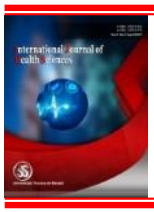

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E-Health Implementation in the Democratic Republic of the Congo: Current Position

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Abstract

E-health holds significant potential to address healthcare challenges in the Democratic Republic of Congo (DRC), a nation grappling with limited resources, vast geographical distances, and a fragile health system. This paper examines the current state of e-health implementation in the DRC, exploring existing initiatives, key achievements, and persistent obstacles. While nascent, e-health adoption is gaining momentum, driven by factors like increasing mobile phone penetration and government recognition of its potential. Successful projects include mHealth programs for disease surveillance, maternal health, and HIV/AIDS management, demonstrating positive impacts on data collection, patient follow-up, and health outcomes. However, significant challenges remain. These include inadequate infrastructure, particularly reliable internet access and electricity, limited funding, a shortage of skilled human resources in ICT and health informatics, and issues of interoperability between different systems. Furthermore, regulatory frameworks and national e-health strategies are still under development, hindering coordinated and sustainable implementation. This paper concludes by highlighting the need for strategic investments in infrastructure, capacity building, and policy development to unlock the full potential of e-health and improve healthcare delivery in the DRC.

Contents

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1 Introduction

Currently, the rates of implementation of information and communication technology (ICT) have become essential indicators of economic progress. Several developing nations have prioritized technological innovation in their national growth agendas and have made significant investments in ICT. The use of information and communication technology (ICT) in healthcare services and patients' desire to pay greater attention to their health has transformed the healthcare system in the twenty-first century (Ráti & Kemény, 2023). The application of ICTs in healthcare is known as electronic health (e-Health), the researcher adopted the abbreviated version in most parts of this study (Ndlanzi, 2021).

eHealth is a fairly young field of research (Sneha, 2017), a typically cross-disciplinary one. The term 'eHealth' can be defined as: 'The application of information, communication, computing, and sensing technologies across the entire range of functions and processes constituting the practice and delivery of health care services' (Sneha, 2017), According to this definition, it is evident that effective eHealth deployment incorporates stakeholders and procedures from a wide variety of healthcare tasks (Nilsen et al., 2020), and entails much more than just technology (Vest, 2010; Barlow et al., 2006).

As a result, many scholars and institutes define and explain eHealth differently. The World Health Organization (WHO) defines eHealth as "the cost-effective and secure use of Information and Communications Technologies (ICTs) in support of health and health-related fields, including health-care services, health surveillance, health literature, and health education, knowledge, and research" (Health, 2022). According to Barbarella et al. (2017), eHealth encompasses many health and care services supplied by ICTs, including EHRs, HMIS, telehealth, telemedicine, telecare, self-management tools, and health data analytics.

eHealth, which encompasses computing, communication, and sensing technologies, is made possible by integrated applications in the healthcare setting (Sneha, 2017). A study conducted in the Netherlands concluded that organizational readiness is an important factor when implementing and adopting eHealth initiatives (Faber et al., 2017). Although the authors' definition of "organizational readiness" is "the availability of the needed organizational resources for adoption" (Nilsen, 2020), the operationalization of this term needs to be modified for the setting of community health care in municipalities because their study was carried out in hospitals. When it comes to deploying and embracing eHealth technology, the organization needs to be "organizationally ready" by being able to adjust to the change process and handle both the intended and unforeseen effects of that change (Faber et al., 2017). eHealth technology enables effective patient record-keeping and streamlined operations by consolidating hospital departments into a single repository unit. This leads to improved administration and control. Healthcare records are stored and accessed electronically using information and telecommunications technologies (ICTs), rather than manually collecting and documenting patient information. Many people view eHealth as a general word that encompasses a wide range of digital health subdomains, including wearable technology, telehealth, telemedicine, electronic health records (EHRs), mobile health (mHealth) apps, electronic medical records (EMRs), and personalized medicine (Mengiste et al., 2023).

E-Health applications, such as EMRs, telemedicine, and mHealth, play a crucial role in improving medical services (Patience & Toycan, 2016). With the increase in the costs of healthcare services and healthcare professionals, it has become vital that healthcare organizations consider adopting e-health (Zayyad & Toycan, 2018). Furthermore, e-health enables healthcare managers to improve. Furthermore, e-health enables healthcare managers to improve the monitoring and assessment of health intervention programs by

providing access to more detailed national healthcare information (Abawajy & Hassan, 2017). The usage of e-health may provide policymakers with precise and reliable information from which healthcare investment decisions can be made (Ndlanzi, 2021).

Digital health improves patient outcomes through individualized care, effective data collection, real-time feedback, and proactive management of chronic diseases. It makes use of technology such as telemedicine and portable devices, transforming surveillance, diagnosis, and treatment while also addressing challenges such as confidentiality and digital fracture (Bizimana, 2024). The DSE improves patient care by improving information accessibility and precision, facilitating communication between providers, supporting evidence-based practices, and allowing real-time monitoring of patient data. These benefits are shown in improved decision-making, better care coordination, and better patient outcomes (Adeniyi et al., 2024). The DSE improves patient care by improving information accessibility and precision, facilitating communication between providers, supporting evidence-based practices, and allowing real-time monitoring of patient data. These benefits are shown in improved decision-making, better care coordination, and better patient outcomes (Georgieva et al., 2023).

The 21st Century Cures Act of 2016 further promotes interoperability and information sharing between healthcare providers through provisions like Open Application Programming Interfaces (APIs) (Cures, 2019). This fosters a more connected healthcare ecosystem, enabling seamless data exchange. The COVID-19 pandemic significantly accelerated the adoption of telehealth services in the US. Relaxed regulations and increased patient demand for remote consultations have driven the growth of telehealth for various conditions, improving access to care, particularly in underserved areas (Zhang et al., 2020). Applications for Digital Health (DHA) are CE-certified medical digital devices that have gained popularity in health systems, including Germany, where the national health system may prescribe and reimburse them. Notwithstanding their potential benefits, DHA faces several obstacles, including patient and provider skepticism, the high cost of benefit demonstration studies, and the requirement to have clear evidence of benefits for patients. To overcome these challenges and enhance the integration of DHA in healthcare services, cooperation between the involved stakeholders is crucial (Schoenfelder & Schaal, 2024). These apps, supported by artificial intelligence, provide more accurate diagnosis, better symptom tracking, and treatment optimization, ultimately leading to highly valuable and individualized care (Alexandra, 2024).

The E-Health Card was Introduced in Germany in 2013, the electronic health card (eGK) allows secure storage and access to patient medical data, facilitating better care coordination and information sharing (Lademann et al., 2019). The Interoperable Electronic Health Record Infrastructure (TI-EHR) initiative aims to establish a nationwide infrastructure for interoperable EHR systems, enabling seamless data exchange between healthcare providers in Germany.

E-health is transforming the healthcare landscape in France, offering promising solutions to enhance access, improve quality, and promote efficiency. By addressing the existing challenges and fostering collaboration among stakeholders, France has the potential to become a leader in the e-health domain, setting an example for other countries worldwide (Raynaud, 2022). Zambia has implemented the Smart care e-health innovation, which allows patients' data to be saved on a smartcard, allowing the health institution visited by the patient to follow medical history while maintaining confidentiality (Mwiinga, 2013). Australia made a significant transformation by giving financial support for general practitioners to purchase computers, implementing systems for those who needed them, and creating incentives for utilizing electronic practices. England has made significant progress, though at a slower rate. Currently, 98% of general practitioners can access an EMR on their desktop. Almost all use it for medication refills, and 30% say their practices are paperless.

Greece, a developing country, has successfully established an e-health system. Healthcare in Greece is supplied by the national health system (NHS), and in recent years, a few e-health services have been launched following the European Union (EU) aims to manage costs and improve services in a secure manner (Katehakis et al., 2018).

E-health implementation and functioning rates in poor nations remain low. According to (J, 2008), adopting e-health systems in various regions of the world, particularly in developing countries, has proved extremely difficult. This difficulty is shared by the United Nations organizations and health authorities at international, national, and local levels, and is ascribed to the lack of an e-health implementation framework. The implementation of online health systems presents several challenges that can impede their widespread

adoption and effectiveness. These challenges cover technical, legal, ethical, and organizational domains, and it is critical to address them to successfully integrate cyberhealth into healthcare systems (Ayat, 2024).

The implementation of online healthcare has many challenges, including technological challenges, resistance to change among healthcare providers, inadequate infrastructure, and concerns about data confidentiality and security. Furthermore, there is often a lack of standardized protocols and interoperability between the many digital health systems. Financial constraints and inadequate user training further impede the implementation of online health solutions. These challenges might significantly hinder the widespread implementation and investments needed for the effectiveness of digital health services, particularly in the US setting (Mehta et al., 2023). Furthermore, the integration of online health into daily tasks presents challenges, including negative perceptions from doctors and patients, long implementation times for hospital information systems, technical difficulties due to platform diversity, resistance to change, and limited use of pilot projects, particularly in Iran (Ayat, 2024). The implementation of e-health includes ethical concerns such as patient autonomy, confidentiality, benefit, and justice, which must be prioritized to protect patients' rights. Legal issues such as medical errors, professional errors, data breaches, and billing inaccuracies highlight the importance of stringent policies and security measures. Furthermore, threats such as phishing attacks, malware, and internal threats require comprehensive cybersecurity strategies (Janarthanan et al., 2024). Large hospitals face unique challenges in implementing electronic medical records (EDR) systems, including integration with existing infrastructures, resistance to personnel change, and the complexity of the systems themselves. These challenges can impede the effective adoption of electronic dossiers, which influences the overall efficiency and precision of patient data management (Nahala et al., 2024). The challenges of implementing e-health in India include a limited digital culture, particularly among the elderly and rural communities, as well as health literacy issues. Obstacles to adoption include insufficient smartphone access, poor Internet connectivity, and cultural preferences for in-person consultations. The challenges at the provider level are related to inadequate training and concerns about the quality of care, whilst the challenges at the system level include the integration of online health in the existing infrastructure and the guarantee of data security (Arora et al., 2024).

The Democratic Republic of Congo (DRC) is in a fragile condition, with its legitimacy under threat from the country's eastern conflict, the destruction of social capital and social cohesiveness, and severe economic issues exacerbated by the political situation. Nationally, this Agenda represents a genuine potential to expedite the deployment of information and communication technologies (ICTs) in the domains of health, education, and public services in this country (Fuamba et al., 2023). E-Health frameworks in DRC are in their early phases, but the potential for expansion is considerable. According to Steeven & Parick (2021), effective e-health solutions should be tailored to local contexts and success stories. Contextual factors are crucial for successful adoption and sustainability. In contrast, wealthy countries such as Canada and the Netherlands have implemented ICT applications in hospitals and clinics. Examples of ICT applications used in healthcare facilities include automation of health records, electronic appointment preparation, telemedicine, Internet communication, and magnetic cards (Boore, 2018). Since DRC's independence and transition to democracy, the government has struggled to provide quality healthcare services to its citizens. Some of the key challenges the DRC government is facing in the healthcare industry include a limited budget, geographical isolation of populations, and a shortage of skilled healthcare practitioners (Verbeke et al., 2014). Despite the potential of e-health to address critical healthcare challenges in the DRC, its implementation remains limited. This research investigates the current status of e-health implementation and identifies the key factors contributing to the gap between potential and reality.

2 Materials and Methods

In this study, a literature review was used, in which published papers and journals connected to health were studied, with a focus on the literature linked to the eHealth implementation process, including both obstacles and potential. Documents such as the National Digital Plan, Horizon 2025, and National Health IT Development Plan 2020-2024 (PUBLIQUE MINISTERE DE LA SANTE, 2021), were also reviewed.

3 DRC Healthcare Context: a Foundation for E-Health

The healthcare situation in the Democratic Republic of the Congo (RDC) is characterized by significant challenges, including high maternal and newborn mortality rates, inadequate health infrastructure, and the impact of prolonged crises. These issues are exacerbated by a lack of leadership and the need to implement effective efforts to strengthen the health system. The Democratic Republic of the Congo faces a high maternal mortality rate, with less evidence of maternal health interventions. The health-system strengthening effort has highlighted the reliance on primary care centers as well as the challenges such as distance, time, and cultural norms that influence the use of services (David et al., 2024). The DRC's health infrastructure has degraded over decades due to violence and war. Inefficiencies, insufficient money, poor infrastructure, limited accountability, and inadequate institutional capability plague the healthcare system. Despite government efforts to increase healthcare access and quality, maternal death rates (473/100000) remain high, and nearly half of children under five are malnourished (Global, 2023).
The DRC's health systems are separated into four sectors: public medicine, private medicine (for-profit and non-profit), private pharmaceuticals, and traditional medicine (Business, 2021). The RDC's health system, established in the 1980s, is decentralized and resilient in the face of persistent difficulties. She relies heavily on external funding, and private religious organizations that manage health facilities, but faces challenges in terms of leadership, decision-making autonomy, and effective resource management (Bigirinama et al., 2023).

The Ministry of Health leads and regulates the healthcare sector. The private sector is critical to the delivery of healthcare services in the DRC, albeit the scope of its engagement is unclear. According to the Sustaining Health Outcomes via the Private Sector (SHOP Plus) DRC Private Sector Assessment study from 2018, private facilities provide 44% of outpatient care and 25% of inpatient treatment. Private facilities have better infrastructure and operational capabilities compared to public ones. There is still a growing demand to enhance public-private partnerships (Business, 2021). The Ministry of Public Health has implemented the IMCI-C program in community health centers, which are managed by community health workers, to improve access and functionality of healthcare services in rural areas (Etshumba et al., 2023). The Democratic Republic of the Congo (DRC) has witnessed persistent conflict and political instability in recent decades (Messner et al., 2018). The DRC has seen significant conflict since the 1994 genocide in Rwanda, which caused instability in eastern and central Africa. Long-standing political tensions along the Rwanda border, as well as conflict involving armed groups and militias operating in the country's east, persist to this day. The country is also plagued by ethnic conflicts and banditry, especially around mining operations (Stearns, 2011; J. Z., 2018). Conflict has had a terrible influence on the country's economy and growth, while poverty is pervasive and severe. In 2020, the gross national income per capita was USD 497, and approximately 64% of Congolese lived in poverty, with rural residents being more likely to be impoverished than urban residents. Poor governance and underinvestment in the health sector have led to issues with recruitment and distribution of health staff, as well as disruptions in medicine, supply, and equipment purchase (David et al., 2024). Conflict has had a terrible influence on the country's economy and growth, while poverty is pervasive and severe. In 2020, the gross national income per capita was USD 497, and approximately 64% of Congolese lived in poverty, with rural residents being more likely to be impoverished than urban residents. Poor governance and underinvestment in the health sector have led to issues with recruitment and distribution of health staff, as well as disruptions in medicine, supply, and equipment purchases (WH, 2019). Despite the country's fragility and instability, significant progress has been made in reducing maternal mortality in recent decades. However, the MMR remains one of the highest in the world. In 2017, the MMR was calculated as 473 per 100,000 live births (Graham et al., 2016; WH, 2019). Despite having a high rate of institutional deliveries (approximately 80 percent according to the 2013-14 Demographic and Health Survey (DHS) and the 2017-18 Multiple Indicators Cluster Survey), the DRC nevertheless has significant maternal mortality rates (INS, 2019). This disparity between high rates of institutional delivery and the high burden of maternal mortality in the Democratic Republic of the Congo shows a serious service quality gap, as many maternal fatalities are caused by preventable pregnancy and childbirth problems. If services are delayed, insufficient, or harmful, then there are missed opportunities to prevent maternal mortality (Koblinsky et al., 2016). Previous research into the use of prenatal care and experienced birth attendants in the DRC found that context-specific interventions are required to make

further success in improving access to services (Ziegler et al., 2020). However, to date, there is only minimal evidence of the impact of maternal healthcare interventions in the DRC on service quality and utilization (Sarah et al., 2016).

4 Current E-Health Initiatives in the DRC

The Democratic Republic of the Congo (RDC) is currently implementing several e-health initiatives aimed at improving the delivery of health care using technology. These projects are critical given the challenges that the country faces, the dominance of paper instruments, the unequal distribution of materials, particularly the low penetration of the Internet, and the inadequacy of healthcare information systems (Fuamba et al., 2023). The current state of e-health reflects ongoing efforts to enhance healthcare delivery through the adoption of digital technologies. Below is an overview of notable aspects:

- *Mobile Health (mHealth) Applications*
  Mobile phones are commonly used to communicate health information, particularly in distant places. Initiatives frequently focus on providing SMS alerts for vaccination campaigns, maternal health reminders, and disease prevention messages (Kidiamboko et al., 2008).
- *Telemedicine*
  Telemedicine is gaining traction as a tool to bridge the gap between healthcare providers in urban centers and patients in rural locations. During health emergencies, like the COVID-19 pandemic, telemedicine has become crucial for providing remote consultations and reducing the spread of infectious diseases.
- *Health Information Systems*
  The DRC is making strides in establishing comprehensive health information systems that facilitate better data management and surveillance of diseases. These systems aim to improve decision-making and resource allocation within health services.

Some DRC hospitals are incorporating technology into their medical procedures to improve speed, accuracy, and quality of care. However, there is still a long way to go in implementing technology in healthcare facilities nationwide. Here are some instances (Ruben et al., 2024).

- Bukavu Provincial Hospital (Bukavu): This hospital also uses computer systems for the management of medical records and appointments, which helps improve the efficiency and precision of care.
- Kananga Reference Hospital (Kananga): Located in the Kasai-Central province, this hospital uses technologies such as scanners and medical imaging equipment for the diagnosis and treatment of patients.
- Kisangani General Hospital (Kisangani): This facility also uses modern medical technologies to provide advanced healthcare, including medical imaging equipment and medical monitoring devices.
- Cinquantenaire Hospital, one of Kinshasa's largest hospitals, has implemented new technologies to enhance patient care and management.
- HJ Hospital: uses a website and an electronic medical record system to track patients' medical history and manage appointments.

Current e-health initiatives in the DRC demonstrate a growing recognition of the potential for technology to strengthen the country's healthcare system. While challenges remain, ongoing efforts to implement and expand e-health solutions offer promising avenues for improving healthcare access, quality, and efficiency, particularly in remote and underserved areas (Fuamba et al., 2023). Continued investment, collaboration, strategic planning, and e-health framework will be crucial to realizing the full potential of e-health in addressing the DRC's complex healthcare needs.

E-Health implementation in DRC is in its early phases, but the potential for expansion is considerable. According to Steeven & Parick (2021), effective e-health solutions should be tailored to local contexts and success stories. Contextual factors are crucial for successful adoption and sustainability. In contrast, wealthy countries such as Canada and the Netherlands have implemented ICT applications in hospitals and clinics. Examples of ICT applications used in healthcare facilities include automation of health records,

electronic appointment preparation, telemedicine, Internet communication, and magnetic cards (Boore, 2018).

Even though some electronic medical records systems have been moderately implemented in DRC, such as level-4 and level-5 hospitals and the District Health Information System (DHIS), which is a health information system whose primary purpose is to expedite health data collection and reporting, DHIS does not automate vital business processes at the health department administrative level, nor work processes at health facilities.

The DHIS does not include all areas of healthcare information systems, such as doctor and equipment scheduling and inventory management, billing, electronic medical records, disease tracking, reporting and auditing, regulatory compliance, and security access control. As a result, developing countries such as DRC require a more complete strategic approach to e-health adoption.

5 Enabling Factors and Opportunities for E-Health Growth

The growth of e-health is strongly influenced by various factors and advantageous opportunities that take the use of technological advancements and enable the resolution of health-related challenges. The integration of IA and IoT, the evolution of the landscape of digital health services, and the specific needs of low- and middle-income countries (LLIC) are among the major factors contributing to this growth.

a) Technical Integration

- **IA and IoT**: The combination of IA and IoT improves patient tracking and personalized medicine, allowing for the implementation of preventive health solutions (Ziadi et al., 2024).
- **Digital infrastructure**: the development of solid digital health systems, including Telehealth platforms and health data, promotes continuous health surveillance and data collection (Lee & Kim, 2024).
- **Increased internet and mobile penetration:** This provides a wider reach for e-health services, even in remote areas.
- **Development of mobile apps and wearable devices**: These tools empower individuals to monitor their health, track fitness, and manage chronic conditions.
- **Cloud computing and big data analytics:** These technologies enable efficient storage, processing, and analysis of large amounts of health data, facilitating research, personalized medicine, and population health management.
- **Improved interoperability and data exchange:** Standards and platforms that allow seamless data sharing between different healthcare systems and devices enhance care coordination and efficiency.

b) Factors of Sociology and Economics

- **Opportunities in the PRMI**: e-health has the potential to improve healthcare systems in the PRFI by improving communication, training healthcare professionals, and combating chronic diseases through precision medicine (Rayan, 2020).
- **Engagement of stakeholders**: Active participation of citizens, patients, clinicians, and service providers is critical for the successful implementation of online health services (Kumari et al., 2022)
- **Shortage of healthcare professionals**: E-health can extend the reach of healthcare providers, especially in underserved areas, through telehealth and remote consultations.

c) Regulatory and Market Trends

- **Regulation changes**: the evolution of regulations is critical for the commercialization of digital health innovations to ensure that they meet clinical effectiveness standards (Lee & Kim, 2024).
- **Market growth**: The digital healthcare sector is experiencing several growth models, fueled by advancements in portable devices and telemedicine (Lee & Kim, 2024).

On the contrary, while these favorable factors present significant opportunities, challenges such as regulatory barriers, concerns about data confidentiality, and the need for a complete digital culture remain significant barriers to the widespread adoption of online health solutions.

6 Challenges and Barriers to E-Health Implementation

The implementation of e-health is hampered by numerous challenges and barriers that prevent its widespread adoption in various healthcare institutions. These challenges can be classified as technical, organizational, and social, with each contributing to the complexity of integrating digital health solutions. Understanding these obstacles is crucial for developing effective strategies to improve the implementation of e-health (Mehta et al., 2023).

a) Technical Challenges

- **Infrastructure issues**: Poor network infrastructure and system outages significantly impair the operation of online health systems (Ayat, 2024; Mwogosi & Kibusi, 2024).
- **Lack of standardization:** The lack of standardized apps complicates the interoperability of the many online health systems (Ayat, 2024).
- **Lack of technical competencies**: Inefficiencies result from the lack of qualified staff to manage and use online health technologies (Mwogosi & Kibusi, 2024).

b) Organizations Face Challenges

- **Support from the leadership:** inadequate backing from health sector officials may impede e-health measures (Mwogosi & Kibusi, 2024).
- **Increased workload:** Health professionals may become resistant to the idea of an increased workload brought on by new technologies (Mwogosi & Kibusi, 2024).
- **High costs:** Numerous organizations are discouraged from using online health solutions due to financial constraints associated with implementation and training (Ayat, 2024).

c) Social Factors

- **Resistance to change:** concerns about professional autonomy and negative impressions of e-health, held by both patients and healthcare providers, prevent acceptance (Ayat, 2024; Mwogosi & Kibusi, 2024).
- **Digital culture:** the success of implementing online health services may be impacted by the users' varying levels of computer literacy (Adong et al., 2024).

Even though these impediments present significant challenges, proactively overcoming them can turn them into facilitators for a successful implementation of e-health. For example, strengthening the digital culture and providing strong leadership support can help to create a more conducive environment for online health uptake.

7 Recommendations and Future Directions

The future of online healthcare is poised for a significant transition, fueled by technological advancements and the need to improve healthcare delivery. The key areas of interest include the integration of artificial intelligence (AI) into the Internet of Medical Things (IoMT), the durability of digital health systems, and the resolution of implementation issues. These components are essential for improving patient care and ensuring the resilience of healthcare systems. The confluence of IA and IoMT, known as AIOMt, improves diagnostic precision and treatment effectiveness, resulting in better patient outcomes (Fins et al., 2024). AioMT enables real-time data analysis, allowing for proactive management of health care and personalized treatment regimens.

Future online health systems must prioritize sustainability, particularly in low and middle-income

countries (PRFI), taking into account infrastructure and regulatory challenges Despite the great potential of online health, it is critical to remain cautious about the cybersecurity risks associated with increased numerisation, which could undermine patient trust and data integrity.

8 Conclusion

This paper has examined the current position of e-health implementation in the Democratic Republic of the Congo, highlighting both the strides made and the significant challenges that remain. While pilot projects and targeted initiatives have demonstrated the potential of e-health to improve healthcare access and delivery, particularly in areas such as disease surveillance and maternal health, widespread adoption is hampered by infrastructural limitations, including unreliable internet connectivity and power supply, as well as a shortage of trained healthcare professionals equipped to utilize digital technologies. Furthermore, issues of interoperability, data security, and sustainable financing models require urgent attention. Despite these obstacles, the DRC stands to gain significantly from strategic investments in e-health. By prioritizing infrastructure development, human capacity building, and robust governance frameworks, the country can unlock the transformative potential of technology to strengthen its healthcare system, improve health outcomes for its population, and move closer to achieving universal health coverage. Continued collaboration between government, development partners, and the private sector will be crucial in realizing this vision.

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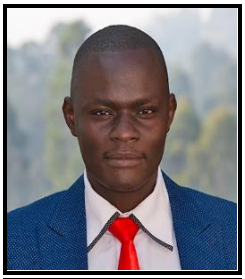

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