoperable platforms, workforce capacity, and data-driven decision-making to scale NCD prevention, care, and primary healthcare services nationwide.
>
> -Prof. Muhammad Ali Pate

Dr. Mories Atoki
CEO, ABCHealth
Co-Host

Africa's path to Universal Health Coverage requires the private sector to function as a system co-architect—anchored in regulatory clarity, interoperable digital infrastructure, and performance-driven financing models that align capital deployment with measurable health outcomes.

-Dr. Mories Atoki

Moderator's Insights

Africa's health systems are confronting a dual burden of disease, with non-communicable diseases (NCDs now accounting for approximately 37% of all deaths on the continent, according to WHO Africa estimates), while communicable diseases and health emergencies continue to exert pressure on already constrained systems. Despite increasing innovation and private-sector interest, progress toward Universal Health Coverage (UHC) remains uneven, largely due to fragmentation across policy, financing, and delivery structures.

- Dr. Mories Atoki emphasized that Africa's pursuit of Universal Health Coverage and health security cannot be achieved without the structured participation of the private sector as a co-architect of health systems, capital deployment, and innovation scale-up, rather than as a peripheral service provider.
- She highlighted that Africa's health ecosystem remains characterized by fragmentation between public institutions, private capital, manufacturers, and digital innovators, resulting in duplicative pilots, under-scaled solutions, and inefficient allocation of resources from a private-sector investment perspective.
- From a market lens, predictability, regulatory clarity, and interoperable digital infrastructure are foundational requirements for mobilizing long-term private capital into health manufacturing, supply chains, and digital health platforms.
- Data intelligence and digital interoperability must be positioned as economic enablers that improve market transparency, demand forecasting, production efficiency, and supply chain resilience, thereby reducing risk for private investors and operators.
- Private-sector participation is most effective when innovation is embedded within national health priorities and institutional architectures, rather than deployed as standalone technological solutions disconnected from policy and procurement systems.
- Africa's health industrialization agenda requires a shift from donor-dependent models toward blended financing structures that crowd in private capital while aligning returns with measurable system outcomes.
- From an enterprise perspective, she noted that health systems must move toward performance-driven models where digital tools, financing mechanisms, and service delivery incentives are aligned to reward efficiency, quality, and continuity of care.

High-Level Interview Session

As part of the ABCHealth Panel Session, a high-level interview was conducted with Dr. Ahmed Ogwell, CEO, VillageReach Africa, moderated by Dr. Mories Atoki, CEO, ABCHealth. From his extensive experience in health diplomacy, continental health policy, and health systems strengthening, including leadership roles at Africa CDC and the UN Foundation, the discussion explored the policy, regulatory, and systems-level considerations shaping the scale-up of digital health solutions for non-communicable diseases (NCDs) across Africa. The interview focused on translating digital innovation into sustainable, interoperable, and equitable health system impact, particularly for under-reached populations.

L-R: Dr. Ahmed Ogwell (FAPH) – CEO, VillageReach Africa, Dr. Mories Atoki - CEO, ABCHealth & Prof. Muhammad Ali Pate – Minister of State for Health and Social Welfare of Federal Republic of Nigeria

From your experience in continental and global health policy, what are the key policy and regulatory bottlenecks limiting the scale-up of digital health solutions for NCDs across African health systems, and how can cross-sector collaboration help address them?

The scale-up of digital health solutions for NCDs continues to be constrained by fragmented policy environments, inconsistent regulatory frameworks, and limited coordination between health, ICT, and data governance institutions. In many settings, digital health strategies are not sufficiently integrated into national NCD plans, resulting in parallel systems that fail to scale.

Cross-sector collaboration is critical to overcoming these barriers, particularly through co-designed policies that align government priorities, private-sector capabilities, and implementer expertise. Coordinated action can reduce duplication, strengthen regulatory clarity, and create predictable pathways for investment and adoption.

With growing concerns around data security, patient privacy, and trust, what guidance would you offer governments and digital health implementers as they scale digital NCD solutions across Africa?

Trust is foundational to the success of digital health, especially for NCD management where longitudinal data collection is required. Governments must establish clear national data governance frameworks that define data ownership, consent, access rights, and accountability. These frameworks should be complemented by enforceable privacy and security standards that protect patients while enabling responsible data use. Implementers, in turn, must adopt privacy-by-design approaches, invest in secure digital infrastructure, and maintain transparency around data use to sustain public confidence and system legitimacy.

In your role as CEO of VillageReach Africa, how do you envision digital health innovations supporting the organization's 2030 strategy for addressing NCDs in under-reached communities?

Digital health is positioned as a critical enabler of last-mile service delivery, particularly for early detection, continuity of care, and treatment adherence in underserved populations. Digital tools can strengthen supply chains, improve the availability of essential NCD medicines and diagnostics, and enhance connectivity between community health workers and formal health systems. When embedded into service delivery models, these innovations can help bridge access gaps while reinforcing system resilience and equity.

Interoperability remains a persistent challenge in digital health. How can governments, health systems, and partners better coordinate to build interoperable platforms that support NCD detection, monitoring, and management?

Interoperability challenges are fundamentally governance issues rather than technical limitations. Effective coordination requires government leadership to mandate open standards, establish national health information exchanges, and align donor and partner investments around shared digital infrastructure. Without this coordination, digital solutions remain siloed and underutilized. Prioritizing interoperability ensures that NCD data flows seamlessly across levels of care, supporting continuity, quality, and informed decision-making.

How can digital health innovation for NCDs be balanced with sustainability in resource-constrained settings, while ensuring that marginalized populations are not left behind?

Sustainability depends on designing digital health solutions that are affordable, scalable, and embedded within existing health system workflows rather than reliant on short-term project funding. Innovation must be matched with long-term financing strategies, capacity building, and system integration. Equity considerations require deliberate attention to connectivity gaps, digital literacy, affordability, and gender disparities to ensure that digital interventions reduce, rather than reinforce—existing inequalities.

Looking ahead, what types of partnerships and financing models are most effective for scaling digital health solutions for NCDs in Africa, and how can stakeholders align around shared impact?

Blended financing models that combine public funding, private capital, and catalytic donor support are essential to scaling digital health for NCDs. These models are most effective when linked to measurable system and health outcomes and supported by long-term policy commitment. Partnerships involving multilateral organizations, private-sector actors, and communities must be structured around shared accountability, coordinated investment, and clear pathways from pilot initiatives to national and regional scale.

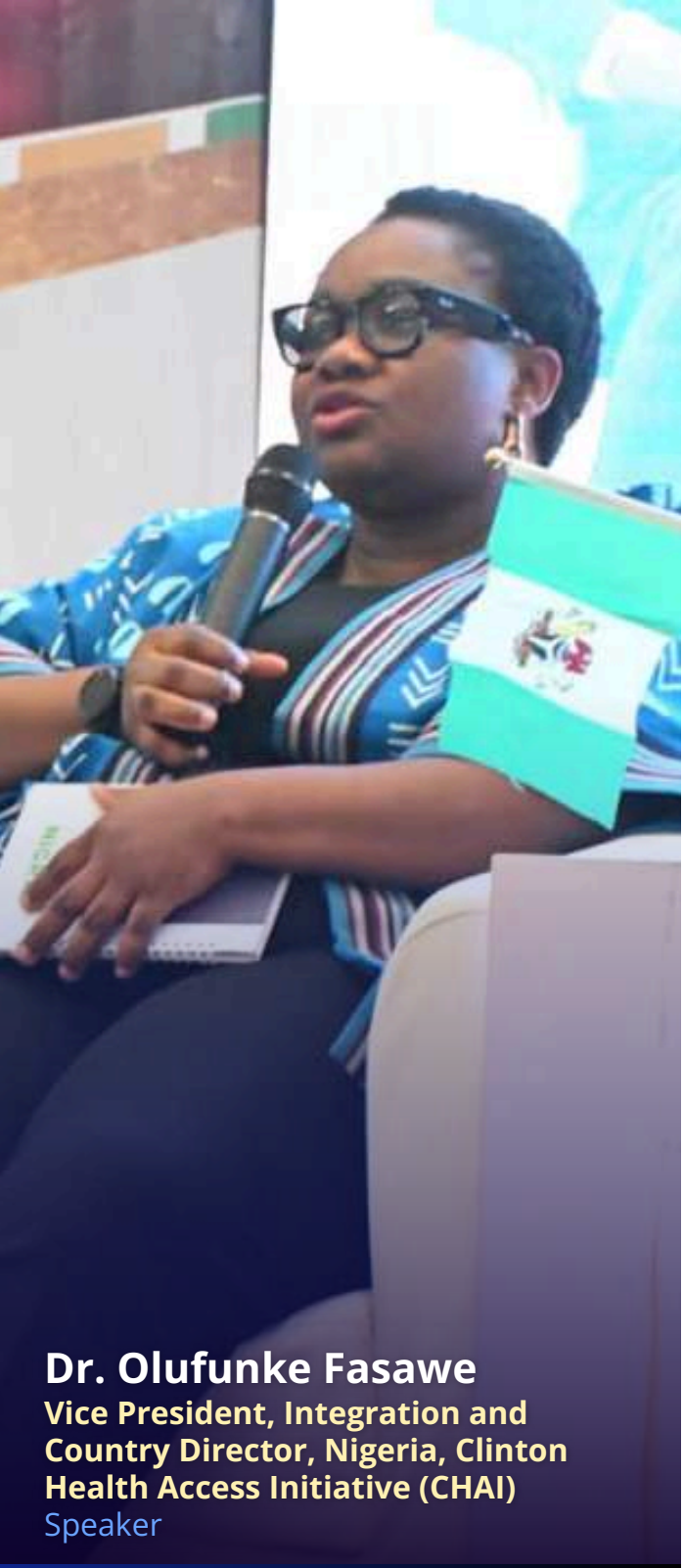
Panelist's Insights

Dr. Olajide Adebola, CTO/Partner at Home Plus Medicare Services Ltd, delivered a systems-oriented perspective on the urgency of scaling digital health solutions for non-communicable diseases (NCDs) in Africa. His intervention framed digital health not as a peripheral innovation, but as a strategic lever for responding to Africa's epidemiological transition, strengthening population health management, and building resilient, future-ready health systems.

- Africa is undergoing a rapid epidemiological transition, with non-communicable diseases now accounting for approximately 37% of deaths, up from about 24% in 2000, placing sustained pressure on health systems historically designed to address infectious diseases.
- Despite increasing innovation across the continent, digital health responses for NCDs remain fragmented, largely pilot-driven, and insufficiently integrated into national health strategies, limiting their ability to support long-term disease management at scale.
- Africa's high mobile penetration and accelerated digital adoption following the COVID-19 pandemic present a unique opportunity to leapfrog traditional infrastructure constraints and establish sustainable digital ecosystems for NCD care.
- Strengthened governance and interoperability were identified as foundational enablers, requiring countries to establish national digital health architectures, interoperability standards, and clear governance frameworks that embed digital solutions within national NCD strategies rather than treating them as isolated tools.
- Investment in community-level digital literacy was highlighted as necessary to improve patient engagement, adherence, and trust, particularly for chronic NCD management that depends on sustained interaction with health systems.
- Demonstrating return on investment through improved outcomes, operational efficiency, and reduced long-term NCD treatment costs was identified as essential for embedding digital solutions into payment systems and strategic purchasing decisions.
- The role of artificial intelligence and predictive analytics was framed as a transformative opportunity, provided that trustworthy data governance frameworks are in place to address privacy, consent, ethical AI use, and secure data sharing.
- Predictive analytics and AI-driven risk stratification were highlighted as powerful tools for early identification of high-risk populations for conditions such as hypertension, diabetes, and cancers, enabling timely screening and personalized care pathways.

Dr. Olajide Adebola
CTO/Partner, HomePlus Med Services
Speaker

> Digital health must be repositioned as a core system enabler—anchored in interoperability, governance, and data intelligence, to support scalable NCD management, predictive population health, and resilient health systems across Africa.
>
> -Dr. Olajide Adebola



Dr. Olufunke Fasawe
Vice President, Integration and Country Director, Nigeria, Clinton Health Access Initiative (CHAI)
Speaker

Sustainable scale-up of digital health for NCDs in Nigeria depends on strong policy and legislative backing, government-led interoperability frameworks, and disciplined investment in proven solutions rather than fragmented, pilot-driven approaches.

-Dr. Olufunke Fasawe

Panelist's Insights

Dr. Olufunke Fasawe, Vice President, Integration and Country Director, Nigeria, Clinton Health Access Initiative (CHAI), shared practical insights on the policy, financing, and coordination requirements needed to move Nigeria's digital health agenda from pilots to system-wide scale. Her contribution emphasized the importance of institutional frameworks, government leadership, and development-partner alignment in enabling sustainable digital transformation for NCD management.

- A comprehensive Digital Health Policy is essential for Nigeria to define clear governance structures, system and technology standards, change management processes, data use principles, and financing mechanisms necessary to scale digital health solutions for NCDs.
- The absence of formal policy and legislative backing continues to limit coherence, enforcement, and sustainability across digital health initiatives, even where technical infrastructure and platforms exist.
- The Nigerian Digital in Health Initiative (NDHI) was highlighted as an important foundational effort, providing interoperability architecture and a health information exchange platform that allows electronic medical records to communicate and enables government-led data consolidation.
- Development partners were identified as critical enablers of government-led digitization, particularly through a shift from competition toward deeper collaboration and consolidation of efforts.
- In a context of constrained funding, prioritizing the scaling of proven digital solutions over repeated pilot initiatives was emphasized as necessary to reduce fragmentation and maximize impact.
- Historical expenditure on paper-based registers was cited as an example of inefficiency, illustrating how such resources could have offset the costs of deploying electronic medical records and eliminated paper-based systems altogether.
- Facility-level digitization was positioned as a strategic investment that can improve data quality, enhance operational efficiency, and strengthen decision-making for NCD service delivery.
- Sustainable scale-up of digital health for NCDs requires deliberate alignment across policy, financing, infrastructure, and implementation to ensure long-term system performance and equity.

Panelist's Insights

Dr. Adeniyi Olusegun Oyeyemi, Manager, Disease Prevention & Monitoring at eHealth Africa, presented a data-driven and implementation-focused perspective on how digital transformation can address systemic gaps in NCD prevention, detection, and long-term management across African health systems. His contribution drew on eHealth Africa's extensive operational experience in digital surveillance, facility strengthening, and community engagement, highlighting how evidence-based digital systems can move NCD care from fragmented pilots to sustainable national scale.

- Non-communicable diseases in Africa present a growing burden that cannot be effectively addressed through traditional, facility-centric care models alone, requiring digital transformation that is embedded within routine workflows and national health governance structures.

- Persistent system constraints, including fragmented and paper-based reporting, limited real-time decision-support tools, weak community follow-up mechanisms, and poor interoperability—continue to undermine NCD outcomes and health system efficiency.

- Experience from eHealth Africa's Disease Prevention and Monitoring portfolio demonstrates that large-scale digital systems can support chronic disease monitoring, early detection, and system-wide intelligence across multiple African contexts.

- Digital surveillance and monitoring platforms such as digital microplanning, surveillance support systems, health intelligence analytics, and vaccine data digitization strengthen real-time decision-making, campaign optimization, and disease intelligence relevant to NCD management.

- Community engagement platforms, including SMS-based patient engagement, traditional leadership mobilization, and community-level digital tools, were highlighted as essential for sustaining follow-up, adherence, and ownership in chronic NCD care.

- Evidence from the DIANN digital NCD model demonstrated measurable impact, with significant improvements in hypertension and diabetes control rates, expanded digital reporting coverage, and activation of real-time clinical alerts across multiple facilities.

- Interoperable digital tools aligned with national systems and standards, including DHIS2 and HL7/FHIR—were emphasized as foundational for integration, scale, and data exchange.

- Workforce capacity building was identified as a critical success factor, requiring continuous training of health workers and data officers on digital case management and data quality.

Dr. Adeniyi Oyeyemi
Manager, Disease Prevention & Monitoring - eHealth Africa
Speaker

> Embedding interoperable, data-driven digital systems into routine care and national governance structures is essential for transitioning NCD prevention and management in Africa from fragmented, facility-centric models to scalable, intelligence-led health systems.
>
> -Dr. Adeniyi Oyeyemi

Dr. Olayinka Badmus
Technical Director, Afrihealth for Social Development and Impact (ASDI)
Speaker

> The scalability of digital health for NCDs depends less on technology and more on human-centered system design, embedding capacity-building, change management, and data use into frontline workflows to ensure sustained adoption and impact.
>
> -Dr. Olayinka Badmus

Panelist's Insights

Dr. Olayinka Badmus, Technical Director at Afrihealth for Social Development and Impact (ASDI), shared her expertise on health systems strengthening, emphasizing that the adoption and scaling of digital solutions is primarily a human and systems challenge rather than a technological one. She highlighted the importance of equipping frontline health workers with the skills, confidence, and workflow integration necessary to sustainably implement digital tools for NCD prevention, early detection, and long-term management.

- Capacity-building must be collaborative, tiered, and continuous, ensuring health workers with diverse digital experience gain practical, hands-on skills. Training should be integrated into pre-service and in-service programs to maintain long-term competency.
- Facilities need multiple digital champions or peer mentors to sustain adoption despite staff turnover, supported by harmonized curricula from ministries, professional bodies, and technology partners.
- Digital tools must function in low-bandwidth and offline settings, leveraging IVR, USSD, WhatsApp Lite, voice reminders, and lightweight mobile applications tailored to real device limitations.
- Training programs should account for Nigeria's cultural and linguistic diversity, offering local-language interfaces, simple navigation, and immediate technical support for frontline health workers.
- Health workers must be empowered to provide structured feedback on tool usability and relevance, enabling iterative improvements and solutions that reflect frontline realities.
- Change management is critical: capacity-building must build digital confidence, address fears, secure leadership endorsement, and integrate tools into routine NCD workflows.
- Co-design with frontline teams accelerates adoption by demonstrating how digital tools simplify screening, counselling, referrals, follow-up, and long-term management.
- A culture of data use must be cultivated, enabling health workers to interpret dashboards, recognize risk trends, link insights to patient care, and act on data in real time.
- Continuous mentorship, refresher training, and shared learning platforms strengthen knowledge retention, practical application, and problem-solving among frontline workers.

Panelist's Insights

Dr. Anshul Govila, Chief Operating Officer of the African Medical Center of Excellence (AMCE), shared insights from the perspective of a high-complexity tertiary healthcare institution. He emphasized that digital health is a critical enabler for continuity of care, clinical quality, and operational efficiency in NCD management, particularly when systems are designed to integrate seamlessly across the care continuum. Drawing on AMCE's experience, he highlighted the importance of interoperability, data-driven clinical pathways, and partnerships between public systems, private providers, and technology innovators to achieve scale and sustainability.

- Digital health solutions must be embedded into end-to-end clinical pathways, ensuring continuity from diagnosis to treatment, monitoring, and long-term NCD management across levels of care.
- Interoperability between tertiary centers, referral hospitals, and primary healthcare facilities is essential to prevent data silos and ensure seamless patient transitions within the health system.
- High-quality digital infrastructure enables advanced clinical decision support, precision diagnostics, and standardized care protocols for complex NCD cases.
- Digital platforms should support multidisciplinary care models, allowing clinicians, nurses, pharmacists, and allied health professionals to collaborate around shared patient records.
- Data governance, cybersecurity, and patient confidentiality must be foundational to digital health systems, particularly in tertiary and specialized care environments.
- Advanced analytics and real-time dashboards can improve clinical oversight, resource utilization, and outcome tracking for chronic disease management.
- Collaboration with public sector institutions is critical to ensure that innovations piloted in centers of excellence can be adapted and scaled within national health systems.
- Workforce digital readiness is essential; clinicians and administrators must be trained to interpret data outputs and integrate insights into clinical decision-making.
- Digital health investments should be tied to measurable clinical outcomes, cost efficiency, and patient experience improvements, particularly for long-term NCD care.
- Centers of excellence can serve as innovation hubs, generating evidence, best practices, and scalable digital models for broader health system adoption.

Dr. Anshul Govila
COO, African Medical Center of Excellence (AMCE)
Speaker

Digital health in tertiary NCD care is most impactful when it functions as an operating layer of the health system—connecting clinical teams, data, and referral networks to drive standardized quality, efficient resource use, and measurable patient outcomes at scale.

-Dr. Anshul Govilla

Photo Album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Future Outlook

The future of digital health for non-communicable diseases (NCDs) in Africa will be defined by a transition from fragmented pilots to integrated, nationally governed digital platforms. As NCDs continue to rise, digital health systems must become foundational to health system design, supporting longitudinal patient records, continuity of care, and real-time population health intelligence across primary, secondary, and tertiary levels.

Interoperable digital infrastructure, aligned with national health information systems and global standards, will be critical to enable seamless data exchange and coordinated NCD management. Advanced analytics and artificial intelligence will increasingly support early risk identification, targeted screening, and data-driven clinical decision-making, provided robust data governance, privacy, and cybersecurity frameworks are in place.

Sustainable scale-up will depend on moving beyond donor-funded pilots toward blended financing and performance-based investment models that embed digital health into national budgets, reimbursement systems, and strategic purchasing arrangements. Equally important, digital transformation will remain a human and institutional challenge —requiring continuous workforce capacity-building, change management, and human-centered design that fits local contexts.

Looking ahead, digitally enabled primary healthcare systems, strengthened through multi-sector collaboration and supported by centers of excellence, will anchor scalable NCD prevention, monitoring, and long-term care. In this model, digital health evolves from an innovation add-on to essential infrastructure, advancing Universal Health Coverage, health security, and resilient health systems across Africa.

Contributors

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Dr. Anshul Govila – Chief Operating Officer (COO), African Medical Centre of Excellence (AMCE)
Dr. Olajide Adebola (FAPH) – Chief Technology Officer / Partner, Home Plus Medicare Services Limited
Dr. Olayinka Badmus – Technical Director, Afrihealth for Social Development & Impact (ASDI); Global Health Strategist & Public Health Specialist
Dr. Francis Ohanyido - Director-General, West African Institute of Public Health
Dr. Mories Atoki – CEO, ABCHealth

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We gratefully acknowledge the speakers, panelists, and contributors who enriched the ABCHealth Panel Session on Collaborative Strategies for Scaling up Digital Health Solutions for NCDs. Their diverse perspectives—from policy, financing, service delivery, technology, and implementation—provided critical insights into how Africa can transition from fragmented digital health pilots to interoperable, system-wide solutions for non-communicable disease prevention, monitoring, and long-term care. The depth and rigor of the discussions underscored the importance of alignment across governance, data systems, financing models, and human capacity to achieve meaningful scale and impact.

We further recognize ABCHealth's partners, member organizations, and technical collaborators whose sustained engagement reinforces the Coalition's role as a convener and catalyst for cross-sector collaboration. Their commitment to evidence-driven dialogue, practical innovation, and investment-ready solutions continues to demonstrate that addressing Africa's growing NCD burden requires collective ownership, shared accountability, and coordinated action across public and private stakeholders.

Finally, ABCHealth extends its sincere appreciation to the West African Institute of Public Health (WAIPH) for its partnership and leadership in convening this important dialogue as part of the 10th Anniversary, 6th Membership Induction, and 2025 Conference of the Academy of Public Health. WAIPH's commitment to strengthening public health practice, fostering regional collaboration, and advancing evidence-based policy created an enabling platform for meaningful exchange, partnership building, and action-oriented outcomes. Their collaboration was instrumental in shaping a session that contributes to building integrated, future-ready digital health systems for NCD management across the region.

References & Sources

World Health Organization. (2023). Noncommunicable diseases (NCDs) — fact sheet / Global health estimates (WHO). https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases

World Health Organization, Regional Office for Africa. (2023). Analytical fact sheet: NCD morbidity and mortality in the WHO African Region (2019). https://files.aho.afro.who.int/afahobckpcontainer/production/files/NCD_Risk_Factors_Regional_Factsheet.pdf

World Health Organization. (2024). Noncommunicable diseases: Mortality — Global Health Observatory data. https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/ncd-mortality

GSMA. (2024). The Mobile Economy: Sub-Saharan Africa 2024 / Mobile Economy Africa 2025 (summary). GSMA Intelligence. https://www.gsma.com/mobileeconomy/africa/

GSMA Intelligence. (2024). Mobile Economy Sub-Saharan Africa 2024 (report). https://event-assets.gsma.com/pdf/GSMA_ME_SSA_2024_Web.pdf

Global Digital Health Index / WHO Global Digital Health Monitor. (2023). Global Digital Health Monitor — country and regional dashboard. World Health Organization. https://data.who.int/dashboards/gdhm/countries

Africa Centres for Disease Control and Prevention (Africa CDC). (2022). Non-Communicable Diseases, Injuries Prevention and Control and Mental Health Promotion Strategy 2022–2026. https://africacdc.org/download/africa-cdc-non-communicable-diseases-injuries-prevention-and-control-and-mental-health-promotion-strategy-2022-26/

https://www.pwc.com/us/en/industries/health-industries/library/digital-analytics/future-of-interoperability-in-healthcare.html

https://cdn.who.int/media/docs/default-source/ncds/synthesis-paper-idsf.pdf

https://www.aha.io/roadmapping/guide/product-strategy/what-are-some-examples-of-a-business-model

https://www.talk360.com/post/the-mobile-economy-in-sub-saharan-africa

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