

# Pressure map technology for pressure ulcer patients: can we handle the truth?

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## Abstract

**Objective.** The purpose of this study was to trial new pressure mapping technology for patients with pressure ulcers.

**Methods:** Pressure mapping data was recorded during 3 phases of technology implementation, as nurses became increasingly familiar with pressuremapping technology in a 55-bed, long-term acute care (LTAC) facility in North Texas. Forty-three patients with pressure ulcers were selected for the study. Patients with pressure ulcers, or who were considered at high risk for developing pressure ulcers based on a Braden score of  $\leq 12$ , were selected to utilize a pressure-sensing device system.

**Results:** Turning timeliness improved greatly from the baseline phase to the last phase. The average turning after the 2-hour alarm decreased from 120 minutes to 44 minutes, and the median time to turning decreased from 39 minutes to 17 minutes. If time past 2 hours is considered the most damaging time to tissue, these reductions (average and median) represented 63% and 56% less potential tissue damage.

**Conclusion:** Pressure mapping technology is in its infancy and this paper discusses implications for the future, including barriers to implementation and potential advanced applications. While only changes in nursing practice were measured in this study, the changes observed suggest the technology can be instrumental in reducing hospital-acquired pressure ulcers and improving the healing of pressure wounds in the future. .

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