PARTNER PROFILE

Artificial Intelligence in Healthcare



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 Health Innovation Centre is the entrance to the region and hospitals when it comes to data and technical integration. Within artificial intelligence, we support the hospitals in understanding clinical challenges and needs that have potential for support from Al solutions, as well as in scoping and establishing strong and valuable projects with a complimentary combination of partners. We have a strong focus on validation and proof of concept and have extensive experience in managing complex, cross-sectorial projects, including on a national scale.

> 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 artificial intelligence solutions for healthcare. We offer unique insights into the challenges and needs in the healthcare sector and across sectors and support collaborative innovation processes. The result is valuable solutions that improve healthcare services, to the benefit of citizens, employees and the healthcare sector.

> The Health Innovation Centre has a central role in the region when it comes to artificial intelligence. Among other things, the Centre coordinates the Regional Artificial Intelligence Network (RAIN) in collaboration with the Regional IT department and the Maersk-McKinney Møller Institute at the University of Southern Denmark. Through this network, regional stakeholders meet 3-4 times a year to discuss different topics with a clinical focus. The Centre has also hosted larger AI themed conferences on a national scale.

Specialist Services

The Health Innovation Centre has a strong team of approximately 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 IT project management (incl. sprint and scrum), to broader methodological competencies in relation to innovation management and participatory design.

Potential Partner Roles

The Centre can be a Work Package Leader or contributing partner within e.g.:

National Coordinator

In order to lay a strong foundation for the project, during the initial planning phase of the project we can contribute with detailed project planning, project management and establishing the Danish partnership. We can be in charge of engaging users, stakeholders and policy makers through e.g. participatory design workshops and thematic events.

Data, Model Design and – Development

Based on FDA's TPLC (Total Product Life Cycle) model for AI and ML projects, we can contribute to a project with e.g. identification and extraction of data, Analytical Base Table as well as GDPR compliance and quality. We can support public-private collaboration at both strategic- and project levels and algorithm development and - training through the regional innovation platform, which provides access to several central data sources and EHR data.

Validation and Proof of Concept

In collaboration with the clinical departments, we can contribute to a project with internal and external validation tests, pilot testing and description of work- and patient flows.

Evaluation

We can contribute to evaluation design, and in connection with qualitative and quantitative evaluation across the project process, we collaborate with the clinical departments to provide qualitative interviews with users, quantitative surveys for users and patients as well as registration of outcomes.

Upscaling

We support upscaling of strong AI solutions through recommendations for e.g. implementation, sustainability and CE marking.

Implementation and User Engagement

In order to ensure that the project solutions are actually transformed into new behaviour and maintained after the project ends, we can contribute to projects with:

- · As-is and to-be analyses of workflows
- Opportunity and barrier analyses
- Change management skills
- Communication plans
- Description of personas and end-users
- · Involvement of all organisational levels and stakeholders
- Design for adoption

Network and Dissemination

As an established knowledge hub for healthcare innovation in the South Denmark ecosystem and a four-star reference site in the EIP on AHA as well as an active member in the ECHAIIiance, we can contribute to a project with international network establishment, exposure and dissemination through strong established channels and networks, as well as thematic events (e.g. challenges and barriers for successful implementation) in our 1.900 m² facilities.

Pilot Test site

The Region of Southern Denmark can be a test/demonstration site in collaboration with one of the four main hospital units in our region, and the Health Innovation Centre can be the national coordinator for the Danish pilot site.

Our Aim in International Collaborations

Our aim is to enter into collaborations that on the one hand develop new, needs-based and valuable artificial intelligence solutions for our regional healthcare services, and on the other hand support knowledge sharing and upscaling of strong artificial intelligence solutions. We have a particular interest in prediction and prevention as well as the use of synthetic data.

We are particularly interested in collaborating with partners with complimentary competencies to our own, e.g. universities, companies and different health care organisations.

Project Portfolio

- <u>Hjertero</u> ("Calm Heart") artificial intelligence to detect heart patients with an increased risk of anxiety and depression
 - Al Medtech mapping current Al projects in Denmark and identifying stakeholders
 - PAIN Regional AI task force
 - RAIN Regional AI Network
 - GERI Toolbox
 - JadeCare
 - <u>Deliver</u> Digital skills to healthcare professionals



The European Silver Economy Awards



European Innovation Partnership on Active and Healthy Ageing

CERTIFICATE OF EXCELLENCE

In 2018 the Health Innovation Centre won the European Silver Economy Award for our Generic Telemedicine Platform, which allows for a quick transition for pilot projects from idea to testing. The Region of Southern Denmark is a <u>four-</u> star reference site for the EIP on AHA and have achieved a certificate of excellence.

Strengths in the Region of Southern Denmark

Denmark is a highly digitalized society and lead the way when it comes to <u>digitization</u> of the public sector. With one secure digital key "easy-ID" Danes can access both public and some private platforms and the successful digitisation of the public sector is further enabled by a very high degree of trust in Denmark. The availability of data across sectors in Denmark is unique, which provides a foundation for accessing a multitude of high quality data for AI algorithms.

The Region of Southern Denmark has a strong foundation for further development, test and utilization of AI solutions, as the Region has already established integrations between many different systems, e.g. through unique platforms such as the Silver Economy Award winning Generic Telemedicine Platform and microservice solutions. The Region is getting ready for AI solutions and the Region is actively pursuing and experimenting with AI projects for prediction and treatment. At political level, the Region has a strong interest in the possibilities and use of AI. Several of our clinicians in the region are very ready to investigate the potentials of AI further.

Al-konference

On 12th September 2019, we hosted the conference "Al in the Future Healthcare Sector" with more than 180 participants. The event included presentations of state-of-theart projects and debates.



RAIN network

In 2020 the Regional AI Network (RAIN) was established to support exchange of ideas, knowledge and inspiration, and to establish a strong collaborative AI ecosystem in the region. RAIN meets 3-4 times per year.



HjerteRo

("Calm Heart") - is a nationally funded Al signature project focused on artificial intelligence to detect heart patients with an increased risk of anxiety and depression.