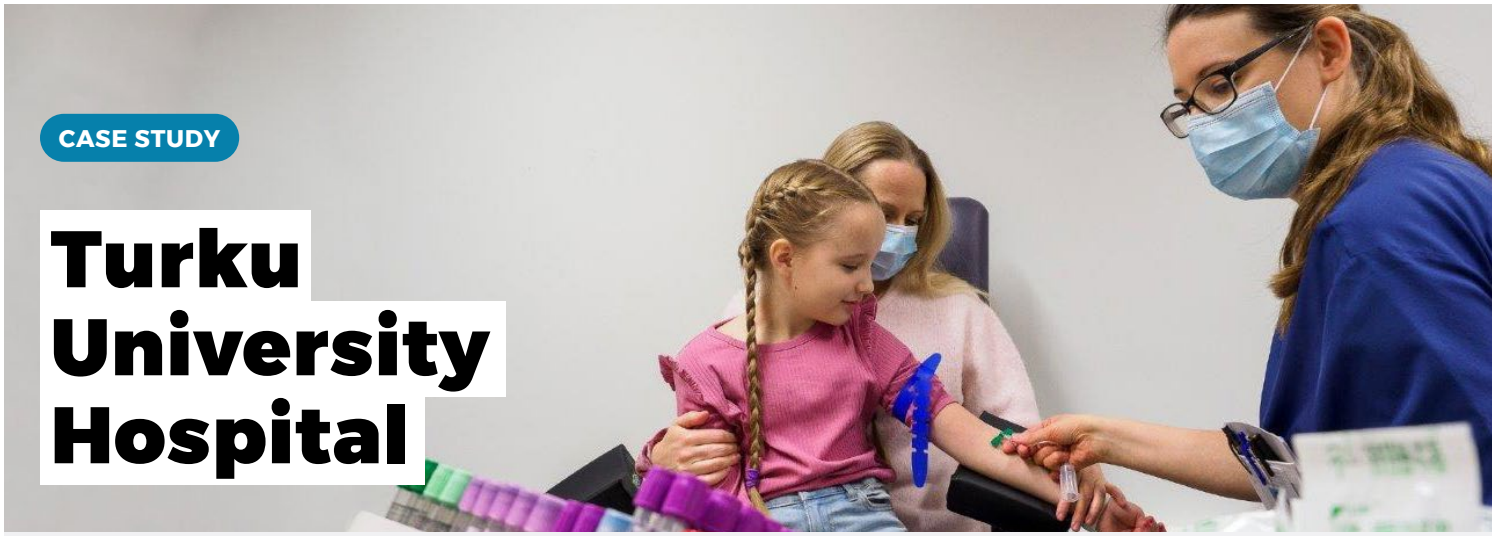

CASE STUDY

Turku University Hospital

FINNISH MEDICAL CENTER UNIFIES, IMPROVES STAFF PROTECTION WITH RTLS SOLUTION

About Turku University Hospital

Founded in 1756, Turku University Hospital (Tyks) Main Hospital is the oldest and one of the largest hospitals in Finland. Located near the Turku city center in southwestern Finland, Tyks includes four main buildings: hospitals A, T2 and U, as well as the T3 Lighthouse Hospital, which opened in 2022.

About 2M-IT

2M-IT is Finland's largest publicly owned company providing IT services for health and social services. The company works with partners, such as Elisa, to secure tomorrow's well-being and advance industry development.

About Elisa

Elisa is a Finnish market leader in telecommunications and digital services and is a STANLEY Healthcare Premier partner. With a 140-year history, the company serves over 2.8 million customers in Finland and internationally.

THE NEED

Preventing workplace violence has always been an important safety initiative at Turku University Hospital (Tyks) Main Hospital. Over the years, Tyks acquired several different staff duress systems within its multibuilding campus. One of the legacy systems was facing end of life; users often complained about others. The hospital was also constructing a new, state-of-the-art building that needed a modern staff protection solution.

THE SOLUTION

Hospital leaders made a strategic decision: identify, implement and standardize staff protection technology across facilities. This unified approach would help streamline security protocols and improve staff safety. Following a rigorous evaluation process led by 2M-IT, Tyks opted to work with telecommunications partner, Elisa, to implement the STANLEY Healthcare Staff Protection solution with more than 1,100 tags. The solution, which uses real-time location system (RTLS) technology, provides a central enterprise platform serving staff across buildings.

THE RESULTS

Tyks operates a single, modern staff protection solution safeguarding physicians, nurses and other employees across four buildings that span 27,500 acres. Staff have greater peace of mind thanks to mobile tags/lanyards and fixed call stations. Leaders within units benefit from real-time visibility to staff duress calls within their wards. And while the Tyks security team remains the focal point for response and resolution, they can now provide detailed data to their peers. These reports are helping inform root-cause analysis and support continual improvement in staff safety.

Challenges Faced

"Getting Better, Every Day" is the simple yet compelling strategy of Turku University Hospital. That includes the medical center's approach to safety and security.

For several years, the hospital had been maintaining multiple staff protection solutions, an approach that created unnecessary technical and operational complexity. With one of the manufacturers poised to sunset its product, Tyks faced an urgent need to identify and implement a replacement solution.

At the same time, the security team was fielding frequent complaints from users about existing solutions. For example, triage rooms within the emergency department are soundproofed to protect patient privacy. Because of this soundproofing, clinicians cannot call for help while in those rooms. They also couldn't count on the existing staff protection solution, as it lacked the required accuracy.

In addition to managing these legacy challenges, Tyks leaders needed to identify a staff protection system to implement during construction of the new T3 Lighthouse Hospital facility.

Solution Benefits

Leaders recognized a strategic opportunity to implement a modern solution across all hospital buildings. Tyks needed a solution that could meet a variety of criteria:

- **Deliver accuracy levels required to support user needs and enhance peace of mind**
- **Operate smoothly across network infrastructure, including multivendor access points**
- **Provide unit leaders with greater visibility to staff duress calls**
- **Enable data review and analysis to help make better decisions in proactively protecting staff**
- **Standardize training for staff on what to do in a duress situation and security professionals and managers on responding to an incident.**

> *We encourage staff to call for help at the first sign of an angry or violent patient. Our goal is to prevent that situation from escalating and leading to an injury for the employee or others.*

ANNE VÄHÄMÄKI
SECURITY DESIGNER, TURKU UNIVERSITY HOSPITAL

TYKS Turku University Hospital

In collaboration with 2M-IT, Tyks chose to work with Elisa to implement the STANLEY Healthcare Staff Protection solution across the affected buildings. The STANLEY Healthcare solution combines the MobileView® RTLS platform with fixed T12 tags in select areas and portable T2s and T14e tags that staff clip on to their clothing or lanyards. Each tag has a button staff can press when they are concerned about the potential for a patient or other security incident.

Initially, the hospital prioritized new solution deployment in two buildings: A and T2. Although Building A has eight floors with four wings, the project scope covered targeted areas of floors 1 through 4 representing 7,300 square meters. Building T2 also has eight floors, and the new system needed to address all previously deployed areas—a total of 51,000 square meters—while delivering additional accuracy.

Working with Elisa, the hospital implemented the solution and trained staff on how it works. Professionals from Elisa conducted solution training via Microsoft Teams calls and recorded the sessions so staff could learn at their convenience.

The second wave of deployments focused on two other buildings. The first was the new-build T3 Lighthouse Hospital above the Turku-Helsinki Highway in the middle of the university campus. The second was at the Tyks Hospital Salo, which is located 34 miles from Turku in the City of Salo and serves as the region's main hospital.

In total, 690 T2s tags, 160 T14e tags and 300 T12 tags were deployed. With the new system in place, staff have a greater sense of security and peace of mind that they can call for help.

"We encourage staff to call for help at the first sign of an angry or violent patient," explains Security Designer Anne Vähämäki. "Our goal is to prevent that situation from escalating and leading to an injury for the employee or others." She adds that user complaints have dropped to zero, a sign that the system is working reliably.

While previous systems gave visibility only to the Tyks security team, unit leaders now have access to the MobileView platform. It provides a map-based view when a staff member requests backup—enabling unit leaders to intervene more quickly. In addition, Tyks successfully integrated MobileView with its Ascom Unite Nurse Call System. This integration makes it possible to send alerts from MobileView to the Ascom Unite Nurse Call systems hallway monitors—further expanding visibility to alarms.

The system generates reports, which Vahamaki provides to the hospital's occupational health and safety group. That team can use the data to perform root-cause analyses and identify opportunities for continual improvement—in other words, "Getting Better, Every Day."

Looking ahead, the hospital sees opportunities and benefits to use the MobileView platform in additional ways—including broader use of staff protection, as well as extension into other RTLS use cases, such as patient safety, asset management and environmental monitoring. As with staff protection, these additional use cases would support the ability to view data all in one place.

"With all services from one provider and one platform, expansion becomes much easier," says Service Engineer Teemu Kiukainen.

Lessons Learned

What might other hospitals learn from the experiences at Turku University Hospital? The team offers the following advice:

Define the user needs.

Invest time in understanding the users and environments you're aiming to protect. How do users move throughout the space? What areas are especially prone to staff duress incidents? Where is area-level accuracy sufficient, and where is room-level accuracy essential?

Make sure the Wi-Fi network is capable.

"Whether in a new building or an old building, ensure that you have a well-designed, RTLS-capable Wi-Fi local area network," says Head of Electrical Engineering Miika Taimela. "And be sure to test it and confirm that it aligns with users' needs."

Identify integrations early.

How will the staff protection solution integrate with other resources in your hospital? Do you want alerts to go to hallway monitors or handheld mobile devices? These integrations can add unexpected time and costs; proactive planning and budgeting are key.

STANLEY Healthcare

About STANLEY Healthcare

STANLEY Healthcare empowers caregivers to deliver connected, productive, and safe care. Our innovative portfolio of solutions helps hospitals, clinics, and senior living organizations protect people, use their assets efficiently, and understand their operations for a caring and healing environment. Learn more at **stanleyhealthcare.com**.

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