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Digital literacy and digital skills of professionals

Peter Szegner
SEPEN, WHO CC
International Congress of Health Workforce Education and Research
Nicosia, 2019

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What HWF-related changes can be expected?

- Shift in the age structure of HWF
  - significant % of older professionals retiring
  - appearence of millenials in education and health provision
    - different exceptations towards the system
    - but also a great potential (eg. facilitators of digitalisation)
- Emerging technologies (eg. AI, robotics, genomics)
- Empovered patients
  - more informed, higher demands
  - advanced role in decision making
- Multi-morbidities in chronic conditions, new diseases, diagnostic & treatment options

Personalised medicine

New roles, career pathways

Multidisciplinary teams

Change in the balance of care

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Digitalisation to respond the challenges/changes

- Establish new promising career pathways (data scientist, bioengineer, medical and health informatics)
- Use in education – technology enchanced learning (eg. e-learning)

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Even more potential…

- Changing the current practice in **health care provision**
  - reducing the administrative burden (eg. AI)→ more time on patient interactions
  - distant consultations (eg. teleconference)
    - multidisciplinary knowledge base
    - solving acute cases where no specialist is available
  - targeted therapies →potential to reduce chronic care costs
  - remote consultations and monitoring
    - reduction in unnecessary secondary care admissions
    - improved service coverage in underserved areas
- Ultimate goal: time gain for HWF, improving patient care and health outcomes by digital transformation

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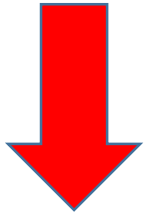
Digitalisation impacts HWF in several aspects, but first….

- HWF needs to be resilient in order to handle:
  - shift from disease centred to personalised care
  - interoperability between health systems (cross border care!)
  - adapting to continuous advances in technology (eg. genomic testing)
  - interprofessional teamwork and education (health informatics experts)



- To achieve resiliency every health worker should possess the so called transversal skills

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Transversal skills of health professionals

OECD
Health Workforce
Skills Assessment Study
2018

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Let's assume that the whole HWF already has the core competencies, is that enough?

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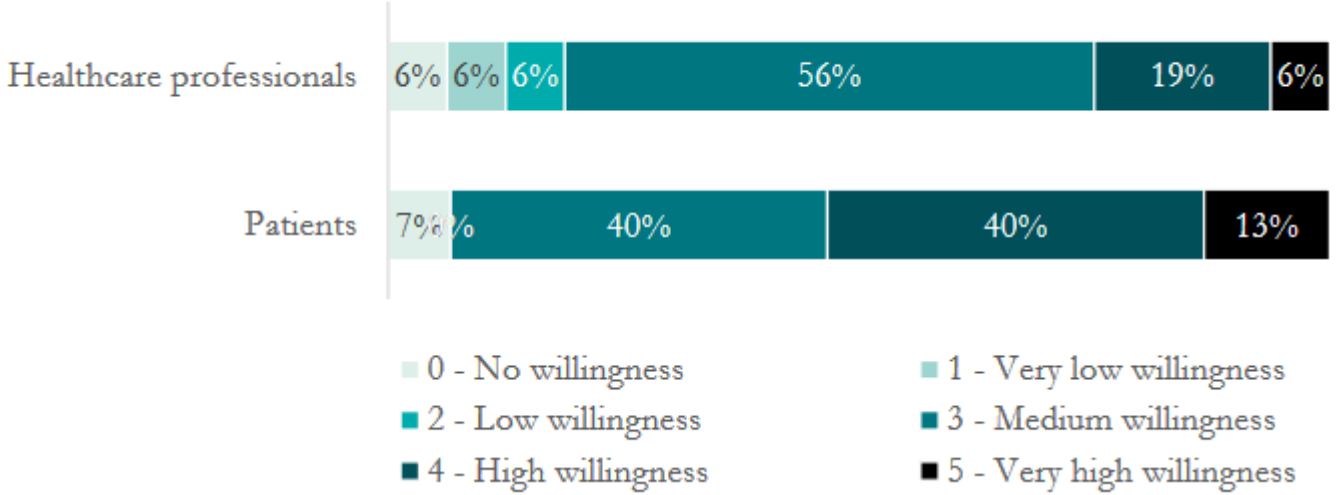
Telemedicine: pioneer in digitalisation

Willingness to use telemedicine services



JaseHN, 2018

Although it is present in the last decades, but the use of telemedicine still needs to be improved!

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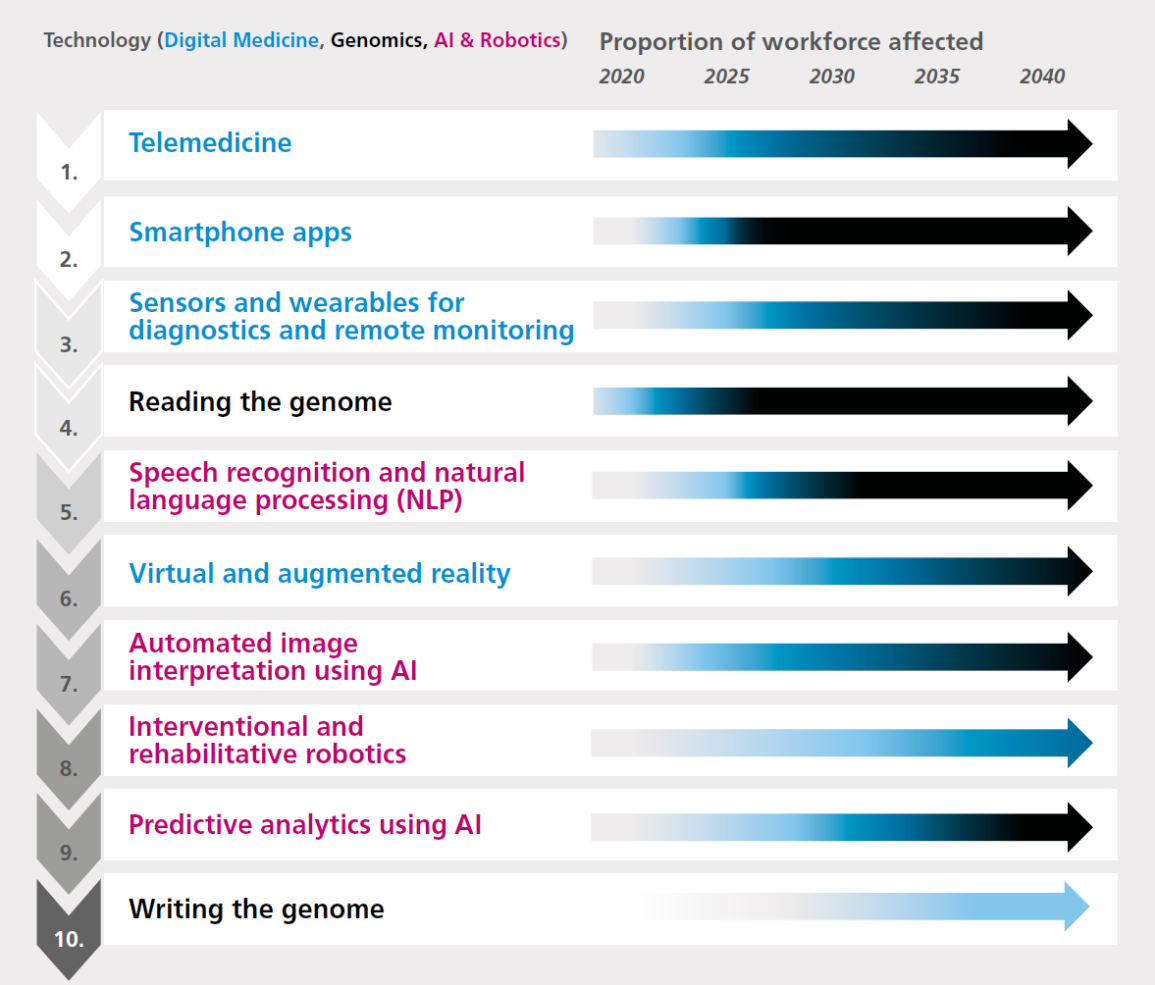
Digital boom is coming in health care!



Arrow heat map represents the perceived magnitude of impact on current models of care and, by inference, on the proportion of workforce affected

<20% 20% 50% >=80%

Digital literacy is inevitable to be developed for the HWF!

Health Education England, The Topol Review, 2019

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What is digital literacy?

„Those capabilities that fit someone for living, learning, working, participating and thriving in a digital society”

- Building a Digital Ready Workforce programme, 2018

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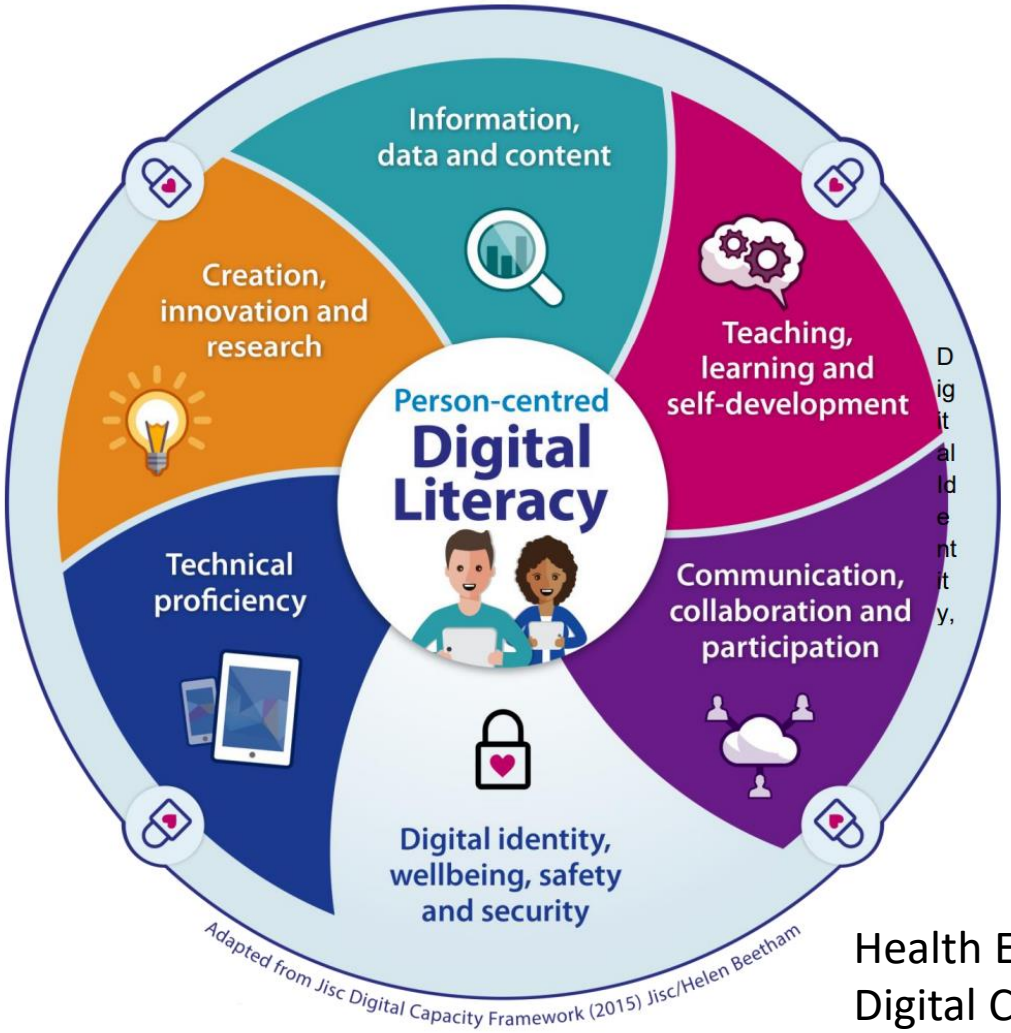
Main domains of digital literacy



Health Education England, A Health and Care Digital Capability Framework, 2018

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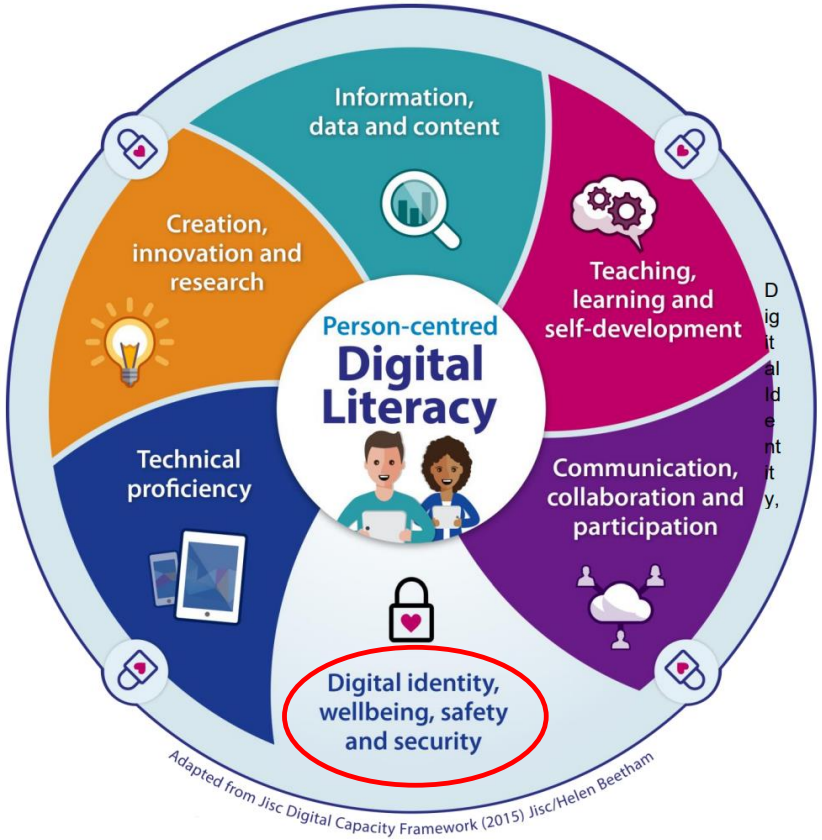
Digital identity, wellbeing, safety and security

- Underpins those surrounding
- Everything we do must be within a safe and secure context considering our own and others' wellbeing
- What we do in the digital system→ contributes to the digital identity/footprint which we all need to be mindful of



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Example of an assessment item

- Capabilities are presented at four different levels ranging from basic to expert
- Eg. Information, Data and Content domain levels:
  - Level 1: I know that some information, data and content cannot be used or shared freely
  - Level 2: I go through a range of checks and actions that help me test the accuracy of information, data and content
  - Level 3: I am confident and proficient in being able to recognise, analyse and evaluate a wide range of digital information, data and content to test for bias...
  - Level 4: I provide leadership and guidance to others on the accuracy and reliability of the information, data and content that they create and/or are responsible for.

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Key factors in adopting digital skills

- Time, confidence and willingness from **HWF** to acquire digital skills
  - increasing digital confidence: eg. not overcomplicating, but simplifying daily routine
- Availability and accessibility of educators, and financial resources
- **CPD** and updates on recent advancements in digital health
  - employer/workplace support
  - easy to use, accessible, flexible learning frameworks
  - eg. potential of e- or m-learning platforms
- Collaboration between key **stakeholders** (eg. regulators, educators)
- Support from decision makers, policy level, leadership and governance (national level digital health strategy)

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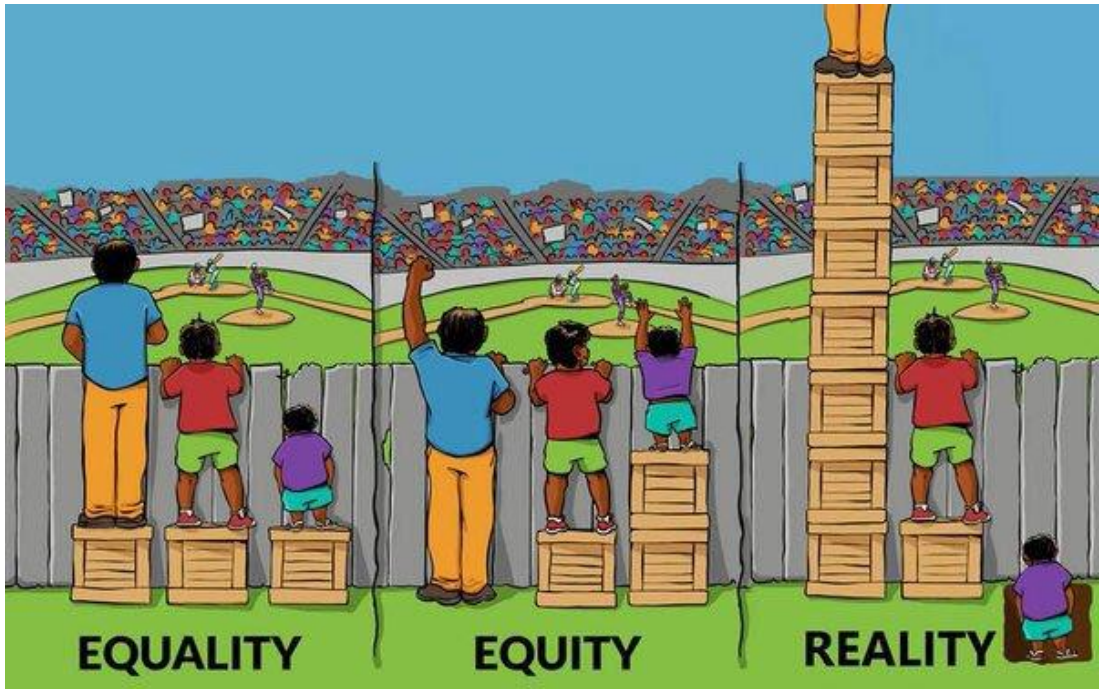
What issues should be considered during improving digital capabilities?

- „Leaving no one behind”
  - particular focus on vulnerable/marginalised groups/regions
  - ensure equitable access
- Ethical issues
  - what ethical issues may arise, how to handle? (eg. genomic profiling & insurance policy)



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Where should we start?

- Mapping current HWF on skills & maturity level (eg. E-HAction)
- Revision of:
  - Curricula
  - CPD programmes
- Advancing transversal skills
- Defining specialisation-specific competency sets (transparency & accessibility for relevant target groups)
- Identifying facilitators & key enablers of change (eg. educators, resident doctors)
- Continuous monitoring and performance assessment to ensure follow-up of digital literacy education programs

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Do not forget the demand side!

- Patient education and empowerment, citizen engagement

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Main messages

- Competence gap analysis is essential to formulate effective interventions
- Communication between stakeholders in education and technology development (regulators, HWF, population/patients, etc.)
- Following good-practices, learning from failures
- Creating a cultural sensitivity towards digital innovation and learning
- Avoiding depersonalisation in health care
- Digitalisation is a progressive, long-term change!

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And… join the digital boom in healthcare at our L-ead Summer School programme!

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Thank you!

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