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Will Telemedicine Be The Future of Healthcare?

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Rapid advancements in connected care technology, big data and analytics are continuing to move telemedicine into the mainstream.



Telemedicine, unlike recent healthcare innovations, has been around for over forty years now. Today, it uses modern technologies in telecommunications, mobile technology and consumer electronics to bring quality medical diagnoses and care to individuals across the globe. As the United Nations calls for universal healthcare by 2030, telemedicine is tackling most challenges in dealing with access to healthcare. A recent report from The Business Research Company shows that the global market for telemedicine technology, currently worth $31.8 billion, will reach $77.2 billion by 2022.

Global trends in telemedicine

Rapid advancements in connected care technology, big data and analytics are continuing to move telemedicine into the mainstream. The proliferation of smart devices coupled with democratisation of the internet is making teleconsultations much more convenient, eventually leading to the emergence of consumer-to-provider telemedicine. The increasing use of smart and connected fitness wearables and telehealth applications such as Practo, Portea, Lybrate and the like is a clear sign of the market moving beyond the peripheries of basic healthcare access. While countries such as Sweden, The Netherlands and Singapore already have high a rate of adoption of connected care technology, other developing markets such as India, Russia and Brazil are moving towards development of better electronic health record (EHR) and clinical decision support systems (CDS) to make headway into the industry.

Impact of telemedicine on patient life and experience

Telemedicine reduces the need for long travel or in-person hospital visits for patients and hence, holds promise in solving the problem of access to quality healthcare at all times and at the patient's ease and convenience. A patient-centric way to provide quality healthcare services, telemedicine has yielded an opportunity for standardization and equity in the provision of healthcare, both within countries and across continents. In addition to remote access, telemedicine also allows doctors to consult among themselves and also reach out to specialists irrespective of geographical locations. It also acts as a key driver for patient engagement, by helping patients maintain check-up appointments and care schedules. This enhances patient care and leads to reduced costs for the healthcare service provider as well as the patient. Enrolment of patients in remote monitoring programs, use of mobile applications, video conferencing and emails for virtual consultation and treatment are the most common practices followed in telemedicine today.

Driving the telemedicine industry towards growth

Traditionally, telemedicine has been associated with providing better healthcare access to under-served communities and rural populations, low-income groups, and regions with limited infrastructure, where its applications were primarily used to link healthcare providers with specialists, referral hospitals, and tertiary care centres. Even though low-cost telemedicine applications have proven to be feasible, clinically useful, and sustainable in such settings, there are a few concerns that need to be addressed to enable scaled adoption of these applications.

ICT literacy and the ability to use the equipment effectively as per schedule and patient's requirements are essential to provide effective and seamless telemedicine services. Further, documenting usage, treatment procedures and outcomes is also necessary to ensure a structured and fool-proof system. Hence, training personnel to effectively deliver telemedicine services, and the set-up and maintenance of telemedicine equipment, will further the penetration of the industry. Secondly, tackling human and cultural factors such as resistance from patients and healthcare workers towards adopting services that differ from traditional approaches or indigenous practices is the need of the hour. This can be done by educating and spreading awareness about the benefits of these technological advancements and the changing landscape of healthcare.

The lack of an international legal framework and internal policies of different governments to allow health professionals to deliver services in different jurisdictions and countries is another issue that obstructs the widespread adoption of telemedicine. An international effort is being expended to address legal and policy-driven issues as well as investment and reimbursement, adoption and cyber-security concerns, to make telemedicine market trends more prominent in the future. In India too, with the introduction of Ayushman Bharat Scheme, the biggest health financing scheme by the Government of India, followed by NITI

Aayog getting established in multiple states throughout the country, and the support of ISRO for cutting-edge satellite technology - there is a big push towards better reach and practice of patient care.

The future of telemedicine is the future of healthcare

With improved internet speeds (4G, broadband) and growth in disruptive technologies, the world is moving towards a more connected future that entails quicker, easier and more personalised delivery of all services. Healthcare is no exception to this sea change. In the future, extensive research and technological advancements will pave way for a deeper look into emergency treatment and speciality medicine such as teleophthalmology, OB-GYN and mental health. The integration of augmented and virtual reality, 3-D printing, robotics, and advanced IoT and AI capabilities will lead to enhanced value-based care for consumers and more personalised and customised user experience. Hence, it is safe to say that in this hyper-connected world, the application of telemedicine and related technologies will transform the way healthcare services are delivered and help to achieve an integrated and seamless healthcare experience for everyone.

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