

Benefits of telemedicine

The authors highlight the opportunities and challenges of telemedicine for patients, healthcare providers and health systems

According to the World Health Organization (WHO), telemedicine is the delivery of health care services by health care professionals, using information and communication technologies (ICT) for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research, and evaluation, and for the continuing education of health care providers, all in the interest of advancing the health of individuals and their communities.

Telemedicine is widely used in many countries to increase access to healthcare by eliminating the logistic barriers involved, but it is also not without drawbacks. Some of which are evident in final treatment choice due to a lack of solid telemedicine infrastructure, especially in Africa with disproportionate doctor to patient ratios, technology barriers, lack of computer literacy and funding which continues to plague the system and slow down proper implementation of telemedicine services.

Telemedicine is gaining grounds globally and is posed to be the future of healthcare service delivery. With looming uncertainties and a planet trying to recover from the COVID-19 pandemic, it has been proven that many things can be done remotely, healthcare inclusive.

Telemedicine application in Africa

Telemedicine can provide access to scarce specialist care, improve the quality of care in rural areas and reduce the need for rural patients to travel to seek medical attention. For this cause, it has risen to fill the gaps created by the inadequacies of health care system from different parts of the world.

It is known that more than 400 Million people live on the continent with limited access to healthcare facilities and predominantly residing in the rural areas.

Some telemedicine services available in Africa include neonatal care; maternal and child healthcare, intensive care services, trauma care, occupational healthcare, especially for farmers and factory workers, mental health services, geriatric medicine, nutritional health, radiological services, and e-pharmacy services.

Benefits of telemedicine

With the advent of ICT and how it's evolving every day, Telehealth services in Africa can be delivered through

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variety of options that allows service providers cater for the healthcare needs of diverse clients using video consultations, telephone calls, text messages and chats, provided the patients have access to a tablet, computer or even a basic smartphone.

The successful implementation of telemedicine has shown that telemedicine increases access to general and specialised healthcare services, delivers medical care to rural areas, offers health care providers greater flexibility in scheduling, and save patients' time and money in seeking care.

Research generally finds that telemedicine works, even for serious medical conditions. For example, a 2017 meta-analysis and systematic review of the use of telemedicine for treating chronic heart failure found benefits. These included lower admission rates, shorter hospital stays, and fewer deaths.

Benefit to patients

Overtime, Telemedicine has given patients an improved access to healthcare regardless of their geographical location. Patients do not necessarily have to appear at the hospital to get the healthcare they need. This makes medical consultations comfortable and stress-free for the patients.

Telemedicine gives patients a sense of privacy and comfort undergoing consultations from the comfort of their home.

With the ongoing covid19 pandemic, virtual consultations have been proven to reduce the incidence of patients encountering other really sick person, thereby reducing their risk of getting infected.

Benefit to healthcare providers

Telemedicine can help healthcare providers diversify their practice and generate more income. For example, a doctor can run more than 1 practice virtually based on his/her schedule and offer the best care to each patient.

Remote and rural hospitals benefit from telemedicine because it affords them the services of specialists without having to bear the overhead cost of physically inviting the specialist to consult at their facility, and the patients in turn are able to receive comprehensive and complete management.

Ultimate accessibility and satisfaction from the patient may also be a benefit for the healthcare provider. Since patients are in the comfort of their home, having no fears of being heard by a third party, they might want to open up more and be genuine with their details than when they are in the hospital.

Benefits to healthcare systems

In making the healthcare system more efficient, Telemedicine has helped bring healthcare services to the grassroots, giving the inhabitants of rural areas access to quality healthcare without having to travel long distances.

Also for the healthcare system, Telemedicine has evidently reduced the need for hospital readmission which can be costly for both patients and healthcare facilities.

Furthermore, Telemedicine, an integrated approach to healthcare brings us closer to achieving Sustainable Development Goals (SDGs). This is quite important because it ensures healthy lives and promotes well-being for all at all ages regardless of their geopolitical location.

Challenges of telemedicine

With the integration of ICT in the field of Telemedicine and its high prospects in Africa, there are still some drawbacks associated with telemedicine.

Patient's challenges

The major challenge patient's face is the lack of computer literacy, awareness, language barriers and socio-cultural gaps between healthcare providers and the patients adds to the growing list of drawbacks that contribute to the slow penetration and spread of Telemedicine in developing countries.

Another challenge is unaffordability of these services. For people in rural communities, the available telemedicine services are expensive. While there is no publication on standard cost of care through telemedicine, the pervasive cultural perception of telemedicine is that telemedicine is for the wealthy.

Healthcare provider's challenges

While healthcare providers in developing countries tend to have major organisational challenges, issues concerning the lack of medical supplies especially medications and poor referral network, there is also a severe shortage of doctors and other healthcare providers needed to service the community and facilities.

Healthcare providers are faced with the challenge of inadequate infrastructure including limited broadband and internet connectivity, inconsistent power supply, lack of specialised medical examination tools, high-resolution digital cameras, computers, customised software, data storage hardware or servers, amongst many others which is neither fully available nor equitably distributed across health facilities in the country.

Asides having the technological gadgets for a successful Telemedicine services, having the technological know-how is also important. Some healthcare workers are resistant to change. The rigid organisational structures, the paucity of skilled professionals in new technology, complicated change management systems that make it almost impossible to change the status quo.

Again, the high cost of setup is a critical challenge of Telemedicine. The cost of specialised medical equipment, computers, cameras and screens for video conferencing can be daunting and is usually deprioritised for more urgent or even higher priorities in health care budgeting and procurement. It is also important to highlight here that many potential entrepreneurs consid-



ering investing in/setting up telemedicine facilities, do not readily have access to reasonable single-digit credit facilities that could help cushion the high set-up cost.

Governmental challenges

For Telemedicine to thrive there must be enabling governmental policies, rules and protocols that will help see to the successful implementation of Telemedicine. However, this is not the case as there are weak regulatory frameworks and policies against the teleconsultation services.

In many developing countries, there are no uniform and standard telemedicine policy which certainly leads to confusion in designing Telemedicine related services, programs, and its smooth implementation. Although Telemedicine policy exists in some developing countries, implementation framework is absent.

Also, there is lack of established international framework on Telemedicine and little understanding on uniform international standards for telemedicine practices. The absence of accreditation councils and regulatory bodies leaves Telemedicine in isolation, seeing that councils of different countries still find that proposed definition of Telemedicine has deficiencies and are yet to consider Telemedicine as a new discipline or a new branch of medicine.

Conclusion

In all, telemedicine is a great approach to improving healthcare services in Africa and if Health Management Organisations (HMOs), National Health Insurance Scheme (NHIS), government insurance services can adopt that into their health plans, it will make the presence of telemedicine prevalent in every sector without leaving any out. Telemedicine offers a lot of advantages to individuals, healthcare service providers and the government and the COVID-19 pandemic have helped reinforce this fact even more.

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