The Impact of Digital Technology on Healthcare

Digital technology has become an integral part of healthcare and is all set to revolutionise the practice of medicine. Digital technology has greatly improved operational efficiency with respect to standards of medical care. The transformation has significantly enhanced the overall experience of both healthcare professionals and patients.

Some of the areas where digital technology has made an enormous impact in healthcare include:

1. Improved Access to Medical Information and Data: One of the biggest benefits of the digital revolution has been the ability to store and access data. Healthcare professionals can now retrieve patient data from anywhere. Also, the intranet and internet have allowed healthcare professionals to share medical information rapidly with each other, resulting in more efficient patient care.

2. Big Data: Another great benefit of digital technology is that it allows clinicians to gather big data in minimal time. For those conducting epidemiological studies, research, or clinical trials, digital technology allows for the instant collection of data from a much more diverse and larger population than ever before. Such data collection allows for meta-analysis and permits healthcare professionals to stay on top of cutting edge techniques and trends. Also, access to big data allows clinicians to identify risk factors and recommend appropriate preventive/intervention steps more effectively.

3. Improved Lines of Communication: There was a time not too long ago when healthcare workers used a beeper to communicate. But today, digital technology has made communication between healthcare providers and patients very easy. Healthcare workers can stay in touch through email, smartphones, text messaging etc. No longer do physicians have to mail out letters to patients reminding them of their appointments and tests. Technology has made all this much simpler and much more cost-effective. Also, medical professionals can make their own webinars, videos and use online platforms and social media to communicate with other professionals. Teleconferencing has made it easy to communicate beyond geographic borders.

4. Electronic Health Records: The introduction of digital technology has been a blessing when it comes to patient medical records. In the old days, large paper files were moved from department to department. It often happened that during transport, patient medical charts went missing or were damaged. It sometimes took a long time to find medical records in emergency departments if patients came at night or during the weekend. Referring patients was also a tedious process and physicians had to send a large box containing the patient chart. Medical records were all over the place; some records remained with the dentist, some with the psychiatrist, some with the internist and some with the rehabilitation specialist. In simple words, it was total chaos. All this has changed with electronic health records (EHR) which have made life easier for both healthcare providers and patients. Access to EHRs has resulted in a centralised storage of all patient data and faster access for improved care and better outcomes. EHRs also enable faster, smoother and easier medical billing.

5. Telemedicine/Telehealth: There are still many places around the world that are rural and have a shortage of healthcare providers. One important benefit of digital technology is video conferencing. Not only is telehealth cost-effective, but it can also help determine who needs emergency assistance. Today, psychiatrists often deliver counseling via telehealth for patients who are not able to physically come to their clinic. Telecommunication is also being used to provide education and training to healthcare workers residing in remote areas.

6. Online education: Another important benefit of digital technology is the availability of online education, specifically in regards to healthcare related degrees. Today, students interested in pursuing a career in healthcare can complete their healthcare degrees completely online. This enables them to study where they want, from whichever school they want and in their own time. The availability of online education for healthcare professionals has eliminated the need to travel long distances and take time off work.

7. Health Apps: The digital revolution has also resulted in the development of hundreds of health apps. These apps enable patients to monitor their health and disease, provide them medical information, allow them access to test results and prompt them when it is time to get their check-up. Also, healthcare apps enable healthcare workers to quickly check on test results, drug dosing recommendations and other information they need urgently.

Overall, digital technology has transformed healthcare. And this transformation is expected to continue in the years to come. Artificial Intelligence, machine learning, deep learning, blockchain, healthcare mobile apps, wearables and many other such advancements will change the future of healthcare. As long as healthcare organisations and healthcare professionals keep their minds open and create the required infrastructure and systems, there is no saying how far digital technology can go in healthcare.

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