

Enhancing a Pressure Ulcer Prevention and Healing Program Through Monitoring and Repositioning with Continuous Bedside Pressure Mapping



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Purpose/Problem

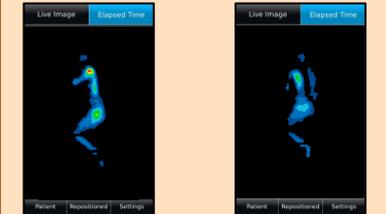
Most pressure ulcers are thought to be preventable with good comprehensive pressure ulcer (PU) prevention programs, which include reducing the duration and magnitude of pressure over vulnerable areas of the body. Staff are challenged with identifying and offloading all potential areas of high pressure for each resident. Staff are also challenged with tracking individual resident turning schedules. We investigated a new technology to assist staff with identifying and offloading high-pressure areas and tracking adherence to individual turning schedules.

Objective

A continuous bedside pressure mapping (CBPM) system* was trialed with 12 long-term care residents over a two-month period. These residents were selected based on their multiple risk factors leading to high risk for PU occurrence. Three of the 12 long-term care residents selected also had recurrent existing PUs. The BPM system* was also trialed on three short-term stay patients who had high risk factors for PUs.

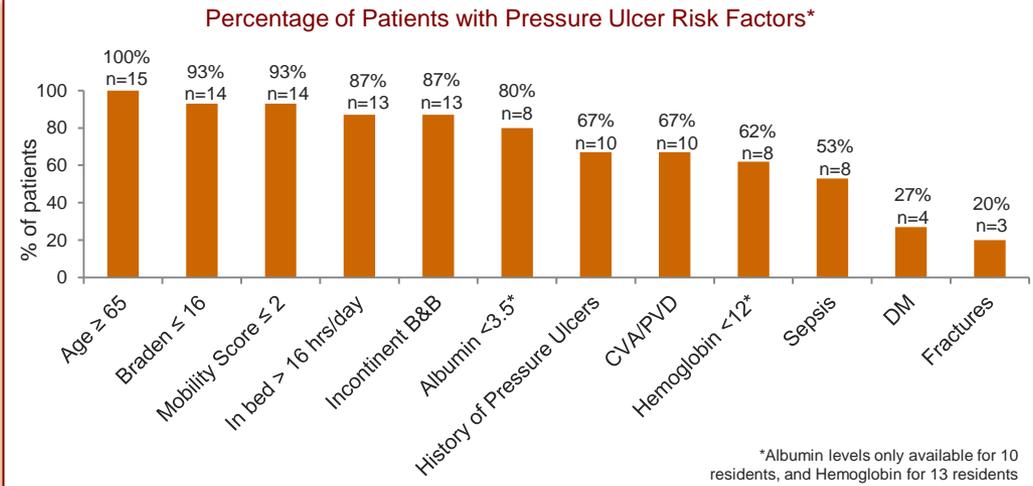
Continuous bedside pressure mapping (CBPM) system*

High pressure areas at a 90-degree side-lying position Lower pressure areas at a 30-degree side-lying position

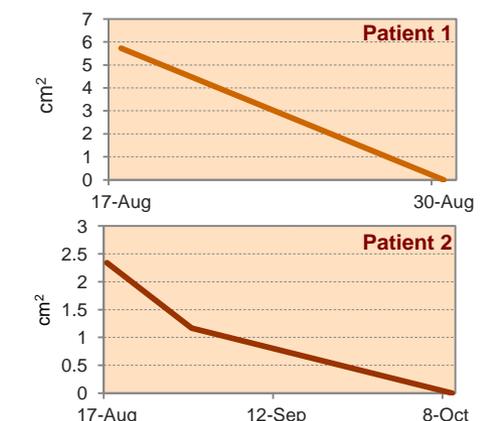


Outcomes

No Pressure Ulcers Developed on 15 High-Risk Residents with 2-Months of Monitoring and Repositioning with a Continuous Bedside Pressure Mapping System*



Surface Area Reduction of Existing Pressure Ulcers with CBPM Systems* in Use



Clinical Staff Feedback on the Continuous Bedside Pressure Mapping System*

"I really like this map, it helps out a lot when I lay my patient down I look to see how to reposition them. Its very nice."
- Marcela, CNA

"It was nice to be able to look at the monitor and see exactly where pressure points were."
- Diana, CNA

"I like this system because I am able to readjust the patient when I see red on the screen. And I also like the fact that it beeps when its time to turn the patient. Sometimes I get busy but this reminds me when its time."
- Maria, CNA

Outcomes Summary

After the two-month trial period, no resident or patient presented with a new PU. The CBPM systems* were used continuously for two months on the 12 residents. The 3 short-term stay patients used the CBPM system* for 2-3 weeks each. The 2 residents who had existing PUs healed with no reoccurrence after 3 and 4 weeks. Staff engagement with the CBPM system* was high as measured by staff surveys and observation. Staff felt the CBPM system* assisted them with improved pressure detection and with completing repositioning protocols.

Conclusions

The CBPM systems* has become an integral part of our comprehensive PU prevention and healing program. Bedside caregivers now have a tool to identify areas of high pressure and confirm that repositioning and turning schedules are achieved.

References

1. NPUAP and EPUAP. Pressure Ulcer Prevention: Quick Reference Guide 2009. Available at: www.npuap.org/Final_Quick_Prevention_for_web_2010.pdf
2. Thurman K, Wickard S. Take the Pressure out of Pressure Ulcers. *Long-Term Living*. 2011 October;60(10):22-23.

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