



# BAM Labs' Smart Bed Solution Reduces Incidence of Pressure Ulcers by 85.4%

## Abstract

One of the largest providers of Long Term Care performed a formal study to examine the implications of the BAM Labs under mattress Smart Bed Solution on the prevention and reduction of pressure ulcers in the long term care setting. Residents at 3 long-term care centers were evaluated for risk of developing a pressure ulcer based on their Braden Scale for Predicting Pressure Sore Risk. The sample included 94 residents over 12 weeks, accounting for 1,222 measurement occasions.

## Efficacy

The results indicated there was a statistically significant reduction in the number of pressure ulcers present ( $t=2.247$ ;  $p=0.027$ ) and the number of new pressure ulcers developed ( $t=2.095$ ;  $p=0.039$ ).

Over the course of 12 weeks, there was a dramatic 85.4% decrease from baseline to the completion of the study period.

8 new pressure ulcers per week before BAM, to 1.17 per week after implementation.

The BAM solution is able to give a long-term care center validation that turning residents within a valid time period is validated.

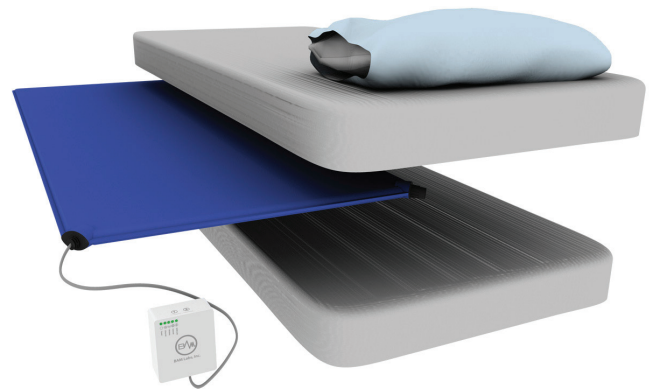
## Staff Efficiency

Average compliance with 2-hour turn intervals improved almost 4-fold, from 13.0% to 48.46%.

## Significant Cost Savings

- Solution Cost = \$6 per bed per day
- Solution Savings = \$15.06 – 20.70 per bed per day
- Net Savings = \$9.06 – 14.70 per bed per day
- Moderate – high risk patients can enjoy net savings of \$3,117 per patient per year

“While the cost of the bed mats seem large, the cost of treating a pressure ulcer is much higher.”



## Risk Mitigation

Average cost of litigation for single pressure ulcer = \$264,843

“If just one lawsuit could be avoided as a result of implementing the BAM bed mat system, savings could be generated.”

## Return on Investment

“The data illustrates that almost every scenario produces savings.”

“Annual savings for all locations combined ranges from \$619,200 for low cost and low risk for wounds, to \$10,856,160 for high cost and high risk for wounds.”

“The greatest savings is in the scenario of low cost and high risk for wounds, which yields \$14,731,200 companywide”

ROI for High Risk residents = 345%

Spend \$4,263,840 to save \$14,731,200

## Additional Benefit: Fall Reduction

“One stakeholder commented on a resident who was accidentally given a mat. CNA's pleaded with the stakeholder to leave the mat because the resident was susceptible to falls. The stakeholder recounted that the resident has had no falls since the implementation of the BAM bed mats.”