THE FUTURE OF HEALTHCARE IS IN THE CLOUD

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"Cloud" is a symbolic definition of Internet storage that can be accessed everywhere. This technology is swiftly gaining fame.[1] Cloud computing is the state-of-the-art modernization in Information Technology (IT) and has provided a substitute mode for managing and accessing health data. It caters to various computing services such as intelligence, servers, storage, databases, networking, software, and analytics. Cloud computing administers fast modernization, flexible resources, and a range of economies. It is a colossal change from the traditional method due to its cost-effectiveness, high speed, security, global scale, performance, productivity, and reliability.[2] Nowadays, hospitals/clinics successfully address patients needs through the cloud, and tech-savvy healthcare professionals are switching to this advancement for its benefits.[3] Furthermore, it is an important step to move health systems and data to the cloud as it has achieved popularity during the pandemic. Cloud computing is accomplishing innovative systems to attain patient portals, offering interoperability and a protective way for important data to be transmitted quickly and efficiently anytime and everywhere. [4] Moreover, experts have predicted that cloud computing can improve services in healthcare and assets in healthcare research that have changed the appearance of information technology (IT).[5] Because of these gains, there is a boost in the adoption of cloud computing to establish more satisfaction among patients and healthcare providers with low costs.[6] Many healthcare systems still rely on old software systems. Healthcare workers' access to data such as electronic health records (EHR), patients' prescriptions, test results, and images/scans are more equipped to diagnose and identify the good management course. Decisions regarding large amounts of information help researchers and healthcare professionals identify patterns, and clues, uncover insights and provide evidence-based management.[7] As a result of the cloud, the healthcare industry is regulated, and it makes sense that the first wave of moves to the cloud is those that have no direct impact on patient care. Healthcare providers are now comfortable with the impressive benefits of the cloud. The next wave of migration of information seems to be quicker and easier. Furthermore, telemedicine is the next strong contender for modernization in the future. A survey estimated that approximately 70 per cent of face-to-face interactions with the medical care provider did not require a routine appointment. A fraction of these interactions, telemedicine, would end in significant cost-effective healthcare delivery. It is a key objective for healthcare providers as insurers, and consumer costs would continue to arise. Another significant rise is patient empowerment tools which are cloud benefits as cloud -based applications (CBA) on smartwatches that help those with health-related chronic diseases, regular monitoring, and daily management. These are nutrition, exercise, medication reminders, and blood glucose monitoring that can be easily tracked through CBA, providing a platform for doctors to improve patient's management further. Bettering outcomes, increased efficiency, and cost-effectiveness via CBA are important components that impact the healthcare system.[8] Compliance and security are the main barriers to implementing community cloud in Pakistan's healthcare system, and the challenges are fat.[9] Pakistan's medical system is still in the initial stages of shifting to this new technology. Healthcare information, X-Rays, medications, and patient history of government and non-government health services are increasing significantly in size, diversity, and rate in this country. [10] The demand for cloud services in Pakistan is improving daily.[11] To sharpen and enhance the healthcare model of the health system, cloud-based solutions provide flexibility. Today, hospitals and physicians are gathering more information from patients and places due to this advancement. Virtual care services have grown over the past year when and where patients receive care. Doctors and physicians now have regular access to patient's information from smartwatches that help update a patient's treatment.

Health information systems (HIS) and Health Management systems (HMS) have all the data for improving patient healthcare delivery connected across the healthcare continuum, and almost all healthcare providers have moved to the cloud. Historically it was a challenging process. The command of the cloud in healthcare is innovative in storing health information. It regards permission for the right care at the right time and place. CBS also provides a secure, integrated, and scalable foundation that supports a patient's health information within healthcare premises to develop the changes needed for tomorrow. HMS will provide a cost-effective and secure platform that will be important for data integrity and high-performance data replication for evidence-based decision and management.

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