

ASSESSMENT 1

DIGITAL SKILLS IN HEALTHCARE

CONTEMPORARY TECHNOLOGY
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Introduction

On this report I will discuss the use of contemporary technology in Healthcare, digital tools and techniques to improve efficiency on the same during Covid-19, the use of digital communication, collaboration and participation, digital literacy for professional career (teaching, e-learning and self-development), digital identity, well-being and safety and the relevance of technical proficiency for information and data handling.

CONTEMPORARY TECHNOLOGY IN HEALTHCARE



(Bing)

Contemporary technology besides being an advance of the old technology, simplifies the life of the health professionals in many ways. If for some it means complicated electronic devices, for others it means a radical change that happens at all stages of life, like easy access to information, saves time, ease of mobility, better communication, better learning techniques, cheaper, improved banking and health and social care work (Telemedicine, lowering of costs, ease of interoperability, access to high powered analytics, patient's ownership of Data, etc) , as a science, for practical purposes and daily use in the performance of specific tasks or interests.

Daily we use contemporary technology (Cloud, AI, Smartphones, Robots....) (MK,2021)

TECNOLOGY DURING COVID 19



(Bing)

Cloud Computing is particularly important on Healthcare.

Although the impacts of the pandemic are still unfolding, the global market for cloud technologies has skyrocketed in the health sector (\$ 25.54 billion increase during 2020-2024), COVID - 19 reinforced this trend, and even if not all industries will be on the same situation, the health and technology sectors seem to fall into this category. Regarding social distancing, healthcare-providers had to analyse the doctor-patient interactions, developing telehealth.

The health sector generates a significant amount of data on a daily basis, democratizing the data and its remote accessibility to professionals and patients free of charge, breaks the geographical restrictions on access to health.(MK)

DIGITAL COMMUNICATION, COLLABORATION AND PARTICIPATION

(Bing)

Involvement of behaviours and attitudes to work with other people in digital spaces (communicating in text-based forums or building digital networks through social media), as well as knowing how to work together online

(with the right productivity platforms and tools to use).

Having this ability, you will be an active digital citizen

(person who posts and responds to other people, interacting instead of being passive in online spaces).(QUB)

DIGITAL IDENTITY, WELL-BEING AND SAFETY**(Bing)****Identity, image and reputation**

- Any text or photograph posted online can remain in the public domain and contribute to a digital footprint (information about a certain person on the internet as a result of their online activity).
- Benefits and risks of presenting in different ways online, example. professionally and personally.
- Using the digital footprint to promote skills and professional experience.

Health and well-being

- Balance virtual time with private life.
- Identify various types of bullying, including cyberbullying, and find ways to deal with it, for example. screen capture, block, report.

Digital security

One of the biggest concerns between different healthcare organizations (GPs, hospitals) is the protection of patient's personal data, secure data transfer and sharing of patient information, therefore cloud providers offer security, risk management and monitoring services for protect your users. (RCN)



(Bing)

Barriers of Cloud Computing in Healthcare:

- **Security Concerns:**

Patient data is sensitive in nature and cloud-hosted healthcare data needs to be safeguarded against external threats, because of this, the biggest concern of cloud computing in healthcare is the security risk associated with it.

- **Compliance to Security Norms:**

Data regulation laws (HIPPA and GDPR), need to be complied with to ensure compliance of health data and related applications, hosted in the cloud, healthcare professionals need to be alert when moving to the cloud.

- **Low-speed connections:**

When downloading from the cloud, computing it is often impossible due to the low speed of the internet connection.

- **Stored data can be lost:**

If healthcare professionals do not have a physical or local backup and a problem occurs, there is a chance that patient data will be lost, even if the data stored in the cloud is theoretically safe (replicated on multiple machines).

THE USE OF DIGITAL LITERACY FOR PROFESSIONAL CAREER DEVELOPMENT



(Bing)

Digital literacy means the functional skills needed to function to communicate through technology and the media, to be able to understand and use information in various formats from a wide variety of sources present through the computer:

- Navigation
- Communication
- Digital environment

There are many benefits of Cloud Computing for healthcare:

Cloud storage:

Easily accessible, it is said that data (or files) are stored in the cloud when they are saved on a remote server, anytime with Internet support (Williams, 2014).

“Cloud computing is a data storage model in which digital data is stored in logical pools, physical storage spans multiple servers (and often local) and the physical environment is typically owned and managed by a hosting company” (Dinesh, 2017).

There are many health benefits of cloud computing:

Collaboration:

Medical service professionals can transfer data through a cloud computer server, increasing the operation for better treatment.

Artificial Intelligence and Machine Learning:

AI can be scary

AI and machine learning resources aim to support clinical decisions on treatments in a quick space of time

Data storage:

Cloud computing gives healthcare institutions the opportunity to store data (electronic medical records, patient portals, mobile apps) without any additional cost of maintaining physical servers

Scalability:

Cloud computing, depending on the flow of patients, provides healthcare professionals with the flexibility to increase or decrease their data storage.

Cost:

Cloud computing is done on a subscription model, through a cloud server, thus making healthcare institutions reduce costs with the purchase of expensive systems and equipment.

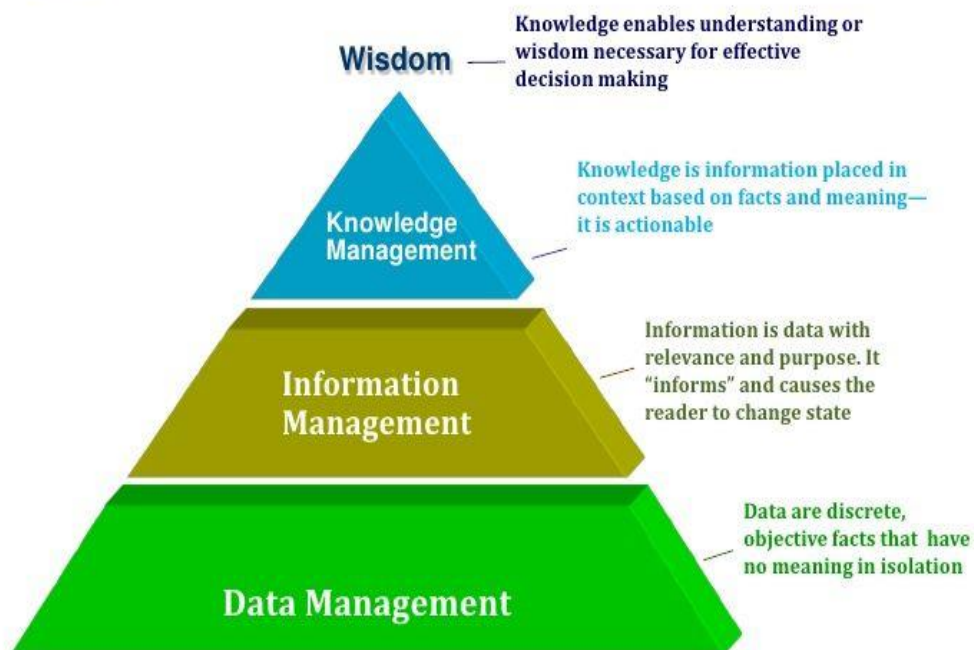
Software:

To download the service on all devices, files must be handled locally via multiple devices

TECHNICAL PROFICIENCY FOR INFORMATION, DATA HANDLING



KM Pyramid: *Data ... Information ... Knowledge*



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(Bing)

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