



Research Skills for Healthcare
Assessment 2

Module number : BMSW4003

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1. Introduction

Over the past ten weeks I have been attending the course Health and Social Care in the University of Wales Trinity Saint David to have a qualification to become a Nurse. In the past two weeks I have been seeking about which workplace was suitable for my Continuing Professional Development(CPD) and turns out that around my area there are many facilities where I could work or study in a not far future.

I have always considered myself capable of solving problems in a brief time if necessary and given the present circumstances I believe that this is the right time to pursue a career in one of the fields that I am passionate about, specifically in the field of Research and Modern Technologies in the Healthcare Industry.

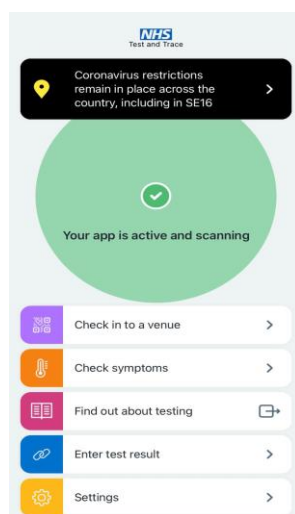
The pandemic was one of the most turbulent events in our generation, for most industries. Covid-19 has led the healthcare industries to rethink and accelerate the transformation of healthcare and assistance systems, and in fact the role of digital has been fundamental and extremely elaborated in a brief time through the new Artificial Intelligences.

Has radically changed the approach to health care the diffusion within health facilities of a growing number of advanced technologies for diagnosis and therapy. **(Giovanni Franco, 2016)**

As I have the desire to work or study one day in the facility, in this report I conducted an in-depth research about the use of technologies in the Guy's and St. Thomas Hospital NHS Foundation Trust located in London, I conducted a research about technologies that makes the place working effectively efficiently.

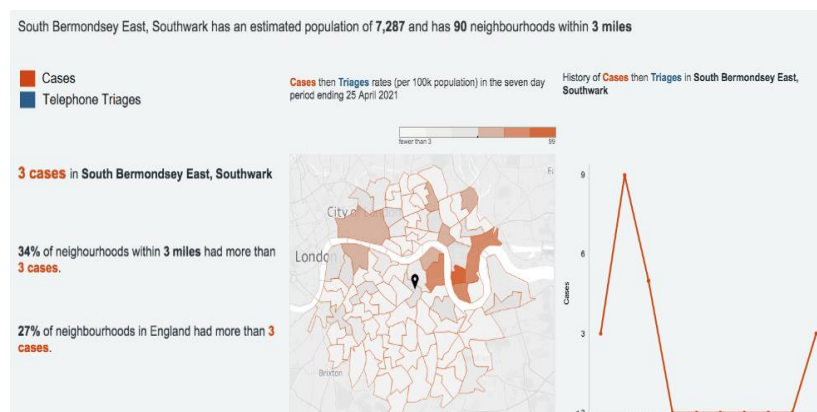
2. NHS App

One of the strongest technologies that helps many in this period is the NHS App which in recent years has been studied and diffuse in England and Wales to give a way to quickly track a risk coronavirus in frequented places and to give information on restrictions in specific areas. This procedure was made possible using technology from Apple and Google, designed to protect the privacy of each user.



Layout App

The diagram below shows a small number of cases in my and surrounding areas, makes me understand that I can safely leave the house without worrying about being infected or to spread the virus.



(<https://digital.nhs.uk/dashboards/coronavirus-in-your-area>)

3. Guy's and St. Thomas Hospital NHS and the Apollo Programme

Guy's and St Thomas' NHS provide a full range of local hospital and community services. The number of patients attending the ward every day has continued to grow and now it is fifty more patients per day than they had planned. This year also saw the expansion of the outpatient and primary care redirection services, which coupled with increased senior clinical coverage in the evenings and weekends ensured they had sufficient beds. **(Guy's and St Thomas' NHS Foundation Trust, 2019)**

One of the UK's best-known hospital, it leads many clinical networks that have a positive reputation for sharing management skills, best practices, and innovative ideas with other NHS organizations and through modern technologies research gives patients access to lasting treatments and the opportunity to improve care for future generations.

Through a program which name is Apollo the hospital can provide a transformative work schedule for staff by empowering them to work efficiently so they have more time to spend with patients. The program will provide an Electronic Health Record (EHR) system and a range of supporting technologies, replacing paper records, merging patient records, and making them easily accessible to our doctors at the point of care. **(Guy's and St Thomas' NHS Foundation Trust, 2021)**

Currently the method of communication between various sites is through a series of IT systems and paper documents to record and retrieve information, and this is not efficient in terms of timing since they must access from different systems. The use of Epic software implements a source of information; it is called EHR or electronic medical record. Through this single system you can access all the patient information from everywhere at any time.

According to research, I have discovered that unfortunately Epic even being a company that offers services to most of the healthcare industries, has given many problems in 2014 when the first installation in the UK was in the Cambridge University Hospitals NHS Foundation Trust at a cost of 200 million \$. After millions of files were transferred, the system became unsafe, causing real damage to the blood transfusion and pathology services as well. Sadly, this event caused a sense of non-trust

in this system, taking years to regain it among the various health sectors in the United Kingdom.

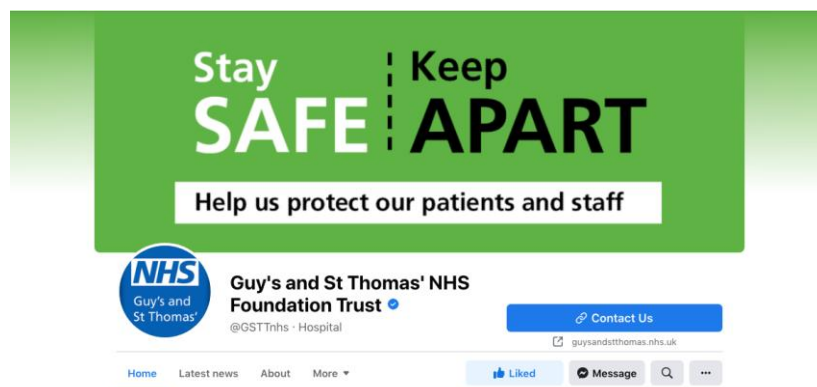
4. Social Media used in the Hospital

Health practices are busy. It is hard challenge with everything, and patients require organizations to keep up with social trends and that includes social media existence, a marketing technique that can benefit organizations in many ways.

One of the reasons why the Guy's and St. Thomas Hospital is using social medias is because the patients already have it, and the use of this platform is expected to increase. 63% of patients said that they would choose one healthcare provider over another if they had a strong social presence. Social media is helping to reinforce the relationship between the patients and the Healthcare Professionals.

A strategic way of communication that they have adopted, such as Facebook, Twitter and YouTube Channels helped the Health Care Professionals to communicate to visitors the new rules to follow, due the recent pandemic event.

As everything in this advanced world, we find disadvantages about social media. However, it is one of the greatest resources that a health facility can possess and that especially in times likewise the present one, this type of intelligence has been of tremendous help in all industries. Unfortunately, this tool has disadvantages due to the lack of privacy. As we know, being part of a social media also implies an approach with strangers from your community and therefore it can often happen that some accounts are fake, others just want to steal information, putting the user of the injured profile at risk. Even so, having a good platform such as the social network Facebook for the health centres it is an outstanding resource.



Layout Profile Facebook Guy's and St. Thomas

5. 3D Printer

Technology is developing every day and due to it clinics are saving many lives which previously would not have been possible in a so brief time and efficiency. One of the technologies that contributes to the development of healthcare is the 3D Printer.

3D printing is a variety of processes in which material is solidified using computers to create a physical object from a digital model file, with a specific type of material added together layer by layer. Initially this machine was created to produce prototypes giving producers more dynamism and flexibility. The instructions for the uses are the same as those for printing any document that sends commands and information to the printer from the computer through internal commands, giving way to obtain a print of the desired object. In the healthcare industry they are studying a way that allows 3D printing to reproduce the bones of a human body using the same components a bone is made of. With certainty this vision is close to reality.

In 2015 the Guy's and St. Thomas NHS Foundation Trust was the first in the world to prove the validity of a 3D printer in transplanting an adult kidney into that of a 3-year-old kid. Decisively a changing life of the child and the family but also of many studies that have finally proved that through the solid work of a large hospital team it is possible to obtain significant results.

6. Conclusion

There is no doubt about the development of technologies within the facility. As seen above, it is a crucial factor in our studies to know exactly what we are dealing with.

Unfortunately, I must admit that despite it was an interesting and particularly important module for my studies, I have had a lot of difficulty understanding its content in the last few weeks, so frankly speaking I did my job in the best way I could, as my research has taught me a lot.

7. Reference List

- Etactics(2020), '*The benefits of using social media in healthcare*'. [Online][The Benefits of Using Social Media in Healthcare](#)

- Giovanni Franco, *The company economic impact of robotic surgery in the HTA perspective*, , University of Pisa, 2016

- Guy's and St Thomas' NHS Foundation Trust (2021) , '*3D printing used in a boy's life-saving transplant*'. [Online]<https://www.guysandstthomas.nhs.uk/news-and-events/2018-news/june/20180607-3d-printing-used-in-boy's-life-saving-transplant.aspx#:~:text=The%20Trust's%203D%20printer%2C%20made,Guy's%20and%20St%20Thomas'%20Charity.>

- Guy's and St Thomas' NHS Foundation Trust, *Annual report*, 2019

- Guy's and St Thomas' NHS Foundation Trust, *Apollo*, 2021

- NHS COVID-19 app support (2021), '*Protect your loved ones download the app*'. [Online] <https://www.covid19.nhs.uk/>

- NHS Digital (2021), '*Coronavirus in your area*'. [Online] <https://digital.nhs.uk/dashboards/coronavirus-in-your-area>

- Wikipedia(2021), '*EPIC Systems*'. '[https://en.wikipedia.org/wiki/Epic Systems](https://en.wikipedia.org/wiki/Epic_Systems)