

DIGITAL SKILLS AND RESEARCH METHODS

Module Code: LCH4002

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WORD COUNT: 2,000

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INTRODUCTION

Report: My research project is about nursing home and the use of technology in the nursing home. As technology becomes increasingly prevalent in our daily lives, the healthcare sector also benefits from technology in multiple ways. Technology has played a very crucial role in the improvement of nursing homes, as it constantly develops and becomes more complex and specialised to residents that require different medical attention. Technology has also helped combat various issues residents of nursing and care homes face, such as loneliness.

When finding a credible source, the author and publication of the source is extremely important. The author of the source must be trusted in their field and hold some authority to the topic/s they are writing about. Credible secondary sources include first-hand reported newspaper articles, encyclopaedias and textbooks. Articles and documents found on the internet must be checked to see if the author is reputable in their field. The foreword or introduction of an article usually contain information on the author's credentials/areas of expertise, which can be evaluated by the researcher to tell if they are worthy of basing their work on. It can also be helpful to check the sources cited by the author of the secondary information. Types of authors who are respected in this field of study are doctors, university teachers and healthcare professionals.

IMPACT

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Technology has also helped combat various issues residents of nursing and care homes face, such as loneliness. Technology is a key to reshaping how nursing homes, and other clinical environments, exchange information amongst one another and to the public, how care is delivered to their residents, and how the conditions of

the residents are monitored. By 2017, 90% of the UK's care and nursing homes had access to an internet connection. 10 years ago, that amount only made 57% of the UK's nursing homes, and in 1998 that number was only 9%.

Technology has benefited nursing homes in many different areas, some of which are benefits to other healthcare workplaces as well. Some examples of these benefits are the improvement of diagnostics through digital recordings such as EHRs. EHRs allows medical professionals like nurses to provide accurate treatments to residents based on the details of their EHRs. It allows informed decisions on what medication should be provided and how large of a dose based on the resident's medical history, health conditions, etc. Since EHRs are comprehensive and take data from various sources, the medication provided to the patient will prove more effective. Newer technology that is available for use like tablets and phones can allow nursing homes to spend more time caring, as well as allow patients to keep in touch with close friends, family and entertain themselves.

Finding a research topic to make a report on relies on the interest of the researcher, the availability of information on that topic, and choosing a manageable range of subtopics to research. It's important to choose a topic you are more interested in, as the research would generally be more relevant if the topic chosen is cared about by the researcher. Narrowing down your scope of subtopics is also important, as if your range of research is too broad there will be too much information and you would not know what to focus on, making your research vaguer. For example, choosing a specific healthcare centre rather than healthcare centres as a whole. It's also important to choose a topic with enough information to research on, so that you have sufficient material to base your research on. I have chosen nursing homes as I feel it is important to see how technology has changed how medical and personal services are given to residents.

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Software not specifically designed for nursing homes, like social media and video call apps can reduce both boredom and loneliness in patients when residing in nursing homes. Software can be a valuable resource for staff, providing them with the assistance they require to ease the tasks of their jobs. Software services such as Skype, which is a platform used for voice and video calls, can also be the result of better communication between patients and their relatives, and patients and the nurses in the home. Software can also help care homes with electronic care planning and room assignment. Handheld mobile devices with appropriate software, can allow

staff to update the care given or information they want to note about a person as they go, rather than adding it to the paper notes at the end of a shift.

CONCLUSION

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Finding reliable secondary sources for your research depends on various factors. When assessing a source, it is important to check first whether the source is up to date, and setting a margin of gap between what is considered outdated information and what is ready to be used. Finding reliable secondary sources for your research depends on various factors. When assessing a source, it is important to check first whether the source is up to date, and setting a margin of gap between what is considered outdated information and what is ready to be used. The advancement of technology is constant and there are always newer versions making older models redundant and less accurate for research, which is why it is important to check when a source has been made, or if it has seen any updates in recent years. An article written in 1998 will not be as accurate for research as an article written in 2016, as the author of the article has, at the time, not experienced the same advancements in technology as it would have in later years.

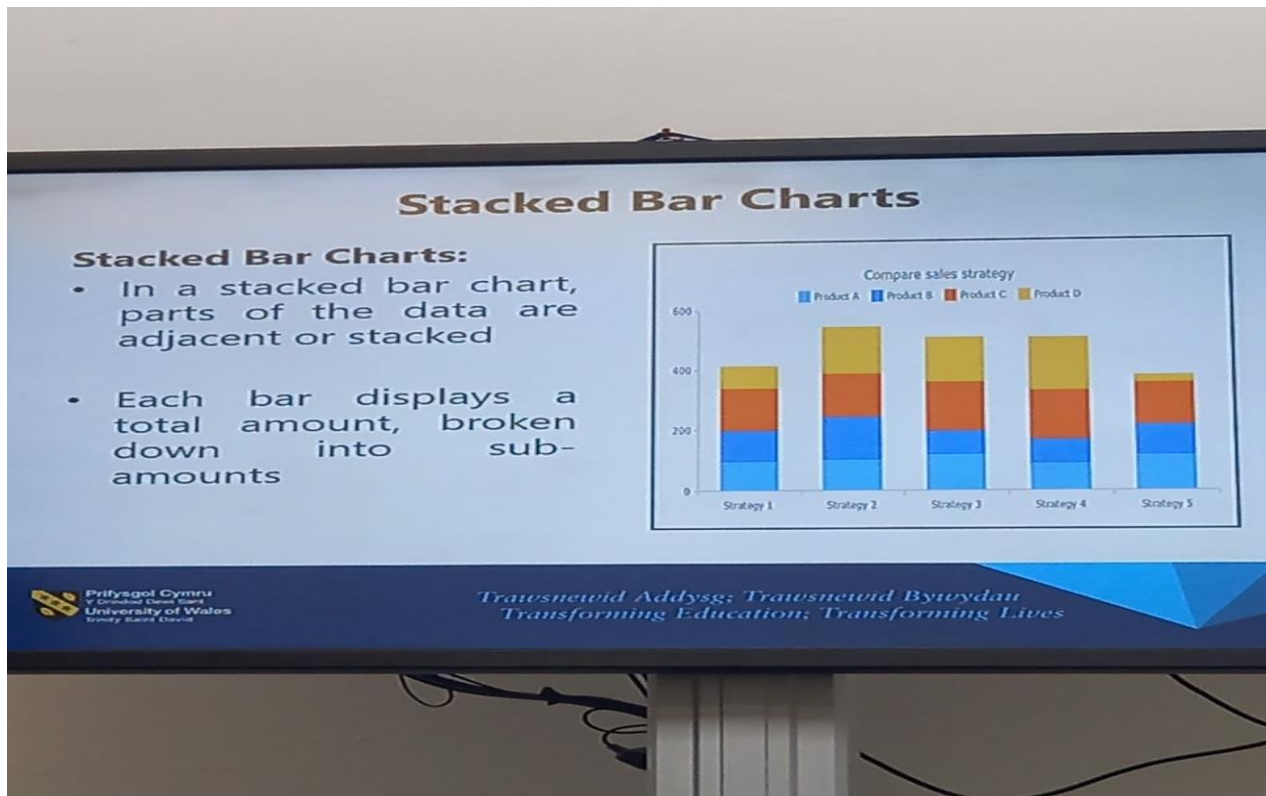
Technology can also be used to help residents in nursing homes that require specialised treatment. For my research I looked into a nursing home that uses technology to help patients suffering from dementia. The residents of the nursing home use software that can be arranged to inform the patient's daily routine, to ask the staff at the nursing home appropriate questions, and to receive quicker answers in turn. There is also technology that allows the staff to perform daily tasks more easily, for example the installation of acoustic listening devices. With permission, these items can be switched on at night to 'listen' for noises that could disturb the resident's sleep, which saves them from having to patrol the rooms. However, staff can still check for unusual disturbances in the rooms. Digital locking systems can also be installed on entrances, exits and nursing home rooms to limit access, and keep the residents in the nursing home safe.

Nursing homes can also use technology to help residents receiving medical treatment. Newer innovations of technology can be used to detect any falls residents

have made (and help prevent them), early warnings to signs of an infection, promote client independence without risking their safety, and in many other instances. Tech-related healthcare systems like telemedicine and telecare can also be used to distribute health-related services and information through electronic information and telecommunication technologies. Using telemedicine can allow care, advice and clinical contact to be presented to the patient from a long distance, which improves access to care for the residents and the cooperation between healthcare professionals.

For this research methodology I have considered using data collection gathered from various sources online, including organisational archives, online reports, documents and articles. In recent years and with the ever-increasing range of sources to choose from online, I believe that this method is a suitable choice for my research. Researching for sources online makes it much easier to compile desired data to use for my report, although I must be cautious of only using authentic and relevant data. Newer and more up-to-date versions of online data can take greater populations into account, meaning the research presented will be more accurate when using it. The methods I have used to gather information are qualitative and quantitative research. For quantitative research, the data gathered is presented numerically or in a graphical format to convey factual information, which can then be collected to use for my report. Qualitative research includes interviews, case studies, and other first-hand primary data.

Finding a credible source to base data collection on also depends on the motive behind the source, and this can be difficult to ascertain. Sources written on topics should be presented with facts alone, and knowing the purpose for the creation of the source can make it much clearer during evaluation of the source, and checking whether it is relevant or reliable to the research. Bias of any sort, whether it is passive or active, that tries to persuade the reader to have more positive views on their descriptions, should generally be avoided and are not suitable to base research on. For example, an article describing how a certain medicine benefits a hospital or care home is most likely trying to persuade readers into looking into that medicine further. This suspicion could be raised further if the author of the article is the manufacturer of this medicine. I found my sources for research from online websites and checked the criteria used to see if it was accurate, relevant and up-to-date.



The graph above shows the stacked bar charts with data taken from the university of Wales. From this graph it shows that there has been a great increase in the technology as involvement within the care sector. And it shows that as technology has advanced it has been of great advantage to the care system as it has helped the patients where they are in care homes and has helped staff produce a better service.

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