



Source: Dr Helene, L. (2019)

Module: Digital Skills and Research Methods (Health and Social Care)

Module code: BMSW4003

Lecturer: Amitave Banik

Group Name and Id :

RUBY KAROMO: 2114144

ANABELA MENDES: 2124257

FLOR DE KILLICK: 2124309

KARY MONTANO: 2121660

FAWSIYA ABDULLAHI: 2030733

Table of contents

- Introduction
 - The use of contemporary technology in healthcare (diagnostic, administrative, and care support).
 - The use of technology during Covid-19.
 - The use of digital communication, collaboration, and participation
 - Digital identity, well-being, and safety
 - The use of digital literacy for employee well-being and their professional career development (Teaching, e-learning and self-development)
 - The relevance of technical proficiency for data and information handling.
 - Conclusion
 - Reference
-



Source: Richard, B. (2019).



Source: Kritti, B. (2020)

Introduction

Name : RUBY KAROMO ID 2114144

The incorporation of technology within the Health and Social care sector evolves everyday as well as become more beneficial for the NHS, private, employees/employers and other participates of the Health and Social care sector.

In this group presentation there will be an in dept evaluation of different uses of technology, techniques and digital skills to portray a positive efficiency in the Health and Social precinct.

THE USE OF DIAGNOSTIC CONTEMPORARY TECHNOLOGY IN HEALTHCARE

Name : RUBY KAROMO ID 2114144



Source :Microsoft presentation

The use of current contemporary technology has evolved and shown great importance within the healthcare industry. Although there are proven facts that certain technology can create more damage. However with the correct training and testing, all technology methods approved by the Health and Social department are safe.



Source : Scherman,J,
Rasmuseen University 2019

1. Electronic Health records
2. Personalized treatment
3. Telehealth
4. Surgical technology
5. Artificial technology

THE USE OF ADMINISTRATIVE CONTEMPORARY TECHNOLOGY IN HEALTHCARE

Name : RUBY KAROMO ID 2114144

6 Ways Technology is transforming the Healthcare industry:

1. Artificial Intelligence. AI technology has come leaps and bounds in recent years, and it is perfect for improving the healthcare system.
2. Robot-Assisted Surgery.
3. Virtual Healthcare.
4. Supplies & Equipment.
5. Virtual Reality.
6. 3D Printing.



Source: IBM 2022



babylon

Source: Babylon 2022



current health

Source: Current Health 2022

Benevolent^{AI}

Source: Benevolent 2022

THE USE OF CARE SUPPORT CONTEMPORARY TECHNOLOGY IN HEALTHCARE

Name : RUBY KAROMO ID 2114144

There are a lot of online and upfront care support groups to help those in the Health and Social care industry. As proven to be a rewarding, uplifting, and honorable job, it can also have a big impact on our mental health as well as physical health.

These are different links that are helpful care support groups, for Healthcare workers in all aspects:

- Sodexo- <https://www.sodexoengage.com/employee-assistance-programme>
 - Spectrum life- https://wellbeing.spectrum.life/eap-uk/?utm_medium=ppc&utm_term=employee%20assistance%20provider&utm_source=adwords&utm_campaign=EAP+UK&hsa_kw=employee%20assistance%20provider&hsa_acc=5811070152&hsa_ad=413306692995&hsa_net=adwords&hsa_src=s&hsa_tgt=kwd-298474596378&hsa_grp=74265197941&hsa_mt=b&hsa_cam=6466121426&hsa_ver=3&gclid=Cj0KCQjwxtSSBhDYARIsAEn0thSKOjTarxmY-Vt1sWtSkwXZE3mki5HIV9UdOCnlJkyYnddQ9bsTK8IaAk9GEALw_wcB
 - Perkbox- https://www.perkbox.com/uk/campaign/sem/eap?utm_source=google&utm_medium=cpc&utm_term=gg_1-eap%20program.b&utm_campaign=Gen_UK_E_Employee-Assistance-Programme&bt=546116207033&bk=eap%20program&bm=b&bn=s&bg=96718363345&gclid=Cj0KCQjwxtSSBhDYARIsAEn0thTpD_psztd2tS2obwJ51tZULR-SwrmejpvnngaFv1wqveALZEHjANQaAgwBEALw_wcB
-

The use of technology during Covid-19

Name : FLOR DE KILLICK ID 2124309

Healthcare



Sources: Sean, M. (2020)



Source: Jorge, C. (2020)

- To track disease and contain the spread of covid-19.
 - Provide treatments effectively to patients.
 - To help the healthcare workers efforts who are overloaded.
 - To develop new treatments and effective vaccines covid-19.
 - To train and encourage healthcare workers in hospitals to reduce the risk of infection transmission.
 - To quickly detect if one is positive through the covid test PCR.
 - Encourage communication between patients, health workers, and family members. To keep information and data collection.
-



Source: Carolina, M. (2021)

The use of technology during Covid-19

Name : FLOR DE KILLICK ID 2124309

Users: Doctors, healthcare workers, all kinds of patients with multiple chronic conditions, and vulnerable people.

Types of technologies

1. Artificial Intelligence:

- To track epidemic in real-time and down words that are alarming and identify online sources to review and expose false information.
 - Cheek temperature with the use of wearable sensors.
 - Open-source data platform to track the spread of the disease.
 - Detection of visual signs on images; Chest computerized tomography, chain reaction (RT-PCR), and lung scans, chest x-ray.
 - Vaccines such ASTRAZENECA and PFIZER.
-



Source: John, T. (2021)

Name : FLOR DE KILLICK ID 2124309

2. Open-source technologies

- Prevention, treatment, and care using Information Platforms share data, such as World Health (WHO) and the European Centre.
- Trace Together contact-tracing app.

3. Telehealth technologies

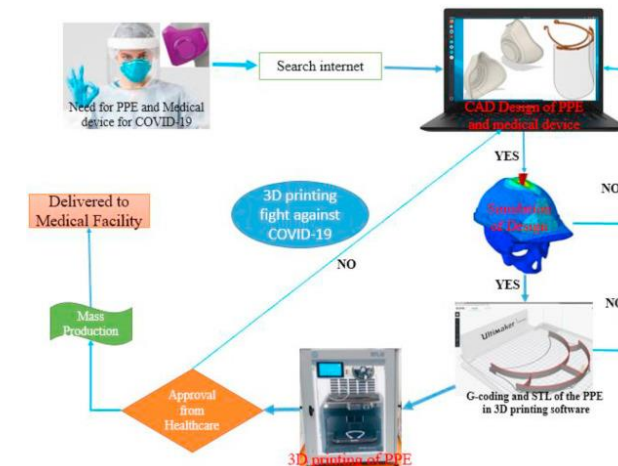
- Video 'visits' via webcam are enabled on computers, tablets, smartphones, chatbots, and automated algorithms.
- Audio-visual conferences to keep hospitals only for confirmed cases.

4. Three-dimensional printing

- Test kits, breathing filters, ventilator valves, plastic door handle adaptors.
- Designs for 3D printable medical products.
- 3D printed face shields and mask closures.



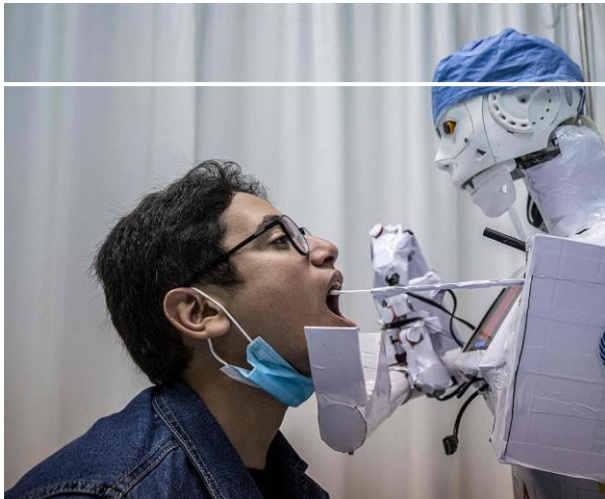
Sources: N/P,(2020)



Source: Elsevier, B. (2020)



Source: Lauren, (n.d). (2018)



Source: Kizzi, A and Africanews.
(2013)

The use of technology during Covid-19

Name : FLOR DE KILLICK ID 2124309

5. Drones

- Ensure that people in remote or quarantined areas have access to supplies.
- Population control, monitoring, and warning of any improper practice through a loudspeaker.
- Thermal checks, and interpret any possible symptoms.

6. Robots

- To minimize the human contact, exposure, and the risk of clinical staff contracting and spreading Covid-19.
 - Disinfect hospitals, decontaminate public and private services, and Manage biohazardous waste.
 - Deliver food and medicines. Physician assistants, robotics.
-

The use of digital communication, collaboration and participation

Student name: Kary Montano Carrizales ID number: 2121660

Digital communication :

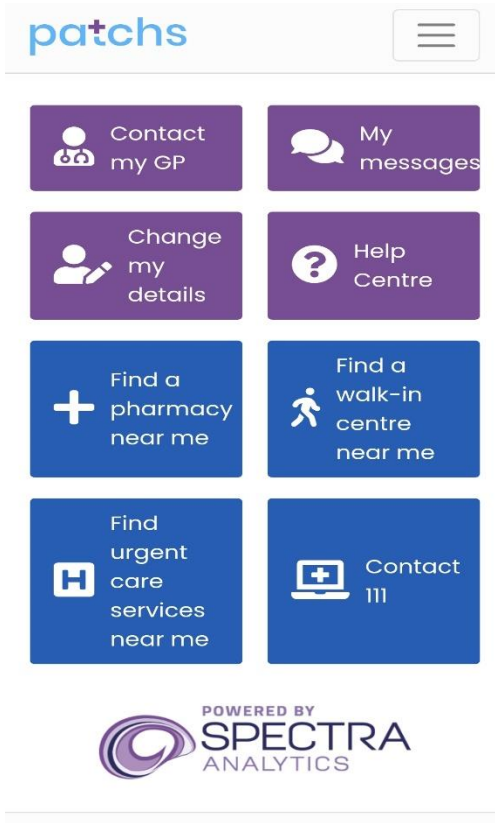
- ✓ The importance the use of digital communication
- ✓ Different tools to use to maintain the patients a clinicians easily: Social media , emails , texting ,Healthcare portal, skype
- ✓ This benefit increases patients compliance and reduces patient harassment like unnecessary return visits.
- ✓ Offers online services and information of healthy life style



Source: iprovonline.com

Digital collaboration

Student name: Kary Montano Carrizales ID: 2121660



Source: Tynemouth Medical Practice

- **The importance**
- multiplicity attention
- automatization of task
- **Attitudes and awareness**
- doubts of doctors and patients to a misdiagnosis
- Covid-19 accelerated the change
- **Performance**
- Effort
- Saving time

(Curtin University and La Trobe University, 2020)

Digital Participation

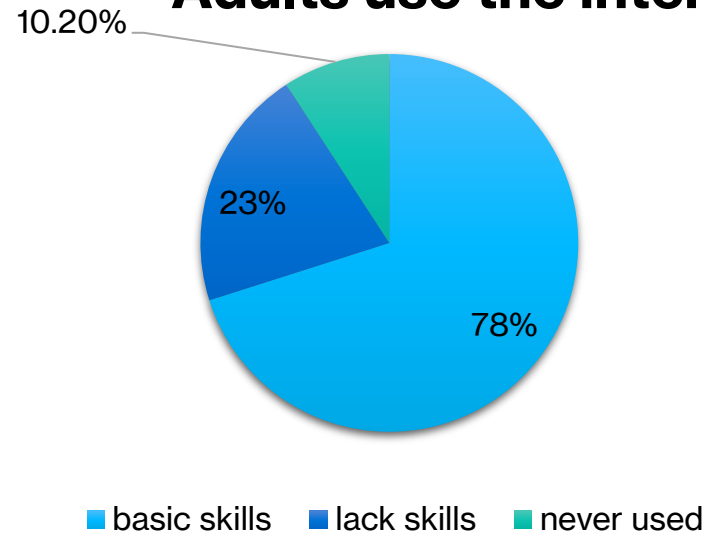
Student name: Kary Montano Carrizales ID: 2121660

- Tinder F. & NHS expand program
- Every one can use technology

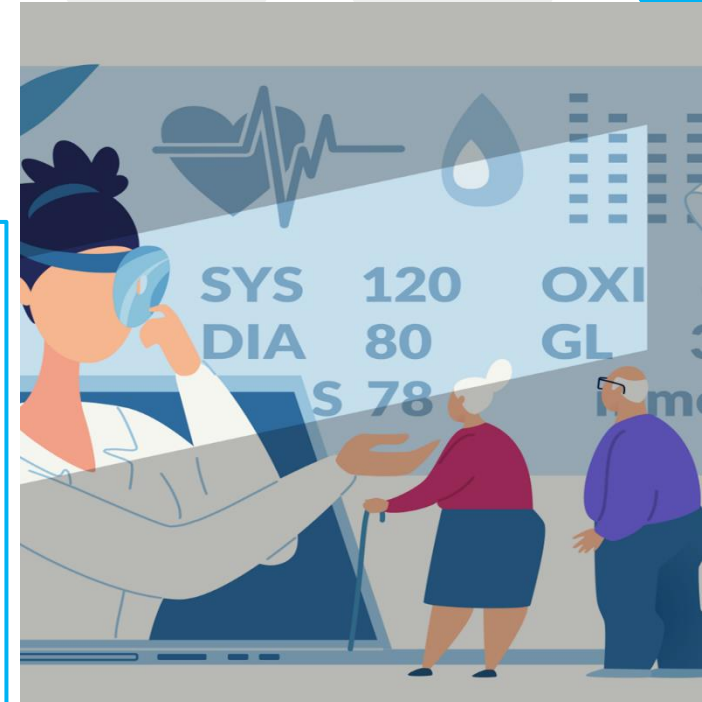
The objectives of Tinder Organisation

- ✓ Augment 150,000 awareness of people to digital health help and tools.
- ✓ • instruct 100,000 of these people to utilise
- ✓ digital health resources and tools.
- ✓ • Engaged in to use of online transaction services
- ✓ such as appointment booking and ordering
- ✓ prescriptions

Adults use the internet



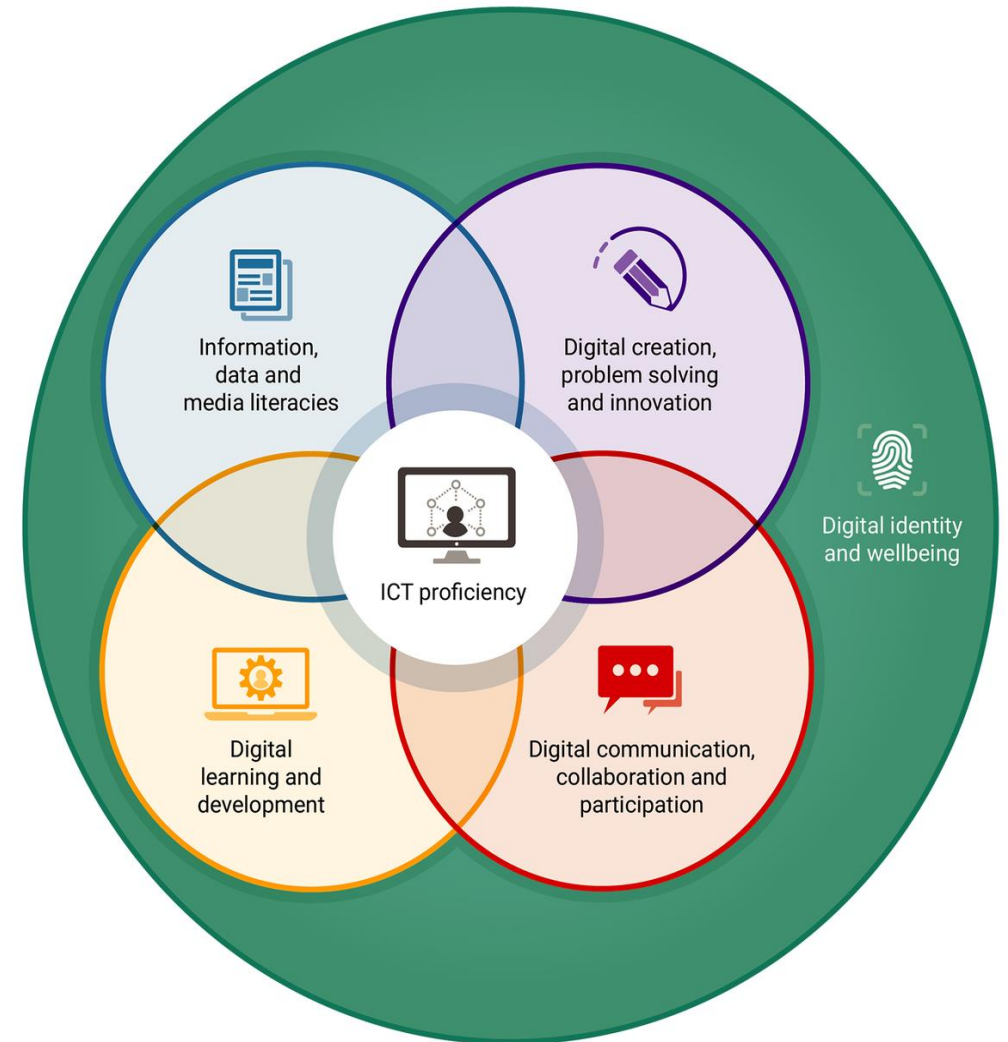
(Tinder Foundation, 2016)



Source: improvonline.com

Digital identity

- The amount of information on person, organization, or electronic equipment that is available on the internet.
- The following are some examples of data points that can aid in the formation of a digital identity
 1. Username and passwords
 2. Date of birth
 3. Medical history



Digital safety

- Digital safety which can be referred to as online safety is preserving and controlling your personal data online reputation.
- Helping to avoid harmful or unlawful information which are all examples of possible threats that you may face while engaging in Internet activity.
- Through awareness, education, knowledge, and technology, Online Safety protects people who use them from harm caused by devices and networks.



This Photo by Unknown
Author is licensed under [CC BY](#)

Digital well-being

- The key point to remember about technology is that it is meant to increase rather than subtract from your life.
- Your life revolves around you. Technology has changed our lives in so many great ways, but it has also brought with it hazards and problems.



6 ways to protect your and your families digital well-being

1



BOUNDARIES
Put clear boundaries in place. No screens at the dinner table.

2



SCREENS
No or limited screens in meetings.

3



SLEEP
No screens an hour before bed and in the bedroom.

4



TIME
Take time away from screens weekly.

5



BREAKS
Take regular screen breaks at work. Move for a few minutes every hour.

6



APPS
Delete apps that you don't need but are tempted to waste time on.



**“Is the ability for
healthcare staff to
be able to learn,
work and grow
effectively with the
use of technology”**

Digital literacy in Healthcare

ANABELA: 2124257

Digital literacy in Healthcare

“Is the ability for healthcare staff to be able to learn, work and grow effectively with the use of technology”



How could you incorporate My Health Record into your current digital literacy programming?

Digital literacy in Healthcare

Digital Literacy

Our biggest challenge

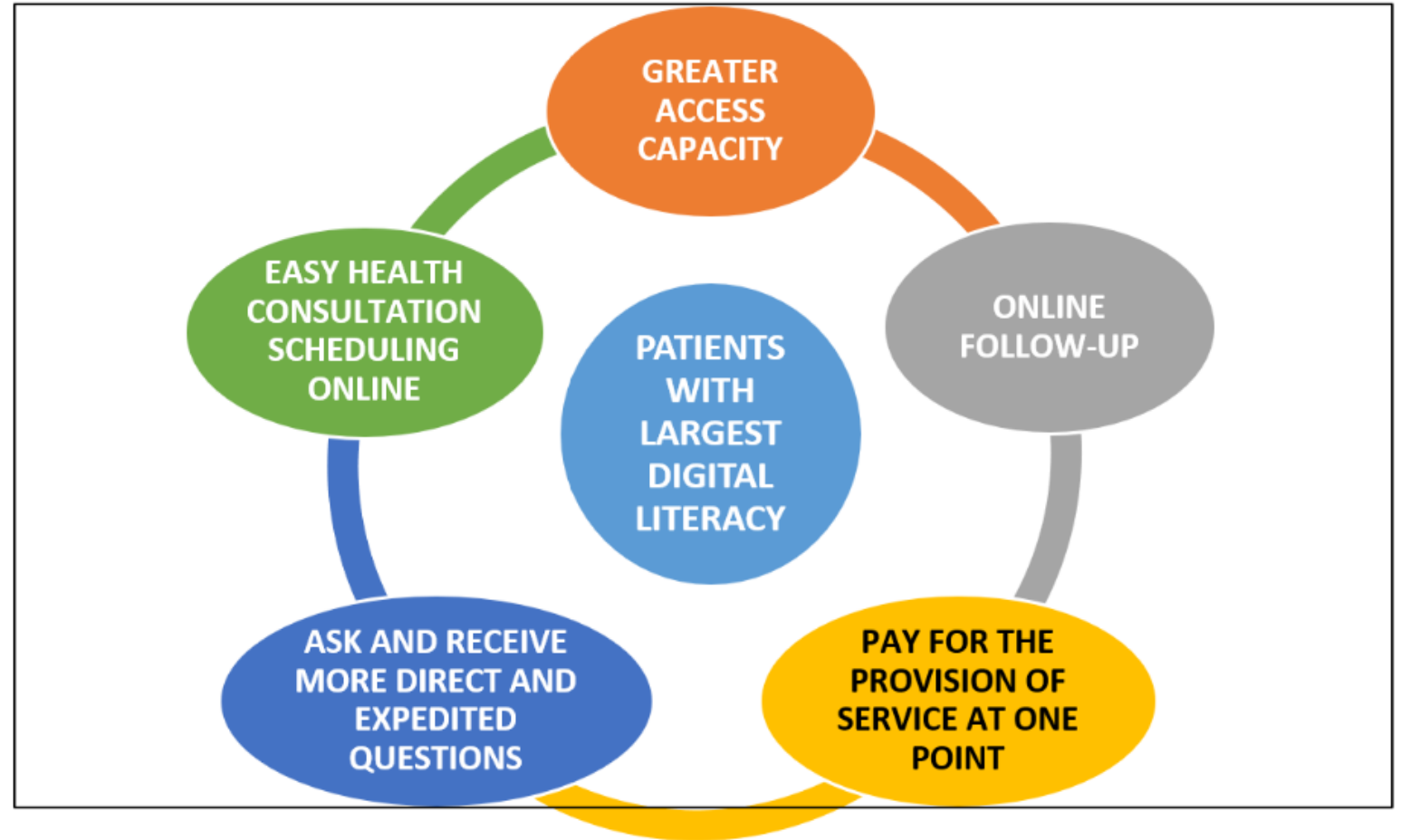
in digital literacy is taking organizations and moving them to a position where they can interact with, communicate with and work with the community that is digitally enabled.

- Earl Mardle, NetHui

Digital health: Using Technology to improve Patient care

- Patient safety &
Quality Healthcare

Anabela: 2124257



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

How is digital literacy used for employee well-being

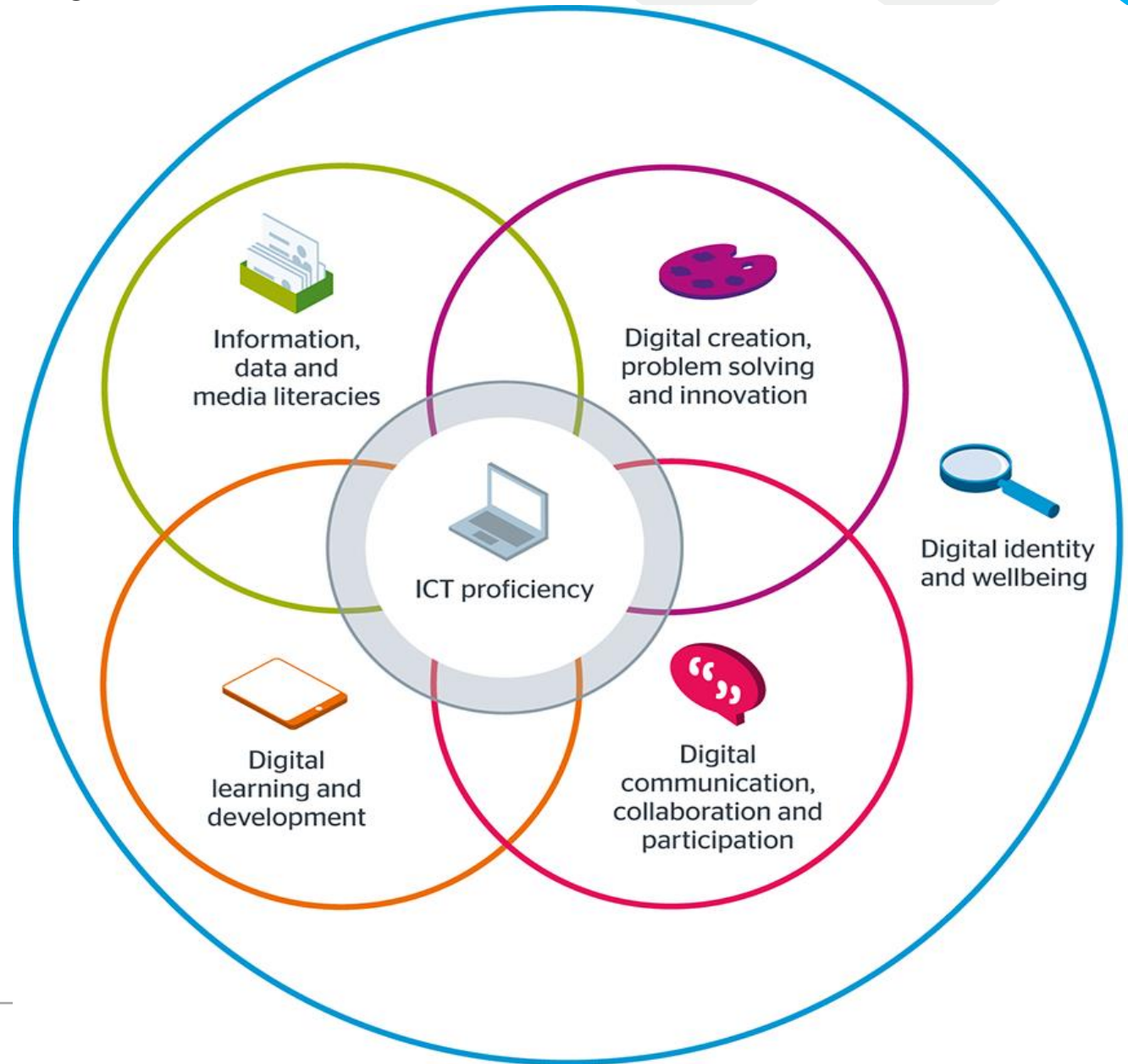
Anabela: 2124257

- ensure the healthcare staffs have the right training to learn how to use the digital tools – e.g. online courses



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

- ensure the healthcare staffs have ease of access to technological equipment – e.g. keyboard mouse and monitor



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

How is digital literacy used for professional career development (teaching, e-learning and self-development)

- One to one tutorial can be arranged through Microsoft teams
- Courses can be made available to teach healthcare staff new skills and increase their knowledge and understanding

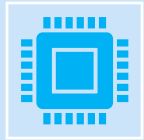


The relevance of technical proficiency for data

Name : FLOR DE KILLICK ID 2124309



Cost reduction: Hadoop and the cloud provide advantages for storing large amounts of data.



To protect data: in the network, infrastructure, and applications, giving it greater security.



To achieve improvement, the set of knowledge and skills.



Sources: Baca, J. (n.d)



Sources: Rina, C. (2020)



Sources: Ron, S. (2021)

The relevance of technical proficiency for data

Name : FLOR DE KILLICK ID 2124309



To improve products, in the pharmaceutical industry, and in the diagnosis of diseases.



Process data from medical history, genetic material, and hospital admission.



To give more efficient administrative health management.

The relevance of technical proficiency for information handling

Name : FLOR DE KILLICK ID 2124309

- Efficient, fast, communication between sectors such as education, health, and economy.
- To perform impossible tasks and find a variety of solutions.
- To improve work organization and reduce repetitive tasks.
- To call video or remote monitoring to have access to medical care.



Source: by HealthStream. (2021)

References

RUBY KAROMO:2114144

Curtin University and La Trobe University, 2020. *How Digital Collaboration is shaping the future of Healthcare and Education*. Available : <https://creativecommons.org/licenses/by/4.0/> Gagnon, K. & Sabus, C., 2015. 1 march.

Professionalism in a digital Age: Opportunities and Considerations for Using Social Media in Health Care. Tinder Foundation, 2016. Health & digital , England: NHS and Tinder foundation.
Calodagh McCumiskey (2019) *Digital well-being*
<https://spiritualearth.com/digital-wellbeing/> accessed April 1st 2022

Andy Robinson (2022) *safety and cyber security*
<https://swgfl.org.uk/magazine/the-difference-between-online-safety-and-cyber-security/> accessed 28 march 2022

TechTarget Contributor(2017) *Digital Identity*
<https://whatis.techtarget.com/definition/digital-identity> accessed April 4th 2022

<file:///Users/anabelamendes/Downloads/Improving-digital-literacy.pdf>
<https://www.magonlinelibrary.com/doi/full/10.12968/bjca.2017.12.9.428>
<https://www.hee.nhs.uk/our-work/digital-literacy>

References

The use of technology during Covid-19

Name : FLOR DE KILLICK ID 2124309

Deedra, V., Lin, Z., Briana, B., & Zheng, Y. (2020) '*Digital technology use during COVID-19 pandemic*'. University at Albany, State University of New York, 3 (1), pp.13-24. [Online] Available from: <https://onlinelibrary.wiley.com/doi/10.1002/hbe2.242> (Accessed; 6 April 2021)

Mihalis. K. (2020) '*Ten technologies to fight coronavirus*' to contact the publisher, e-mail stoa@ep.europa.eu. Bruselas © Unión Europea, pp.1-24. [Online] Available from: [https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/641543/EPRS_IDA\(2020\)641543_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/641543/EPRS_IDA(2020)641543_EN.pdf) (Accessed; 7 April 2021)

The relevance of technical proficiency for data and information handling

Namkee, C., Min, K. (2013) "*eHealth Technology Competencies for Health Professionals Working in Home Care to Support Older Adults to Age in Place: Outcomes of a Two-Day Collaborative Workshop*". Faculty of Healthcare, University of Applied Sciences Utrecht, Bolognalaan, Netherlands, to contact the publisher; JMIR Publications Inc. [Online] Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4084768/> (Accessed; 15 April 2021)

Tulane University. (2021) "*How Big Data in Health Care Influences Patient Outcomes*" TULANE UNIVERSITY SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE 1440 Canal Street New Orleans. [Online] Available from: <https://publichealth.tulane.edu/blog/big-data-in-healthcare/> (Accessed; 24 April 2021)

Michele, M. (N.D) "*Difference Between Data and Information Explained*". [Online] Available from: <https://examples.yourdictionary.com/difference-between-data-and-information-explained.html> (Accessed; 16 April 2021)

References

- Curtin University and La Trobe University, 2020. How Digital Collaboration is shaping the future of Healthcare and Education.

Available : <https://creativecommons.org/licenses/by/4.0/> Last seen 20 April,2022

- Healthcare,2019 .Significance of digital communication in healthcare advancement?
Available : [Significance of digital communication in healthcare advancement? – ARTwebnet](#) Last seen 20 April, 2022
- Gagnon, K. & Sabus, C., 2015. 1 March. Professionalism in digital Age: Opportunities and Considerations for Using Social Media in Health Care.
- Tinder Foundation, 2016. *Health & digital* , England: NHS and Tinder foundation.

References

- [Calodagh McCumiskey \(2019\)](#) Digital well-being
<https://spiritualearth.com/digital-wellbeing/> accessed April 1st 2022
- [Andy Robinson \(2022\)](#) safety and cyber security
<https://swgfl.org.uk/magazine/the-difference-between-online-safety-and-cyber-security/> accessed 28 march 2022
- [TechTarget Contributor\(2017\)](#) Digital Identity
<https://whatis.techtarget.com/definition/digital-identity> accessed April 4th 2022
- [The Photo](#) by Unknown Author is licensed under [CC BY](#)

References

NHS, , Digital literacy of the wider workforce.
Available: <https://www.hee.nhs.uk/our-work/digital-literacy>.

Digital literacy of the wider workforce (2018) *Health Education England*. Available at: <https://www.hee.nhs.uk/our-work/digital-literacy> (Accessed: 6 April 2022)

S.K.J. (2017) 'A look at digital literacy in health and social care', *British Journal of Cardiac Nursing* [Preprint].
doi:[10.12968/bjca.2017.12.9.428](https://doi.org/10.12968/bjca.2017.12.9.428)

ANABELA MENDES: 2124257

