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Charting a healthier future: Africa CDC's strategic approach towards strengthening the health workforce of the African continent

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The health workforce plays a vital role in any healthcare system, underscored by the strong correlation between a higher density of skilled professionals and improved health outcomes.\(^1\) Notably, the COVID-19 pandemic, the 2014 Ebola outbreak in West Africa, and other disease emergencies have highlighted the acute shortage of health personnel in Africa. While progress has been made since 2013, but the global healthcare workforce deficit remained at 15 million in 2020, projected to decrease to 10 million by 2030. This shortage is exacerbated by regional disparities, with Africa's healthcare workforce gap expected to surge from 15% in 2020 to a concerning 52% in 2030. Furthermore, the post-COVID-19 international migration of healthcare workers is anticipated to compound this problem.\(^2\)

The health systems in most African countries are often characterized as weak. Dr. Margaret Mungherera, a former President of the World Medical Association, emphasized the need to prioritize the development of leadership capacity in any endeavor to reduce the disease burden in Africa.\(^3\) Leadership and governance are widely recognized as critical components of effective health systems.\(^4\) However, leadership development programs are not commonly observed across the continent despite the pivotal role they play in the healthcare sector.

The Joint External Evaluation (JEE) and the International Health Regulations (IHR 2005) stipulate that each country should have one epidemiologist per 200,000 population.\(^5\) Given Africa's expected population of 1.7 billion by 2030,\(^6\) this implies a need for 8,500 epidemiologists across the Advanced and Intermediate cadres. Currently, however, the actual number falls short, with less than 50% of this requirement being met.

Furthermore, in the ongoing global digital revolution, data has become the lifeblood and currency of public health. Information and communication technologies (ICT) have enabled data to be digitized, marking a significant shift in how information is managed in public health. In this context, the importance of health informatics training cannot be overstated, as it plays a pivotal role in developing a 21st-century digitalized health system. Despite substantial recent progress, there remains a pressing need to expand the training of public health practitioners in the field of public health informatics, encompassing a broader spectrum of skills and knowledge.\(^7\)

To confront the challenges of the 21st century, including epidemics and syndemics, and to achieve the goals outlined in Agenda 2063\(^8\), Africa CDC has called for a new public health order for Africa. The new public health order is characterized by strengthened public health institutions, Expanded local manufacturing, Strengthened public health workforce, action-oriented and respectful partnerships, and Increased domestic resources for health.\(^9\) Towards strengthening public health workers, Africa CDC, along with partners, has developed a framework for workforce development. This framework underscores the importance of advocating for support at the highest levels of government, enhancing technical competencies in fields such as epidemiology, health informatics, and laboratory leadership, and improving continuous professional education.\(^10\) This emphasis on building a strong and exemplary
African public health workforce is a critical enabler of the Africa CDC’s strategic plan for 2023–2027.\textsuperscript{11}

The Africa CDC is bolstering the continent's public health workforce through three key strategies: enhancing leadership capabilities, refining technical competencies, and advocating for workforce development at the highest levels.

**Leadership Development:** To enhance leadership capabilities across the continent, the Africa CDC launched the Kofi Annan Fellowship in Global Health Leadership. This program aims to inspire African public health leaders to emulate the late Secretary-General Kofi Annan's leadership qualities and equip them with advanced skills to transform public health in Africa.\textsuperscript{12} To date, the program has graduated 39 fellows from over 20 African countries and is currently training 20 fellows from 14 African nations. These program alumni have become influential leaders within their respective health sectors, with some authoring books, others replicating the program in their institutions, and one even becoming a minister.

Building on the successes of the Kofi Annan Fellowship in Global Health Leadership Program, Africa CDC has launched the Ministerial Executive Leadership Program on the margins of the 36th Ordinary Session of the African Union Assembly.\textsuperscript{13} This program focuses on enhancing the leadership capabilities of Health Ministers on both continental and global scales to catalyze transformation in the public health landscape of African Union (AU) Member States. Presently, it is benefitting 22 Health Ministers from across the African Union.

Recognizing the vital role played by nurses and midwives, the Africa CDC, in collaboration with the Harvard T.H. Chan School of Public Health, initiated the Africa CDC – Harvard Global Leadership Program. This program equips Ministry-level nurses and midwives with foundational knowledge and field experience in global public health and population health management.\textsuperscript{14} The program has already graduated 15 nurses in leadership roles from 11 African countries and has enrolled the second cohort of students in 2023.

**Technical Competency:** In addition to leadership development, Africa CDC is committed to strengthening the technical competencies of public health disciplines across the continent. One notable initiative is the creation of the African Epidemic Service (AES), hosted and directed by the African Union. The AES comprises of three tracks: Epidemiology, Laboratory Leadership, and Public Health Informatics. The aim is to create a highly trained and interconnected group of experts across the continent to improve emergency preparedness, response, digital public health practices, and laboratory systems. Applications for the African Epidemic Service – Epidemiology track opened on World Field Epidemiology Day in September 2023.\textsuperscript{15}

Moreover, contributing towards closing the field epidemiology gap, Africa CDC has actively supported the training of 49 frontline and 63 advanced field epidemiology residents in southern and central African regions. Additionally, in partnership with the European and Developing Countries Clinical Trials Partnership (EDCTP), Africa CDC is backing the training of a cadre of public health professionals who will enhance epidemiological and biostatistical capacity on the African continent. This initiative supports 151 'EPI-Biostat Fellows pursuing master's level programs in epidemiology and biostatistics.\textsuperscript{16}

Africa CDC recognizes the importance of continuous professional education in enhancing technical competencies. To address this need, Africa CDC has developed an integrated
management platform called the Integrated Management Platform for Africa CDC’s Training (IMPACT). This platform is designed to provide high-quality self-paced training to public health professionals, complementing the short- and medium-term training programs offered across the continent.

**Advocacy:** Advocating for health workforce development at the highest level is a critical aspect of Africa CDC's strategy. In this regard, Africa CDC organized a Health Workforce Consultation Session in December 2021, where several recommendations were tabled to grow a health workforce that is fit for the needs of our Continent. This led to H.E. Cyril Ramaphosa, the President of the Republic of South Africa and the African Union (AU) COVID-19 Champion, calling for the establishment of an African Union Health Workforce Task Team to meet current and future health workforce needs of the continent. The call was unanimously endorsed in February 2022 at the 35th Assembly of the African Union Heads of State and Government. 17 Africa CDC, in collaboration with the AU COVID-19 commission, is currently developing the evidence for a social compact package for Africa, a centralized framework to guide member states and partners on priorities and investments needed to address the critical gaps in health workforce development and to align efforts.

In conclusion, the pressing need to strengthen Africa's healthcare workforce is evident, and the strategies outlined by Africa CDC represent a comprehensive and forward-looking approach. By focusing on leadership development, technical competency enhancement, and high-level advocacy, Africa CDC is charting a course toward a more resilient and effective healthcare system across the continent. The commitment to these initiatives is not only about addressing immediate challenges but also about securing a healthier and more prosperous future for Africa. It is an invitation to governments, organizations, and stakeholders to join hands with Africa CDC, to collaborate, and to invest in building a brighter and healthier Africa. Through sustained efforts and open partnerships, we can bring about transformative change and shape a promising future for public health in Africa.

**References**


