

Best Practices observed in the Region of Skåne

Regional Context

Skåne has a long history of innovation. It is home to globally leading technology companies, world-leading research, and a supportive innovation system. Companies such as Gambro, the developer of the first artificial kidney, originate here. As an Innovation Leader, the region was ranked the 14th most innovative region in the EU in 2023. The economy of Skåne is diverse and includes five key industries: Advanced materials & manufacturing, Food, Lifescience, Smart sustainable cities and Tech.

The Research and Innovation Council in Skåne (FIRS) aims to promote innovative procurement and urban design processes with a high degree of innovation and sustainability. They work to increase the availability of support functions throughout Skåne, even outside the dominant innovation environments in Skåne.

Importance of identifying good practices

Through innovation procurement, the public sector can engage in dialogue with companies to create access to products and solutions that better meet public needs. Innovation procurement can contribute to the renewal of public services and improve the quality of Swedish welfare.

Innovation procurement can benefit from a dialogue-based approach, both to formulate needs and to engage potential suppliers. It is a success factor to appoint process-leading competence to gather and facilitate dialogue with various parties and organizations.

Innovation procurements are complex processes that require significant resources and a collection of various competencies. It is advantageous if they can be managed as projects with specifically allocated resources. This is particularly important for organizations that have not previously worked with innovation procurement. To get started with innovation procurement, many organizations need to strengthen their basic innovation maturity and knowledge.

It is important to demonstrate the socio-economic benefits and develop knowledge about how innovation procurement works in different organizations, based on the specific challenges and opportunities of these organizations.

Sharing good examples of innovation implementation can serve both as inspiration and knowledge dissemination, which in turn can lower the barriers to initiating innovation procurement.

Best practices observed

In the healthcare sector in the Region of Skåne following examples of innovation procurement have been implemented;

- **Biobased disposable aprons** – Disposable aprons are an important part of basic hygiene routines in healthcare. They are used to protect both healthcare workers and patients from the spread of infections and contamination. These aprons are usually made of plastic and are intended for single use, meaning they are discarded after each use to ensure the





highest possible hygiene standards. The aim with the innovation procurement was to develop a more sustainable apron in order to reach environmental goals regarding climate footprint in the Region of Skåne. By replacing oil-based aprons **with** biobased we aimed to reduce CO2 emissions **by** at least 70% within the specific product area. The process opened up for non-traditional and new suppliers in the region. The project resulted in better formulation, design, and functionality, with a larger share of renewables (91%). The product is better in terms of climate impact and is locally produced with local ingredients. Additionally, it created 10 new job opportunities in Skåne and similar process has big potential to be applied **to** other product categories.

- Fall prevention in hospital care – Annually, approximately 70,000 people are admitted to Swedish hospitals after falling. It is mostly the elderly and those with multiple illnesses who fall, and it often happens at home or in a care facility. However, many fall accidents also occur after hospital admission. In hospitals in Skåne, thousands of fall accidents occur annually. Patients often fall when getting out of bed to go to the bathroom or when returning. Most patients do not get injured in the fall or only sustain minor injuries such as pain and wounds, but annually around 200 patients fall so badly that they suffer a head injury or fracture. Of course, healthcare facilities take fall prevention measures such as risk assessments, anti-slip socks, reviewing medication lists, beds that can be lowered to the floor, and other measures, but there was a need to identify and develop better solutions. The objective was to develop a solution to decrease the number of falls in hospital environments **by** 20%. The solution developed consists of a new bed sensor collecting real time data regarding the vital parameters of the patient. The bed sensor communicated directly with a monitor and information regarding fall risk was sorted out and early warnings **were** provided to caregivers. The solution has great potential for fall prevention in many different clinical environments.
- **Remote care of heart failure patients** - Heart failure is one of the most common public health diseases in Sweden, and approximately 250,000 people in Sweden have heart failure. Patients with heart failure are often elderly, frail, and have multiple illnesses. This increases the complexity of managing both the biomedical as well as psychological and social aspects of the disease, complicating self-care behavior. The objective for the innovation procurement was to improve the quality of life in patients with heart failure by increasing patient involvement and decreasing the amount of acute hospital care as a result of not optimally adjusted medication. The developed solution consists of a smart scale for domestic use that easily helps the patient monitor their weight. The data is sent to a tablet, and based on the weight curve, the optimal amount of diuretic medication is adjusted daily. The solution improved access for the patient to information regarding their treatment and health status which resulted in improved selfcare/compliance and a decrease of hospitalization by 50% within this patient group. The solution has great potential for similar conditions.
- **Human centric light in neonatal ward** - The goal was to create a healthy lighting environment tailored to the needs of children, parents, and staff. In the long term, it was hoped to potentially shorten hospital stays and increase the well-being of patients, relatives, and staff. To develop a more sustainable work and health environment for neonatal care, the process was based on collaboration between industry, academia, and the public sector, and it opened up opportunities for non-traditional and new suppliers in





the region. The suppliers had technical experience in lighting for health and well-being to ensure good health and great performance. We asked for a system that could provide the right kind of light at the right time. A new human-centric light solution for the hospital environment was developed and implemented. The light solution provided possibilities to choose different light spots in order not to disturb the neonatal patients but still allow staff to perform specific tasks in adjusted light.

- Also, the region of Skåne is involved in, and runs an ongoing **PCP project; Carematrix. Home - Carematrix** CareMatrix is a European H2020 Pre-Commercial Procurement (PCP) project for integrated care solutions designed to challenge the health market to develop innovative technology for People with Multimorbidity (PMM). PMM are an aging population who have two or more chronic health conditions such as diabetes, heart disease and depression. The vision is to close the gap between supply and demand for innovative technology that enables predictive and specific care, treatment, administration and support needed for PMM. Starting fall 2024 CareMatrix Phase 3 is in progress, with three suppliers trialing their solutions together with the project partners. These suppliers understand the CareMatrix challenge, and have proposed innovative, state-of-the-art ways to improve care for people with multimorbidity. Their proposed solutions include AI and data analytics features, improved ways for people to manage their own care, and proven ways of making care more efficient and effective for care professionals.

Closing Remarks

The public sector plays a crucial role in driving innovation procurement. By actively seeking and implementing innovative solutions, public organizations can improve services and societal benefits. This collaboration with industry, academia, and other public actors fosters development and growth, enhances the quality of welfare services, and addresses major societal challenges. Additionally, it stimulates the market by creating incentives for companies to develop new products and services.

When working with innovation procurement, it is of utmost importance to keep an objective focus on the aim, follow a strict but iterative process and convince essential stakeholders including end-users. The suppliers must be offered support for product development, adjustments and detailed know-how regarding the specific care environment. Sharing good examples of innovation implementation can serve both as inspiration and knowledge dissemination, which in turn can lower the barriers to initiating innovation procurement.

