Digital Health and AI in Africa: An Overview

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Challenges in African Healthcare

Shortage of clinicians: of the 54 countries in the continent, 31 have less than 10 doctors per 100,000 people compared to the 240 doctors for every 100,000 people in Germany and 370 to every 100,000 people in Italy.

Infrastructure gap:

Chart 1: A comparative analysis of Hospital beds per 1000 people and ICU beds per 100,000 people in different countries. *source: World Bank
Opportunities for Digital Health

Growing access to smartphone, computing devices and internet in Africa

475M people in the region will be mobile internet users by 2025 - GSMA
District Health Information System 2 (DHIS2) has been adopted by majority of African countries. DHIS2 is used for health data collection, validation, analysis, management, and visualisation. Kenya (2011), Ghana (2012)
Delivery Drones
Ghana and Rwanda are using drones to deliver medical supplies to remote regions in order to reduce delivery time and cost.

Medical Robots
Kenya - 3 robots - deployed in hospitals and the airport
Rwanda - 5 robots - deployed in hospitals

It takes the temperature of 200 people per minute, records their data for storage
Tells those not wearing masks to put them on
Tells those standing too close to others to respect social distancing rules
Fumigates as well

African governments
African Digital Health Startups

More than 180 active digital health startups in Africa
They raised over $103 million in 2020

minoHealth AI Labs - AI for Radiology, AI for Infectious Diseases, AI for Oncology, AI for Biomedical Science
Partners - ITU & WHO FG-AI4Health, Imperial College London, Oxford University, WACCBIP etc
Challenges Facing Digital Health Startups in Africa

Funding
African startups accounted for only a small fraction of funds raised in 2020.
That last group bankrolled 372 funding rounds for 351 companies, and by MobiHealthNews' count pumped about $13.8 billion into the digital health sector. - MobiHealthNews

Sufficient digital infrastructure

Lack of Data culture

Stakeholders not adopting local solutions

Appropriate regulatory frameworks and standards