Pressure Ulcer Prevention and Treatment Solutions

Please note: This document is not designed as a comprehensive overview of guideline recommendations. Always refer to the full guideline document or quick reference guide when planning care or making any clinical decisions.

Products available for sale or rental may differ by country. Your local ArjoHuntleigh representative can provide further information.

References:
The references listed below by page number refer to statements appearing in the full version of the National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. Emily Haesler (Ed.), Cambridge Media: Osborne Park, Western Australia; 2014.

Page numbers for the Quick Reference Guide, where applicable, are in parenthesis:
2. Page 104...........................................................................................................(28)
3. Page 108...........................................................................................................(29)
5. Page 111...........................................................................................................(29)
6. Page 108...........................................................................................................(29)
7. Page 123...........................................................................................................(29)
8. Pages 106/110.................................................................................................(28/29)
9. Page 110...........................................................................................................(29)
10. Page 109...........................................................................................................(29)
11. Page 100...........................................................................................................(29)
12. Page 109...........................................................................................................(29)
13. Page 110/111...................................................................................................(29)
14. Page 71...........................................................................................................(29)
15. Page 71...........................................................................................................(29)
16. Page 71...........................................................................................................(29)
18. Page 112...........................................................................................................(29)
19. Page 113...........................................................................................................(29)
20. Page 112...........................................................................................................(29)
21. Page 93...........................................................................................................(29)
22. Page 97...........................................................................................................(29)
23. Page 139...........................................................................................................(37)
24. Page 92...........................................................................................................(29)
25. Page 73...........................................................................................................(19)
27. Page 93...........................................................................................................(29)
28. Page 93...........................................................................................................(29)
31. Page 248...........................................................................................................(29)
32. Page 97...........................................................................................................(29)
33. Page 97...........................................................................................................(29)

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GETINGE GROUP is a leading global provider of products and systems that contribute to quality enhancement and cost efficiency within healthcare and life sciences. We operate under the three brands of ArjoHuntleigh, GETINGE and MAQUET. ArjoHuntleigh focuses on patient mobility and wound management solutions. GETINGE provides solutions for infection control within healthcare and contamination prevention within life sciences. MAQUET specializes in solutions, therapies and products for surgical interventions and intensive care.
As a leading global provider of solutions, designed to help you deliver harm free care for patients at risk from pressure ulcers and other preventable complications of immobility, we would like to share with you how ArjoHuntleigh’s unrivaled range of products and integrated solutions align to the new recommendations.

As the scope of the guideline is substantial, this document will focus on subject areas related to the management of pressure, tissue tolerance and immobility - areas closely aligned to our philosophy and expertise.

...with people in mind

With more than 25 years of experience, ArjoHuntleigh has become a leading global authority on the design, development and clinical application of therapeutic support surfaces for the prevention and treatment of pressure-related injuries.

As a company, we aspire to deliver class leading clinical performance and technological innovation to assist healthcare facilities to reduce preventable harm.

“WHEN SELECTING A SUPPORT SURFACE CONSIDER THE INDIVIDUAL’S NEED FOR PRESSURE REDISTRIBUTION.”

We recognise that each healthcare provider has its own unique blend of clinical and financial objectives to consider when addressing support surface solutions as part of a pressure ulcer prevention and management strategy.

With an extensive choice of Active (Alternating Pressure) and Reactive (Continuous Low Pressure) approaches to pressure redistribution, along with powered microclimate control mattresses and cover options, ArjoHuntleigh can tailor flexible, user friendly and guideline-aligned solutions to help you meet a wide range of requirements.

Therapeutic Support Surfaces

Reactive Non-Powered Range

- Rik™ Fluid Overlay
- Pressure IQ Evolve™
- AtmosAir™ Range
- ConformX™
- PentaFlex™
- SimuFlex™

Active and Reactive Range

- Nimbus™ Range
- Therakair Visio™
- First Step All In One™
- Auto Logic™
- Alpha Response™
- Alpha Active™
- First Step Select™
- Alpha Trancell Deluxe™

Microclimate Management

- Skin IQ™
There are many situations where a patient might not be able to tolerate, or have access to, frequent repositioning. ArjoHuntleigh Active Therapeutic Support Surfaces are designed to closely mimic the natural protective environment of regular spontaneous movement, by redistributing pressure several times each hour, even if the patient does not move. A 1-in-2 cycle, where alternate cells inflate and deflate, balances the application and removal of pressure to give time for tissue reperfusion.

As a further level of tissue protection, products such as the Nimbus Professional and Nimbus 4 mattresses offer the unique facility to completely and permanently off-load pressure from high risk areas such as the heels, wounds and surgical sites through unique Wound Valve Technology. Reactive (Continuous Low Pressure) therapeutic surfaces typically reduce the contact pressure at the skin-mattress interface by increasing the surface area over which the individual is supported. Pressures will depend on the type of support surface and how it is adjusted. As the pressures do not change unless the individual makes a movement, these devices are termed ‘reactive’. Reactive surfaces typically include foam, gel, air foam combination products, low air loss and air fluidised systems.

Active (Alternating) Support Surfaces

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“USE AN ACTIVE SUPPORT SURFACE (OVERLAY OR MATTRESS) FOR INDIVIDUALS AT HIGHER RISK OF PRESSURE ULCER DEVELOPMENT WHEN FREQUENT MANUAL REPOSITIONING IS NOT POSSIBLE.”

“CONSIDER USING (OTHER) REACTIVE SURFACES FOR INDIVIDUALS ASSESSED AS BEING AT RISK FOR PRESSURE ULCER DEVELOPMENT.”

Full Thickness Tissue Injury

“SELECT A SUPPORT SURFACE THAT PROVIDES ENHANCED PRESSURE REDISTRIBUTION, SHEAR REDUCTION, AND MICROCLIMATE CONTROL FOR INDIVIDUALS WITH:

- Category/Stage III, IV, and unstageable pressure ulcers.
- Suspected deep tissue injury if pressure over the area cannot be relieved by repositioning.”

Reactive (Continuous Low Pressure) Support Surfaces

Reactives (Continuous Low Pressure) therapeutic surfaces typically reduce the contact pressure at the skin-mattress interface by increasing the surface area over which the individual is supported. Pressures will depend on the type of support surface and how it is adjusted. As the pressures do not change unless the individual makes a movement, these devices are termed ‘reactive’. Reactive surfaces typically include foam, gel, air foam combination products, low air loss and air fluidised systems.

The range of Reactive Support Surfaces from ArjoHuntleigh aim to reduce the level of continuous pressure exerted against the skin by enabling the body to immerse into and be enveloped by the support surface.

With a choice of non-powered technologies including AtmosAir and the Pressure IQ Evolve foam/air hybrid mattress through to powered surfaces such as First Step All in One and Therakair Visio that both deliver pulsation and low air loss therapy, the range of Reactive Support Surfaces from ArjoHuntleigh can suit a wide range of clinical applications and environments.
PARTIAL THICKNESS TISSUE INJURY

“CONSIDER USING A HIGH SPECIFICATION REACTIVE FOAM MATTRESS OR NON-POWERED PRESSURE DISTRIBUTION SUPPORT SURFACE FOR INDIVIDUALS WITH:
- Category/Stage I and II pressure ulcers.9

High specification foam pressure redistributing mattresses are indicated for the prevention of pressure ulcers and treatment of superficial tissue injury8.

REACTIVE FOAM SUPPORT SURFACES

Pressure IQ Evolve AtmosAir ConformX PentaFlex Simulflex

With foam pressure redistribution mattresses often delivering the first line of defence against pressure ulcer development, it’s important to feel confident in the capabilities of the solution you choose. For this reason, ArjoHuntleigh has a range of high specification foam mattresses and hybrid air/foam pressure redistribution surfaces with unique Self-Adjusting Technology (SAT™), designed for prevention and treatment of pressure ulcers.

“PRESSURE REDUCES PERFUSION TO INJURED TISSUES. CONTINUED PRESSURE ON AN EXISTING PRESSURE ULCER WILL DELAY HEALING AND MAY CAUSE ADDITIONAL DETERIORATION.”10

“ENSURE THAT THE HEELS ARE FREE OF THE SURFACE OF THE BED.”11

“WHEREVER POSSIBLE, DO NOT POSITION AN INDIVIDUAL ON AN EXISTING PRESSURE ULCER.”12

SPECIALIST OFF-LOADING FOR PREVENTION AND HEALING

Zoned Wound Valve Technology

To prevent or heal a pressure ulcer you must first tackle the cause. Floatation can create the perfect environment for pressure ulcer management through continuous offloading of specific high risk areas13.

Products such as Nimbus 4 and Nimbus Professional, facilitate selective offloading of vulnerable tissue, such as heels and wound sites, by enabling permanent deflation of targeted cushions at the turn of a dial, using patented Wound Valve Technology.

MICROCLIMATE MANAGEMENT (tissue tolerance)

“CONSIDER THE NEED FOR ADDITIONAL FEATURES SUCH AS ABILITY TO CONTROL MOISTURE AND TEMPERATURE WHEN SELECTING A SUPPORT SURFACE.”14

“CONSIDER THE NEED FOR MOISTURE AND TEMPERATURE CONTROL WHEN SELECTING A SUPPORT SURFACE COVER.”15

Skin IQ Microclimate Management System

Microclimate Management has been identified as one of the emerging therapies, which can complement pressure redistribution for the prevention and treatment of pressure ulcers. There is a growing appreciation of the role of this therapy option in improving tissue tolerance to aid pressure ulcer prevention and healing, particularly in the presence of excessive moisture and elevated temperature at the skin/surface interface16.

Any surface that is in contact with the skin has the potential to affect the microclimate. The overall effect is dependent on the nature of the support surface and the cover.

Skin IQ is an adjunctive therapeutic mattress cover, which adds microclimate control to a pressure redistributing surface17 used with patients presenting with complex skin care issues, including full thickness tissue injury.

SEATING

“USE A PRESSURE REDISTRIBUTING SEAT CUSHION FOR INDIVIDUALS SITTING IN A CHAIR WHOSE MOBILITY IS REDUCED.”18

“USE ALTERNATING PRESSURE SEATING DEVICES JUDICIOUSLY FOR INDIVIDUALS WITH EXISTING PRESSURE ULCERS.”19

Risk is particularly high when patients are sitting in a chair, given that the pressure exerted over the bony pelvis is naturally elevated20. Aside from limiting sit time, pressure-redistributing chair cushions are recommended for any patient with reduced mobility.

AtmosAir™ air-filled (reactive) seat cushion

AtmosAir™ air-filled (reactive) seat cushion

AURA logic™ (active) seat cushion

Risk is a 24-hour problem

ArjoHuntleigh has a range of seat cushions to compliment the mattress range from home care to hospital.
Repositioning is undertaken to reduce the duration and magnitude of pressure over vulnerable areas of the body, and to contribute to the patient’s comfort, hygiene and dignity.

As a global leader in safe patient handling solutions, ArjoHuntleigh believe frequent repositioning can be made easier and safer for both patient and staff with use of appropriate safe patient handling aids. This may include the use of slide sheets and, where necessary, patient lifters and standing raising aids. The variety of sling solutions helps facilitate both patient repositioning in bed and transfers out of bed.

"DO NOT LEAVE MOVING AND HANDLING EQUIPMENT UNDER THE INDIVIDUAL AFTER USE, UNLESS THE EQUIPMENT IS SPECIFICALLY DESIGNED FOR THIS PURPOSE."

"CONSIDER USING SILK-LIKE FABRICS RATHER THAN COTTON OR COTTON-BLEND FABRICS TO REDUCE SHEAR AND FRICTION."

"USE MANUAL HANDLING AIDS TO REDUCE FRICTION AND SHEAR. LIFT - DON’T DRAG - THE INDIVIDUAL WHEN REPOSITIONING."

"USE A LIFT OR TRANSFER SHEET TO MINIMIZE FRICTION AND/OR SHEAR WHEN REPOSITIONING AN INDIVIDUAL, KEEPING BED LINENS SMOOTH AND UNWRINKLED."

Maxi Transfer Sheet

The dual purpose Maxi Transfer Sheet, is designed to replace the hospital bed sheet. Combining the benefits of a transfer sling for repositioning, and the functionality of bed linen, its soft, breathable fabric construction, enables it to remain in place under the patient after use.

Maxi Slide Flite

Maxi Slide Flite

Standing and Raising Aids

For chair bound patients, regular relief of pressure is vital to help protect the skin against tissue damage. In addition to an appropriate pressure redistribution cushion, the use of a standing and raising aid such as Sara Plus or Sara Stedy can facilitate standing to allow regular skin inspection and temporarily relieve the sustained high pressures normally encountered during sitting.

Sara Plus

Sara Stedy
"LIMIT HEAD-OF-BED ELEVATION TO 30° FOR AN INDIVIDUAL ON BED REST UNLESS CONTRAINDICATED BY MEDICAL CONDITION OR FEEDING AND DIGESTIVE CONSIDERATIONS."²⁷

As a global leader in healthcare bed design, ArjoHuntleigh has incorporated simple, user friendly features such as a 30° degree pause facility and visible digital angle indicator to help caregivers position patients appropriately.

Individuals should be positioned and supported to prevent sliding down in bed creating shear forces²⁸. Articulating bed frame designs may contribute to skin protection, as shear, friction and interface pressure can be altered during bed frame articulation²⁹,³⁰.

"INDIVIDUALS ON BED REST SHOULD PROGRESS TO SITTING AND AMBULATION AS RAPIDLY AS THEY CAN TOLERATE. AMBULATION SCHEDULES MAY HELP OFFSET THE CLINICAL DETERIORATION OFTEN SEEN IN PATIENTS SUBJECTED TO PROLONGED BEDREST."³²

Bed rest not only places patients at an increased risk of pressure ulcers and venous thromboembolism events, but also, reduces pulmonary function and significantly increases muscle loss and decreases muscle strength. Mobilisation early in the patient’s care pathway is encouraged to help prevent many of these issues³³.

Pressure ulcers occur because of a breakdown in the continuum of care. The following strategies are recommended to ensure preventive measures are successful³¹:

1. Regular evaluation of facility performance and monitoring of pressure ulcer rates as part of pressure ulcer prevention and treatment initiatives, together with providing timely feedback to stakeholders
2. Use quality indicators to monitor how best practice is being followed which influence pressure ulcer development
3. Use modern technology such as electronic systems to report and track pressure ulcer development

The ArjoHuntleigh Diligent™ Pressure Ulcer Prevention Program (PUPP) contains tools and processes to help implement best practice based on precepts recommended in these guidelines. If you wish to learn more, please contact your local representative or visit our website.

As a leader in therapeutic support surfaces and safe patient handling solutions, ArjoHuntleigh is committed to helping you address preventable harm in a cost effective manner across the care continuum.

We help you achieve this...with people in mind

To learn how ArjoHuntleigh may be able to assist you, please contact your local representative or visit: www.ArjoHuntleigh.com

Maxi Move™ Passive lifter
Sara Plus Active lifter
Sara Combilizer™ Patient Positioning and Mobilisation Aid