

WHITE PAPER



ROTEC

THE ULTIMATE 2025 BARIATRIC HOSPITAL BED SELECTION GUIDE

Answering the Call: How the VersaTech
Bariatric Bed Rises Above Competition in
Safety, Adaptability and ROI

Patient falls are the most common, preventable adverse events reported in hospitals. Each year, approximately 700,000 to 1 million falls occur in U.S. hospitals, resulting in up to 250,000 patient injuries and 11,000 patient deaths.¹ On-the-job injuries among RNs occur at a significantly higher rate than those in all other occupations, with 51% of these injuries resulting in sprains, strains, or tears that require a median of 7 days away from work.²

Falls have significant financial implications for hospitals, with annual estimated costs totaling \$17 billion in the form of lawsuits and unreimbursed claims due to CMS's classification of falls as a "never event" – a term that CMS uses to describe a particularly serious but preventable medical error that hospitals should avoid through established best practices and safety protocols.³

Each year, approximately

700,000 to 1 million

falls occur in U.S. hospitals, resulting in up to

250,000 patient injuries

and

11,000 patient deaths.¹

Falls have significant financial implications for hospitals, with estimated costs totaling

\$ \$17 billion annually.³

A significant amount of these falls involve obese patients, with around 20% of falls attributed to patients classified as obese.⁴



Due to the serious health and safety risks that hospital falls present to bariatric patients and healthcare workers alike, as well as the economic risks to hospitals, the healthcare industry needs equipment that meets the highest standards.

Safety and Psychological Risks to Caregivers

Healthcare workers have a responsibility to turn, lift, and reposition bed-confined bariatric patients in their care, and as a whole they repeatedly cite caring for these patients as a safety risk. Up to 60% of back injury claims are associated with patient handling activities, and OSHA reports that healthcare settings incur roughly \$20 billion in costs annually just for back injuries.²

Overexertion from repeatedly moving patients is a leading cause of musculoskeletal disorders (MSDs) among healthcare workers, particularly nursing aides. In fact, nursing aides experience the highest rates of these injuries, with an incidence rate of 249 per 10,000 workers. The issue is compounded by the physical demands of tasks such as lifting patients, repositioning them in bed, or transferring them to chairs and toilets. These risks are heightened as patients increasingly require heavier and more frequent care, particularly in settings with aging populations.



Data from 2010 revealed that the average incidence rate for MSD cases with work absences among nursing aides, orderlies, and attendants rose significantly—10% compared to a 4% increase in roles like construction laborers and freight movers. As a result, nursing aides were 5 times more likely to sustain these injuries than construction laborers and 1.6 times more likely than freight movers. This troubling trend continues today, with MSD cases among healthcare workers growing at an alarming pace.⁵

In addition, a 2021 study published in Workplace Health & Safety cited that 52% of hospital nurses reported experiencing musculoskeletal pain in the past year, and 38% indicated this pain interfered with their ability to work. The study also noted that musculoskeletal injuries among healthcare workers often lead to extended absences, with some cases resulting in hospitalization or long-term disability. As the prevalence of patient obesity rises, the physical strain on healthcare workers is expected to increase, further exacerbating these risks and emphasizing the critical need for effective risk management programs.⁶

Not only do these injuries cause stress in the form of lost work days, possible career damage, and missed income, but the simple fear of a possible injury on the job creates psychological distress. Caregivers grapple with the fear of an injury on a daily basis, with up to 75% of nurses reporting anxiety related to their risk of injury while performing manual handling tasks.⁷ Along with that anxiety comes the potential to lose focus on tasks and protocols at hand, leading to more potential risks to patient care. Compounding that with the staffing shortage already facing the US healthcare system produces a recipe for burnout.

Safety and Psychological Risks to Patients

On top of the staggering injury and fatality statistics around falls in US hospitals, there are other issues a patient can experience as a result of a fall in a healthcare setting. First, a fall can lead to major setbacks in overall recovery time because now the patient not only needs to heal from the procedure itself, but the injury from the fall and the monetary setbacks that come with extended hospital stays. According to the American Hospital Association (AHA), each extra day of stay costs, on average, \$3,000, and may not be reimbursable, causing patients financial distress.⁸

In addition, bariatric patients can suffer greatly if they experience an injury while already in the hospital because they may be unable to perform the adequate activity needed to prevent common issues bariatric patients face. This includes activities and movement to avoid pressure ulcers, rashes, dermatitis, and tape-related skin tears.

This immobility can then contribute to developing pulmonary complications such as pneumonia or exacerbate pre existing conditions such as overweight hyperventilation syndrome or sleep apnea.

This prolonged hospitalization can then lead to feelings of powerlessness and depression. Adults living with obesity already face a 55% higher risk of developing depression over their lifetime, and this is without the traumatic experience of a hospital fall. Therefore, it's paramount that hospital beds not only support their physical recovery, but also their psychological health and well-being.⁹

Bariatric patients and caregivers alike need hospital beds that prioritize safety and adaptability.



LOWEST BED HEIGHT ON MARKET

Higher bed heights can increase the risk of falls. With that in mind, lowering bed height is widely considered best practice for reducing risk of falls. Providers also need sturdiness and reliability they can count on.⁹ With a low setting of only 8 inches from the ground, VersaTech offers the **lowest bed height compared to any other bariatric beds on the market.**

Bed Model	 VersaTech 1100 ULB (Rotec)	Bari Rehab Platform 3 (SizeWise/ Agiliti)	Citadel Plus+ Bariatric Care System (Arjo)	Compella Bariatric Bed (Hillrom)	Bari 10A Bariatric Bed (Stryker /Joerns)	Ook snow ALL (Umano)
Low Position - Deck to Floor	8"	15.35"	14.1"	18.5"	18.7"	11" w/ 5" casters 13" w/ 6" casters or w/ drive

SUPERIOR ADAPTABILITY

VersaTech offers the **most variety in weight capacity, width, length, and backrest/headrest customization when compared to competitors.** It's also the lightest bed on the market despite having a maximum weight capacity of 1,100 lbs.

Load Capacity	1100lb	1000lb	1150lb	1100lb	1050lb	1000lb
Deck Width	36", 39", 42" or 48"	39" or 48"	34" or 48"	40" to 50"	36", 48"	36" to 48"
Deck Length	80", 84" or 88"	80" or 86"	80"-84"-88"	80" to 88"	80"-88"	80" or 84"
Backrest/ Headrest	0-70°	0-64°	0-62°	0-50°	0-65°	0-60°

HIGHLY MANEUVERABLE AND ERGONOMICALLY FRIENDLY DRIVE SYSTEM

The VersaDrive system makes VersaTech beds the most ergonomically friendly option on the market. Despite supporting the highest weight capacity, VersaTech's lightweight frame and intuitive drive system eases physical strain on caregivers, in turn providing patients with confidence knowing they are being transported in a safe, sturdy bed.

Caregiver Faces Patient During Transport	✓	X	X	X	X Drive not available	X
Bed Weight With Drive System* *total bed frame weight	539lb	850lb w/ drive 560lb no drive	793lb	994lb	700lb w/out drive. Drive not available.	800 lb w/ drive



Maximum Design for Optimal Well-Being

The VersaTech Bariatric bed is preferred by hospitals, nurses, and medical rental companies because of its efficient design, reliability, responsiveness, and optimum value. With features unmatched in the market, Rotec effectively minimizes the risk of falls and injuries. Studies show that keeping beds in their lowest position significantly reduces fall-related injuries, enhancing safety for both patients and caregivers. Therefore, this low-bed feature not only decreases fall risk by up to 50% but also minimizes strain on nurses during patient transfers and care, promoting overall workplace safety.¹⁰



About Rotec

With over 40 years of dedication to applying industry best practices in close collaboration with healthcare professionals, our beds consistently meet the highest standards of care. We firmly believe that patients and their families deserve nothing but the best care, maximum comfort, autonomy, and dignity. We understand that nurses and caregivers rely on equipment that provides them with the confidence and security to deliver optimum well-being to their patients. Our patented innovations stand as a testament to our unwavering dedication and expertise.

rotecbeds.com

<https://rotecbeds.com/en/contact>

(800)-358-6440

Sources

1. LeLaurin, J., & Shorr, R. (2019). Preventing Falls in Hospitalized Patients: State of the Science. *Clinics in Geriatric Medicine*, 35(2). <https://doi.org/10.1016/j.cger.2019.01.007>
2. Bureau of Labor Statistics. (2024). Occupational injuries and illnesses among registered nurses: Monthly Labor Review: U.S. <https://www.bls.gov/opub/mlr/2018/article/occupational-injuries-and-illnesses-among-registered-nurses.htm>
3. Dykes, P. C. (2020). Cost of Inpatient Falls and Cost-Benefit Analysis of Implementation of an Evidence-Based Fall Prevention Program. *JAMA Health Forum*. <https://doi.org/10.1001/jamahealthforum.2022.5125>
4. Hitcho et al. (2004). Characteristics and Circumstances of Falls in a Hospital Setting. *Journal of General Internal Medicine*, 7(732-739). <https://pmc.ncbi.nlm.nih.gov/articles/PMC1492485/>
5. Gallagher, S. (2015). *A Practical Guide to Bariatric Safe Patient Handling and Mobility: Improving Safety and Quality for the Patient of Size*. United States: Visioning Publishers.
6. McClean, K., Cross, M., & Reed, S. (2021). Risks to Healthcare Organizations and Staff Who Manage Obese (Bariatric) Patients and Use of Obesity Data to Mitigate Risks: A Literature Review. *Journal of Multidisciplinary Healthcare*, Volume 14, 577–588. <https://doi.org/10.2147/jmdh.s289676>
7. Marfil-Garza B. A. et al. (2018). Risk factors associated with prolonged hospital length-of-stay: 18-year retrospective study of hospitalizations in a tertiary healthcare center in Mexico. *PLoS One*, 13(11). <https://pmc.ncbi.nlm.nih.gov/articles/PMC6224124/>
8. Hospital Adjusted Expenses per Inpatient Day | KFF. (2024, February 1). KFF. <https://www.kff.org/health-costs/state-indicator/expenses-per-inpatient-day/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
9. Gallagher, S. (2004). Commentary by Susan Gallagher. *Journal of Wound, Ostomy and Continence Nursing*, 31(6), 384–387. https://www.nursingcenter.com/journalarticle?Article_ID=539998&Journal_ID=448075&Issue_ID=539960
10. Tzeng H.M. et al. (2013). Nursing Staff's Awareness of Keeping Beds in the Lowest Position to Prevent Falls and Fall Injuries in an Adult Acute Surgical Inpatient Care Setting. *Medical Surgical Nursing*, 21(5):271–274. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3639136/>