

Optima Turn

Reducing patient handling complexity and pressure injury risks.

8.5% of acute and post-acute adult patients develop hospital-acquired pressure injuries (PI), with 5.4 incidences per 10,000 patients per day. Over half of all PI incidences are within Stage I and Stage II severity and primarily affect the sacrum, heels, and hips (in prevalence order). PI significantly increases inpatient mortality and length of hospital stay by 7 to 11.2 days.¹⁻³

Rotating patients in a 30° lateral position every 4 hours on an alternating pressure mattress reduces pressure injury incidences by 85% and labor-intensity for caregivers and improves patient comfort - and cost-efficiency.^{4,5}

Optima Turn is a pressure-reducing support surface solution that improves patient handling efficiency, pressure injury prevention, and patient care delivery and outcome for inpatients.



Access multiple therapy modes

Care providers can switch between static, alternating, and turning therapy modes to deliver high-quality and flexible patient care according to the patient's recovering status without moving the patient to and from different mattresses.

Consistent turning speed and angle

Slow and consistent turning ensures a smooth and comfortable repositioning experience for the patient. Care providers can choose between turning angles (10, 20°, and 30°) to optimize patient recovery outcomes.

Automate 30° lateral turning

Two longitudinal air cells inflate to achieve 30° repositioning, reducing excessive labour and injuring care providers. Auto-turning supports continuous 30° turning, increasing clinical guidelines compliance for repositioning immobile patients.

Optimal patient safety during turning

Firm air cell side bolsters combined with the bed rails prevent the patient from slipping off the mattress and feeling trapped, uncomfortable, or hurt by the railings during turning. Optima Turn supports upper body turning only, improving patient safety.

Clinical Benefits



The benefit of routinely rotating the inpatient between 30° lateral positions on each side reduces the incidence of pressure injuries compared to the conventional 90° lateral position.⁶

The heel (calcaneus) is vulnerable to pressure injuries due to withstanding high pressure across a small surface area with thin tissue layering for protection.^{7,8} Elevating or suspending inpatients' heels to create a zero-pressure zone reduces pressure injury risk significantly.⁹



The side bolster has a lower border design in the middle section. This is to create a space for sorting the drainage tubes (especially for ICU patients) and to prevent the chances to occur reflux issues. Also, the side bolster has its own deflation knob to improve the process for handling patient transfer.

- Li Z, Lin F, Thalib L, Chaboyer W. Global prevalence and incidence of pressure injuries in hospitalised adult patients: A systematic review and meta-analysis. *Int J Nurs Stud.* 2020 May;105:103546. doi: 10.1016/j.ijnurstu.2020.103546. Epub 2020 Jan 31. PMID: 32113142.
- Bauer K, Rock K, Nazzari M, Jones O, Qu W. Pressure Ulcers in the United States' Inpatient Population From 2008 to 2012: Results of a Retrospective Nationwide Study. *Ostomy Wound Manage.* 2016 Nov;62(11):30-38. PMID: 27861135.
- Sullivan N, Schoelles KM. Preventing in-facility pressure ulcers as a patient safety strategy: a systematic review. *Ann Intern Med.* 2013 Mar 5;158(5 Pt 2):410-6. doi: 10.7326/0003-4819-158-5-201303051-00008. PMID: 23460098.
- Defloor T. The effect of position and mattress on interface pressure. *Appl Nurs Res.* 2000 Feb;13(1):2-11. doi: 10.1016/s0897-1897(00)80013-0. PMID: 10701278.
- Defloor T, De Bacquer D, Gryndonck MH. The effect of various combinations of turning and pressure reducing devices on the incidence of pressure ulcers. *Int J Nurs Stud.* 2005 Jan;42(1):37-46. doi: 10.1016/j.ijnurstu.2004.05.013. PMID:15582638.
- Moore Z, Cowman S, Conroy RM. A randomised controlled clinical trial of repositioning, using the 30° tilt, for the prevention of pressure ulcers. *J Clin Nurs.* 2011 Sep;20(17-18):2633-44. doi: 10.1111/j.1365-2702.2011.03736.x. Epub 2011 Jun 27. PMID: 21702861.
- van Zwam WGH, van Turnhout MC, Oomens CWJ. Risk factors for developing heel ulcers for bedridden patients: A finite element study. *Clin Biomech (Bristol, Avon).* 2020 Aug;78:105094. doi: 10.1016/j.clinbiomech.2020.105094. Epub 2020 Jun 17. PMID: 32619872.
- Cichowitz A, Pan WR, Ashton M. The heel: anatomy, blood supply, and the pathophysiology of pressure ulcers. *Ann Plast Surg.* 2009 Apr;62(4):423-9. doi: 10.1097/SAP.0b013e3181851b55. PMID: 19325351.
- Li Z, Lin F, Thalib L, Chaboyer W. Global prevalence and incidence of pressure injuries in hospitalised adult patients: A systematic review and meta-analysis. *Int J Nurs Stud.* 2020 May;105:103546. doi: 10.1016/j.ijnurstu.2020.103546. Epub 2020 Jan 31. PMID: 32113142.

Specifications		Optima Turn			
Pump 	Dimension	34.1 x 16.5 x 26.0 cm ; 13.4 x 6.5 x 10.2 in			
	Weight	4.5 kg / 9.9 lbs			
	Case Material	Fire Retardant ABS			
	Supply Voltage	230 V / 50 Hz			
	Operating Cycle	10 / 15 / 20 / 25 minutes			
Mattress 	Dimension	Cells	Length	Width	Height
		20	200cm(78.7 in)	85-90cm(33.4-35.4 in)	13-25cm(5-10 in)
	Type	Replacement			
	Weight	12.5 kg / 27.5 lbs			
	Top Cover Material	4-way stretch PU, polyester cover with welded seams			
	Cell Material	TPU			
	Maximum Patient Weight	180 kg / 379 lbs			

Pump: water resistant standards (IP21); Mattress: flame retardant standards (EN597-1, EN597-2), RoHS, WEEE

