

CliniCare 100 HF

EFFECTIVE HYBRID MATTRESS



CLINICARE 100 HF

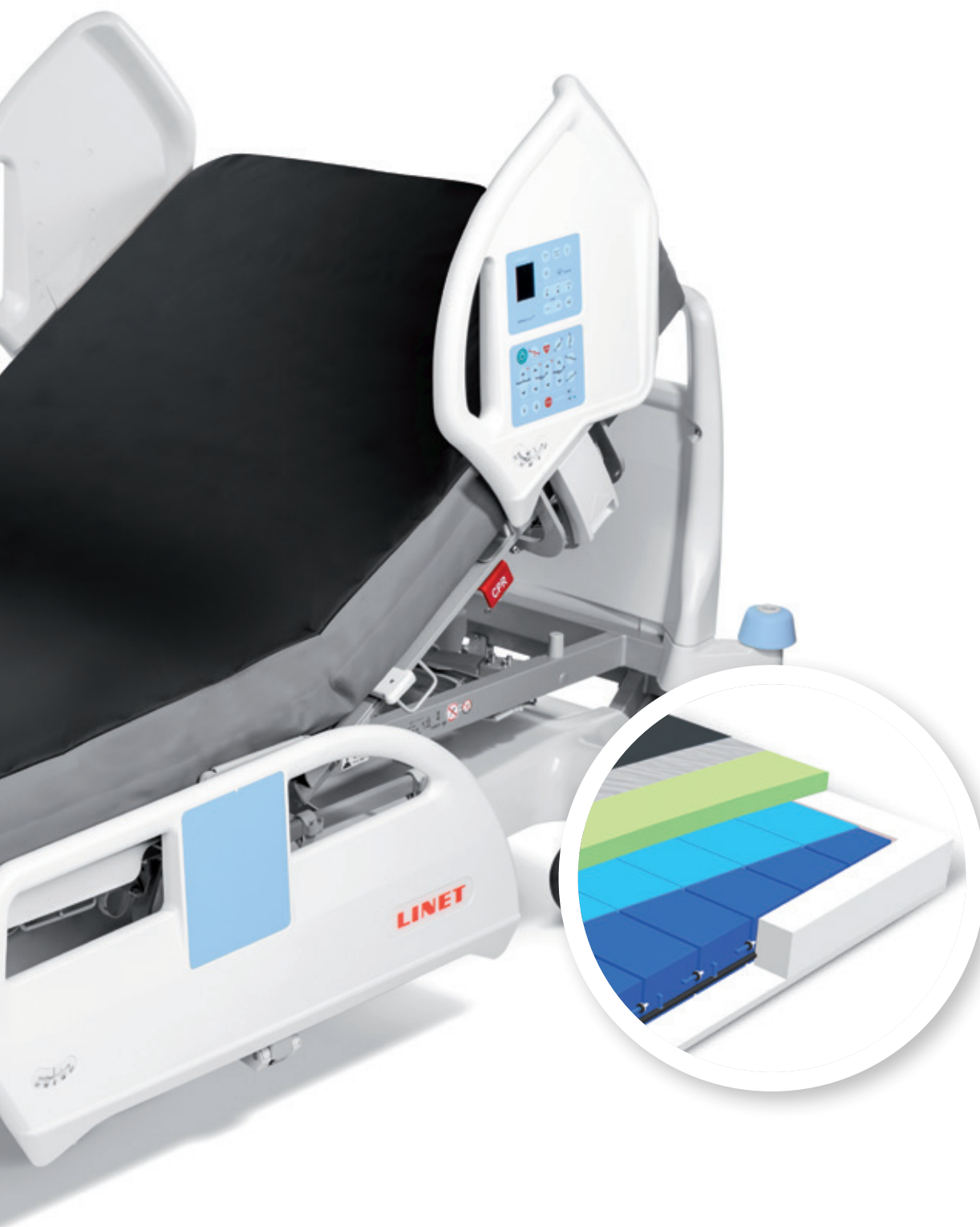
Active and passive system in one

The CliniCare 100 HF hybrid mattress is comfortable and highly efficient for the prevention of pressure injuries. It uses a combination of an active (air) system and a passive (foam) mattress to provide many benefits across the spectrum of hospital care.

PASSIVE SYSTEM



ACTIVE SYSTEM



The treatment of pressure injuries is
6× more expensive than prevention.*

CLINICARE 100 HF

Effective pressure injury prevention

The CliniCare 100 HF is a LINET solution for ICUs, standard departments, long-term, and palliative care.

The technology used brings a number of benefits for the prevention of pressure injuries.



Intensive care



Acute care



Long-term care

Up to 95% of
pressure injury cases
can be avoided
with proper prevention.*





Effective pressure redistribution

The foam layer of the mattress improves pressure distribution which is further optimized by the active air cell layer according to the patient's position and movement.

Patient comfort

The materials for the mattress and cover are chosen to maximize the comfort of the patient, along with its technological design.

Active pressure injury prevention

When connected to a compressor, the mattress provides active 2 cell alternating pressure therapy.

Microclimate management

When the pump is activated, it allows airflow between the cells and the mattress cover, thereby contributing to an improvement of the micro-climate.

Effective pressure redistribution

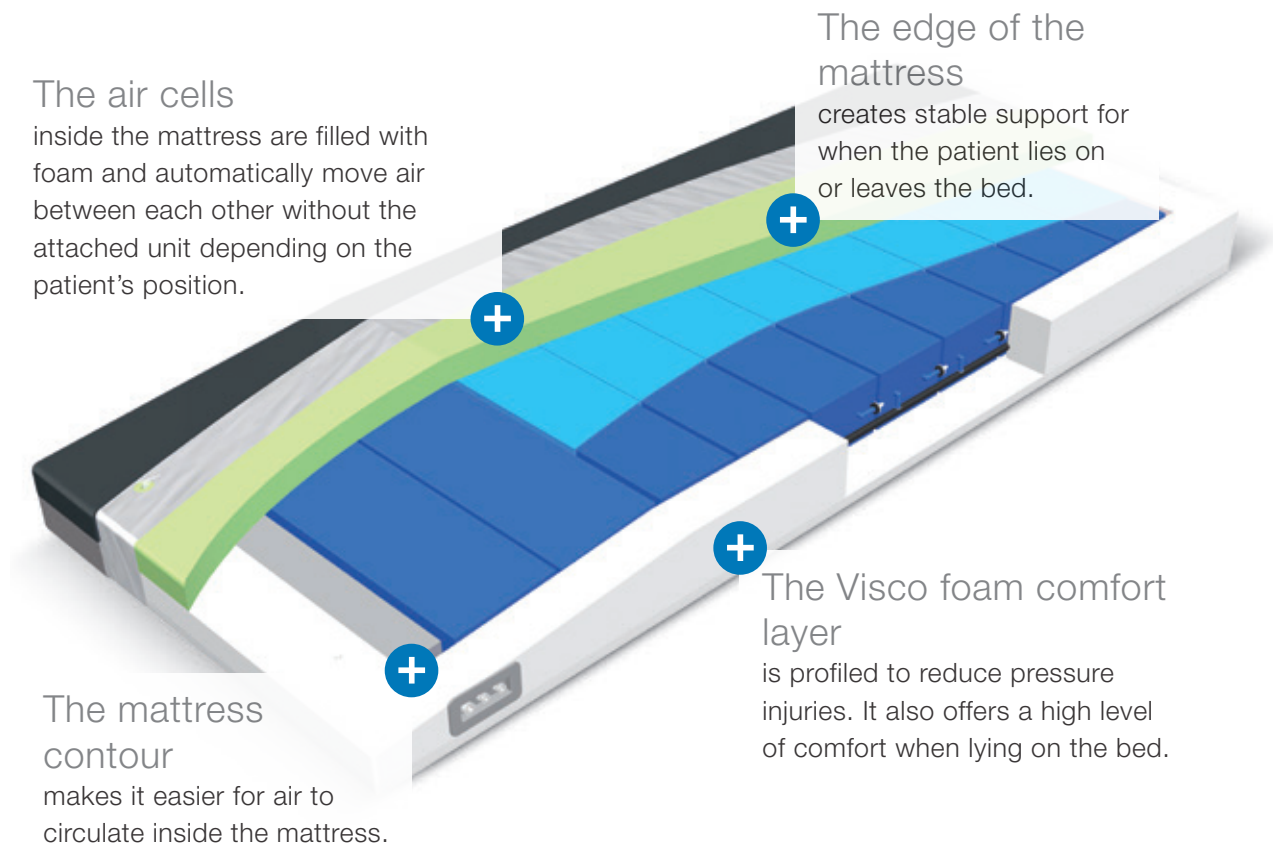
The CliniCare 100 HF provides pressure redistribution in non-powered mode by allowing air to move from cell to cell as a reaction to the patient's body movements and weight.

The air cells inside the mattress are filled with foam and automatically move air between each other without the attached unit depending on the patient's position.

The edge of the mattress creates stable support for when the patient lies on or leaves the bed.

The mattress contour makes it easier for air to circulate inside the mattress.

The Visco foam comfort layer is profiled to reduce pressure injuries. It also offers a high level of comfort when lying on the bed.



CLINICAL



The mainstay of pressure injury prevention practice is the provision of pressure redistribution support surfaces (mattresses, cushions) and patient repositioning to minimize both the intensity and duration of pressure exposure on vulnerable skin sites that are not adapted to sustained and/or excessive loading.⁽¹⁾

Patient comfort

A viscoelastic foam layer adapts to the body to provide comfort and proper support without exerting pressure on exposed areas.



Viscoelastic foam is a type of porous polymer material that conforms in proportion to the applied weight. The air enters and exits the foam cells slowly which allows the material to respond slower than a standard elastic foam (memory foam).



Pressure offload for heels. The mattress has a 7° slope that helps to reduce pressure in the vulnerable heel area, which is considered to be a very delicate zone for pressure injury development.



Pressure injury prevention

When a patient's condition requires active therapy, the mattress can be connected to a compressor for alternating pressure therapy in a 2 cell cycle to enhance and optimize pressure redistribution and pressure injury prevention.

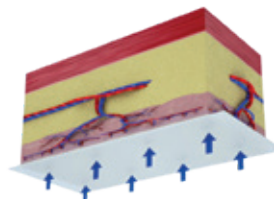
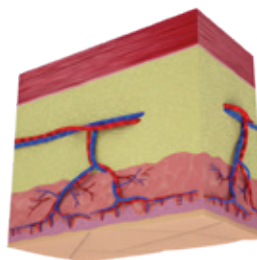


The SCU control unit inflates and deflates the air mattress to maintain the set pressure regardless of the patient's weight distribution and position.



CLINICAL

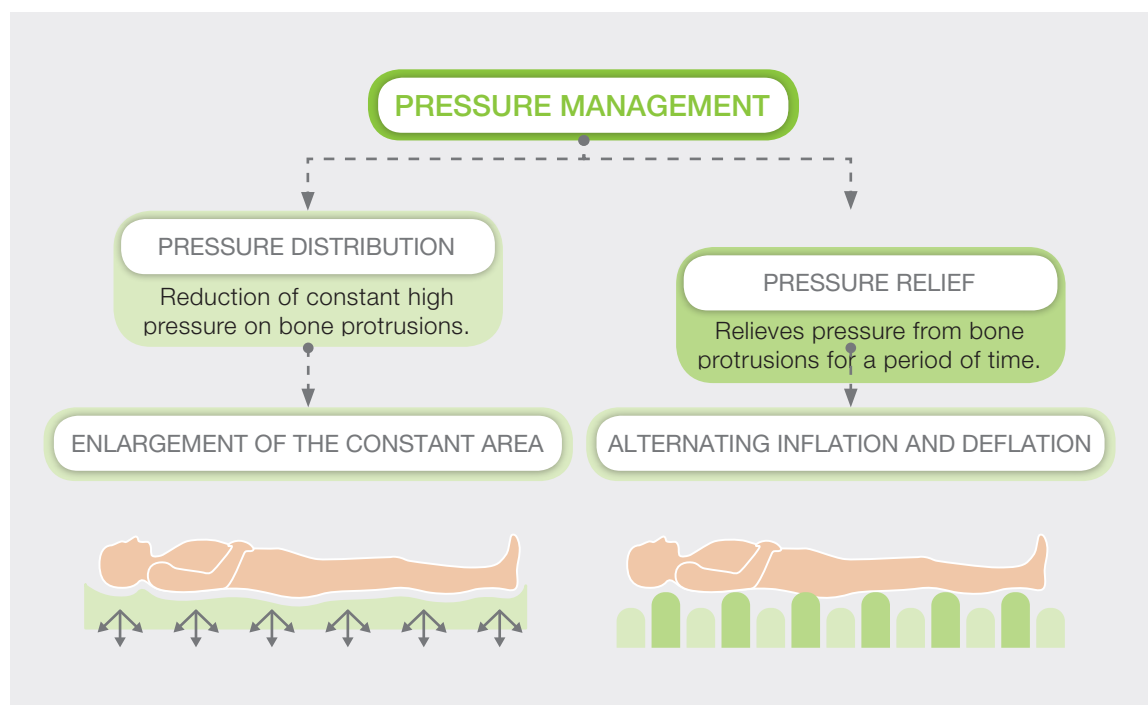
By reducing the pressure load, the likelihood of vascular flow is increased and the supply of nutrients and oxygen to the tissues is unhindered. Fully open vessels allow up to 16 times higher blood flow than partially open (50%) vessels.



Vessels are compressed up to 50%.

Alternation of inflating and deflating cells (two-cell system)

By alternating the inflation and deflation of the cells, the pressure on the tissue is kept as low as possible for as long as possible.



Microclimate Management

In the context of pressure injuries, microclimate usually refers to skin temperature and moisture conditions at the skin support surface interface.

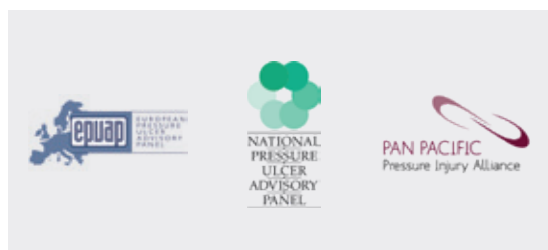
How do humidity and skin moisture relate to the risk of pressure injuries?

Increased skin moisture, especially when due to incontinence, has long been recognized as an important risk factor for pressure injury development.⁽³⁾

Clark reported that the humidity just above the sacral skin of elderly hospital patients who subsequently develop pressure injuries was higher than the humidity of the patients who did not.⁽⁴⁾

Any surface that has contact with the skin has the potential to alter the microclimate, including contact between textiles and skin. Thus, the bed climate has an important function in preventing pressure injuries.⁽⁵⁾

Quick Reference Guide



Beds and mattresses against pressure injuries

In addition to selecting a high performance anti-decubitus mattress, careful selection and use of bed features also assist the overall program of care. Some LINET beds, for example, are equipped with lateral tilt or Ergoframe®. The patient's positioning as a therapeutic procedure for the prevention and treatment of pressure injuries presents physical and time-demanding tasks for nurses.

Lateral tilt

is a highly valued function for patients that are immobile, require daily care, or are bedridden long term.

- Improves the effectiveness of positioning
- Helps in prevention of pressure injuries
- Significantly reduces physical exertion of nurses

DEMANDING NURSING-CARE



It is no secret that health and nursing-care is statistically one of the most high risk professions. Besides infection and stress, health and nursing care workers are affected to a great extent by musculoskeletal apparatus disorders – they suffer back injuries, spinal blockage and deformity, i.e. long-term and difficult to treat illnesses often with lasting effects. Studies have shown that the most common outcome of this profession is back pain, which represents 65% of all stated problems. One of the main reasons is frequent manipulation of patients on the bed.



In 2013, up to **11,430**
were injured



Ergoframe®

reduces pressure and friction forces on the pelvic area of the patient which decreases the risk of pressure injuries in this area.

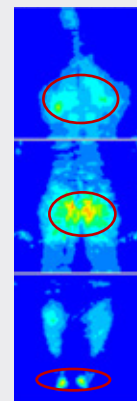
In the sitting position, there is increased pressure on the buttocks and the coccyx, which are the most at risk of pressure injuries. With the aid of Ergoframe®, the space is automatically extended during the positioning of the pelvic area.

Ergoframe® reduces the negative effect of a patient sliding down towards the foot end of the bed, and thereby reduces the need to subsequently manipulate the patient.

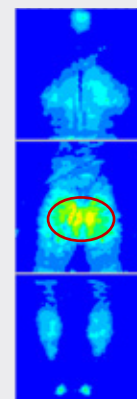
Standard bed



 Most-affected areas by extensive pressure and shearing forces.



Bed with Ergoframe®



nurses
by patient handling*

CliniCare 100 HF

Patient

- Therapy according to individual needs of the patient
- Maximum pressure relief on tissues
- Optimal patient comfort



- Effective prevention of pressure injuries
- Helps in the daily care of risky patients
- Saves the hospital staff time



Staff

Management

- Increases the quality of medical care
- Minimizes risk to patients
- Hospitals save money
- Effective prevention shortens a patient's stay in the hospital



References

- (1) European Pressure Ulcer Advisory Panel (EPUAP) and National Pressure Ulcer Advisory Panel (NPUAP), Prevention and treatment of pressure ulcers: quick reference guide. Emily Haesler (ed) Perth, Australia, Cambridge Media; 2014
NICE Pressure ulcers: prevention and management.2014 www.nice.org.uk/guidance/cq179. Accessed 8 Dec 2016.
- (2) McInnes E, Jammali-Blasi A, Bell-Syer, Dumville JC, Cullum N. Support surfaces for pressure ulcer prevention. Cochrane Database Syst. Rev. 2011;4:CD001735.
- (3) Spector WD, Fortinsky RH. Pressure ulcer prevalence in Ohio nursing homes: clinical and facility correlates. J Aging Health 1998; 10(1):62-80.
Berquist S, Frantz R. Pressure ulcers in community-based older adults receiving home health care. Prevalence, incidence, and associated risk factors. Adv Wound Care 1999;12(7):339-51. Schoonhoven, L, Grobbee DE, Donders ART, et al. Prediction of pressure ulcer development in hospitalized patients: a tool for risk assessment. Qual Saf Health Care 2006; 15(1): 65-70
- (4) Clark M. The aetiology of superficial sacral pressure sores. In: Leaper D, Cherry G, Dealey C, Lawrence J, Turner T, editors. Proceedings of the 6th European Conference on Advances in Wound Management. Amsterdam: McMillan Press; 1996. p. 167-70.
- (5) Zhong W, Xing MMQ, Pan N, Maibach HI. Textiles and human skin, microclimate, cutaneous reactions: an overview. Cutan Ocul Toxicol 2006;25:23-39.
Nicholson GP, Scales JT, Clark RP, Calcina-Golf ML. A method for determining the heat transfer and water vapour permeability of patient support systems. Med Eng Phys 1999;21:701-12.
Zhong W, Ahmad A, Xing MM, Yamada P, Hamel C. Impact of textiles on formation and prevention of skin lesions and bedsores. Cutan Ocul Toxicol 2008;27:21-8.
Okamoto K, Kudoh Y, Yokoya T, Okudaira N. A survey of bedroom and bed climate of the elderly in a nursing home. Appl Human Sci 1998;17:115-20

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