CASE STUDY

Improving Occupational Therapy Education with the ForeSite® SS Wheelchair Seating System

CHALLENGE

- **Needed a better way to teach occupational therapy students how to evaluate and manage pressure distribution, posture, and skin integrity for clients using wheelchairs.**
- **Traditional methods lacked real-time, visual feedback to demonstrate the effects of positioning and support clearly.**

SOLUTION

- Chose **XSENSOR's ForeSite® SS Wheelchair Seating System** for its ease of use, portability, and ability to assess both seated and lying positions.
- Integrated into Assistive Technology and Client Care Management courses, giving students hands-on experience with interpreting pressure data and making clinical adjustments.

RESULTS

- Improved connection between classroom theory and clinical practice.
- Increased student confidence in preventing pressure injuries and providing personalized care.
- Strengthened advocacy skills for effective posture and pressure management in future clinical settings.

At the University of St. Augustine for Health Sciences in Dallas, TX, USA, the occupational therapy program is built on hands-on, evidence-based education. To enhance students' understanding and application of pressure management concepts, the program incorporated XSENSOR® Technology's ForeSite® SS Wheelchair Seating System into its curriculum.

Occupational therapy students must be equipped to evaluate and manage pressure distribution, posture, and skin integrity for clients who use wheelchairs or require customized seating solutions. However, traditional teaching methods often fail to demonstrate the real-time effects of positioning and support.

There was a need for a **visual**, **data-driven solution** that could foster evidence-based education, while being intuitive enough for students to use in a lab setting.

This case study reflects insights gathered from interviews and evaluations with the Assistant Program Director and Assistant Professor at the University of St. Augustine for Health Sciences' Dallas Occupational Therapy Program, showcasing the benefits of integrating cutting-edge pressure mapping technology into healthcare training.

University of St. Augustine for Health Sciences

THE SOLUTION

After evaluating multiple pressure mapping systems and consulting with other clinicians, the University of St. Augustine selected the ForeSite SS system from XSENSOR.

Key advantages included:

- User-friendly setup and operation.
- Portability, allowing for use on laptops and tablets.
- Specialized seating and whole-body mats.
- Strong support and training from XSENSOR.

The system featured two seating sensors (seat and back) and a full-body sensor, enabling assessments in seated and lying positions to meet diverse educational and clinical needs.

The Assistant Program Director, with experience using XSENSOR since 2009 as a wheelchair therapist in the UK, had confidence in the system's long-term value and reliability.

Integrated into the occupational therapy program, the system gives students hands-on experience interpreting real-time pressure data to guide clinical decisions.

IMPLEMENTATION & INTEGRATION

The ForeSite SS system became an integral part of the curriculum, supporting instruction on wheelchair pressure injury prevention, posture management, and personalized care.

Used in both Assistive Technology and Client Care Management courses, it reinforces concepts around complex mobility and posture needs.

Students used the system to:

- Examine pressure distribution in different seated and lying positions.
- Test adjustments to cushions and supports.
- Interpret data to achieve better clinical results.

Its intuitive interface helped students quickly adapt to advanced assistive technology, while faculty valued the easy setup and flexibility for demonstrations in different learning environments.

Ongoing personalized support from XSENSOR included tailored training and continuous assistance, fostering a lasting relationship that strengthened trust and usability in the academic setting.

THE RESULTS

Faculty enhanced the occupational therapy curriculum by introducing hands-on tools that replicate real-world conditions, promoting active learning and critical thinking.

Early exposure to real-time pressure mapping helps students connect classroom theory to clinical skills, interpret data for individualized care, and understand its role in injury prevention.

This experience also empowers students to advocate for effective posture and pressure care solutions in future practice, reinforcing the program's commitment to client-centered care.

CONCLUSION

For occupational therapy programs and clinics seeking to refine their methods of teaching wheelchair seating and posture assessments, **XSENSOR's ForeSite SS system** provides an optimal blend of user-friendliness, clinical insight, and educational benefits.

It serves not only as an instructional resource but also as a vital bridge between academic learning and real-world application in healthcare.