

Partner profile from the Region of Southern Denmark

(HORIZON: Resilience and mental wellbeing of the health and care workforce)

A Danish “ecosystem” for Horizon Europe collaboration

The Region of Southern Denmark is one of five administrative public units in Denmark. The Region of Southern Denmark (RSD) operates the healthcare service in Southern Denmark. The Region covers many functions including five main hospital units with a large focus on innovation and digitalisation in health and social care. The Regional Digitalisation Strategy states that all citizens and patients have the right to and must have equal opportunity for digital contact with the healthcare system. In accordance with this strategy, the region actively develops and disseminates digital solutions to give patients a better overview of their own patient journey and offer better opportunities for e.g. video consultation and self-booking.

RSD has a unique ecosystem for development, testing and evaluation of innovative healthcare solutions, consolidated through the patient@home project and the regional ecosystem’s EIP on AHA engagement. The ecosystem is acknowledged as a four-star reference site in the EIP on AHA with a certificate of excellence. The coalition consists of a long list of quadruple helix partners with a strong history of close collaboration. The ecosystem is also an active member of the European Connected Health Alliance and CORAL network.

RSD has a vast experience in participating in national and EU projects solving cross-border health challenges with a focus on health innovation. This includes Mastermind (making treatment for depression more widely available for people in rural areas using cCBT and video conference); ACT@Scale (scaling video consultations with a specific focus on relatives of haematology patients); DREAMING (testing home monitoring solutions to measure vital and environmental factors in the home of older citizens with chronic conditions). The Region has participated in Interreg collaborations such as ACCESS & ACCELERATION focusing on overcoming barriers in development of innovative health technology, and ProVaHealth – Proof and Validation in Health, which stimulated cooperation among health laboratories in the Baltic Sea region and tested new technologies in real-life contexts. The region is also an affiliated partner in JADECARE, a Joint Action on integrated care, where RSD participates as one of four selected best practices across Europe with our “Digital Roadmap for Integrated Healthcare Services”, to be adopted by eight other European Regions.

The Region is highly dedicated to delivering transformation in health and care and have put in place several policies and strategies and shaped the organisation optimally to achieve this. The technological and financial foundations are in place to support this transformation. The Region has a longstanding agreement between the region, municipalities and GPs to improve the services for the increasing number of people with chronic conditions, aiming to improve their quality of life, whilst using our resources optimally, based on the LEON principle (Lowest Efficient Cost Level).

Since 2017, the Region has had an Innovation Strategy coordinating the direction of the joint innovation efforts in the region, focusing on the use of innovation to improve health and care services for the citizens of the region. In 2021, the Region developed its first Strategy for Digital Psychiatry to underline the importance and commitment for using digital solutions in both somatic and mental health services.

Denmark as a country has a long tradition in development and implementation of eHealth and is internationally recognized as a frontrunner in digitalisation of the health domain by having a mature infrastructure, very high level of digitalization and information exchange across all sectors and actors.

International collaboration, incl. European projects has had a high priority in many years. Engaging, innovating and learning with different stakeholders in the health and IT domain is how we improve and prepare for the future for the benefit of Danish citizens/patients, health professionals, industry, researchers, authorities etc.

All the organisations in the Southern Denmark Eco-system share an ambition to drive eHealth forward in Denmark and to work with likeminded organisations around Europe. We complement each other's competences and specialties well and uniquely and can jointly provide a strong platform for collaboration with a Danish network. Collectively, we have +30 years' experience in participating in European funded projects across different programmes and domains.

What we can contribute with

We can offer a complimentary flexible Southern Danish founded ecosystem, which is able to contribute to a consortium with a range of skills and which includes the possibility to have both technological, piloting and supportive specialist roles in a consortium. The joint experience also covers coordination, WP and task leader functions in H2020, local pilot site lead as well as specialist roles. The specific partners for this call are introduced below in later sections.

Our Aim in International Collaborations

Our aim is to enter into collaborations that on the one hand develop new, needs-based and valuable solutions for our regional healthcare services, and on the other hand support knowledge sharing and upscaling of strong and innovative solutions.

From international collaborations within healthcare innovation, we would like to learn more about future possibilities and developments within digitalisation, use of emerging technology and the methods for supporting the professionals in healthcare. We are also very interested in learning more about the different aspects on successfully implementing workflows and technology in healthcare.

Potential Partner Roles

The Region of Southern Denmark can be a work package leader or a partner in this call, with a focus on digital competencies for healthcare professionals. This could include, but not limited to, areas such as:

- Description and test of educational programmes for healthcare professionals using digital technologies in their interactions with patients
- Knowledge sharing on digital competencies within emerging technologies such as Virtual Reality and AI
- Test/pilot site in collaboration with one or more of the hospitals in our region
- Collaboration with other partners in our ecosystem, such as educational institutions and the relevant associations

About the Health Innovation Centre

As the central innovation unit in the Region of Southern Denmark, the Health Innovation Centre's purpose is to support the regional hospitals and psychiatric care units in their local innovation efforts, across the whole innovation process from idea to implementation and evaluation. Our mission is to *"co-create solutions for the future healthcare sector"*.

The Centre has a significant role in supporting public-private innovation partnerships in the region, including establishing links and building bridges between needs in the clinical operations and companies who develop new robotics solutions for healthcare. The Health Innovation Centre offers unique insights into the challenges and needs within the healthcare sector and supports innovation processes that result in valuable solutions that improve healthcare services, to the benefit of citizens, employees and the healthcare sector.

The Health Innovation Centre has a strong team of around 65 employees with a wide range of skills to support innovation and co-creation processes. We have a mixture of specialist skills within specific areas such as robotics in healthcare, to broader methodological competencies in relation to innovation management, participatory design, anthropological observation and understanding of human robot interactions.

Through a strong focus on cross-disciplinary collaboration, user involvement and design thinking the Health Innovation Centre of Southern Denmark develops innovative solutions that contribute to high quality healthcare for citizens and efficient services and procedures for healthcare professionals. Our innovation field explores new ways of designing hospitals, improving telehealth and telecare solutions, and supporting daily operations in and around the Region's hospital units, e.g. through the use of emerging technologies such as AI and robotics.

The centre employs coproduction and co-creation as a method to involve users as co-creators of solutions. Involving users – patients, citizens, and employees – is at the core of the Health Innovation Centre of Southern Denmark, e.g. through a specialisation in needs analyses, user qualification/testing of new technologies and services as well as implementation. At its core is close collaboration with public health and care organisations and private companies as well as knowledge- and educational institutes such as the University of Southern Denmark. The main aims are to bring integrated care to the citizens of the Region as well as being a meeting point and an accelerator for public and private innovation partnerships.

At the Health Innovation Centre of Southern Denmark we co-create solutions for the future healthcare sector. Innovation, to us, means changes that work in everyday life. Innovation is the process from demand to implementation. Our solutions are productive and contribute to a measurable effect in somatic and psychiatric hospitals, social institutions and regional companies. Our characteristics are:

- We create innovative solutions for clinicians' everyday life
- We create innovative solutions, that support citizens' own coping skills
- We deploy innovation in public and private co-operations
- We focus on user-centered design and prototyping

The Centre collaborates with Danish Life Science Cluster to host thematic open ecosystem events e.g. “Skills for Health” in South Denmark within the ECHAlliance network. As shared research- and innovation centres between the University of Southern Denmark and Odense University Hospital, CIMT, CAI-X and CCR contribute to sharing knowledge between research and clinical practice.

Relevant projects

DELIVER – is an Erasmus+ project to advance digital skills for health care professionals, acknowledging that healthcare professionals are at the core of digital transformation in health and the further use of ICT. The project builds upon the learnings from SDSI’s national project “Becoming digitally competent”. DELIVERs objective is to provide a curriculum for training courses as well as learning material for ongoing professional development beyond the duration of the educational program. The generic educational program will include components that can be tailored to various local contexts and secure optimal relevance for all partners and for the transferability of the project to other EU countries. Each country will provide test courses for the target groups. The learning outcomes of the educational program will be regulated as part of the European Qualifications Framework (EQF). To meet the current demand for enhancing HCPs and HCMs digital health skills, the educational program will be a post-graduate digital skills educational program for HCPs and HCMs. The educational program can potentially be incorporated into BSc of Nursing Studies, BSc of Physiotherapy etc. throughout the European region.

One of our other initiatives is a course for healthcare professionals on how to interact with patients through digital tools as these are becoming more and more widespread and in demand by citizens. This means that the health professionals need to feel comfortable in using digital tools themselves, be able to solve simple technical issues and adapt their communication from personal to virtual interaction. **“Increase your Digital Skills”** ([“Bliv digital kompetent”](#)) will strengthen the healthcare staff’s digital competencies and increase their technological literacy, use of digital technologies and communication with citizens through digitally supported treatment, care and rehabilitation. The purpose is for the healthcare staff to be able to support citizens in self-care.

Contact Information

Further information on the Health Innovation Centre of Southern Denmark and our activities can be obtained at www.innosouth.dk. You can reach us directly on: +45 2964 5884 and mhs@rsyd.dk. Our coordinator Maria Hardt Schoennemann will be the primary contact. We are also active on LinkedIn and Twitter!

About the Odense University Hospital

Odense University Hospital (OUH) is one of four university hospitals in Denmark and covers all medical specialties in healthcare. Furthermore, the hospital has research activities in the majority of medical areas. The hospital is part of the Region of Southern Denmark and is the largest hospital in the area. The hospital covers national function in 16 areas. We treat approximately 100,000 Patients per year and has 1050 beds available. The staff number is approximately 11,300 employees.

The mission is *Patient first*. *Patient first* is the underlying principle of OUH's approach and ambition in creating value for our patients. This commitment to our patients includes acting as their university hospital, which we achieve through full implementation of our code of practice. The yearly budget is approximately € 1 billion.

For the time being the hospital is in a process of establishing a new high-tech university hospital in the Odense Area and a reconstruction of the hospital in Svendborg. The hospital site in Odense, which is the largest part of the hospital will structurally be integrated into the University of Southern Denmark and its new Faculty of Health Sciences. The aim is to benefit patients by positioning research and treatment close to one another, a model found in only a few places around the world. The vision for the new hospital is to qualify and improve patient treatment in modern surroundings, the hospital will be of a high, and modern standard using technologies to improve patient care,

The department of Innovation at Odense University Hospital (OUH) has a long tradition of working with innovation as well as of testing, implementing and assessing new technological solutions. This means that new technologies and innovative initiatives are a regular part of the hospital's daily operations, which constantly improve treatments and workflows at OUH. Innovation has been a key part of OUH for years. For instance, OUH was the first Danish hospital where all 50 clinical wards switched to an electronic patient record back in 2009.

A high degree of digitization, an agile IT infrastructure and an innovative culture are the prerequisites for us at OUH to easily and quickly test and implement new solutions – the basic elements and the digital foundation are in place.

INNOVATION CENTRES

An important and direct result of OUH's focus on strategic innovation is the creation of the Centre for Innovative Medical Technology (CIMT) in 2014, which promotes innovation and research in new medical technologies such as telemedicine, online applications, patient reported outcomes, video consultations and more. In recent years, the two research centres Centre for Clinical Robotics (CCR) and the Centre for Clinical Artificial Intelligence (CAI-X) have been created as well for the purpose of promoting innovative new technologies in the field of healthcare.

The department of Education and Competency Development at Odense University Hospital works with competency development for hospital staff and collaborates with educational institutions. Among other things, responsible for tasks related to all health educations and OUH's strategy is to develop the digital competencies of clinicians, which is a necessity to be able to offer the best patient care. As part of this work, the department develops e learning, train supervisors in using digital skills and assist clinical supervisors in the planning of internships. A part of the department is a modern simulation centre, where health care professionals can train skills. For instance video consultations and team cooperation.

Relevant projects

HEAL:

internships in future hospitals. The department of ECD has received an Erasmus + grant, in order to develop an innovative framework for planning and implementing new ways of doing internships for nurse and medical students. Hospitals throughout Europe experience challenges in planning internships, as the number of students are growing, at the same time where the number of patients in hospitals are decreasing due to more online and virtual treatments. The project aims at developing new methods for learning and to explore digitalisation as part of planning internships. OUH is the project leader and cooperates with five European partners. The outcome is to implement new recommendations of how to secure internships in the future in order to help the recruitment of health care staff. [The HEAL Project \(rsyd.dk\)](http://rsyd.dk)

Digital transformation:

RSD has made a priority in developing digital competencies for employees and management. At Odense University hospital, the aim is that all departments work with focus on implementing digital solutions by putting a focus on the digital competences of the staff. In order to be able to do so, the management will be supported in and receive guidance in how to lead a digital transformation in a modern hospital. The project also focus on particular training programs, for instance video consultations, implementation of more e-learning courses and support in implementation of various digital systems.

CIMT: Digital Vision (1.0)

Creating a highly innovative pioneering medical department focusing on implementation and enabling and testing synergies between innovative IT solutions. The goal was to create seamless workflows resulting in more resources to focus on patients and to create flexible patient pathways. This year we have started a version 2.0 focusing on cross-sector cooperation.

CIMT: TELEMED: Database on Telemedicine

The TELEMED database provides an overview of evidence based telemedicine in hospital settings, and serves as an inspirational overview for hospital departments looking for information on telemedicine as well as others who are interested in evidence based digital solutions in hospitals. (www.telemedicine.cimt.dk)

CAI-X: MAGIC - AI for Breast Cancer Diagnostics

The objectives of this project are to validate and test an AI system in an existing radiology workflow and analyse the impact on cancer detection and recall rates as well as workload. The project presents the world's first large-scale validation study and a prospective clinical trial which will assess the impact of a DL-based workflow in Danish clinical screening practice.

CCR: Hubot – Automated Blood Sample Transportation

HUBOT is an Autonomous Mobile Robot (AMR) that carries blood samples between OUH's intensive care units and central laboratory. HUBOT drives six-seven kilometers daily between three floors and three pick-up points.

Contact Information

Further information about OUH and our projects, please visit: ouh.dk.

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About the Centre for Digital Psychiatry

Centre for Telepsychiatry is an innovation, research, and treatment centre within the Mental Health Services in the Region of Southern Denmark. CTP supports digital innovation for mental health and wellbeing from catalysing new ideas through to developing, deploying, and evaluating the impacts. The centre aims to increase access to mental healthcare and to improve health outcomes for people with mental health problems by designing and delivering digital technologies. The centre has a strong focus on prevention, and operates preventive mental health services, but also delivers treatment for anxiety and depression on a national scale through online services. The centre comprises skills in research, innovation, implementation, service delivery, and more, in the field of digital mental health.

Relevant projects

Most recent EU projects include MasterMind; E-COMPARED; ImpleMentAll; and STOP.

Contact Information

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