



Region Syddanmark



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Fakulteta za zdravstvo **Angele Boškin**
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Digital Educational programme involving health professionals (**DELIVER**):

An overview of the project and its main expected results

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Consortium Members



Background & Aims



- The digitization is dramatically requesting a wider usage of digital technologies in all settings of the healthcare system
- The Healthcare Professionals (HCP) are the core actors of the digital transformation of health care settings
- In addition to specific digital knowledge they will require skills capable of transferring their professional competencies into a **new digitalised healthcare paradigm**



(WHO, 2019 & WHO 2016)

The project aims to enhance the digital skills of HCPs by supporting the digital transformation of health within and across European regions

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The DELIVER project aims to enhance the digital skills of HCPs by supporting the digital transformation of health within and across European regions

Undelining Concepts (1)

Digital *Competencies* and *Literacy*



Digital competence should be understood as **the ability to combine digital technologies, knowledge, skills and attitudes appropriate to the context**. Digital competence is therefore divided into the following learning domains:

1. **Knowledge, theories and principles** related to technology.
2. **Attitudes** towards strategic use, openness, critical understanding, creativity, responsibility and independence.
3. **Instrumental skills** to use digital tools and media.

Digital Health Literacy can be defined as **“the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem”** [Norman and Skinner (2006)].

Undeline concepts (2)

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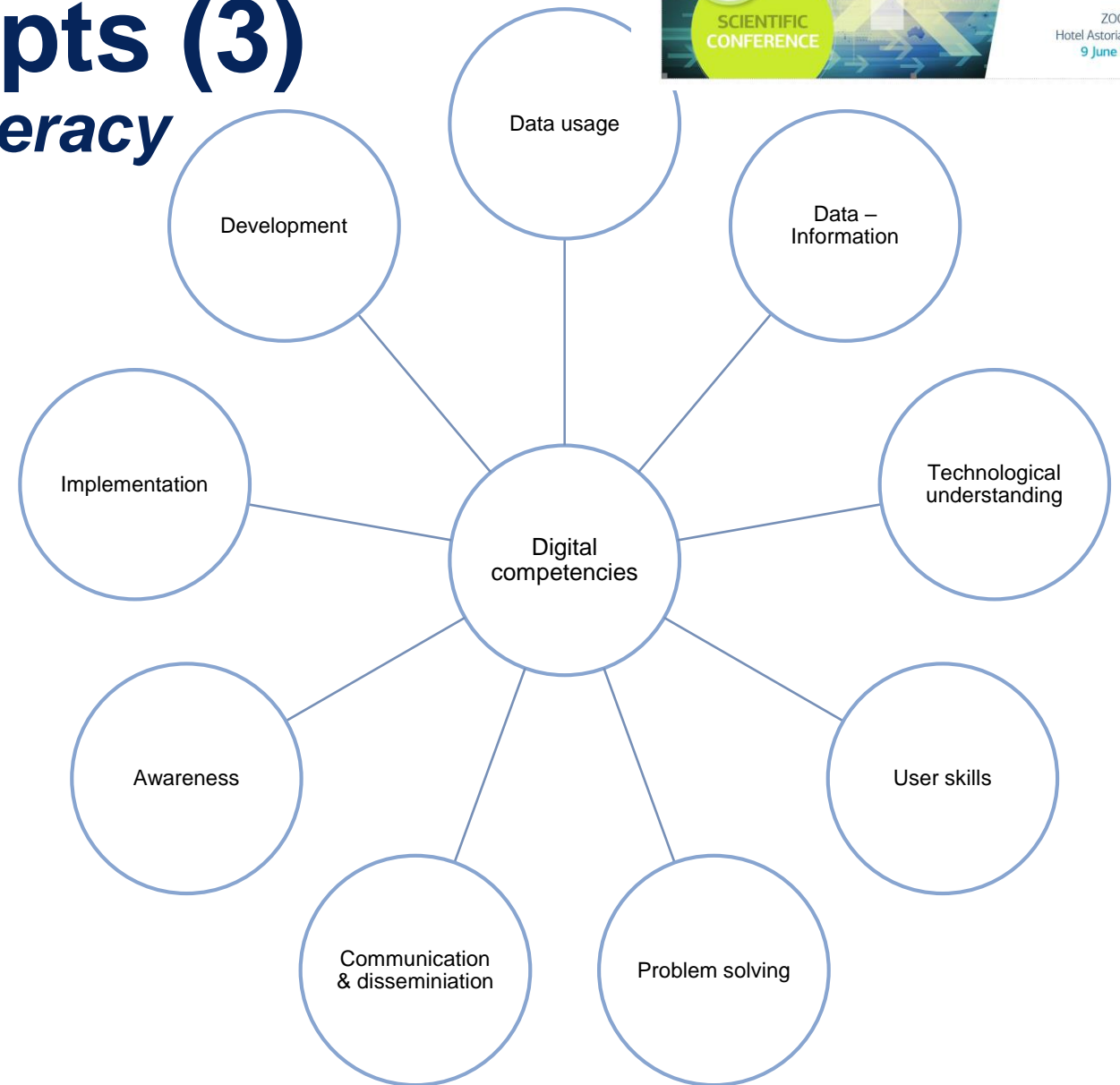
Digital Health Literacy can be defined as **“the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem”** [Norman and Skinner (2006)].

The DELIVER project takes a broader approach to what digital competencies.

It entails not just the skill to work with a specific ICT or digital healthcare solution but also **an awareness of the development in digital technologies, a readiness to adapt, the necessary skills to implement and lastly, the ability to communicate and disseminate knowledge of digital technology.**

Underlining Concepts (3)

Digital *competencies* and *Literacy*



- **Based on EU DigComp 2.0 Framework**
- Merged with the Digital Competencies Wheel (KL & Center for Digital Dannelsen)
- Transformed into a healthcare context

DELIVER

Intellectual Outputs (IOs)

- **IO1** : Needs analysis
- **IO2** : Organisational analysis
- **IO3** : Curriculum and learning material
- **IO4** : Health care professionals e-learning platform for *digital skills*
- **IO5** : Policy and implementation recommendations

IO1 & IO2: Aim of the analysis



Intellectual Output IO1

1. **Assessment of level of digital competencies** of health care professionals (HCPs) and health care managers (HCMs)
2. Digital solutions **most frequently** used and considered most important
3. **Perceptions** on digital solutions and digitization
4. Existing **framework and practices of introduction** and training of digital competencies - including existing ICT support structure.
5. **Potential areas for improvement of** digital competencies among HCPs and HCMs
6. **Decisive elements** for implementation of digital solutions

Intellectual Output IO2

- **Organisational readiness** for digitization, including strategies for digitization and equipment/organisational structures for adaption of digital technologies.
- **Organisational attitude** towards digitization and management support in using digital technologies.
- Description of **organizational factors** that pose barriers and facilitators to the digitization and implementation of educational programme

IO1 & IO2: Aim of the analysis



Methodology - Mixed methods

Quantitative approach

- Only IO1, self-assessment survey
- Survey with a pilot
- Translated into three languages
- **395 respondents in total across three countries** (Denmark, Italy & Slovenia)

Qualitative approach

- Merged questions from IO1 and IO2
- Interview guide with a pilot
- Individual and focus group interviews
- **74 respondents across four countries + 4 ICT specialists** (Denmark, Italy, Catalonia & Slovenia)

Quantitative survey – IO1

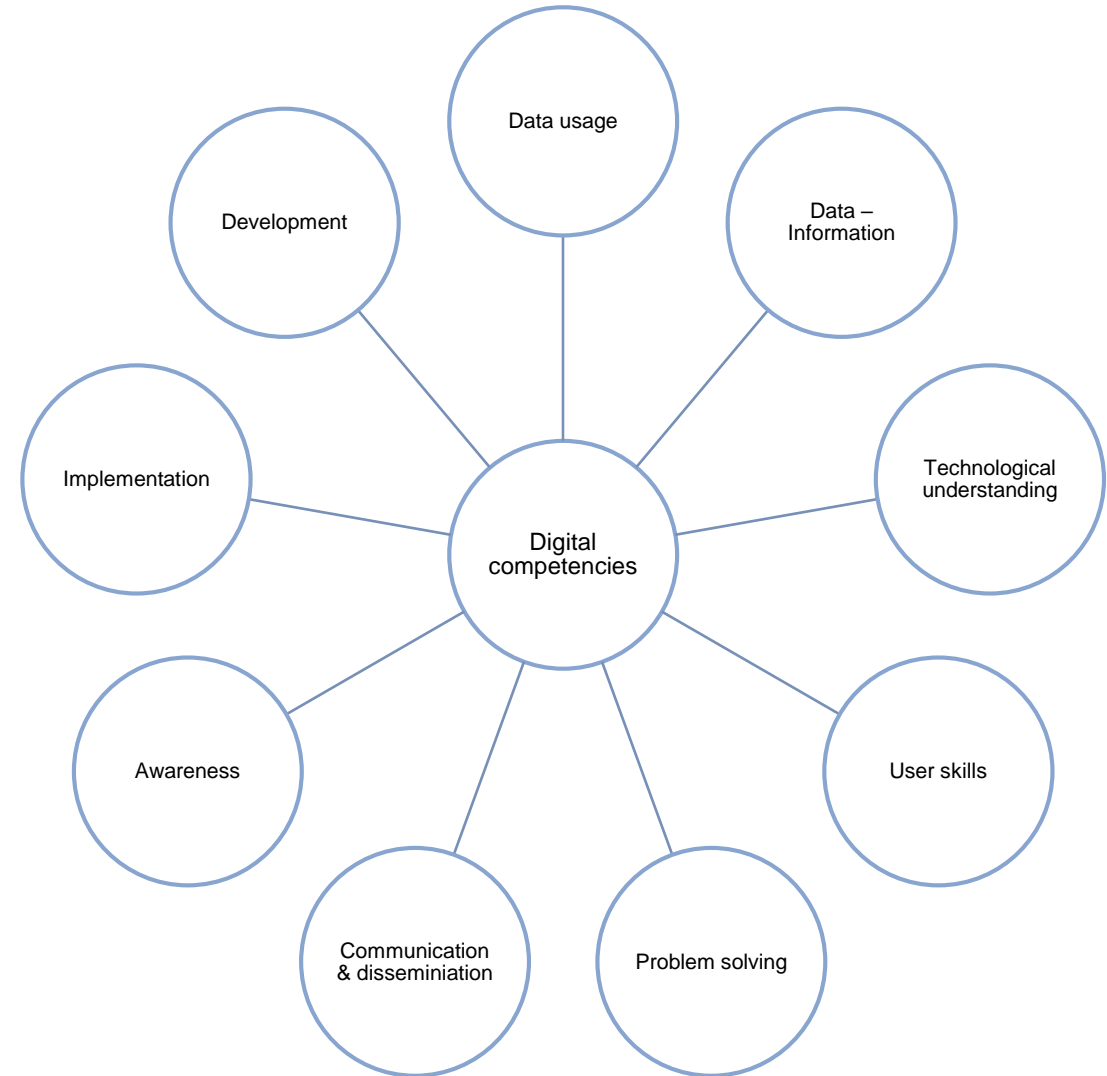


Measures self-assessed digital competencies within 9 different areas (100% index)

7-point Likert scale with neutral option (Strongly disagree to strongly agree)

Also includes questions on:

- Background data
- Experience with digital technologies
- Perception of organizational readiness
- Desired areas for improvement
- Experience with training of digital competencies
- Use of digital technologies and ICT (HCP to HCP & HCP to patient)



Result IO1 #1



IO1

1. Level of digital competencies of HCPs and HCMs
2. Digital solutions most frequently used and considered most important
3. Perceptions on digital solutions and digitization
4. Existing framework and practices of introduction and training of digital competencies - including existing ICT support structure.
5. Potential areas for improvement of digital competencies among HCPs and HCMs
6. Perceptions on decisive elements for implementation of digital solutions
7. (Knowledge, strategies and best practice related to educative initiatives on digital competencies of HCPs)

IO2

1. Organisational readiness for digitization, including strategies for digitization and equipment/organisational structures for adaption of digital technologies.
2. Organisational attitude towards digitization and management support in using digital technologies.
3. Description of organizational factors that pose barriers and facilitators to the digitization and implementation of educational programme

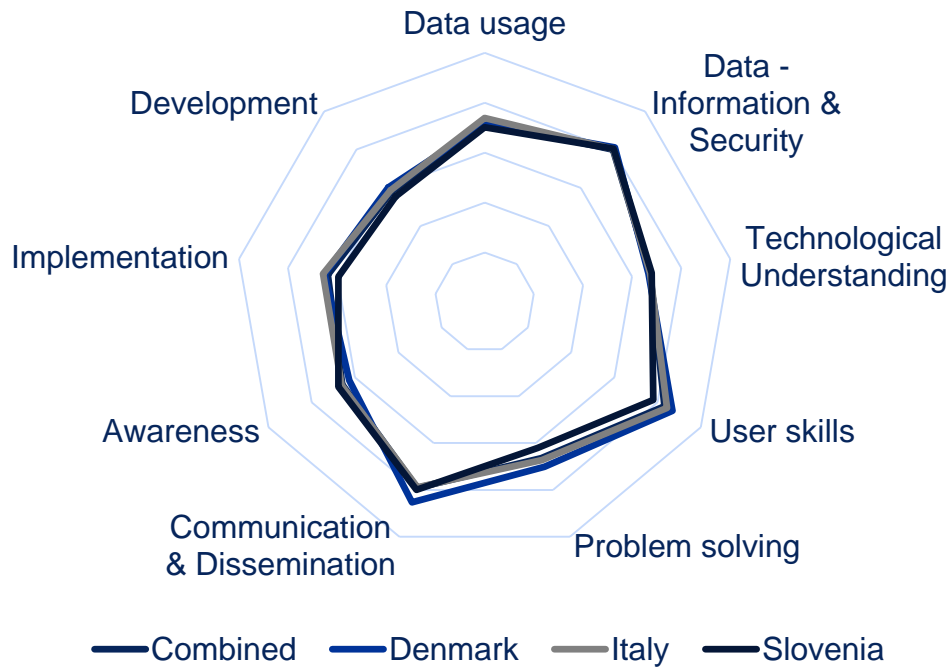
Analysis is currently in progress

Result IO1 #2

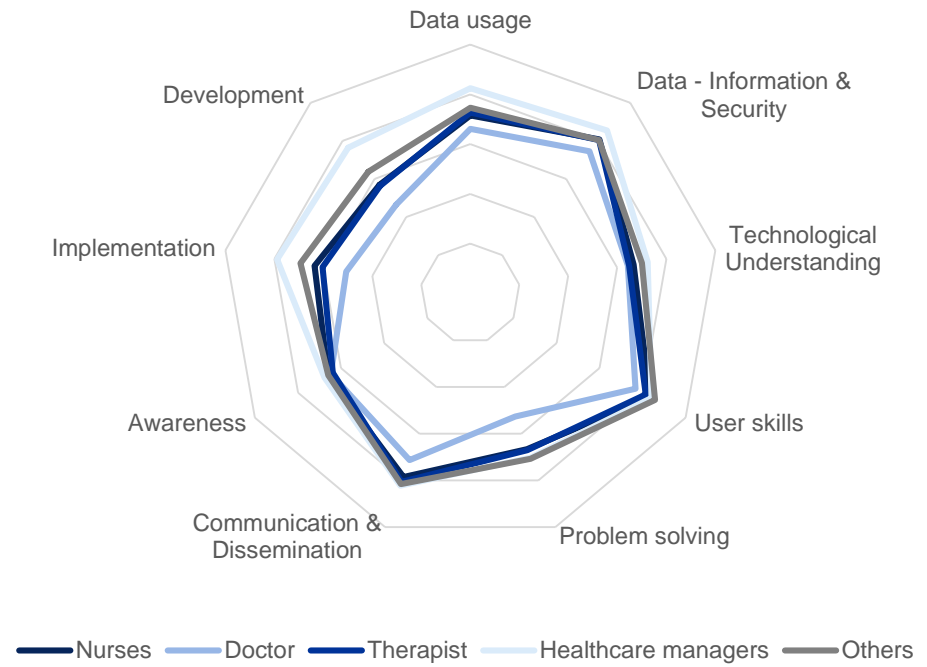
- Level of digital competencies of HCPs and HCMs



Digital competencies – Countries



Digital competencies - Professions



Qualitative approach (2) IO1

- Multiple case study approach
- Three Countries (Italy, Denmark and Slovenia) and one Region (Catalonia) included
- Survey with 15 open-ended questions
- Four policy documents analysed: the most relevant for the digitization of the Country/Region



Limitations



Quantitative limitations:

- Self-assessment survey
- Some healthcare professions are not equally represented or missing across all samples
- Majority of sample consist of nurses
- No survey data from Catalonia

Qualitative limitations:

- Some healthcare professions are not equally represented or missing in sample
- Big variation in ICT responsibility of respondents between countries

Next steps

- IO1 : Needs analysis
- IO2 : Organisational analysis
- **IO3** : Curriculum and learning development material
- **IO4** : Health care professionals e-learning platform for *digital skills*
- **IO5** : Policy and implementation recommendations





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How can we further the use of technology on healthcare?

