

Introducing Robotics into Hospital



A next-generation logistics robot system is now part of a Finnish hospital's daily operations. The system is designed to reduce transportation costs, improve the availability of supplies and alleviate congestion on hospital hallways by running deliveries 24/7.

VTT Technical Research Centre of Finland studied the implementation of the logistics robot system at the Seinäjoki Central Hospital in South Ostrobothnia. Finland has taken steps to introduce automated delivery systems in hospitals, with Seinäjoki Central Hospital acting as one of the pioneers. The Seinäjoki hospital's robot system will include a total of 5-8 automated delivery robots, two of which were deployed during the study.

As the population ages, the need for robotic services is on the increase. Adopting new technology to support care and nursing work is not straightforward, however. Autonomous service robots and robot systems raise questions about safety as well as about their impact on care quality and jobs, among others.

During the first six months of implementation of the robot system at Seinäjoki hospital, transport personnel expenses and the physical strain of transport work have been reduced, according to the VTT study. The personnel's views on the delivery robots have developed favourably and other hospitals have shown plenty of interest in the Seinäjoki hospital's experience.

This study by VTT, employing work research approaches and a systems-oriented view, highlights the importance of taking into account in the change process the interdependencies between various players, along with their roles in the hospital's core task.

Careful planning, piloting and implementation are required to ensure that the adoption of new robots proceeds smoothly as a whole. "As the system is expanded with new robots and types of deliveries, even more guidance, communication and dialogue is needed. Joint planning that brings various players to the same table ensures that the system's implementation goes as smoothly as possible, making it easier to achieve the desired overall benefits," according to Senior Scientist Inka Lappalainen of the ROSE project.

The VTT study is part of the Robots and the Future of Welfare Services project (ROSE), which runs from 2015 to 2020. The project investigates Finland's opportunities for adopting assisting robotics to support the ageing population's independent living, wellbeing and care.

Source: [Technical Research Centre of Finland \(VTT\)](#)

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Published on : Tue, 5 Sep 2017