

Healthcare

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Introduction

Digital Skills are considered to be the range of abilities that entails the use of digital devices, networks to access and manage information and communication applications. The digital skills are important for employability as it enables the people to create and share digital content, collaborate and communicate with the colleagues using digital devices and online applications to execute high-level tasks (Iordache, Mariën and Baelden, 2017). It can be said that digital skills have become indispensable for the employees as it helps in building greater customer relationships and develop new strategies and approaches to working (Leahy and Wilson, 2014). The purpose of the report is to understand the importance of digital skills in the field of health and social care. Further, the report is structured on the basis of explaining the technology and its role in improving efficiency in healthcare. The report also discusses the importance of digital literacy and its relevance to healthcare practitioners and professionals and different impacts within society.

Discussion

Define Technology

The concept of technology garnered attention in the 20th century in connection with the Second Industrial Revolution. Technology is defined as the use of science in the field of manufacturing and industry to invent things to solve problems using the machine, method or piece of equipment (Wahab, Rose and Osman, 2012). On the other hand, technology can be explained as the collection of techniques that help in combining resources to solve problems, satisfy wants and fulfil the needs of the service users. With the advent of technological advancements, digital technologies have gained prominence which is intertwined with electronic tools, devices, systems and resources that help in generating, storing and processing data (Carroll, 2017). Some of the significant technologies that are dominantly used by different industries are social media, instant messaging tools, application and software, multimedia and mobile phones.

Evaluates how technology, digital tools and techniques are used to improve efficiency in healthcare

There are different technologies that are adopted by healthcare organisations that present numerous opportunities for healthcare services and operations. In this regard, the use of technology in the healthcare sector has helped in improving and transforming operations by reducing human errors, facilitating care coordination, improving clinical outcomes, tracking patient data over time and improving practice efficiency (Kraus et al., 2021). For instance, the outbreak of Covid-19 involved developing diagnostic technologies based on virology, imaging diagnostics and serology to identify the accurate extent of the virus. In this case, imaging diagnostics entails the use of computed tomography which is an auxiliary detection technology that is used for the diagnosis of Covid-19 (Chen et al., 2020). It has also been found that the responses to the Covid-19 have been accelerated due to the adoption of digital technology within the administration activities. In this regard, one of the significant administrations of Covid-19 reduction is limiting the spread of the viruses for which public health officials have identified contact tracing as a valuable technology to help contain the spread. Apple and Google have launched the contact tracing technology that includes the application programming interfaces (APIs) and operating system-level technology to initiate the contact tracing. This type of digital technology has been found to be effective in maintaining strong protections around user privacy (Apple, 2020).

The healthcare sector has experienced continued growth of digital technologies embedded within the care support systems. According to Budd et al. (2020), it can be said that digital technologies have been harnessed to assist the public-health responses especially in times of Covid-19. This has been achieved through the integration of digital technologies in case of population surveillance, contact tracing, case identification and evaluation of the interventions based on communication with the service users and mobility data. The care support technologies have leveraged billions of mobile phones, connected devices, large online datasets, and low-cost computing resources to offer services to patients especially during the Covid-19 pandemic (Shen et al., 2021). For instance, there has been an increase in telehealth usage among the service users in the early covid-19 pandemic as it involved safe accessibility and delivery of healthcare

services to the patients. The overall telehealth utilisation in-office visits and outpatient care have surged by 78 times in April 2020 as compared to its usage rates in February 2020. This paved the path for virtual healthcare models and digital health solutions to offer urgent virtual care to patients to improve service users' experience, convenience, accessibility, outcomes and affordability (Bestsenny et al., 2021). Although the use of digital technologies in diagnostics, administration and care support have been proved to be effective in improving healthcare efficiency, it has also cited concerns over patient security and technical faults when treating the patients.

Further, digital communication tools and techniques in the form of instant messaging, emails and mobile phones have been embraced by the healthcare sector to facilitate interaction, collaboration and participation between clinicians and patients. According to Huxley et al. (2015), the adoption of digital communication tools has presented the solution to the capacity issues faced by the healthcare sector in current pandemic times. There has been increasing use of the internet and asynchronous communication between the patient and provider to acquire healthcare consultations. In this regard, patients have been using email as a digital communication tool to interact with the healthcare professionals who offer online consultations (Cook et al., 2016). On the other hand, mobile phones and instant messaging have helped the patients to acquire health services at any time and at any place with the availability of the healthcare professional. The real-time consultations acquired through the mobile phone have helped to enhance the way the patients contact their healthcare professionals (Newhouse et al., 2015). With the easy accessibility, affordability and availability of health services and professionals, digital technologies have a positive impact on improving the efficiency of healthcare practices.

Explain digital literacy

Digital literacy has been linked with the skills that individuals need to learn, live and work within the society in which communications and access to information are mainly done through digital technologies such as through mobile devices, internet platforms and social media. In other words, digital literacy is referred to as the ability of the individual to find, evaluate and

communicate information using various digital platforms and technologies (Santos and Serpa, 2017).

Discuss why digital literacy is important for healthcare practitioners and professionals

Healthcare professionals and practitioners are required to maximising the potential digital technologies to enhance patient care. In this regard, it is important for healthcare professionals and practitioners to improve their digital literacy. With digital literacy, the healthcare professionals would be able to develop their digital identity which is significant for increasingly enabling the colleagues and service users to be digitally be empowered (Pearce, 2017). As per Health Education England (2017), digital literacy entails the capabilities that fit an individual for ‘living, learning, working, participating and thriving in a digital society. It must be noted that as the healthcare system continues to thrive, the healthcare practitioners and professionals have been equipped with digital health technologies to be adopted and used to deliver better quality of care to the patients (Health Education England, 2017). Digital literacy is important for healthcare practitioners and professionals to pursue their ability and skills to use digital technologies to learn, communicate and present health service opportunities for the service users. Further, digital literacy could also be used by healthcare practitioners and professionals to engage in professional career development in terms of teaching, e-learning and conduct self-assessment tests to assess their competencies (Kennedy and Yaldren, 2017).

Discuss how digital literacy impacts their living, learning, working, participating and thriving in a digital society

Digital literacy has a positive impact on healthcare professionals and practitioners in terms of enhancing care education. Care education has been enhanced through the use of varied digital technologies available and accessible by healthcare professionals. For instance, social media platforms, as well as medical portals and journal databases, act as significant digital tools and techniques that help healthcare professionals to acquire knowledge and practical ideas about care and health education (Hill, 2016). With effective digital literacy skills, healthcare professionals would be able to use social media and other medical portals to develop their practice. For instance, the WeNurses and WeCommunities facilitate regular Twitter chats to provide a unique

platform for healthcare professionals and others to connect and discuss contemporary health issues (Kennedy and Yaldren, 2017). Digital literacy skills intertwine with technical proficiency which has a significant impact on the working and participation of the health professionals within the digital society. This is because digital literacy skills help the health professionals to deliver health services from remote locations and also virtually in case of telehealth services etc. Therefore, digital literacy impacts the learning, living, thriving, working and participation of healthcare professionals and practitioners to empower and enable themselves to offer services to the patients using digital technologies (Kuek and Hakkennes, 2020).

Conclusion

In conclusion, it can be said that there has been a widening recognition of the digital tools and technologies within the healthcare sector to discharge the health services. In this regard, digital technologies such as contact tracing, imaging detection technology and telehealth services have been used during the Covid-19 pandemic. Further, digital communication tools such as emails, instant messaging and mobile phones have also been used to improve healthcare efficiency. On the other hand, digital literacy has also gained importance among the healthcare professionals who have been demonstrating them to impact their learning, living, working and participating within the digital society.

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