

DIGITAL SKILLS AND RESEARCH METHODS (BMSW4003)

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INTRODUCTION

Today I will be talking about the use of contemporary technology in healthcare which is essentially divided in 3 sections.

Anna will be talking about the use of technology during COVID-19.

Fatimata will be the use of digital communication, collaboration and participation.

Maryan will be talking about relevance of technical proficiency for data and information handling.



THE USE OF CONTEMPORARY TECHNOLOGY IN HEALTHCARE (DIAGNOSTIC, ADMINISTRATIVE AND CARE SUPPORT)

THE TYPES OF CONTEMPORARY TECHNOLOGIES

- The NHS track an trace app
- Mobiles with special software in care homes for example in terms observation, making notes of administering medication and the time given.
- Cloud software
- Emails
- Telemedicine
- Electronical e-prescription

DIAGNOSTIC, ADMINISTRATIVE AND CARE SUPPORT

Diagnostic is defined as "the art or act of identifying a disease from its signs and symptoms". (diagnostic, 2021)

Administrative is defined as "Relating to the work of managing or organizing a business or business activity". (administrative, 2021). In the medical field administrative is defined as the "giving or application of a pharmacologic or other therapeutic agent."

In contemporary technology care support means providing technological aid to support to the service user daily activities.

WHAT IS THE USE OF CONTEMPORARY TECHNOLOGY IN HEALTH AND SOCIAL CARE?

We live in a day and age in which technology is required in nearly everything we do including in the health and social care setting such as care homes and hospital, community care setting.



Contemporary technology is used in various ways in the setting and is relied upon in terms of providing care for service users. For examples some care homes have moved into the digital era where they only use phones which are installed with a special software enabling the carer to record service user daily activities and the time medication has been administered.



The use of contemporary technology in the current health and social care setting is in place to enable settings such as carehomes or young people homes is to help minimise use of paper trail as this can be sometimes easily lost and therefor a service user privacy could be breached.

EVALUATION OF CONTEMPORARY TECHNOLOGY IN HEALTH AND SOCIAL CARE

There are various pros and cons to contemporary technology in the health and social care setting, however the pros outweigh the cons. For example, service users who were very hesitant on seeking medical assistance in the past for whatever reason whether it be cultural reasons or anxiety may be more hesitant to seek through the app as they may feel like they will not be taken seriously.

A benefit to contemporary technology in the health and social care is for example service users who may suffer from visual impairment are able to independently work in various settings such as in customer service with the assistance of braille.

Another benefit to contemporary technology in healthcare according to the research conducted by Caroline Free, Gemma Phillips, Leandro Galli, Louise Watson, L.F, P.E, V.P and A.H was believed to be that phones and other portable technological devices have a potential to change the delivery of health messages to service users. This is because nearly more than two-third of the people in world now own a phone or a technological device

THE USE OF TECHNOLOGY DURING COVID 19

- The situation of COVID-19 created a global pandemic that had affected the health of people all over the world. This time of pandemic had led to the shutdown of the working system in the whole world which subsequently led to the downfall of the companies, institutions, and organizations. However, the technology has helped in coping up with the differences that were created in the economic system worldwide during the time of the pandemic.



TECHNOLOGIES USED IN COVID-19

- Tracking activity of the disease in real-time
- Infection screening population affected by the disease
- Tracing contact identification of individuals who have come in contact ▪ Quarantine and self-isolation isolating the infected individuals
- Clinical management diagnosing and treating the disease virtually
- Monitoring real-time mobile- devices through wereable teachnology

ANALYSIS ON THE HEALTHCARE

The various groups of users can be classified into:

- Healthcare
- Education
- Work

EFFECT OF TECHNOLOGY ON THE DURING COVID 19

Helps in gathering and providing information

- Remote working due to development in technology

- Workgroup such as authorities, officials and also the non-working group also takes advantage of the technology.

- Tracing, predicting and diagnosing virus.

- Mapping the various number of cases

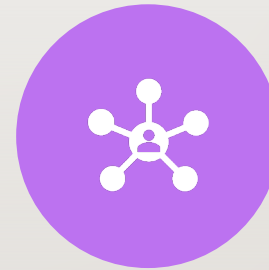
- Ease education system



THE USE OF DIGITAL COMMUNICATION, COLLABORATION, AND PARTICIPATION



Digital communication is the process of devices communicating information digitally through the internet or through any other relevant media (Laurenza et al., 2018).



This deals with behaviours and attitudes that facilitate work with different individuals in a digital space

DIGITAL COMMUNICATION, WHAT IS IT?

EXAMPLES OF DIGITAL COMMUNICATION TOOLS IN HEALTHCARE

- **MSD Salute Digital Ecosystem:** a virtual collection point for all digital services supporting the medical practice of general practitioners, specialists and pharmacists, which can be accessed through private credentials.

EXAMPLES OF DIGITAL COMMUNICATI ON TOOLS IN HEALTHCARE

- **Mobile communication channels:** Arguably the newest development for both external and internal communication, mobile allows you to convey rich information wherever your recipients are based (Thomas, 2021).
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- Their services include:
- Mobile calls
- SMS text messages
- Instant messaging apps like WhatsApp
- Video calls
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LITERATURE ON THE USE OF DIGITAL COMMUNICATION, COLLABORATION AND PARTICIPATION

It may include forming digital networks via social media. Its basically about knowing how to work with others through the help of internet.

In healthcare services, this approach help healthcare workers to disseminate their digital materials with their colleagues, formulate varied communications to persuade, entertain, inform and to support.

It also assist health workers in adhering to different norms and needs of communicating.

It assists in figuring and discarding of false information within the healthcare system.

By means of collaboration, this approach help workers to effectively partake in digital groups and team works.

It facilitate smooth working across different cultural, social and linguistic regions (Health Education England, 2018).

IMPACTS OF DIGITAL COMMUNICATION ON COLLABORATION AND PARTICIPATION IN HEALTHCARE

Pagers can share information on a patient's status, let them know test results are in or inform them of an emergency.

It facilitate doctor, nursing, and health educator consultations on telehealth. This is done without meeting in person.

It also allow patients to know medical results in the EHR system.

FUTURE OF DIGITAL COMMUNICATION IN HEALTHCARE

Healthcare in the future is expected to pave way for:

Changing chatbots: With the ability to pick up on information in free text responses and to then use it to tailor additional questions, fully-fledged chatbots can glean far more valuable data from survey responders using Natural Language Processing (NLP).

Rich Communication Service: Digital messaging channels like RCS open the door to simple automation for basic query handling (FAQs) and form filling, moving the functionality and services of expensive-to-create apps into a low-cost, accessible channel.

These are already been used for piloting but yet to be integrated into the healthcare system.

BARRIERS TO DIGITAL COMMUNICATION IN HEALTHCARE

- Physical barriers:include other environmental conditions like time, place and medium..
- Semantic barriers: Semantic barriers are about the different interpretations of words and symbols used to communicate.
- Accessibility barriers: Digital communication is effective only when people of all abilities can access and understand information.
- Attention barriers are when people miss out on what you have to say because they are distracted from giving your message their full focus(Girardin, 2020).

RELEVANCE OF TECHNICAL PROFICIENCY FOR DATA AND INFORMATION HANDLING

DEFINITION

- Data is defined as raw facts which is unprocessed and does not require full meanings. They are facts, statistics or items of information which is often numeric. They can be inputted to a system.

- Information handling is a processed data that which gives full meaning. Informations are normally output from the system. For example, an organisational monthly salary of an employee, total sales in a particular month.

- Data handling management also involves understanding how to write a report and queries using tools and copying data into excel and other types of formats in order to discover even further.

- Technical skills are the knowledge and capabilities to perform field specific specialised tasks. These skills often enable a manager to coordinate work, solve problems, communicate effectively and understand the big picture.

DATA HANDLING

Importance of data handling

- In health and social care, data handling is important because it improves the health, care and the NHS services. For example, if small amounts of data of the patients are being linked and being brought together, the doctors and patients and enhances the health outcomes.
- Meaningful data allows the hospital health staff members to make informed decisions to improve the quality of the care.
- This can be able to be monitored and analysing clinical data facilities to understand where programs are working and where they need to be improved.

INFORMATION HANDLING

Importance of information handling

- The correct handling of personal information are vital for trusting relationships and a collapse in this may lead to a service user becoming unwilling to cooperate with their care providers. As a health and social care staff member, it is your responsibility to safeguard an individual's personal information.
- Collecting information is used at all levels and in all contexts within organisations managing information in HSC is important because this leads to understanding and ensuring how patient data is generated and captured by health professionals is just as important as the analysis itself.

TECHNICAL PROFICIENCY FOR DATA HANDLING



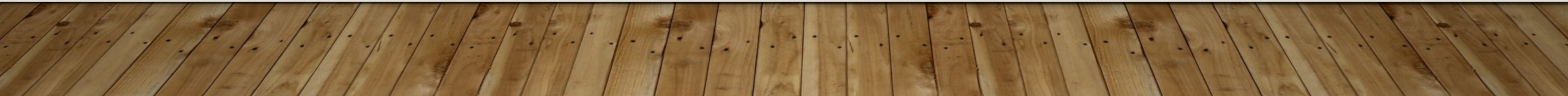
- . A data analyst is someone who uses technical skills to examine data and report insights.
- . A data analyst might use SQL skills to pull data from a company database, using programming skills to investigate that data and then use communication skills to report their results to the audience.
- . SQL skills stands for structured query language which is basically a language used by databases.
- . Having an SQL skills is important because it is highly marketable skill both within the organization and other organizations. Learning SQL is an effective use of time.

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- Technical information skills are sets of abilities that are used to perform practical tasks that are needed in HSC.
 - This are learned tasks that usually improve with experience and practice. For example. Writing down medical records, administrating medications or electrocardiogram.
 - information handling management in health and social care is the analysis, interpretation and presentation of health data. It enables the planning, improvement and delivery patient services and care.



CONCLUSION

- In conclusion contemporary technology in the health and social care is a vital part of the future and the current time we live in, this is because technology plays such a big part in everyone's life regardless of the age and life stage one is in. For example nearly everyone owns at least one technological device such as a phone or a tablet which can be used not only for leisure but also to monitor one's health.
- The above discussion helped in the understanding of the importance of technology during COVID-19. It could also be concluded that technology has a very important role in the lives of people during the time of the COVID-19 situation that has helped globally. Although there were setbacks in the usage of the technology, still the constant use of the technology made it easier to understand and develop it. The various types of users were also been able to analyze through the discussion who have taken the privilege of using technology. Hence, technology is considered an important part of the lives of people for the working process which has been evolving with constant usage.



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