InnoBuyer
FAST TRACK TO INNOVATION PROCUREMENT

CHALLENGER

WOJEWÓDZKI SZPITAL SPECJALISTYCZNY W OLSZTYNIE

SOLVER

sterna innovation

INNOBUYER IMPACT STORIES:

OPEN CALL FOR SOLVERS

SAFE-STAY

Safe in-hospital mobility of patients and visitors

Innobuyer collaborated with public institutions (challengers) to identify their unmet innovation needs and select suitable SMEs (solvers) to address them. The matched teams co-created pilot solutions over a 10-month period. Following successful pilots, challengers received support from Innobuyer and experts to design simplified ToR. Each project was backed by €100,000 in financial support—€41,500 for the challenger and €58,500 for the solver.

THE NEED

The Wojewódzki Szpital Specjalistyczny in Olsztyn is one of the largest public specialist hospitals in the Warmian-Masurian region of Poland.

In the Polish healthcare system, there is no designated staff to assist patients with mobility around hospital facilities, nor is there free access to mobility aids such as wheelchairs. Patients must rely on accompanying family members, caregivers, or hospital staff to reach their appointments or visit hospitalized loved ones. This often requires medical personnel to leave their core duties to help patients move through the hospital, search for available wheelchairs, and return them after use. These tasks, though essential, consume valuable clinical time and contribute to staff fatigue and reduced quality of care. Given persistent staff shortages and increasing workloads, the hospital recognized an urgent need to implement a system that would both improve patient mobility and reduce the burden on healthcare staff.

Improving access to mobility equipment was also seen as a way to **enhance patient safety, prevent overcrowding or obstruction in hospital corridors**, and increase satisfaction among patients and their families.

THE SOLUTION

Sterna Innovation, a company specializing in Internet of Things (IoT) technologies and smart medical devices, developed an intelligent wheelchair management system tailored to hospital environments.

The solution combines several advanced technologies to **create smart wheelchairs equipped with real-time location tracking, usage monitoring, and incident detection**. The system can detect when a wheelchair is in use, waiting, stationed at an appointment, or left unattended, and it reports this data to a central platform. Additional features include:

- Geofencing alerts, which notify staff if a wheelchair moves outside its designated area.
- A patient guidance system, with a digital screen and voice prompts, that directs patients to and from their appointments.
- Real-time incident detection, which alerts staff in case of significant impacts or if a wheelchair tips over.

IMPACT

The system recorded 272 uses during the pilot phase.

Patient and caregiver satisfaction increased by 65%, while staff satisfaction rose by 57%.

No wheelchairs were lost, stolen, or returned improperly—all were securely latched back in place.

> THIS SECTOR IS A VERY PROMISING ONE IN THE NEAR FUTURE AS IT IS SEEN AS **A MECHANISM TO GAIN EFFICIENCY IN THE HEALTH SECTOR.** HAVING A FIRST EXPERIENCE WITH A REAL APPLICATION CAN HELP TO BOOST STERNA INNOVATION'S POSITION IN THE MARKET.

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