



Digital & Innovation Skills Helix in Health

Final Conference

30 March 2022 - 14.30-17.30 CET

The final conference of the **DISH - Digital & Innovation Skills Helix in Health** project took place on 30 March 2022 under the theme '**Bridging the digital gap: how the healthcare workforce can obtain innovative and digital skills**'.

The conference was hosted by the European Health Management Association (EHMA), a member of the DISH consortium, and moderated by its Executive Director, **Mr George Valiotis**.

The conference aimed to present the DISH digital tools, their adoption, project implementation outcomes, and case studies describing the pilot results. The conference also featured policy recommendations, providing space for the exchange of opinions on enhancing the digital skills of the health workforce.

Ms Trine Ungermann Fredskild, Head of Innovation of SHS Hospital, Denmark, and Coordinator of the DISH project, opened the event. She presented the philosophy of DISH, and the project aims. She elaborated on the triple helix construction on skills and partnership and provided an overview of the three

tools: the planning tool, the on-the-job training tool, and the assessment tool.

The sessions

Session 1 - Digital skills for the health workforce of the future

During the first session of the conference, **Ms Maya Matthews**, Head of Unit 'Performance of Health Systems', DG SANTE, European Commission, Belgium, delivered a keynote speech presenting key takeaways from the EU report on the State of Health in the EU.

- The **key effects of COVID-19 on health systems** are yet to be understood.
- A huge **acceleration in digitalisation and telemedicine** may lead to new ways of operating.
- The **health workforce needs to be boosted** to cater to the needs of an ageing population and ageing workforce.

Session 2 - The DISH approach to digital innovation implementation processes

In the second session, **Ms Henriette Hansen**, European Project Manager at the South Denmark European Office,

presented an overview of the DISH tools.

The first, a **preparation tool**, defines the urgency of changes and engages in explorative behaviour fostering innovation. A preparation team shall primarily be involved in 'peopleware' which includes training, culture, and behaviour. **The preparation team is multidisciplinary and encourages collaboration, 'out-of-the box' thinking, and implements innovation. Mr Thomas Karopka**, Senior Project Manager at BioCon Valley GmbH, further elaborated on the preparation tool in his presentation. He described the shared decision-making process, and the change management processes that took place in the pilot site in Germany. Mr Karopka provided an overview of the practical preparation tools, such as the checklists, templates and a free open-source project management system, 'Taiga', which can be accessed via the DISH website to plan for on-the-job training.

Ms Henriette Hansen also presented a process tool for **on-the-job digital skills training** that responds to the needs reflected by the preparation team. This tool translates the urgency and training needs into a series of concrete objectives and outcomes relevant to the healthcare professionals' daily work. **Ms Lone Boysen Lauritzen**, Head of the Department of Heart Medicine at Hospital Sønderjylland, University Hospital of Southern Denmark, presented a concrete application of the on-the-job training tool. Ms Boysen Lauritzen described the importance of **training skills in a cross-sectoral way**, using smartphones for

documentation, video conferencing for consultations and the education app platform for reflection. As a case study, she explained that now her team has PC screens with cameras installed on all work desks, and they use video consultations, among other purposes, for weekly cardiac rehab planning, a patient journal club, and webinars across regional municipal healthcare.

Finally, a **process tool for assessment and recognition** was presented. The tool guides the planners or leaders of innovation through a structured process to consider all key factors that support learning and provide evidence as a basis for formal recognition of competencies. **Ms Gertrudis Fornés Romero**, Senior Research Technician at Polybienestar Research Institute of the University of Valencia, presented the assessment tool in practice, described how it was developed and discussed the results, such as barriers and successes. Ms Fornés Romero explained how the Spanish Triple Helix used the assessment tool for online training on Diabetes Mellitus Type 2 (T2DM), covering three technological innovations addressed to nurses and physicians from HULAFE. The assessment was based on learning objectives and evaluated by ad-hoc questionnaires, case studies and forum participation. The assessments measured satisfaction, usefulness, applicability, and impact. The main limitation to the use of the tool was the workload of health professionals, indicating a need to simplify the assessment. Results showed that 92% of the 96 healthcare staff targeted were trained and officially recognised with 5 ECTS to improve their professional

career and daily practice, and participants reported being strongly satisfied with the course.

Furthermore, Ms Henriette Hansen described the tools' background, referencing several underlying theories and approaches, including but not limited to **Change Management, Teaching and Learning Theories, The European Qualification Framework (EQF)** and **21st Century Skills**.

The processes between the tools were described in a stepwise approach:

1. to determine needs and objectives;
2. planning and delivery;
3. assessment, evaluation of learning and competencies, validation, certification and supporting the cycle with reviewing and revising.

Session 3 - The DISH tools in action: case studies from partner countries

In the third session, case studies from partner countries were presented by various speakers.

The first speaker, **Ms Sabine Paasch Olsen** from Learning and Research Center, Sygehus Sønderjylland, Denmark, presented a **case study on implementing a video solution named Mit Sygehus for families in 'early home-stay' with premature babies**. During the COVID-19 pandemic, video calls were used to replace home visits. Some of the outcomes were a reduction of 140km driving distance, €40 per visit economic savings and up to 50% reduction of home visits for healthcare professionals. Ms Paasch Olsen described the

preparation process, where nurses were presented with various options and could select the best solution for them, the training process, and the positive evaluation of the tool from both the families and the nurses.

Ms Susanne Krotsetis, RN (Registered Nurse), CCRN, MSc. from the Nursing Development University Medical Centre Schleswig-Holstein, Germany, presented the **case study on a quality improvement project to implement a digitally supported sepsis screening tool**. She described some of the challenges to creating a rapid, successful, and sustainable digital solution that considers working hierarchies, staff numbers, and working conditions during the COVID-19 pandemic. According to Ms Krotsetis, cross-professional joint decision making has resulted in sustainable improvements in her institution by including management, IT, nurses, nursing development and physicians. Lisa, a ward nurse, was quoted as saying

"For the first time, I have had the experience that the introduction of a new technical solution was oriented towards our needs in terms of ease of use, incorporating already recorded vital signs and all without double reporting. This makes the handling and acceptance in practice so much easier."

Some achievements in the pilot ward at the Nursing Development University Medical Centre Schleswig-Holstein were that 100% of the participants stated their training expectations and needs were met, while 85% of the participants stated that the training helped them work more effectively with the digital tool in practice. The tool was

applied in the pilot ward more than 2,200 times within five months. Ms Krotsetis concluded her presentation by urging the audience to use the DISH components to create sustainable results and have motivated users.

Next, **Ms Susanne Eriksen**, PhD student at Western Norway University of Applied Sciences, presented a **case study on implementing electronic door locks through co-creative planning in municipal home-based care in the Vaksdal Municipality in Norway**. The municipality is currently implementing electronic door locks to provide faster and safer help for the 150 care recipients who live between 30 minutes to 1,5 hours drive away from the care centre. Using the preparation tool for innovation and digital skills adoption, the groundwork for the municipality was laid, and ten stakeholder groups were identified, describing their needs and wants. The on-the-job training took place online, creating an opportunity to streamline costs and instruction. An exercise door placed in the office for healthcare staff would help the staff practice what they learned immediately after the training. To ensure that all healthcare staff used the solution effectively, the project managers used the assessment and recognition tool to identify problems and empower the healthcare staff's ability to perform the tasks. Innovation barriers and unforeseen scenarios experienced by the Vaksdal community were overcome with the DISH tools.

Various outcomes of the case study are that 98 e-locks have been installed successfully and are used by 48 out of 50 home care staff daily. The e-locks

save 7 hours per week amongst care staff, and €5,000 implementation costs have been avoided.

Ms Sara Fasoli, Project and Membership Officer at HOSPEEM and advisor to the DISH project, discussed the healthcare employers' perspectives to adopting the DISH approach. Ms Fasoli addressed creating attractive career paths that improve organisational performance. Professional development and lifelong learning implemented in a team-oriented approach improve and sustain quality care for patients in hospital settings and community-based care environments. Jobs are becoming hybridised and require multiple skill sets that range from statistics and data analytics to progressive leadership, the globalisation of healthcare, regulatory compliance, and data privacy, among others. Ms Fasoli explained that while before the COVID-19 pandemic, it was challenging to make clear that new skills are needed, in the last two years, there has been **an acceleration of exchanging practices, adapting to the use of digital technology, telemonitoring and using artificial intelligence**, leading to new ways of cooperation between caregivers.

According to Ms Fasoli, the COVID-19 crisis has shown the healthcare sector's resilience and critical function in infrastructure and human resources. Furthermore, it has created space for developing new skills for both the patients and the healthcare professionals. She emphasised the importance of placing the healthcare professional at the centre of their training and encouraging ownership of

their learning pathway to ensure the workforce is ready to face a future emergency related to a new pandemic or climate change.

In her concluding remarks, Ms Fasoli reminded that **healthcare is an investment and not a cost** and that investing in new technologies and digital tools is a major challenge. The DISH project has great potential when all key health and employment stakeholders are included in the digitalisation of the healthcare system.

Session 4 - Recommendations to enhance the digital skills of the health workforce

The fourth session was opened by **Prof Christine Øye**, Professor at Western Norway University of Applied Sciences, Norway, who presented an overview of the policy recommendations identified by the DISH project. Professor Øye framed EU, national and local level policy recommendations based on lessons learned from case studies and success stories resulting from the project. For the preparation tool, she recommended context-specific preparation of training and early identification of relevant stakeholders and their learning needs. Learnings from past experiences have shown that it is important to keep it simple and identify methods to maintain sustainable development while using the on-the-job training tool. For the process tool for assessment and recognition, she emphasised the importance of follow-ups, adjusting assessment to the target group, and providing feedback and certification.

Next, **Mr George Valiotis** moderated an esteemed panel discussion with **Prof Christine Øye**, **Mr Ber Oomen**, Interim Executive Director at European Specialist Nurses Organisation (ESNO) and Member of the DISH European Reference Group, Netherlands, **Dr Eszter Kovacs**, Assistant Professor at Health Workforce Planning Knowledge Centre, Semmelweis University Health Services Management Training Centre, Hungary and **Mr Kazimierz Murzyn**, Managing Director at Klaster LifeScience in Poland.

Mr Ber Oomen discussed the **importance of the helix format for future identification and development of the digital skill needs of healthcare professionals**. The DISH project has provided a wonderful start, yet there are still many steps to attain equivalent growth with national and EU-wide policy. From a cross-border collaboration perspective, he addressed the benefits of providing internationally recognised training certification that proves the competencies of professionals and improves their self-esteem, facilitating healthcare professionals to continue developing on their career paths.

Dr Eszter Kovacs offered reflections on the DISH project from a health management perspective and identified several priorities. She emphasised the importance of change management to make progress and noted the focus on acquiring transferable skills, including digital skills and other skills such as coordination, communication, and system awareness. In addition, she stressed **the need for readiness towards change and**

willingness to take on new skill sets and care models. Teamwork and interprofessionalism are two coins that can lead to digital leadership and maturity of the digital workflows, and the utilisation of digital task shifting.

Dr Kovacs highlighted that technological advancement is a clear common goal in the European Union, but at the same time, **we are planning for a moving target, that challenges are emerging and changing, and by acknowledging this, we can learn to react resiliently.** She concluded with the importance of thinking globally but making changes locally, identifying the unique needs of all stakeholders to ensure good quality training and knowledge for all EU citizens that will use healthcare systems in different member states.

On sustainability, Dr Kovacs discussed how long the changes to the patient and care provider relationship caused by COVID-19 will remain and how this will influence workforce operations. Improved processes and workflows related to pathway management, such as e-health platforms, are utilised more after the pandemic. On the other hand, new topics such as cyber security are being discussed more often and influencing workforce operations.

Mr Kazimierz Murzyn, who coordinated three clusters across Krakow, delivered some key messages from the DISH project. He expressed that the development of clusters from a systemic perspective relies on thinking and action, with a policy approach that covers the task of improving digital skills as a whole. When it comes to resistance against innovation, the DISH tool helps

by involving all relevant stakeholders to collaborate.

Lessons learnt from six groups of interest, including hospitals and business support organisations, by Mr Murzyn were that **dialogue leads to identifying needs and challenges and provides a holistic approach to development.**

He addressed the importance of fostering collaboration for innovation and expressed expectations that digital tools will be used more frequently in the healthcare setting. However, approaches are fragmented, especially with the division of hardware and software and people, leading to a recommendation to use more system thinking to deliver results. More than an improvement of hardware or software, for the healthcare system to improve, patients must become proficient and have the skills needed to use the digital tools and have this literacy even across borders.

Prof Christine Øye added to the reflections on involving stakeholders. Even when needs and resources are identified, there can still be protests to change strategies, or a learning resistance, which interferes with professionals' values, identities and ways of working. Such barriers can be overcome by involving people at an early stage and knowing how to communicate the benefits of learning that will be provided to each stakeholder.

Ms Øye mentioned that for technological advancement, more than the development of hardware, **important dimensions that need to**

be considered are organisational readiness and that the relevant stakeholders have the skills to use the new technologies daily.

Concluding remarks

Ms Henriette Hansen delivered the concluding statements on behalf of the project management team. She thanked the EU and the Erasmus+ Programme for providing an opportunity to work together. Although there were challenges, crises like the COVID-19 pandemic can be turned into opportunities, putting DISH even more in focus because it became so important to implement digital solutions and the training to use them. Some of the most important factors are to have tailor-made training to upskill

and introduce digital solutions, and the DISH tools are sufficiently flexible to be used in different contexts and countries. Furthermore, Ms Hansen underlined that **tools should be used together to make a real change because they include many factors**. She concluded by sharing a final recommendation from the DISH project, which is to find ways to coordinate activities better by building on existing needs analyses and tools instead of reinventing the wheel each time.