INNOVATION PROJECT COLLIN

"KEEP THE PATIENT OUT OF THE HOSPITAL"

Photo: UKSH

Almut Kalz is project manager of COLLIN. She offers interesting insights into the Danish-German collaboration and its results.

In June 2014 the Danish partners of the innovation project COLLIN (collaboration for innovation) visited the University Hospital Schleswig-Holstein (UKSH). Project manager Almut Kalz provides information about the synergies of the German-Danish collaboration.

What are the main areas of interest and research in the COLLIN project?
COLLIN was started to initiate and intensify the collaboration between the UKSH and the Odense Universitetshospital and the multiple network partners from the field of clinical innovation. A major focus has been on robotic and automation solutions, which are particularly relevant in hospital logistics. In Odense, for example, blood samples are transported by means of a high-speed tube system, which has recently been developed by the hospital and a small Danish company. Further examples are electric bed transporter systems, self-navigating robot vehicles for small transports and fully automated systems like the unique robot-controlled central sterile services department in Gentofte. In view of the UKSH plans for comprehensive renewal of many buildings both in Lübeck and Kiel, solutions like the above are highly relevant for logistics planning. In addition, there has been collaboration in the field of robot-assisted surgery, as both hospitals set up daVinci surgical centers recently.

But COLLIN has also been looking for new impulses in healthcare IT and telemedicine. In these fields, Denmark has gained a kind of international pole position, mainly due to the fact that some years ago Danish hospitals were not able to cope with the large patient numbers. The innovation motto frequently quoted is therefore: "Keep the patient out of the hospital."

How can German patients profit from the so-called "Patient Briefcase," developed in Odense?
This solution is essentially a simple hinged case with a monitor for video conferencing and encoded data pathways. The most important feature is its simplicity: anybody without previous knowledge of a computer can use it. Acute or chronic COPD patients, for example, can use it to contact their physician or rehabilitation specialists to train and monitor their lung function.

What is special about the automated central sterile services department in Gentofte?
The crucial feature is a completely secluded storage area for surgical equipment and consumables behind glass walls. The staff work on PC ports on the other side of the glass and order the required material per surgical intervention by editing a standard list. The robotic storage system "knows" exactly where everything is and combines the material into ready-to-use case carts, specifically labeled for each patient and surgery.

What are the special features of the electric bed transporters?
Instead of having to push the bed over long distances, which is a strenuous task and often causes back problems, the staff become a "hangers-on," maneuvering the towing vehicle via an ergonomic steering unit. From the patient perspective, the benefit lies in decreased wheel vibration and ultrasoft braking of the transport machine. At the same time the transport staff are free to give the patient increased attention. At the Odense Hospital, these transporters have been in use for some years; in Germany, the UKSH could become the first hospital to employ this innovative technology. A recent test trial in Lübeck showed promising results: staff and patients were equally satisfied with the innovation.

How does the robot-assisted surgical daVinci system function?
Both UKSH, Campus Kiel, and OUH have recently established daVinci surgery centers and in both hospitals the daVinci is shared by urologists, gynecologists and thorax surgeons. The physician guides the endoscopic instruments via finger straps and a 3D vision console. He sees a maximum enlargement of the surgical field and is able to move the endoscopic instruments tremor-free and with high precision. Large numbers of patients can now profit both from the benefit of minimally invasive surgery and improved surgical results. Further collaboration between the two centers for research on robot-assisted surgery has been agreed on. bp

Further information:
www.collaboration-for-innovation.eu