

Envella™ Air Fluidized Therapy Bed

Accelerating wound healing. Elevating the standard of care.



Enhancing outcomes for patients and their caregivers:

Hill-Rom

Pressure Injuries are Common and Serious

Dealing with advanced pressure injuries and complex skin conditions such as flaps, grafts, burns and deep tissue injury can be both clinically and financially challenging for hospitals and long-term care facilities.¹

Without appropriate interventions, pressure injuries can contribute to complications if healing doesn't occur.¹

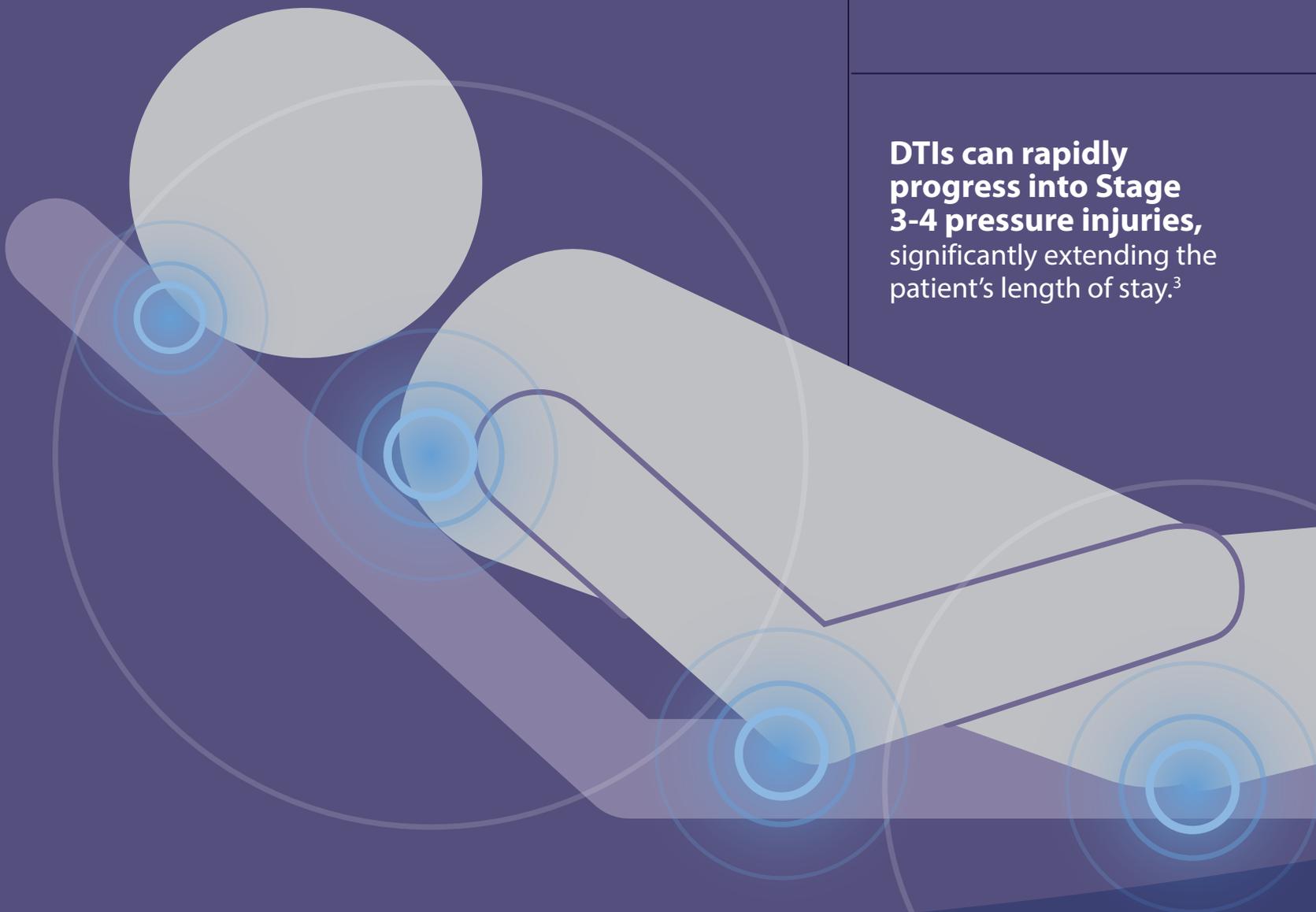


1 in 10 patients have a pressure injury, leading to extra nursing care and increased risk of death.^{1,2}

21% of flap surgeries have complications

like dehiscence, adding additional expense to an already costly procedure.⁵

DTIs can rapidly progress into Stage 3-4 pressure injuries, significantly extending the patient's length of stay.³



Pressure injuries extend length of stay and add to overall cost of care

Pressure injuries are a top expenditure for hospitals. An average 100 bed facility will see 170 pressure injuries in a year, costing the facility \$1.8M in incremental cost.⁶

Costs are extremely high and can negatively impact hospital reimbursement and total cost of care.



Average 57% longer length of stay.



3 times higher mortality rate.



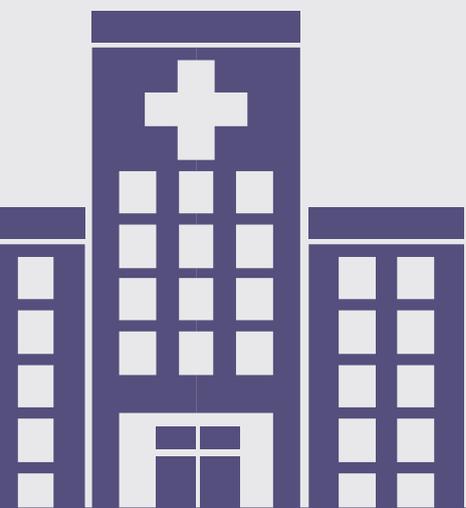
22% higher rate of readmission within 30 days.

The average cost per patient of extra care resulting from a hospital-acquired pressure injury ranges from

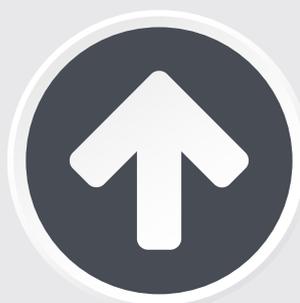
\$9,200 – \$10,845.^{7,8}

The Challenge Persists Across the Continuum

Acute Care patients with pressure ulcers are three times more likely to be discharged to long term care facilities.² Under the IMPACT Act, LTC facilities are now required to report skin integrity data to Medicare, placing an increased emphasis on quality of care across the continuum.¹⁹



Increased risk of infection



Increased co-morbidities



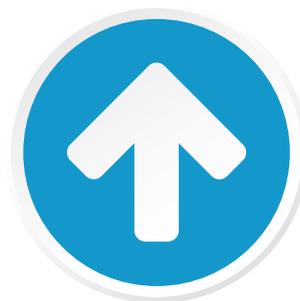
Extended length of stay

Without continuity of therapy across care settings^{6,10}

With continuity of therapy across care settings¹⁰



Maintaining a culture of pressure injury prevention in each care setting is important to delivering:



Improved outcomes



Shorter length of stay



Reduced readmissions



**MORE UNPLANNED
RE-ADMISSIONS**



Implementation of the right surface technology is critical for optimal healing of pressure injuries.



WOCN® FINDINGS

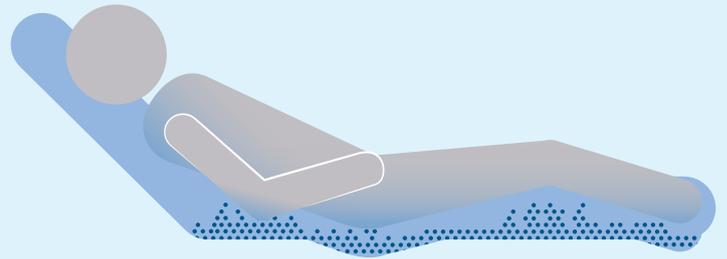
IF patients have...	USE the following surface type:	Hill-Rom® Recommended Surface:
Significant* mobility issues	Reactive/constant low pressure (CLP) or Alternating Pressure (AP) surface	AccuMax Quantum™ VPC Surface
Significant* moisture and mobility issues	Low air loss (LAL) surface	Hill-Rom® P500 Surface
Wounds and limited turning surfaces	Low air loss (LAL) surface	
Wounds, limited turning surfaces, significant* moisture and mobility issues	Recommend Air Fluidized Therapy	ENVELLA™ AIR FLUIDIZED THERAPY BED 

Braden score determines "at risk" patients, subscale scores identify surface needs.

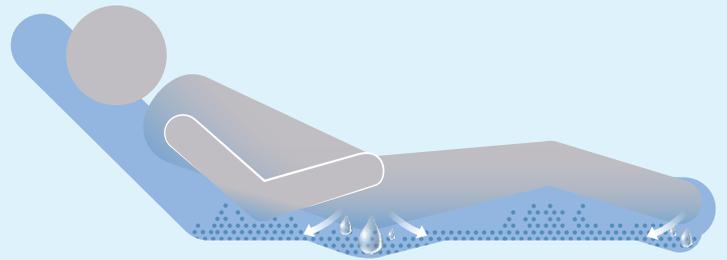
**Significant defined as subscale score of 1 or 2.*

Air Fluidized Therapy creates an ideal healing environment for complex, advanced pressure injuries.

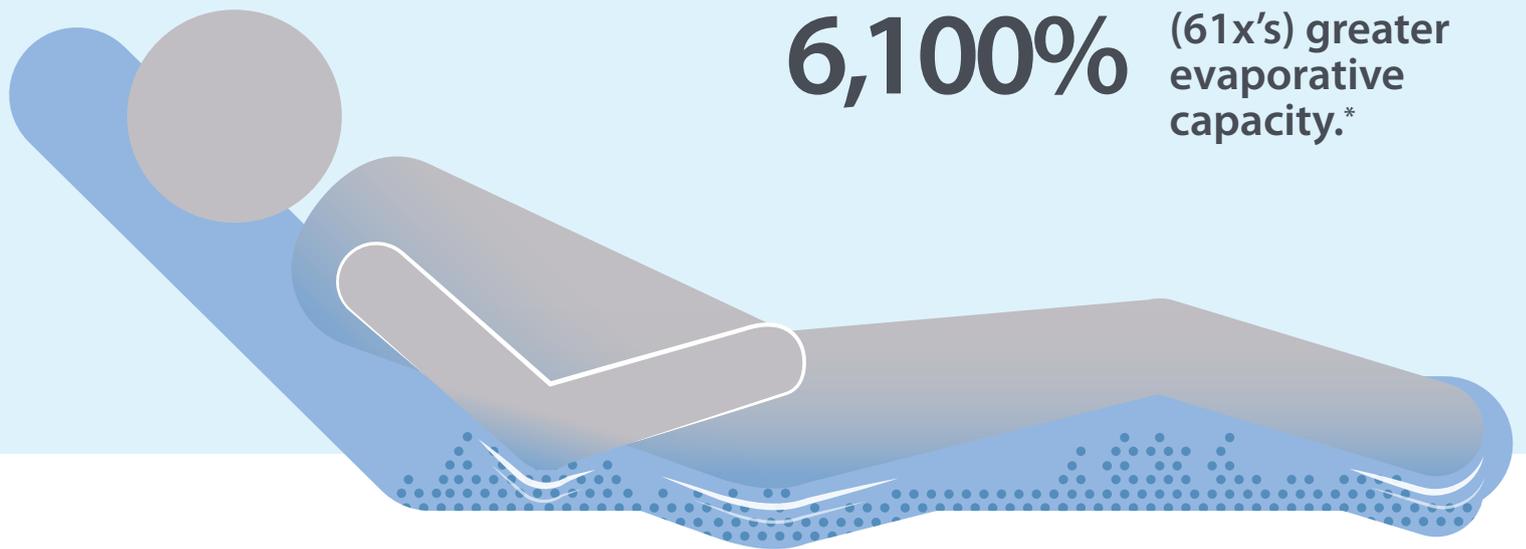
Air Fluidized Therapy pushes air flow through a bed of millions of tiny beads, creating a fluid-like environment resulting in a similar sensation to floating on water, maximizing immersion and envelopment, minimizing shear and pressure and controlling the skin's microclimate.



33% better pressure redistribution.*



6,100% (61x's) greater evaporative capacity.*



92% better shear performance.*

Differentiated technology delivers superior performance against other powered surfaces.¹²

Envella™ Air Fluidized Therapy Bed

Providing the highest quality wound care along the care continuum for patients with complex and advanced wounds.

Improved outcomes:

- 1 **Superior performance for major skin risk factors.**
- 2 **Weight-based pressure redistribution** in head section.
- 3 **Side Transfer** helps make it easy and safe for patients to get in and out-of-bed.
- 4 **Auto leveling bead bath** to help maintain immersion for optimal therapy.
- 5 **Head-of-bed angle indicator and alert** provides responsive monitoring and protocol compliance.
- 6 **Bed Exit with alert silence** supports fall prevention protocols.
- 7 **Improved lumbar support** allows smooth, and comfortable transition from head-of-bed section into the bead bath.

Quality of care:

- 8 **Integrated scale** facilitates less disruption of patient.
- 9 **Adjustable patient comfort settings.**
- 10 **CPR quick-release handle.**
- 11 **Easy to remove, self standing siderails.**
- 12 **Central brake and alert.**
- 13 **Intuitively designed controls** are consistent with other Hill-Rom beds.

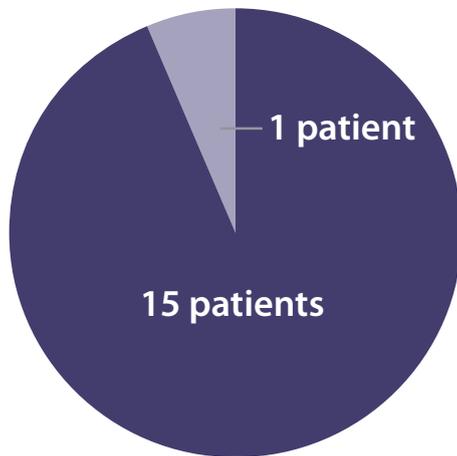




Technology drives superior clinical and improved financial outcomes helping to elevate the standard of care.

Proactive healing and prevention for pressure injuries

Air fluidized therapy's differentiated technology provides an ideal wound healing environment for the prevention and treatment of flap and graft and Stage 3-4 wounds.



In a post op study, 16 flap patients were placed on AFT immediately after operation with successful results.¹⁸

94% of flap patients developed no complications.¹⁸

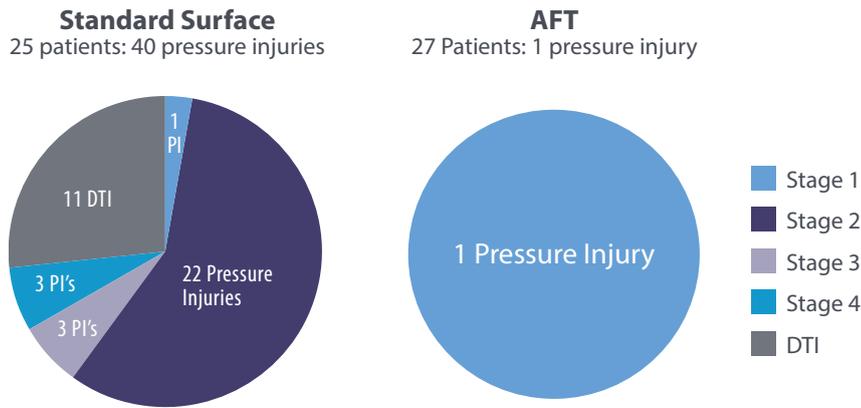
- No Complications
- Complications

Dolezal. 1985

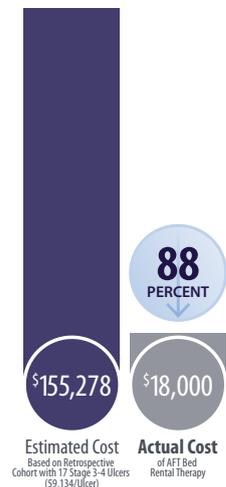


In a study of very high risk post-op ICU patients, 25 were placed on a standard surface and 27 were placed on air fluidized therapy. Only 1 of 27 patients developed a pressure injury while on AFT compared to 40 ulcers in 25 patients utilizing a standard surface.⁸

The utilization of AFT to prevent hospital acquired Stage 3-4 pressure injuries in high-risk post-op ICU patients, resulted in an estimated 88% reduction in cost to treat.⁸



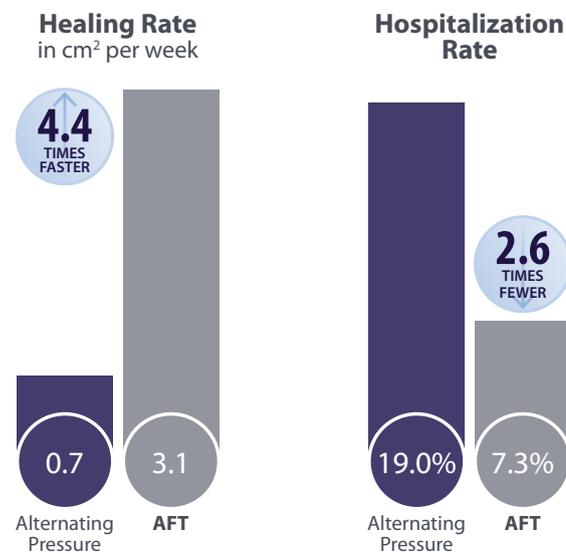
Estimated Reduction in cost to treat



No high risk patients placed on AFT developed Stage 3-4 pressure injury, compared to 60% of patients placed on standard surfaces.⁸

Jackson, et al. 2011.

In a study of 664 nursing home patients, those with Stage 3-4 pressure injuries who were placed on AFT healed faster and had fewer hospitalizations compared to alternating pressure surfaces.¹⁴



Ochs, et al. 2005.



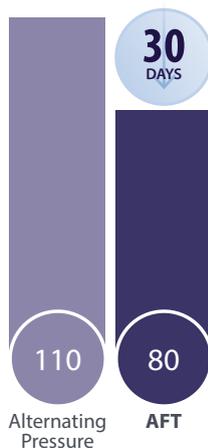
Significant savings across the continuum

Proactive wound healing and prevention for improved acute care financial outcomes.

In a case study of 17 acute care patients with Stage 2-4 pressure injuries, utilization of AFT reduced length of stay and total cost of care compared to use of conventional therapy.¹⁶



Length of Stay
(days)



Total Cost
(per patient)

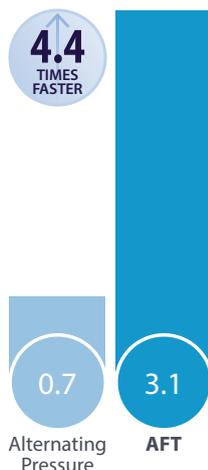


Faster healing, shorter lengths of stay, significant savings in long-term care.

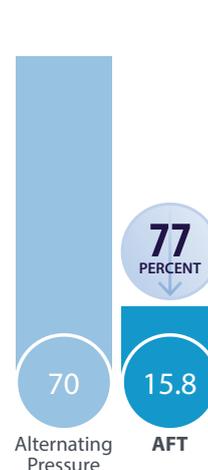
A model indicates AFT could result in 77% less healing time and 66% lower total average cost when compared to utilizing an alternating pressure surface for treating Stage 3-4 pressure injuries.^{14,17}



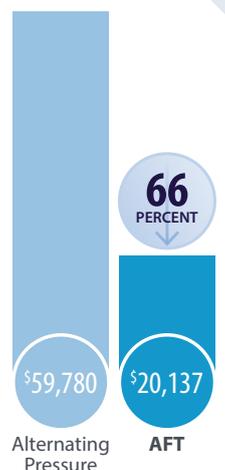
Healing Rate
in cm² per week



Healing Time
(weeks)



Total Cost of Care






PATIENT LEFT FOOT RAIL

Highest standard of care when needed

Hill-Rom's clinical expertise and support helps address the challenges of wound care, giving caregivers the confidence to provide the highest standard of care on demand.

The Hill-Rom® Safe Skin® program reflects our commitment to the prevention and treatment of pressure injuries. Our partnership with the WOCN® Society led to the first evidence and consensus based support surface algorithm, which is the core of our program.

Our expert clinicians work with you to apply evidenced based tools to enhance clinical and financial outcomes.



Hill-Rom is a leading global medical technology company with more than 10,000 employees worldwide. We partner with health care providers in more than 100 countries, across all care settings, by focusing on patient care solutions that improve clinical and economic outcomes in five core areas: **Advancing Mobility, Wound Care and Prevention, Patient Monitoring and Diagnostics, Surgical Safety and Efficiency and Respiratory Health.** Hill-Rom's people, products and programs work towards one mission: **Every day, around the world, we enhance outcomes for patients and their caregivers.**

References

1. Brem H MD, et al. High Cost of Stage IV Pressure Ulcers. *Am J Surg.* 2010.
2. IPU.
3. Wake W. Pressure Ulcers: What Clinicians Need to Know. *The Permanente Journal.* 2010.
4. Internal Document. Avalere Health 2010-2014.
5. Biglari B, et al. A retrospective study on flap complications after pressure ulcer surgery in spinal cord-injured patients. *Spinal Cord (2014) 52, 80-83.*
6. Braden B. "Costs of Pressure Ulcer Prevention. Is it really cheaper than treatment?" NPUAP.
7. VanGilder, Lachenbruch, Amlung, Harrison. Pressure Ulcer Prevalence Reductions Seen from the International Pressure Ulcer Prevalence Survey.
8. Jackson, et al. "Pressure Ulcer Prevention in High-Risk Postoperative Cardiovascular Patients" *Crit Care Nurse.* 2011;31:44-53.
9. Melter C. Pressure Ulcer Assessment and Treatment. 2014.
10. Lyder CH, Ayello E. Pressure Ulcers: A Patient Safety Issue. *AHRQ.* 2008.
11. McNichol L, et al. "Identifying the Right Surface for the Right Patient at the Right Time-- Generation and Content Validation of an Algorithm for Support Surface Selection" *J Wound Ostomy Contenance Nurs.* 2015;42(1):19-37.
12. Lachenbruch C. Internal Testing Data.
13. Allman R, et al. "Air Fluidized Bed or Conventional Therapy for Pressure Sores" *Annals of International Medicine.* 1987.
14. Ochs R, et al. "Comparison of Air-Fluidized therapy with Other Support Surfaces Used to Treat Pressure Ulcers in Nursing Home Residents." *Ostomy Wound Management,* 2005.
15. Allen, et al. "Air-Fluidized Therapy in Patients With Suspected Deep Tissue Injury." *J Wound Ostomy Contenance Nurse,* 2012.
16. Greer, et al. "Cost-effectiveness and Efficacy of Air-Fluidized Therapy in the Treatment of Pressure Ulcers." *Journal of Enterostomal Therapy* 1988.
17. Cuddigan, et al. "Treating Severe Pressure Ulcers in the Home Setting: Faster Healing and Lower cost with Air Fluidized Therapy." *Remington Report,* 2004.
18. Dolezal, et al. "The Use of Clinitron Therapy Unit in Immediate Postoperative Care of Pressure Ulcers." *Annals of Plastic Surgery,* 1985.
19. Center for Medicare and Medicaid Services. *IMPACT Act of 2014 & Cross Setting Measures--*<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/IMPACT-Act-of-2014-and-Cross-Setting-Measures.html>.

Hill-Rom reserves the right to make changes without notice in design, specifications and models. The only warranty Hill-Rom makes is the express written warranty extended on the sale or rental of its products.

©2017 Hill-Rom Services, Inc. ALL RIGHTS RESERVED.
199859 rev 3 07-JUL-2017 ENG - US

For further information about this product or a service, please contact your local Hill-Rom representative or visit our webpage:

USA 800-445-3730
Canada 800-267-2337

www.hill-rom.com

Enhancing outcomes for patients and their caregivers:

Hill-Rom



- Extensive service network
 - Comprehensive delivery programs for rental products
 - 92% of rental deliveries completed within four hours.
- Hill-Rom is the leading national provider of AFT for the care continuum, ensuring that caregivers have access to accelerated wound healing technology for their patients who need it most.

Flexible service support