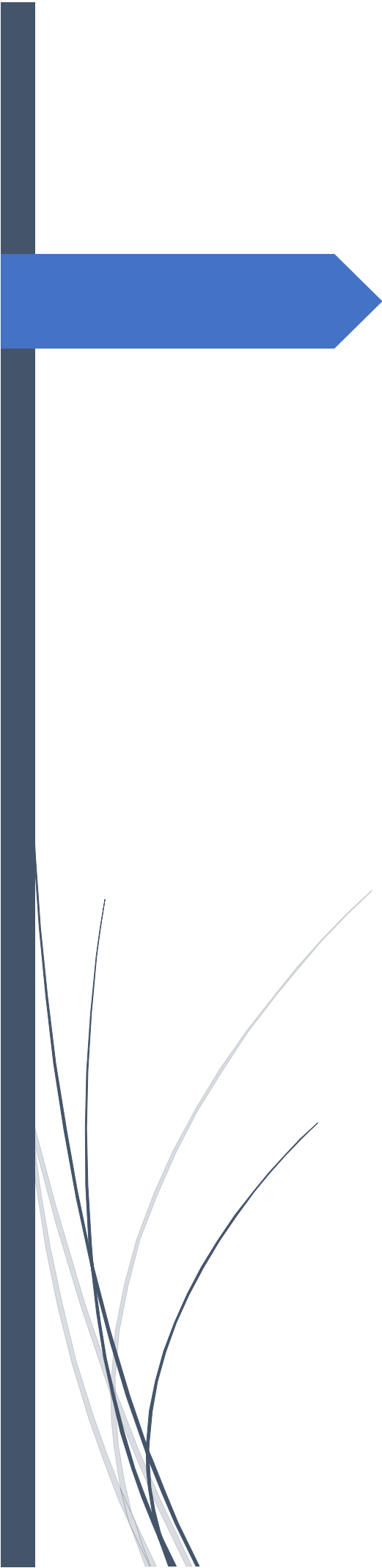




Contemporary Technology in Healthcare

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Introduction

The development and advancement of technology has been incredibly amazing both economically and in terms of healthcare. The technology has had and still has a very strong impact on the work and personal world.

Throughout the long term, technology has been growing. It was from the 17th century, during the industrialization cycle, that technology started to propel a lot quicker and all the more strongly. In the 20th century we have radio, TV, radar, PC, phone and numerous others however, nowadays we have numerous new advancements like wireless, scratch pad, plasma TV, computerized camera, iPhone and numerous different digital tools.

In the healthcare field, it can be observed that in institutions such as hospital, GP surgery, day centres, nurseries, nursing homes, rehabilitation centres, etc, technology has brought numerous opportunities for improving and transforming healthcare which includes; reducing human errors, improving clinical outcomes, care coordination, improving practice and efficiency, and tracking data over time.

As stated Stoeva (2020), “contemporary healthcare is driven by the technology, while at the same time healthcare demands are among the main factors to support technology growth.”

Telemedicine

In primary care, telemedicine is usually in the form of phone calls, where the patient seeks the doctor's advice about non-emergency medical problems which do not require the doctor to see the patient. The real role of telemedicine at present lies in the convenience it offers to patients and practitioners by obviating the necessity for a physical visit to get medical advice or treatment. (Thomas, 2021)

In addition to communication, telemedicine can provide health information that is collected remotely from medical devices or personal mobile devices.

Telemedicine can be a more comfortable approach to seeking healthcare for those who feel daunted by both medical professionals and their associated surroundings. As the medical information is exchanged in strict confidence, telemedicine can also encourage a good relationship to develop between patients and healthcare professionals. It can also be an effective tool in health education by allowing newly-qualified healthcare professionals to observe clinical practices in real time. (Khetrapal, 2021)

During the Covid 19 pandemic, telemedicine became essential as it greatly helped physicians and patients to stay in contact and minimize potential healthcare worker and family exposure to the virus.

According to Kahn (2015), the main disadvantages is availability and cost because is not everyone that has access to it. The using telehealth for things like minor injuries, stomach pains and nausea provides the same level of care as in-person medicine and reduces unnecessary ambulance rides and hospital visits.

The use of technology during Covid-19

Throughout the COVID-19 pandemic, the digital technology in healthcare was transformed and used to keep everyone as safe and healthy as possible.

The prevailing effects included care being delivered at a distance, better patient outcomes, and a reduction in the spread of the virus. Many medical professionals and a wide range of patients with various persistent conditions are without a doubt the biggest group of users using the digital technology during the pandemic.

Computer literacy is defined as an understanding of computer characteristics, capabilities, and applications, as well as an ability to implement this knowledge in the skilful, productive use of computers in a personalized manner (Martin & Dunsworth, 2007). It is essential to “being digital” nowadays because most jobs require computer skills.

In healthcare, the number of communication between clinicians and patients using the digital communication have been increasing along the years. Mainly in the last two years when Covid 19 was emerged.

Due to the increased number of infections and deaths, many countries, such as the UK, have taken the decision to close restaurants, schools and universities and most non-essential stores in order to prevent the spread of the virus. Depending on government measures for the population to comply with quarantine, they had to resort to technological means to maintain contact with distant family and friends and with doctors and nurses.

The radiologists hold an important position to classify the chest computerized tomography as positive or negative for COVID-19 and describe main computerized tomography features and lesion distribution. At the same time, patients with different chronic diseases are receiving the services and treatment from healthcare professionals through the use of technologies, especially, for those who have already been infected with the coronavirus. (Vargo, Zhu, Benwell, & Yan, 2020).

Although we are making a lot of use of technology during the pandemic, it is important to emphasize that we must be aware that we must always keep our personal data secure. We also need to keep our wellbeing and our digital identity safeguarded and share them as little as possible when we use social media to post our photos and videos or when we shop online and/or check our bank statement.

There are many malicious people who can use our personal data to their advantage. Which can consequently bring us mental problems such as anxiety, depression and stress.

For being a supportive existing service, innovation has been utilized to deal with the actual pandemic.

At the beginning of March, the NHS 111 online services was launched to give expanded ability to individuals requiring counsel about Covid, and to free up NHS 111 call controllers' time. It also worked with social media companies such as Google and Twitter to forward people to the right advice and counter misinformation. Additionally, text messaging was used to communicate with people who were advised to protect themselves and to check in with people who registered their coronavirus symptoms with NHS 111 online. It remains unclear when the app will be ready and, if and The impact of Covid-19 on the use of digital technology in the NHS when it is, how far the challenges it has faced will have affected public trust and confidence in it. Although it is clear that there will be no return to 'normal', at least in the near future, the experience of Covid-19 has demonstrated the need to reconsider the way that the NHS traditionally delivers services. Technology has also been at the centre of discussions about the test, track and trace system, with the controversial contact-tracing app originally supposed to have a key role to play in this. (Hutchings, 2020)

Data Handling and the relevance of technical proficiency

Data is very important in healthcare because it allows clinicians and hospital staff to make informed decisions to improve quality of care. However, data fracture and the absence of uniform digitization obstruct productivity. Some medical services frameworks might need to work on their utilization of huge information tools although need staff individuals with the essential training.

For data handling, there is an application that permits observe, correspondence, and videoconferencing with the goal that clinicians and patients have more persistent data about changes in condition or well-being.

The health data provides patients with consistent care, improves patient care within a health care facility, shares information for better patient outcomes and assists in health research (Aziz, 2016).

Efficiency in healthcare is best possible use of available funding in order to resource. To improve more efficiency in healthcare, hospitals and medical organizations need to improve and deter the quantity or quality of health outcomes with the same amount and type of resource such as staff and medical technology. Bringing efficiency into medical services conveyance with full comprehension of determinants of infection in explicit populace can give space to further developing adequacy, and value in medical services as proven by presence of avoidable wastages and shortcoming in each medical care framework.

Conclusion

In conclusion, the use of technology in the healthcare sector has been increasing every year, especially two years ago due to the Covid 19 pandemic that forced several countries to take measures that could prevent the spread of virus. One of the main measures was the lockdown that caused most people to communicate more through digital media. Between doctors and patients, telemedicine has helped a lot of the health sector to prevent the spread of the virus.

Health data technology can potentially transform health care transport, bring information from where it is required and readjusting healthcare around the consumer.

It can give us both better care – care that is higher in quality, safer, and more consumer responsive – and more efficient care – care that is less wasteful, more appropriate, and more available.

The efficiency in health sector is fundamental because improving it leads to saving healthcare budget. This saved money can be spent on less accessible products and services. This is particularly important in settings with limited health budget to provide equitable care for their population.

Bringing proficiency into medical services conveyance with full comprehension of determinants of illness in explicit populace can give space to further developing viability, and value in medical care as proven by presence of avoidable wastages and shortcoming in each medical care system.

The effect of Covid-19 on the utilization of advanced technology in the NHS the pandemic will require an exhaustive assessment of the effect that digital technology has had on patients' admittance to and nature of administrations, clinical results and the encounters of patients and staff during the pandemic. This will mean learning the exercises for how to keep up with the advancement we have seen while additionally perceiving where personal contact is required.

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