

**USE OF TECHNOLOGY, DIGITAL TOOLS AND TECHNIQUES TO IMPROVE
EFFICIENCY IN HEALTHCARE**

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1.INTRODUCTION

The use of technology has helped the health service's resources to extend allowing it to keep up with the demands put on it. For example, an ageing population and expansion morbidity. (Liddell, Asheed and Burges. 2018).

It is important in healthcare to pay more attention to the broader sense of how knowledge is used.

From anaesthetics as well as antibiotics through computed tomography scanners and radiotherapy are two things that come to mind when thinking about imaging technical advancement has had an important influence on medical field. Hereafter, technical revolution will be sustained to change medical services, but although new management of dealing with and method of healing, new computerised, new social web support for medical services, and so on) will push revolution, individual element will carry on for a constant breakthrough. From x-rays to blood report, patients produce massive quantities of data medical records. Patients care become simpler and more effective as paper is replaced with computerised summaries. (Thimbleby,2013).

2.USE OF TECHNOLOGY IN HEALTHCARE

2.1: Diagnostic: Diagnostic testing is a vital aspect of the healthcare system because it provides physicians and patient the knowledge, they need to make the best clinical decisions. Early detection and diagnosis can help to avoid needless discomfort and pain. (Taylor and Chisambi n.d). In addition, National products and services in the diagnostics are currently funded by NHS Digital: data from genetic tests, messages in primary care pathology studies, screening programmes and more (NHS, 2021)

2.2: Administrative: SystemOne gives physicians and other health care providers access to a single, shared Electronic Health Record (EHR) that is updated in actual flow at the spot of care. Patient data can be safely exchange across services with SystemOne, allowing for improves quality and consistency. Above all, it allows providers to enhance the patient care. SystemOne help providers completely digitalize healthcare and function innovatively, as a total clinical and administrative solution. Clinicians can work from anywhere including schools and patients' homes. (tpp-uk.com/products/SystemOne).

2.3: Care Support: Technological advancements have the potential to change healthcare remarkably. (Clarke, 2018). Technological advancements present major opportunities for healthcare patients are highly accepting of emerging technologies and expecting it to assist them in their treatment. For example, most people say they will consult their GP through video consultation for minor elements and ongoing conditions. Technology has help in managing patient data and patient is commonly used for analysis and to enhance treatment, and there is public support for doing so.

3. USE OF TECHNOLOGY DURING COVID-19

The Covid-19 rampant has enhanced the adoption of emergency equipment in the NHS, as well as upgrade in how assistance is provided. The pandemic disease has prompted a fast adoption of innovatively technologies in the NHS, as well as major changes in service delivery more broadly, to allowed up area and room in severe health centres, allow faraway working and lessen the chances of contamination transferred in NHS environment. Remote consultations have nearly doubled in primary care. (Hutchings, 2020)

Patients use of remote health services has also increased, such as registrations for the 'nhs app, nhs login and e- prescription services. Telecommunicatio has been on clinical performed, patient means of entry to and nature of treatment, patient, and staff interactions.

4.DIGITAL COMMUNICATION, COLLABORATION AND PARTICIPATION

The way we communicate with others is examined through digital communication, cooperation, and participation. It focuses on how you collaborate with others, join in, and communicate with others using tool. (digitalcapabilitytoolkit.wp.derby.ac.uk). Some examples are:

- Using range of methods to connect with others such as email, social media, photo sharing, presentations, and videos.
- Collaborate on project with others online, sharing files, working on articles, and completing to-do lists.
- Participating in a vital meeting or discussion group
- Giving others access to the digital materials.

5.DIGITAL IDENTITY, WELL-BEING, AND SAFETY

Being a digital specialist requires taking care of digital people. You are in charge of sharing and protecting data. This involves the ability to create, promote and protect acceptable digital identities that lead to a successful personal and organisation image.

In addition, in health and well-being, different types of bullying including cyber bullying are identified and methods for coping with it are suggested such as screenshots, blocking and reporting. Building and using stable passwords, for example by using strong password characteristics and easy security and its intent such as security confidential data transmission. (Royal College of nursing, 2017).

Furthermore, digital well-being, according to (JISC,2015) is “the ability to look after one’s personal health, protection, relationships, and work-life balance in digital settings”. This contains the following:

- Using one’s own digital data to improve one’s well-being.
- Using digital media to encourage group involvement and well-being in digital worlds, acting safely and responsibly.
- Digital tension, workload and diversion management.
- When using digital resources, acting with consideration for people and the environment.
- Appropriately balancing digital and real-world interactions.

6.THE USE OF DIGITAL LITERACY FOR PROFESSIONAL DEVELOPMENT

According to (Allan and Grudziecki 2006) we live in a digital society in much of Europe and many other parts of the world. A society influenced by the digital in which our acts are constantly controlled by digital instruments and the things we experience are often digitally controlled.

Again, technology has gone beyond and change the UK health and social care field in ways that were unthinkable a decade ago, as it has in every other industry. Two of the key words used to define the diverse range of health technologies currently available are connected health and Technology Enable Care (TEC). Mobile devices and digital applications that allow service delivery, exercise and sleep-tracking wearable devices, and experienced artificial intelligence result that have the potential to medical records and design treatment plans are among them.

Digital literacy is defined by (HEE,NHS) the skills that suit a person for means, studying, in work, taken part and flourishing in a computer world. It is also about individual staff and those in tutoring feeling at ease, happy, and better prepared to work in a digital world.

To do this, we must make learning and growth accessible to all people and careers. Importantly, this must include both specialised (e.g., more generalised content (for example prescribing patient apps or professional social media use).

6.1: Teaching: As online education was consistently expanding, Goodyear and team (Goodyear et al, 2001) gathered a report outlining the skills needed for effective teaching methods. An online teacher in addition to face-to face teaching is said to need skills in technology and design. Medic has been interested in developing advances to include more digital health in teaching, such as use of remote digital interactions in teaching, from a medical point of view.

Again, electronic education is quickly attracting a key necessity for students, researchers, patients, and anyone in work in health and social care, thanks to the emergence and advancement of 'technology enhanced learning' (TEL) and 'technology enhanced care' (TEC). Technology's advancement has led up to the substantial and ongoing cultural shift in health and higher education, involving genuine and successful leadership.

The increasingly wide and varied technologies available can and should be used to improve care and education. 'The hello my name is...' campaign, created in August 2013 by Dr Kate Grainger, is an excellent example of how social media can be used to improve treatment and health education. (Grainger,2013)

Others in the health-care field have used social media to build and help practise groups. According to (Chinn,MBE), the founder of 'We Nurses' and 'We Communities,' is a pioneer in this field. We Communities' frequent Twitter chats give a particular opportunity for student carers, patients, senior health practitioners, policymakers, and others to interact and address current point of issues. These experiences aid in the development of users' digital identities and provide participants with the ability to impact health care.

6.2: E-Learning: Wheeler and team (wheeler et al.,2015) describe eLearning as the distribution of information to individuals and families over the Internet. Brown (2006) describes eLearning as any learning activity that is aided by information and communication technology.

The most used versions, according to Wheeler and team (wheeler et al.,2003) are: On-line supplement to a face-to-face course; On-line supplement to a face-to-face course; On-line supplement to a face-to-face course; On-line supplement to a Self-paced online course (as opposed to correspondence courses); On-line seminars (over-the-internet video and audio); Collaborative learning; (students learn by working together); Based on a digital game.

6.3: Self-Development: Digital literacy, was described as the knowledge of required skills in technology use and problem-solving because of the development of health literacy. With the advent of patient-involving digital health care systems, such as email communication with general practitioners and looking up health records online, digital literacy became increasingly important in the health care environment. (P. Gilster, n.d)

Norman and Skinner (2006) discussed this emerging need to consider users' digital competencies in the context of health care in 2006. "The ability to seek, identify, understand, and appraise health information from electronic sources and apply the knowledge gained to resolving or solving a health problem," they described electronic health (eHealth) literacy.

7. TECHNICAL PROFICIENCY FOR INFORMATION, DATA HANDLING

The retrieval, examination, evaluation, and presentation of health data and information is known as information management. This makes it possible to prepare, develop, and deliver health services and treatment. Identifying how health practitioners produce and collect patient data is just as critical as the research itself.

Through their work, they may also promote evidence-based practise, assess results, and increase access to patient records. (NHS.UK)

CONCLUSION

Digital technology opens new possibilities for improving medical outcomes and resident experiences. The public has no understanding of how the NHS and private companies use data for health research. Although both advantages are beneficial, they each bring about a different type of transformation.

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