



Evolution PSV™ Case Study #2

Introduction

The purpose of this case study is to demonstrate the performance and effectiveness of a VARILITE wheelchair cushion.

Case History

Rehab professionals name & credentials: Trudie Read OTR/L

Client's name (pseudonym): Richard

Facility: Provail, Seattle WA.

PROVAIL provides supported living and instructional services to 90 adults with severe disabilities living in 25 separate community-based residential settings. Each setting is a single-family type house or apartment shared by 3-4 people. The organization is one of Washington State's largest providers of services to children and adults with disabilities.

Age: 51

Gender: Male

Pertinent medical history:

- Diagnosis: Cerebral palsy
- Stage IV sacral pressure ulcer with flap surgery in 2003 (currently healed with no red areas)

Age at onset: Birth

Previous equipment:

- ROHO® High Profile™ Single Compartment wheelchair cushion
- Invacare® Action Arrow Storm™ wheelchair
- Invacare® Pindot Personal™ wheelchair back cushion

Functional Level:

Richard requires maximum assistance with grooming tasks and is dependent with all personal activities of daily living due to his spastic muscle tone and fixed joint contractures at the elbows, shoulders, hips and knees. Richard is dependent for functional transfers due to his inability to stand or perform weight shift. He requires minimal assistance with wheeled mobility using his Invacare Ranger™ power wheelchair and has poor activity tolerance (< 1 hour) due to complaints of discomfort in his seating system. He lives in an assisted living community and attends rehab for occupational therapy, physical therapy and speech & language pathology 2 x week.

Objectives/goals:

1. Reduce interface pressure under sacral area to assist in the prevention of further pressure ulcer development.
2. Increase activity tolerance to fair (2 hours) in order to participate in therapy.



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Physical Exam

- Spastic muscle tone
- Limited hip flexion
- Posterior pelvic tendency with right rotation posture

Intervention

Pressure mapping was completed utilizing the Force Sensitive Applications (FSA) system, version 3.1.040 (Winnipeg, Manitoba, Canada).

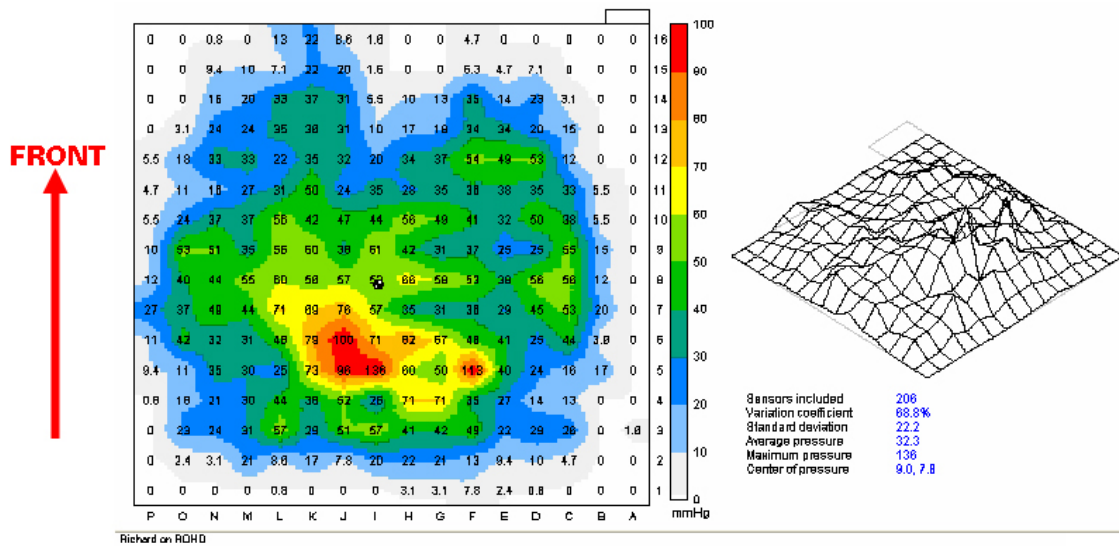
Equipment trialed:

- 18" x 18" ROHO High Profile Single Compartment wheelchair cushion (current seat cushion)
- 18" x 18" VARILITE Evolution PSV wheelchair cushion with incontinence cover and 2" wedge.

Results:

Goal #1 achieved using VARILITE Evolution PSV cushion. (See attached FSA pressure maps). Interface pressure under sacral area decreased from 136 mmHg to 52 mmHg.

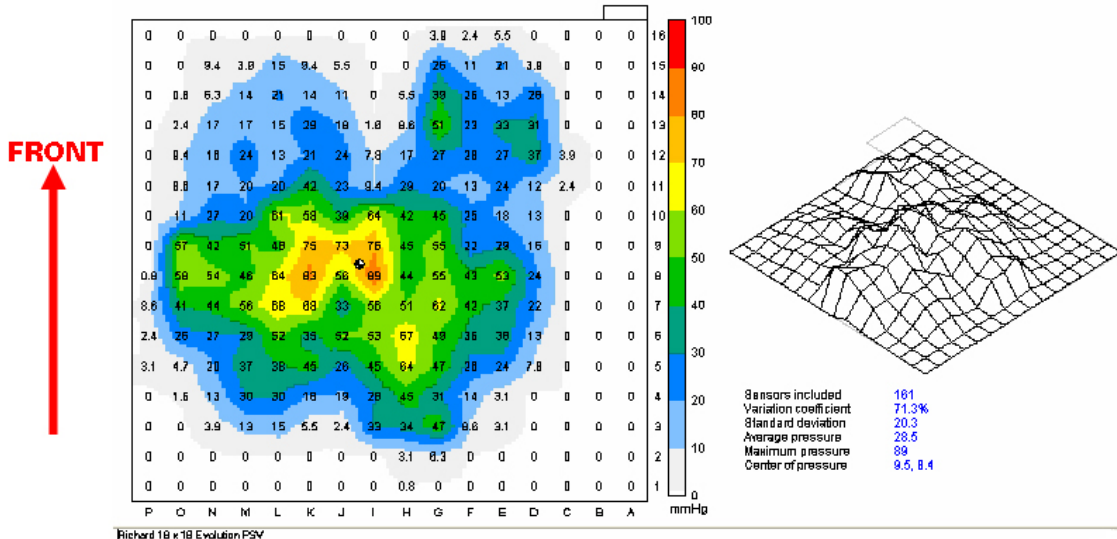
Goal #2 achieved with VARILITE Evolution PSV cushion. Client states that he feels stable and comfortable using the VARILITE Evolution PSV cushion and there were no signs or symptoms of pressure development after 2 hours of use.



Pressure map of current seating system- ROHO



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Pressure map of VARILITE Evolution PSV

Discussion

This case study demonstrates an appropriate application of the VARILITE Evolution PSV™ wheelchair cushion to re-distribution the interface pressure between the wheelchair surface and the user and to provide a stable and comfortable support.

About Pressure Mapping

Pressure Mapping can be a valuable tool when comparing how different seating systems perform for a client.

VARILITE cautions, however, that it makes no claim, and no inferences should be made, that the results presented in this case study will be repeated for other clients with the same or similar conditions. VARILITE believes that every client is unique and requires an individual assessment.