Accelerating Innovations into CarE – Validate Program (AICE-Validate)

ForeSite Intelligent Surface - Continuous Skin Monitoring

PROJECT FAST FACTS

RECIPIENT: XSensor Technology Corp. and partners W21C at the University of Calgary and AHS

PROJECT DURATION: 24 months

AWARD: $300,000

AWARD DATE: January 1, 2022

XSENSOR

Intelligent Dynamic Sensing

THE PROBLEM

The current care pathway for pressure injury prevention involves skin inspection and regular patient repositioning. Despite current best practice, 2.5 million people in US will develop pressure ulcers and 60,000 hospital acquired pressure ulcers / injuries will be attributed to patient death in US per year. These skin and soft tissue injuries remain a significant problem within hospitals and long-term care facilities and result in prolonged patient stays, decreased quality of life, high costs for both the patient and our health care system, as well as increased morbidity and mortality.

THE SOLUTION

XSensor has developed the ForeSite IS system which continuously monitors skin pressure exposure, providing actionable information to help clinicians improve patient safety. Clinicians can individualize care using bedside visual risk information and get real-time confirmation of safe wound relief. Artificial Intelligence (AI)-powered algorithms inform advanced prevention strategies to maintain healthy skin for at-risk patients. Data is collected from a either a mattress or a fitted mattress cover with integrated sensors, each using more than 1,500 sensor cells to continuously monitor the surface pressures exerted on the patient's body. AI-enabled software clearly identify areas of the body that have been under sustained pressure. The patient dashboard provides centralized monitoring, with information regarding the status of each monitored patient and allows clinical staff to prioritize and individualize patient care.

PROJECT OBJECTIVES

XSensor Technology Corp is working to reach the following goals:

- Clinical validation trial with W21C at the University of Calgary
- Use clinical data to refine artificial intelligence/machine learning models
- Refine cloud and SaaS platform to enable SaaS revenue model.

ABOUT THE AICE-VALIDATE PROGRAM

AICE-Validate is an opportunity for Alberta's health-tech innovators to accelerate commercialization of digital and data-enabled health technologies through the early validation phase. If you'd like to learn more, please check out AICE Validate on the Alberta Innovates website.

Learn how

albertainnovates.ca