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Digital Skills and Research Methods (BMHP4003_LON)

Assessment Component 1

Written Report

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Learner declaration

This assignment is my own original work. No part of this work has been copied from any other source or person except where due acknowledgement is made, and no part of the work has been previously submitted for assessment at this or any other institution.
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Introduction

The world today is changing from analog to digital in all aspects due to the rapid growth of technology. Technology is much appreciated in the modern world today and has been adopted in all sectors including the Health and Social Care sector. In the health and social care sector, technology is used in day-to-day operations of hospitals, care homes, GP surgery, Day Centres, nurseries, rehabilitation centres among others. Technology in health centres is used daily in the process of diagnosis, medical imaging and keeping online records. This is the reason why medical workers, social workers, and support workers are being equipped with technology skills through digital literacy and computer proficiency to ensure they are very efficient in providing health care.

Technology used in health and social care

Majorly, technology is used in the health sector especially hospitals and care homes for record keeping, clinical decision support, Laboratory and imaging;

Electronic Health Records

In hospitals and care homes, things regarding record keeping have moved digital where health records are collected, sorted, stored and retrieved using digital tools like computers. Electronic health records are maintained through the use of

information technology tools to manage digital health information of patients, staff and other stakeholders of the hospital through big data. (Qian, Yu and Hailey, 2015). The records kept electronically contain administrative data and clinical data like; insurance cover, medications, and demographics. Electronic health records are very important in health care because they are easily collected, stored, and retrieved as well as enabling data sharing between medical experts to solve medical problems and promote health. (Chou and ChanLin, 2012).

Telemedicine

Hospitals and care homes today are adopting to remote delivery of medical services through telemedicine. With telemedicine, individuals who need medical care do not have to move to the hospital in person for evaluation, diagnosis, and treatment but they should utilize technologies like; the internet, video conferencing, store-and-forward imaging. (Ahmed, 2019). People who need health care are advised to possess their personal technologies to communicate with medical practitioners in the comfort of their homes. Through apps like Live Health, video conferencing, and calling a telemedicine number, the patient is able to share their symptoms, health history, current treatments to the medical practitioners. (Krick et al., 2019). Patients also use mobile devices to capture data such as temperature, blood sugar levels, blood pressure. Telemedicine has helped improve on health and social care because it allows remote patient monitoring. (Lusting, 2012).

Remote Patient Monitoring

According to Kottek, Stafford and Spetz (2017) telehealth enables digital tracking of patients outside the hospitals through technological tools. In a care home, remote patient monitoring is usually used for monitoring patients who have chronic issues like heart failure, diabetes and hypertension among others. (Van Dyk, 2014), Use of wearable devices like; oximeters, heart rate sensors, exercise trackers, and sweat meters helps medical practitioners and care givers are able to tell whether a patient under monitoring needs an emergency or not, and the ambulance is always available with clinicians to ensure people receive quality and reliable health care. (Lusting, 2012).

Tele pathology

According to Farahani and Pantanowitz (2015), tele pathology involves use of “tele communication technology to practice pathology at a distance” by using real-time

video imaging for diagnosis of surgical pathology. A patient is able to transfer pathological data digitally for medical diagnosis through static image based system, real-time systems, and virtual slide systems. National Health Service England (2018) encourages use of tele pathology for medical diagnosis in locations where pathology services are not easily used. Tele pathology has helped in providing efficient health care because it is used where traveling to the hospital is not a viable option especially in such times of Covid-19 pandemic.

COVID-19 Home Testing

Due to the outbreak a COVID-19 Global pandemic, government of UK and in other countries restricted movements and this led to rise of distance health care access. For example, Home testing has been introduced like “LabCorp’s COVID-19 RT-PCR test which is used as a diagnostic test from home without having to move to the hospital. This has helped to curb the rampant spread of COVID-19. (Geldsetze, 2020).

At Bolton NHS Foundation Trust in the UK, a technological machine was installed to automatically interpret COVID-19 proliferation from chest X-ray. By using this machine, it has been easy for health workers to monitor and evaluate the impact of viral infection which has led to better health outcomes during the pandemic. (Vargo et al., 2021).

Use of digital communication, collaboration and participation

Digital communication is being used in the hospitals and care homes because it promotes quick and easy communication between clinicians and patients. Digital communication like video conferencing, emails also enables collaboration and participation in the process of providing care. (Zhou et al., 2020).

In health and social care centres, digital tools like telephones are used for urgent contacts to pass communication from one person to another. For example, a phone call is made through a mobile phone to communicate emergency conditions and an ambulance is made available immediately. This enables quick communication, collaboration and participation. (Newshouse et al., 2015).

In case of need to pass lengthy and detailed information in health centre, emails are used because it cannot be sent through text messages and direct phone contacts. On the other hand, medical practitioners and their colleagues use text messages for appointment changes and quick questions from patients and other experts.

Digital communication through online patient portals has enable quality care because it is easy to inform and educate patients about health lifestyles, treatments and preventive measure about many medical conditions and diseases. (Itsekor et al., 2012). Through these online patient portals, participation increases because it reduces loneliness and isolation which encourages the patients to adhere to treatment instructions as well as improving self-care and self-management.

Digital communication is very important for cost saving to the hospitals and care homes because services are accessed digitally and communication made digitally where traveling to the hospital is not a viable option. In addition to cost saving, communicating digitally helps to promote remote monitoring through wearable devices and online patient portals. (Pence, 2014).

Electronic health records have promoted digital communication in hospitals and care homes because it has promoted easy storage and data sharing for the betterment of health provision. In addition, digital communication has enabled government in the fight for Covid-19 by sharing preventive measures with the general population like no more unnecessary movements among others. This has been possible because many people around the world own smart phones. For example, 90% of UK's population have smart phones.

Use of digital literacy for professional career development

According to Itseko et al. (2012) digital literacy is the ability to get, evaluate, and create information by using Information and communication technology. Digital literacy is relevant for professional career development because it enables competence for teaching, learning and community building especially in the field of health and social care.

Equipping health and social workers with basic computer skills like; typing, key board commands, disconnecting computer, Ms office and internet enable health workers to be more employable because computer skills are one of the employable skills in one's career. (Graham, 2014). It helps workers to easily collect, store and access patient's information digitally by simply using the computer.

Digital literacy is important in health care setting because it helps health and social workers to be more efficient and productive. This is because digital literacy enables the worker to obtain digital skills like social media management, database

management among others. All these improve on the value of the worker in the job market. (Itseko et al., 2012)

Digital literacy promotes technical proficiency which is important for career development. Computer skills like use of internet; social media and search engines, MS Office (Excel, Word, PowerPoint, Teams) helps a health worker to become more relevant in the job market since it increases on the qualification needed for the job. (Passey, 2014).

Relevance of technical proficiency

Technical proficiency enables health and social care workers to obtain skills required to perform their roles very effectively like Microsoft word, Microsoft excel, presentation skills. This is because these skills are used on a daily basis for capturing records, analyzing data and sharing the data. Presentation skills enable a health and social worker to express themselves digitally especially in times of Covid-19.

Technical proficiency facilitates career growth because it enables one to be obtain digital literacy good for relearning and research. This is because knowledge is power and a health worker will be more self-confident with this knowledge when performing their tasks from an informed point of view. (Graham, 2014). Equipping employees with computer skills to use computer systems like; customer services system, data base managing, company software proficiency, and social media management makes them satisfied with their careers because they can use it as a basis to negotiate for higher pay and it makes them feel wanted.

Technical proficiency helps health and social workers to manage accounts and files in the work place like collecting data, sorting data, reviewing data, editing and printing. This makes their work since everything is done by the computer not manually. (Passey, 2014). It also improves on security and safety of documents by reducing on risks of keeping physical records like printed reports, papers, and hard copy files.

Technical proficiency is relevant in health and social care because it enables learning and encourages research through digital tools like computers by using the internet. This makes the health workers knowledgeable and more productive while administering care.

Conclusion

The use of technology in health and social care has greatly contributed to better service delivery in the sector. Through use of digital tools and techniques like telemedicine, telehealth, electronic health records, remote patient monitoring among others, a lot of benefits have been identified; quality health care has improved, easy access of information and communication, patient safety has also improved, encourages research in medical sector, decreased medical errors as well as acting as a communication link between health providers and their patients. In conclusion therefore, digital literacy and computer proficiency should be given priority while training health and social workers because it makes more efficient and productive as they perform their tasks because it equips them with required skills for the job.

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