



AI4 AFRICAN HEALTH

Transforming African Healthcare Through Artificial Intelligence
Investment Support Package



EXECUTIVE SUMMARY



The International Medical Exchange (IME) AI4African Health and Care Initiative represents a transformative opportunity to revolutionize health and care delivery across the African continent through the strategic integration of artificial intelligence technologies. This comprehensive initiative combines a landmark stakeholder conference in Johannesburg, South Africa (Spring 2026) with an innovative Proof of Concept Pilot Program that validates the integration of foundational AI Large Language Models (LLMs) with Small Language Models (SLMs) applied to regional African Languages (SLAMs) for health systems and public health applications.

Our Vision

To harness the power of AI to address Africa's most pressing health and care challenges while ensuring technological solutions are culturally relevant, linguistically appropriate, and ethically developed with African ownership and leadership.

Investment Request

\$2.5 million over 24 months to fund the stakeholder conference, pilot program development, and initial implementation across 5 African countries.

Strategic Alignment

The initiative directly supports the UN Sustainable Development Goals (particularly SDGs 3, 9, 10, and 17), aligns with the African Union's AI Position Paper, and complements South Africa's G20 presidency priorities on digital transformation and health equity.

Expected Impact

By 2027, we project that improved health outcomes will be achieved for 10 million Africans through AI-enhanced disease surveillance, optimized resource allocation, strengthened health worker capacity, and greater support to health workers and citizens.

ORGANIZATION OVERVIEW: INTERNATIONAL MEDICAL EXCHANGE (IME)

International Medical Exchange (IME) is a distinguished nonprofit organization dedicated to mobilizing resources and implementing programs that support underserved communities in both the United States and African nations. For over two decades, IME has focused on enhancing the quality of healthcare services, expanding access to healthcare, and alleviating the financial burdens associated with care.

Mission: To bring together healthcare professionals, policymakers, educators, entrepreneurs, industry leaders, and ICT experts from Africa, Canada, the U.S., and the African Diaspora to design and implement innovative and effective programs to improve and extend health and care delivery in Africa and underserved communities in the U.S.

Core Competencies:

- Strategic partnership development across multiple continents
- Healthcare systems strengthening and capacity building
- Digital health innovation and implementation
- Cross-cultural collaboration and knowledge transfer
- Policy advocacy and regulatory framework development

Current Strategic Partners include leading institutions such as Morgan State University, the W. Montague Cobb/National Medical Association Health Institute, Lusaka Apex Medical University (Zambia), the South African Health Informatics Association, and N2T Technologies are among the active collaborations spanning academia, government, and industry across Africa and North America planning the IME AI4African Health initiative.

IME STRATEGIC PARTNERS



Confirmed Partners

- U.S. National Medical Association (NMA)/ W. Montague Cobb/ Health Institute
- Morgan State University's School of Community Health & Policy of the State of Maryland
- N2T Technologies – Midrand, Gauteng, South Africa
- South African Health Informatics Association – Johannesburg, Gauteng
- HELINA (Health Informatics in Africa), regional arm of the International Medical Informatics Association (IMIA)
- Lusaka Apex Medical University – Zambia

Awaiting Finalization of MOU

- University of the Witwatersrand (South Africa)

Organizations with Representatives on the Planning Committees

- Charles R. Drew University of Medicine and Science – Los Angeles, CA
- The University of Lusaka, Zambia
- International Society for Telemedicine and eHealth (ISfTeH) – Basel, Switzerland
- The Canada International Scientific Exchange Program (CISEPO) – Toronto, Canada

Pending Confirmation

- WHO African Regional Office (WHO/AFRO) – Brazzaville, Republic of Congo
- Council for Scientific and Industrial Research (CSIR) – South Africa

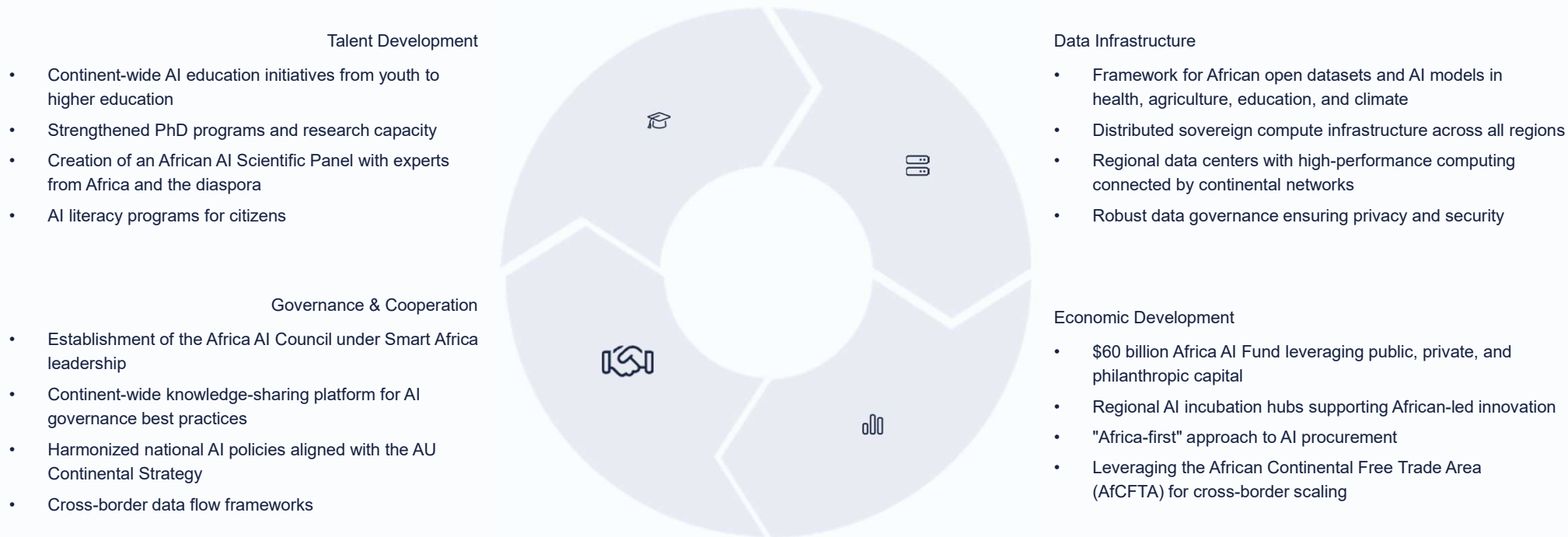
Scheduled Initial Meetings

- Ashesi University – Berekuso, Ghana
- The University of Ghana College of Health Sciences – Korle Bu, Accra
- Health Information Management System Society (HIMSS) Foundation
- NHIT (National Health Information Technology Collaborative for Underserved)

As of June 16, 2025, IME has established a robust network of strategic partners across Africa and North America, with additional outreach planned to academic institutions and international organizations to further strengthen the initiative's reach and impact.

AFRICA DECLARATION ON ARTIFICIAL INTELLIGENCE

This historic declaration was signed on April 4, 2025, in Kigali, Rwanda, by African Union leaders and representatives from 54 African countries, establishing a unified continental approach to the development of artificial intelligence (AI).



The declaration positions Africa as a global leader in the adoption of ethical, inclusive, and trustworthy AI, ensuring that AI benefits all African communities and reflects the continent's strategic priorities and cultural diversity.

The declaration represents Africa's commitment to developing AI capabilities that serve African priorities while establishing the continent as a competitive player in the global AI economy. With massive investment commitments and comprehensive institutional frameworks, it aims to ensure AI development benefits all Africans while maintaining sovereignty over the continent's digital future.

THE TRANSFORMATIVE POTENTIAL OF AI IN AFRICAN HEALTH AND CARE

African countries face unprecedented health and care challenges, creating both urgent needs and unique opportunities for AI-driven solutions. With many African countries currently not on track to meet the United Nations Sustainable Development Goal (SDG) #3 targets for universal health coverage by 2030, the continent requires innovative approaches that can rapidly scale impact while addressing local contexts and constraints.

Current Health and Care Landscape Critical Challenges:

- A health worker shortage of 4.3 million professionals across the continent
- Limited healthcare infrastructure in rural and remote areas
- Inadequate disease surveillance and outbreak prediction systems
- Inefficient resource allocation and supply chain management
- Language barriers preventing access to health information and services

Emerging Opportunities:

- Rapid mobile phone adoption (over 80% penetration in many countries)
- Growing digital infrastructure and connectivity
- Increasing government commitment to digital transformation
- Strong academic and research institutions developing local AI expertise
- Vibrant startup ecosystem focused on health technology solutions

AI Applications with Transformative Potential



Disease Surveillance and Outbreak Prediction

AI-powered systems can analyze diverse data streams, such as clinical records, environmental data, social media patterns, and mobility data, to detect disease outbreaks earlier than traditional surveillance methods. Early detection translates directly to reduced outbreak scale, lower mortality, and decreased economic impact.



Resource Optimization and Supply Chain Management

Predictive models can improve forecasting accuracy for essential medicines and supplies by 15-25%, reducing stockouts and waste while optimizing distribution networks. This is particularly critical for managing vaccines, blood products, and emergency medical supplies.



Health Worker Training and Capacity Building

AI-enhanced learning platforms can accelerate training for community health workers, nurses, and specialists through personalized curricula, virtual reality simulations, and adaptive assessment tools. Nigeria's successful World Bank project demonstrated that AI can compress two years of learning into six weeks.



Clinical Decision Support in Multilingual Contexts

AI systems supporting local languages can provide real-time diagnostic assistance, treatment recommendations, and patient education materials, effectively extending the reach of limited specialist expertise to remote and underserved areas.

THE IME DIFFERENTIATOR: AFRICAN SMALL LANGUAGE MODELS (SLMs)

Revolutionary Approach: LLM – SLM Integration

IME's innovative approach centers on the strategic integration of foundational Large Language Models (LLMs) with specialized Small Language Models (SLMs) optimized for African languages and health and care contexts. This symbiotic relationship combines the broad cognitive capacity of LLMs with the precision and cultural relevance of SLMs.

Specialization vs. Generalization

While LLMs like GPT-4 and Claude operate as polymaths processing 1+ trillion parameters for diverse tasks, SLMs focus on specific domains—medical terminology, local disease patterns, cultural health practices—achieving superior accuracy through curated training on vertical-specific data. In IME use cases, SLMs leverage regional African language resources and datasets to ensure cultural and linguistic appropriateness.

Efficiency and Accessibility

SLMs deliver 10-100x faster processing speeds than LLMs while consuming 90% less computational power. This efficiency enables real-time deployment in resource-constrained environments—from smartphone applications in rural clinics to IoT devices monitoring community health indicators.

Strategic Synergy for Health Applications

The LLM-SLM partnership creates a powerful continuum where LLMs expand diagnostic and treatment possibilities. At the same time, SLMs operationalize these insights into actionable, culturally appropriate healthcare guidance. Enterprise studies have shown a substantial reduction in AI hallucinations when using domain-focused SLMs compared to raw LLMs—a critical factor for healthcare applications.

Linguistic Diversity and Health Equity

Africa's linguistic diversity—with over 2,100 languages spoken across the continent—presents both a challenge and an opportunity. Current AI health solutions primarily operate in English, French, or Portuguese, creating barriers for Africans who access healthcare information in local languages.

IME's SLM approach addresses this equity gap by developing AI systems that can:

- Provide health information in Swahili, Hausa, Yoruba, Amharic, and other major African languages
- Understand cultural context and health beliefs that influence treatment adherence
- Deliver culturally appropriate health education and prevention messaging
- Support multilingual clinical documentation and patient communication

IME INTERCONTINENTAL AI AND PROGRAM ADVISORY COUNCIL

The IME council has over 85 Years of combined experience in health and advanced technology and is focused on "Harnessing AI to Improve Public Health in Africa" with the mission to "Drive Change, Improve Health and Care for All."



Global Expertise

The IME advisory council brings together a diverse, transcontinental group of medical professionals, public health specialists, and academics with extensive experience in health, particularly focused on improving public health outcomes in Africa through the application of health information and artificial intelligence technologies.

The council members represent a combination of clinical expertise, public health knowledge, academic leadership, and practical implementation experience across different African countries, the United States and Canada. This diverse expertise ensures that IME's AI initiatives are grounded in real-world healthcare needs while leveraging the latest technological advancements.



Strategic Partnerships

Council members leverage their extensive networks to facilitate partnerships between technology companies, healthcare providers, academic institutions, and government agencies, creating a robust ecosystem for AI implementation in African healthcare.



Innovation Leadership

The council provides strategic guidance on emerging technologies and innovative approaches to healthcare delivery, ensuring that IME's initiatives remain at the cutting edge of AI applications in health and care.

The IME Advisory Council's extensive experience and diverse expertise position the AI4African Health Initiative for successful implementation and sustainable impact across the continent.

IME AI4AFRICAN HEALTH INITIATIVE: COMPREHENSIVE PROGRAM DESIGN

Component 1: Stakeholder Conference - Spring 2026, Johannesburg

"Harnessing the Power of Artificial Intelligence to Improve Health in Africa"



The landmark 2.5-day conference will convene 300+ participants representing the full spectrum of African AI and health stakeholders, including:

- Government public health officials from 20+ African countries
- African Union Commission and Africa CDC leadership
- Academic researchers from leading African and international universities
- Industry experts from major technology companies and health AI startups
- Policy makers and regulatory experts focused on AI governance
- Healthcare providers and system administrators
- Development finance institutions and funding organizations

Conference Structure and Themes:



EXPECTED CONFERENCE OUTCOMES

	3-5 Year AI in Health and Care Roadmap A comprehensive, phased implementation framework beginning with foundational Year 1 initiatives (data governance, small-scale pilots, workforce capacity building), progressing to Year 3 scaling activities (expanding to 8-10 countries, health information infrastructure integration), and culminating in Year 5 mature AI ecosystems across 15+ African countries with measurable improvements in health outcomes.
	Partnerships Workforce Development Network Formalized collaborations between African institutions, international technology companies, and funding organizations to support ongoing AI health initiatives.
	Policy Framework Ethical guidelines and governance structures aligned with the African Union's AI strategy and individual country regulatory requirements.
	Pilot Project Pipeline Identification and preliminary planning for specific AI health implementations across multiple African countries.

Component 2: Potential Proof of Concept Pilot Programs

Objective: Validate the integration of foundational AI LLMs with African Language SLMs for health system applications through focused pilot implementations in 5 African countries.

These pilot programs represent high-potential investment opportunities with scalable applications across multiple African markets.

POTENTIAL PILOT PROJECT PORTFOLIO

1 AI-Powered Multilingual Health Information System

Focus: Develop chatbot systems providing health information in local languages (Twi, Ga, Hausa, Yoruba, Igbo)

Potential Collaborative Partners:

- AI BizHive (South Africa)
- Ghana NLP (Ghana)
- Lelapa.ai (South Africa)
- minoHealth AI Labs (Ghana)
- Intron Health (Nigeria)

Timeline: 12 months development, 6 months field testing

Success Metrics: User engagement rates, information accuracy, health behavior changes

2 Predictive Disease Surveillance Network

Focus: Integrate multiple data sources for early outbreak detection with alerts in Swahili and English

Potential Academic Partners:

- AI4PEP Hubs and nodes in Africa
- University of Buea, Buea (Cameroon)
- Nkwame Nkrumah University of Science and Technology, Kumasi (Ghana)
- Jimma University, Jimma (Ethiopia)
- University Mohamed V, Rabat (Morocco)
- Cheik Anta Diop University, Dakar (Senegal)
- University of Witwatersrand, Johannesburg, (South Africa)
- Pasteur Institute, Tunis (Tunisia)

Potential Tech Partners:

- Afya Intelligence (Tanzania)
- iZola (Kenya)

Timeline: 18 months of full development and deployment

Success Metrics: Early detection accuracy, response time improvement, outbreak scale reduction

POTENTIAL PILOT PROJECT PORTFOLIO (CONTINUED)

1 AI-Enhanced Community Health Worker Platform

Focus: Decision support tools for CHWs with multilingual patient education materials

Potential Academic Partners:

- Infectious Diseases Institute, Kampala, Uganda
- Other selected nodes of the Africa-Canada Artificial Intelligence and Data Innovation Consortium (ACADIC), created in January 2020

Potential Tech Partners:

- Uganda, Infectious Diseases Institute, Kampala
- KarisimbiTech (Rwanda)
- Vantage Health Technologies (South Africa)

Timeline: 15 months of development and training

Success Metrics: Diagnostic accuracy improvement, CHW confidence levels, patient satisfaction

2 Health Resource Optimization System

Focus: Predictive analytics for medical supply distribution and healthcare worker allocation

Location: Multi-country implementation coordinated through the Africa CDC

Potential Collaborative Partners:

- Cassava Technologies
- LifeBank (Nigeria)

Timeline: 24 months for full system development and regional deployment

Success Metrics: Supply chain efficiency gains, cost reduction, stockout prevention

Each pilot project is designed to address critical healthcare challenges while demonstrating the commercial viability and scalability of AI solutions in African contexts.

STRATEGIC ALIGNMENT AND GLOBAL RELEVANCE

United Nations Sustainable Development Goals (SDGs)

The IME AI4African Health Initiative directly advances multiple SDGs:

- **SDG 3** (Good Health and Well-being): Enhancing healthcare delivery, disease prevention, and health system strengthening.
- **SDG 9** (Industry, Innovation, and Infrastructure): Building technological infrastructure and fostering innovation.
- **SDG 10** (Reduced Inequalities): Addressing healthcare disparities and improving access for underserved populations.
- **SDG 17** (Partnerships for the Goals): Creating multi-stakeholder collaborations for sustainable development.

African Union (AU) AI Position Paper

Our initiative will support the AU's strategic priorities for:

- Ethical AI development with African values and ownership
- Capacity building and knowledge transfer within the continent
- Digital transformation of essential services, including healthcare
- Regional integration and collaboration on technology initiatives

G20 South Africa Presidency (November 2025)

The conference timing follows South Africa's hosting of the G20 Summit (November 2025), and its focus on:



Digital Transformation

Leveraging technology for inclusive growth across economic sectors, with special emphasis on healthcare and education.



Health System Resilience

Building robust healthcare infrastructure and pandemic preparedness capabilities through innovative technologies.



Technology Transfer

Facilitating knowledge sharing and capacity building in emerging economies to bridge the digital divide.

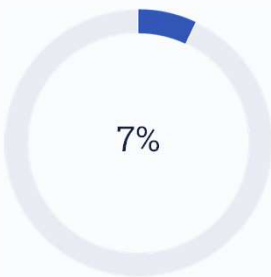


Public-Private Partnerships

Creating collaborative frameworks between government, industry, and civil society for sustainable development initiatives.

FUNDING REQUIREMENTS AND INVESTMENT OPPORTUNITIES

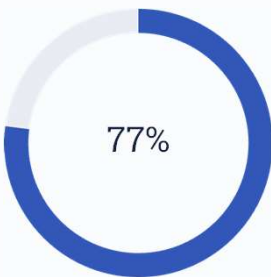
Total Program Investment: \$3 Million (24 Months)



Conference Component

\$200,000

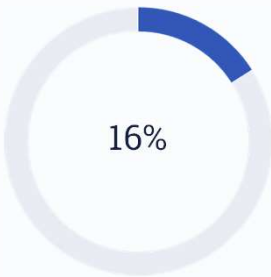
- Venue, logistics, and hospitality: \$150,000
- Technology infrastructure and streaming: \$35,000
- Marketing and communications: \$10,000
- Documentation and follow-up activities: \$5,000



Pilot Program Development

\$2,3 Million

- AI model development and training (3 Pilot Programmes): \$1,200,000
- Partnership agreements and local implementation: \$300,000
- Data collection and validation systems: \$300,000
- User interface and experience design: \$300,000
- Testing, iteration, and quality assurance: \$200,000



Program Management

\$500,000

- Project management and coordination: \$250,000
- Monitoring, evaluation, and reporting: \$100,000
- Regulatory compliance and legal frameworks: \$100,000
- Contingency and administrative costs: \$50,000



This strategic investment will catalyze the development of AI healthcare solutions with potential for significant returns through improved health outcomes, reduced healthcare costs, and creation of scalable technology platforms.

SPONSORSHIP AND PARTNERSHIP OPPORTUNITIES



Platinum Partnership (\$500,000)

- Presenting sponsor recognition at the conference
- Keynote speaking opportunity
- Logo placement on all materials and communications
- Dedicated pilot project co-branding
- Year-long partnership development support

Gold Partnership (\$250,000)

- Conference track sponsorship
- Panel discussion leadership role
- Prominent branding throughout the event
- Pilot project technical advisory role
- Quarterly stakeholder engagement sessions

Silver Partnership (\$100,000)

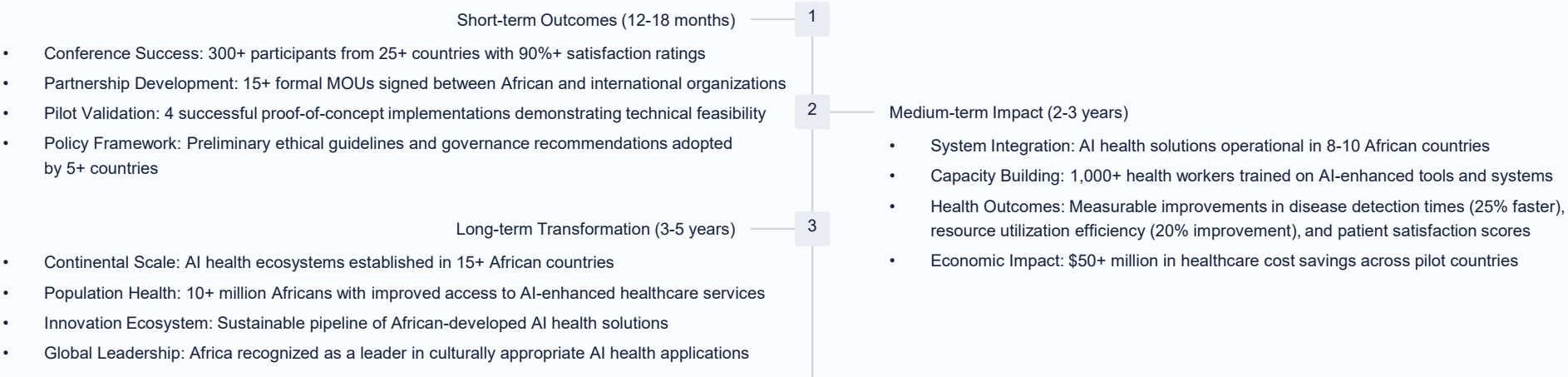
- Session sponsorship and speaking role
- Marketing material inclusion
- Networking event participation
- Access to conference outcomes and roadmap
- Semi-annual progress briefings

Supporting Partnership (\$50,000)

- Logo inclusion in conference materials
- Conference attendance for 2 representatives
- Access to the final conference report and recommendations
- Invitation to follow-up stakeholder meetings

Partnership opportunities offer strategic positioning in the rapidly growing African digital health market, with early access to innovative technologies and potential commercial applications.

EXPECTED OUTCOMES AND IMPACT MEASUREMENT



Measurement and Evaluation Framework

Quantitative Metrics:

- Healthcare outcome indicators (disease detection rates, treatment success, mortality reduction)
- System efficiency measures (resource utilization, supply chain performance, workflow optimization)
- Technology adoption rates (user engagement, system uptime, accuracy metrics)
- Economic impact assessment (cost savings, productivity gains, investment leverage)

Qualitative Assessment:

- Stakeholder satisfaction and engagement levels
- Cultural appropriateness and acceptance of AI solutions
- Policy and regulatory framework development
- Knowledge transfer and capacity building effectiveness

CALL TO ACTION: PARTNERSHIP FOR TRANSFORMATION

The IME AI4African Health Initiative represents more than a technology implementation—it embodies a vision of African-led innovation addressing the continent's most pressing healthcare challenges while contributing to global advancement in ethical AI development.

Why Partner with IME:



Proven Track Record

Two decades of successful healthcare program implementation across Africa and the United States



Strategic Network

Established partnerships with leading African institutions, major technology companies, and international development organizations



Cultural Competency

Deep understanding of African healthcare contexts, linguistic diversity, and cultural considerations



Innovation Leadership

Pioneering approach to LLM-SLM integration for culturally appropriate AI health solutions

Your Investment Delivers:

10M+

Lives Impacted

Direct contribution to improved healthcare access and outcomes for millions of Africans

\$50M+

Cost Savings

Projected healthcare cost savings across pilot countries within 3 years

15+

Countries

Market access to rapidly growing digital health ecosystems across the continent

1000+

Health Workers

Trained professionals utilizing AI-enhanced tools and systems

NEXT STEPS

We invite you to join us as a founding partner in this transformative initiative. Your support will:

Enable the Stakeholder Conference

Fund Africa's most comprehensive AI health stakeholder conference, positioning your organization at the forefront of this emerging field.

Establish Pilot Programs

Launch sustainable pilot programs with measurable health outcomes, demonstrating the effectiveness and scalability of AI health solutions.

Support Breakthrough Research

Invest in cutting-edge research and development in African language AI applications, creating proprietary technologies with significant market potential.

Create Lasting Partnerships

Develop strategic relationships that advance both African development and global health equity, opening new markets and opportunities.

The future of African healthcare lies in the strategic integration of advanced AI technologies, with a focus on deep cultural understanding and local ownership. Partner with IME to bring this vision to life.

Contact Information:

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APPENDIX A: KEY COMPANIES IN AFRICAN ARTIFICIAL INTELLIGENCE

Small to medium-sized enterprises (SMEs) are at the heart of AI innovation in Africa. These companies are developing cutting-edge solutions that address local challenges, have the potential to scale throughout the continent, and will be approached as potential exhibitors at the conference.

Healthcare & Medical AI

minoHealth AI Labs (Ghana)

Founded in 2016 by Darlington Akogo, minoHealth specializes in automating medical diagnosis, prognosis, and forecasts for communicable and non-communicable diseases. The company has gained international recognition through partnerships with institutions like Imperial College London and received a \$149,533 grant from the Gates Foundation in July 2023.

AfyaRekod (Kenya, Nigeria, South Africa, Cameroon, Zambia)

A consumer-driven health data platform built on AI and blockchain technology, founded in 2019 by CEO John Kamara. The platform provides patients and medical professionals with real-time access to health data and medical history through a Universal Patient Portal, with over 150,000 users in Kenya alone.

Intron Health (Nigeria)

Founded in 2020 by Dr. Tobi Olatunji, Intron Health provides speech-to-text transcription tools for healthcare workers. The company's transcription app captures doctors' dictated messages with more than 92% accuracy across over 200 African accents, reducing paperwork time by an average of six times. In 2024, the company raised \$1.6 million in pre-seed funding.

Enterprise & General AI

InstaDeep (Tunisia)

Founded in 2014 by Karim Beguir and Zohra Slim, InstaDeep utilizes advanced machine learning techniques to integrate AI into enterprise applications. In January 2023, InstaDeep was acquired by German biotech company BioNTech for \$684 million, making it Africa's largest AI acquisition.

Lelapa.ai (South Africa)

Founded by Pelonomi Moiloa and Jade Abbott, Lelapa AI focuses on developing resource-efficient AI solutions for African languages. The company introduced InkubaLM, Africa's first multilingual AI large language model for five African languages serving approximately 364 million speakers. In February 2024, Lelapa AI raised \$2.5 million in seed funding.

Cassava Technologies (UK/Zimbabwe)

A UK-registered technology company with operations in Zimbabwe that provides AI and digital technology solutions across various sectors in Africa, with significant infrastructure investments and a growing presence in multiple African markets.

APPENDIX B: KEY POLICY MAKERS & SUBJECT MATTER EXPERTS

Africa's AI landscape is characterized by a diverse range of applications, spanning healthcare, agriculture, education, and workforce development. The continent's unique challenges, including limited infrastructure and diverse languages, have spurred the development of innovative AI solutions tailored to local needs.

Key Influencers in African AI



Government & Policy Leaders

- **Hon. Dr. Sabin Nsanzimana**, Minister of Health, Rwanda
- **Hon. William Kabogo Gitau**, Cabinet Secretary, Ministry of Information, Communications & The Digital Economy, Kenya
- **H.E. Paul Kagame**, President, Republic of Rwanda
- **Hon. Paula Ingabire**, Minister of ICT and Innovation, Rwanda
- **Hon. Bosun Tijani**, Minister of Communications, Innovation and Digital Economy, Nigeria



Academic & Research Experts

- **Dr. Conrad Tucker**, Director, Carnegie Mellon University Africa
- **Dr. Emma Ruttkamp-Bloem**, AI Ethics and Cross-Border AI Regulation expert, South Africa
- **Dr. Rachel Adams**, CEO, Global Centre on AI Governance, South Africa
- **Prof. Maria Keet**, AI & Data Science, South Africa
- **Dr. Moustapha Cisse**, Director, Google AI Accra, Ghana



Industry & Technology Leaders

- **Strive Masiyiwa**, Founder & Executive Chairman, Econet Group & Cassava Technologies
- **Ahmed El Beheiry**, CEO, Cassava AI
- **Aisha Walcott-Bryant**, Head of Google Research Africa
- **Karim Beguir**, CEO, InstaDeep, Tunisia
- **Alex Tsado**, Founder and Director of Alliance4ai



International Organization Leaders

- **Dr. Matshidiso Moeti**, Regional Director Emeritus, WHO Regional Office for Africa
- **Rodwell Mangisi**, Director, Digital Economy Pan African Programs, Mastercard Foundation
- **Sanjay Jain**, Director Digital Public Infrastructure, Gates Foundation
- **Rebecca Finlay**, CEO, Partnership on AI
- **Lacina Kone**, Director General and CEO, Smart Africa

These influential figures are driving the AI revolution in Africa, creating a robust ecosystem for innovation and investment in healthcare and other critical sectors.