

Welcome



Digital technology in healthcare sector

BMSW4003

Group 4

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1.Tunde (2114279)

- ✓ The use of contemporary technology in healthcare (diagnostic, administrative and care support)
- ✓ The use of digital communication, collaboration and participation

2.Luana (2114278)

- ✓ The use of technology during COVID19

3.Teodora (2114277)

- ✓ The use of digital literacy for employees well-being and their professional career development

4.Shelby-Ann (2117848)

- ✓ Digital identity ,well-being and safety
- ✓ The relevance of technical proficiency for data and information handling

Introduction

- Today we are going to talk about the importance of the digital technologies in healthcare.
- We will introducing the importance, advantages and disadvantages of using digital technologies in healthcare
- We will talk about six topics between four of us.

The use of contemporary technology in healthcare (Tunde 2114279)

Technology changed the healthcare industry and it made peoples life easier and more accessible in different ways.

With the help of modern technology healthcare able to:

- ✓ Bring quick results with the help of diagnostic tools
- ✓ Provide remote consultations to patients
- ✓ Download health supporting applications on our devices
- ✓ Keeping our records digitally in the Cloud
- ✓ Giving accurate diagnosis

The technologies appearance in the fields of healthcare

Diagnostical field	Administrative field	Care Support field
Ultrasound Imagine (Sonogram)	Repeat prescriptions sending online to pharmacy	Wearable devices (for example watches that checking heart rates)
MRI Scan (Magnetic Resonance Imagine)	Saving patient records in GP database for easy access	Mobile Health apps – helping us to drinking enough water or eating healthy foods
X-Ray	Remote consultations between patients and specialists	Telehealth – online communications

Impacts of contemporary technologies in healthcare

Advantages:

- ✓ Integrated care systems makes easy access to patients records and treatment plans.
- ✓ Helping to saving time, prioritizing treatments for patients.
- ✓ No human errors and results are accurate and also helping to store safely the patient records.

Disadvantages:

- ✓ Overuse of technology could cause mental health issues
- ✓ Informations may not be reliable on the website we found
- ✓ The personal health devices could be hack-able which could be harmful for patients

The use of digital communication, collaboration and participation

**It is about how we could contacting people, how we working
and communicating with them in digital environments.**

- ✓ Contacting patients in e-mail, phone call or video appointments
- ✓ Sending to Pharmacies patient prescriptions
- ✓ Referring patients to hospitals or to specialists
- ✓ Allow patients to know when medical test results are available
- ✓ Sending appointment reminders to patients

Advantages and disadvantages of using digital communication, collaboration and participation

Advantages it giving the ability to:

- ✓ Communicate with people with the help of wide range technology available
- ✓ Participate actively in and across digital networks online classes or meetings
- ✓ Work collaboratively with others like via digital care platforms which could save time and provide the right treatment in time

Disadvantages:

- ✓ For older generation could have difficulties to use the digital platform
- ✓ It separating people and cause mental health issues because people not meeting face to face
- ✓ Could have a technical issues and people could miss their appointments or not hear or understand clearly the words due to network issues

Challenges in communication before digital technology appearance

- ✓ Medical error causes lots of people deaths
- ✓ Alarm fatigue in hospitals staffs get loads of alarms per days and they could not separate which was medical emergency or general alert
- ✓ Doctors did not have direct access to patient records and data progression were slow
- ✓ Delayed Nurse/Physician communication cause not getting the treatments and answers in the right time, and it is affected more people health in the past

The use of the technology during covid-19

(Luana 2114278)

COVID-19

- SARS-CoV-2 (Severe Acute Respiratory Symptoms Coronavirus 2)
- First reported: December 2019 in China (Wuhan)
- UK report:
- Symptoms: new continuously cough / high temperature / a los of taste or smell

Use of technology

- Increased relationship between humans
- Last two years there has been a rapid growth in its use during the pandemic.
- Use of the electronic prescribing service, NHS website.
- Healthcare make use thought smartphones, computers or tables, medical care and information, regardless of the distance between the patients and doctor.
- Different sectors such as hardwares and softwares

Advantages and Disadvantages

	Positive	Negative
Social distancing / Work at home	Slow the spread of infection (Some employers) flexibility Reduce face to face contact and help manage demand	Staff feeling isolated home distractions Information security risk
Age	Fast and good handling for new generation	Unfamiliarity of its use in older people
Social Media	Fast, effective and economical form of communication	Misuse of information
Healthcare	App for appointment booking Patient record access	High demand for calls

Digital literacy for employees well-being and their professional career development (Teodora 2114277)

Digital literacy is described as “being able to make use of technologies to participate in and contribute to modern social ,cultural ,political and economic life” **(Kuek, A and Hakkennes, S 2019).**

Digital literacy gives the employee the ability to search, find, understand and evaluate health information from electronic sources and apply the knowledge acquired to address or solve a health problem.

Impact the increase use of technology in healthcare

Positive impact:

- Education
- Training
- Increase confidence

Negative impact:

- Low skills
- Poor attitude
- Risk for the patient health

The increase use of innovation in healthcare is important for employee well-being

To improve their digital literacy employees in Healthcare sector needs to invest and to offer their staff multiple types of training:

- ✓ one on one
- ✓ classroom
- ✓ online training

All of the above are critical factors for successful career in healthcare.

Digital identity, well-being, and safety (Shelby-Ann 2117848)

What is Digital Identity?

Digital identity is a set of data attributes that are reliably associated with that individual.

A digital identity is from the use of personal information from data created by the individual's online activities.

For example:

- ✓ Photos uploaded to social media
- ✓ Email Accounts
- ✓ Health Records

Digital identity, well-being, and safety

Digital identity usually includes some aspect of an individual's legal identity, such as;

- ✓ Legal name
- ✓ Date of birth/place of birth
- ✓ Gender
- ✓ Address

Digital Identity in Health and Social Care

- Digital identification is important for the efficient and effective delivery of health services and public health management
- Healthcare providers need to know a patient's identity to access relevant medical and treatment histories and ensure that they are giving consistent and appropriate care.
- Digital identity can help healthcare organizations combat against fraud prevention and identity theft.

Digital identity, well-being, and safety

- The ability to use digital technologies in many ways that support personal well-being and safety.
- To understand and act upon digital situations and events that might compromise personal and professional security.
- Understanding the basic rules for sharing data and data security e.g., information governance.
- Creating and using secure passwords, e.g., apply characteristics of strong passwords.
- Being aware of sending sensitive data more securely.

The relevance of technical proficiency for data and information handling

Health information technology presents several opportunities for improving and transforming healthcare which includes;

- ✓ reducing human errors
- ✓ improving clinical outcomes
- ✓ facilitating care coordination
- ✓ improving practice efficiencies, and tracking data over time.

The relevance of technical proficiency for data and information handling

It is necessary for healthcare workers **to have skills to be effective** in a healthcare organisation.

- Technology has the potential to improve quality and safety of care as well as reduce costs.
- Technology in healthcare is rapidly evolving, changing the way we deliver health care.
- Handling essential information enables individuals with critical health are able to share information with family, friends.
- This information may enable individuals to have personalised centred care.

The relevance of technical proficiency for data and information handling

Enables us to quickly access important information about an individual health or illness and your treatment plan from your electronic health record.

Nurses can access information such as;

- ✓ laboratory test
- ✓ x-ray results
- ✓ health reports from other health-care team members to give the individual the best care possible.

Handling essential information enables individuals with critical health to be able share information with family, friends. This information may enable individuals to have more personalised centred care.

Conclusion

- Digital technology has an important leading role in healthcare
- The using of the different contemporary technologies more people could get a chance for fully recovering and longer lifetime
- Digital technology giving limitless opportunities for healthcare and constantly developing
- Peoples need to be educated about how to use digital technologies so they could be more familiar with its usability

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**Thank
You**

