

Objective:

- **Study pressure injury (PI) category II-IV** (including suspected deep tissue injury and unstageable PIs) Cumulative Incidence.
- Observe **PI category III-IV** wound evolution in the sacral (including sacrum, ischium and ilium) and lateral thighs in this patient case study within the community.

Case Study Timeframe:

- **4-month** observation period.
- Implementation of fully automated and monitored AdaptAir™ Mattress System in **1-in-2** cell alternation.
- Also assessed perceptions of patient and family's assessments of mattress comfort and pain levels of patient.

Patient Context:

- 120kg male patient with **advanced muscular dystrophy** in the community, resulting in minimal mobility.
- Due to the patient's weight (120kg) and minimal mobility, chronic **stage 3-4 pressure injuries** on the lateral thigh persisted despite the use of traditional pressure-relieving surfaces.
- With 24-hour home care with strict repositioning protocols, daily specialised wound care management, optimal nutrition and infection management, after 10+ months the numerous wounds still remained non-healing.

Before AdaptAir™ Intervention



March 2025

(Patient consent was obtained for anonymous use of images and clinical detail)

Intervention:

- The introduction of the AdaptAir™ Mattress System. A dynamic pressure redistribution surface that is configurable to accommodate to patient conditions with high-risk of developing pressure injuries.
- All practises and client management plans were reported as unchanged during this time-frame.

Settings Used:

- 10- minute alternation cycle, with 1-in-2 cell configuration for severe (PIs).

Outcome:

- Full granulation and epithelialisation of previously non-healing wounds were achieved from month 3 progressing to month 4.
- No new pressure injury developments, despite limited patient mobility.
- Automated pressure adjustments and remotely monitored data system may have reduced care-giver burden and resource expenditure.

3 - months on AdaptAir



June 2025

4 - months on AdaptAir



July 2025

Conclusion:

- The AdaptAir™ allowed the dynamic support surface to be managed with mm/Hg specific calibrations, which allowed increased blood circulation and an improvement in patient's skin integrity.
- This suggests that for high-risk demographics - characterised by existing Pressure Injuries (PI) or - limited mobility, that the implementation of dynamic, alternating-pressure support surfaces may be a critical component in the therapeutic management of clients with compromised skin integrity.