

Useful Resources

Pressure Mapping & Wheelchair Seating

A curated guide to key references, clinical guidelines, and educational resources for pressure mapping practitioners.

Nabil Kodsí, OT/Clinical Educator

Clinical Guidelines & Standards

International Best Practice Guidelines

hiaus.net.au — HIA Australia

Detailed measurement definitions, clinical application guidelines, and standardised setup protocols for pressure mapping. Essential reference for all clinicians.

Pressure Mapping Assessment Guideline

clwk.ca

In-depth clinical procedure and assessment guideline. Covers data analysis, image interpretation, and clinical decision-making from pressure mapping results.

Queensland Health — SCI & Wheelchair Prescription

health.qld.gov.au

Introductory resource to spinal cord injury and wheelchair prescription. Covers indications, prescription considerations, and pressure injury prevention.

NSW Health Spinal Seating Modules

aci.health.nsw.gov.au

Comprehensive modules on spinal cord injury in relation to pressure injuries, seating management, and wheelchair interventions. Module 8 covers client-wheelchair relationships.

Applications of Pressure Mapping

sci.washington.edu

Resource from the University of Washington Spinal Cord Injury Resource Center on applying pressure mapping across different seating surfaces and clinical scenarios.

Clinician's Seating Handbook

Xsensor.com

Full-scope OT specialist handbook covering spinal cord injury, seating biomechanics, pressure injury prevention, and cushion selection.

XSensor Resources & Educational Tools

XSensor — Taking the Pressure Off (Webinar)

xsensor.com

Bart Van der Heyden (2020). Part 2: Wheelchair Seating Interventions and Interpreting Pressure Images & Data. The XSensor website hosts many detailed videos and resources.

Interactive Data Interpretation Videos

sway.cloud.microsoft

Excellent video collection for interpreting pressure data and for use in client education sessions. Visual and engaging for non-clinical audiences.

Pressure Mapping in Clinical Practice

hmpgloballearningnetwork.com

General overview of the value, methodology, and integration of pressure mapping into clinical practice. Includes a case example of nurse/physiotherapist team use.

Debunking Myths: More than Just Cushion Comparison

hiaus.net.au

Explains the broad clinical applications of pressure mapping beyond cushion trials — including postural assessment, education, and outcome measurement.

Peer-Reviewed Literature

Pressure mapping systems: reliability of pressure map interpretation.

Stinson, M. D., Porter-Armstrong, A. P., & Eakin, P. A. (2003). Clinical Rehabilitation, 17(5), 504–511.

Supports the reliability of using pressure maps to interpret interface pressure compared to numerical data alone. Also validates use across different seating surfaces.

The relative contributions of compression and hypoxia to development of muscle tissue damage: an in vitro study.

Gawlitta D, Li W, Oomens CW, et al. (2007). Annals of Biomedical Engineering, 35(2), 273–284.

Foundational evidence that sustained tissue compression — not just duration — drives pressure injury development, supporting the clinical rationale for pressure mapping.

Membrane-Stretch-Induced Cell Death in Deep Tissue Injury: Computer Model Studies.

Slomka N, Or-Tzadikario S, Gefen A. (2009). DOI: 10.1007/s12195-009-0046-X

Demonstrates that sustained tissue deformations can elevate intracellular metabolite concentrations via stretch-induced membrane permeability changes, leading to cell death — supporting early intervention with pressure mapping.

Principles and Practice in the Manufacture of Seating for the Handicapped.

Nelham, R. L. (1984). Physiotherapy, 70(2), 54–58.

Classic reference for principles and terminology relating to pressure cushions and weight redistribution while seated. Useful historical context for modern pressure mapping practice.