AIDING CLINICIANS IN PRESERVING SKIN INTEGRITY THROUGH ADVANCED THERAPIES IN AN INTEGRATED SYSTEM
THE CLINICAL CHALLENGE: MAINTAINING SKIN INTEGRITY FOR MEDIUM TO HIGH RISK PATIENTS

PRESSURE ULCERS: A SIGNIFICANT ISSUE
The consequences of pressure ulcers can be devastating to patients. Pressure ulcers can increase a patient's risk of complications, such as infections, pain and delayed healing. They can lead to increased morbidity, mortality and compromised quality of life. A NPUAP* pressure ulcer survey established the following:1

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>15%</td>
<td>of patients within hospitals have a pressure ulcer</td>
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<tr>
<td>50%</td>
<td>of patients with a pressure ulcer acquired it while in the hospital</td>
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<tr>
<td>4.6%</td>
<td>increase in overall prevalence of pressure ulcers from 1995</td>
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PRESSURE ULCERS: THE CHANGING LANDSCAPE
As a way to improve quality of care while managing the rising incidence of pressure ulcers, Medicare no longer pays for the additional costs of hospital-acquired pressure ulcers. Accreditation agencies, such as the Joint Commission, use pressure ulcer incidence as:

- A key indicator of care
- A benchmark for quality-initiative requirements
- A means to impose fines for noncompliance

PATIENT HANDLING: A SIGNIFICANT ISSUE
Patient repositioning and handling represents a serious risk to both caregivers and facilities:

- 11,000 nurses lost work time due to injuries from lifting patients²
- 54% of all nursing injuries were musculoskeletal disorders³
- 12% of nurses leave the profession as a result of back injuries⁴

* National Pressure Ulcer Advisory Panel (USA)
2 Centers for Disease Control and Prevention, 2000.
4 ANA Website: “Handle with Care” Ergonomics Campaign, 2003.

Clinical Considerations: Risk of Pressure Ulcer Development
Pressure ulcers can result from a variety of risk and support surface microenvironment factors, including:

Pressure
A result of immobility, applied pressure compresses the body tissue between the support surface and a patient's bony prominences.
Clinical issue: Occludes capillary blood flow resulting in tissue damage.

Shear
Skin shear occurs when opposite forces acting parallel to the skin surface cause the skin to stretch or tear from the underlying connective tissue.
Clinical issue: Causes capillaries to elongate, diminishing blood flow and resulting in tissue damage.

Friction
Friction is the resistance to motion of the external tissue sliding in a direction parallel to the support surface.
Clinical issue: Leads to epidermal stripping resulting in tissue damage.
THE SOLUTION: THERAPULSE™ ATP™ THERAPY SYSTEM

DESIGNED TO MANAGE MICROENVIRONMENT FACTORS IN MEDIUM TO HIGH RISK PATIENTS
The TheraPulse™ ATP™ employs Automated Turning and Positioning, which helps manage many aspects of tissue viability while helping to reduce the risk of caregiver injury that may occur with patient repositioning. Pulsation therapy combined with advanced pressure relief improves capillary circulation, lymph flow and tissue oxygenation, and provides aggressive therapy for the prevention and treatment of chronic wounds.

1. Optimizes Skin Microclimate
   High Performance Medical Fabric removes excess moisture and maintains a constant skin temperature by allowing air flow through the surface.

2. Helps Prevent Friction and Shear
   Gentle side-to-side turning helps reduce friction, shear and risk of pressure ulcer development.

3. Helps Reduce Caregiver Time
   Automatic, programmable controls facilitate easy and rapid operation.

4. Helps Manage Edema
   Pulsation therapy mimics the body’s natural movements, encouraging lymph and blood flow for increased oxygenation to the skin, reduced risk of skin damage and support for wound healing.

5. Reduces Positioning Risks
   Automated turning and positioning helps reduce risks to caregiver and patient.

Moisture and Temperature
Moisture is emitted through the skin as sweat to control body temperature, but moisture must be removed to preserve skin integrity. Excessive body heat emission results in excessive moisture output.
Clinical issue: Weakens the skin and increases level of friction and shear resulting in tissue damage.

Edema
Edema results from excess fluid accumulating under the skin in spaces within the tissues. Immobility decreases the body’s ability to return these fluids into the circulatory system.
Clinical issue: Compresses capillaries, decreasing oxygenation and blood flow to the skin.
The Commitment: Improving Patient Outcomes

**Your Partner in Pressure Ulcer Management**
ArjoHuntleigh is a leading global medical company with therapies that help the healing process and help reduce complications. As your partner in the prevention and treatment of pressure ulcers, our goal is to help improve clinical outcomes while reducing the overall cost of care with clinical technologies, educational programs and support services.

**Case Study**
A 30-year-old male presented a Stage IV pressure ulcer with no discernable healing after 60 days on a bead-type bed. Patient was placed on a TheraPulse™ Pulsating Air Suspension Therapy bed, and in less than 45 days, the wound was completely healed.

*Facility case study on file and available on request. Results may not be typical and may vary.

**Automated Turning and Positioning**
Automated Turning and Positioning continuously changes pressure points to help reduce interface pressure and risk of caregiver injury:
- Minimizes patient pain and discomfort
- Helps reduce caregiver injuries that may occur while repositioning patients
- Allows for improved flexibility in wound dressing management

**Managing Edema Through Pulsation Therapy**
Pulsation therapy automatically alternates cushion air pressures in chambers under the torso and leg, causing pulsation.
- Improves capillary blood flow
- Increases oxygenation to the wound and skin
- Stimulates lymphatic flow
- Reduces edema
- Reduces pressure-induced pain

Running from foot to head, they emulate the body’s natural intermittent movements.

*1 4*
THERAPULSE™ ATP™
THERAPY SYSTEM


Only ArjoHuntleigh designed parts, which are designed specifically for the purpose, should be used on the equipment and products supplied by ArjoHuntleigh. As our policy is one of continuous development we reserve the right to modify designs and specifications without prior notice.

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