

# Adding Vision through Continuous Bedside Pressure Mapping to an Intensive Care Unit with a Goal of Preventing Preventable Pressure Ulcers



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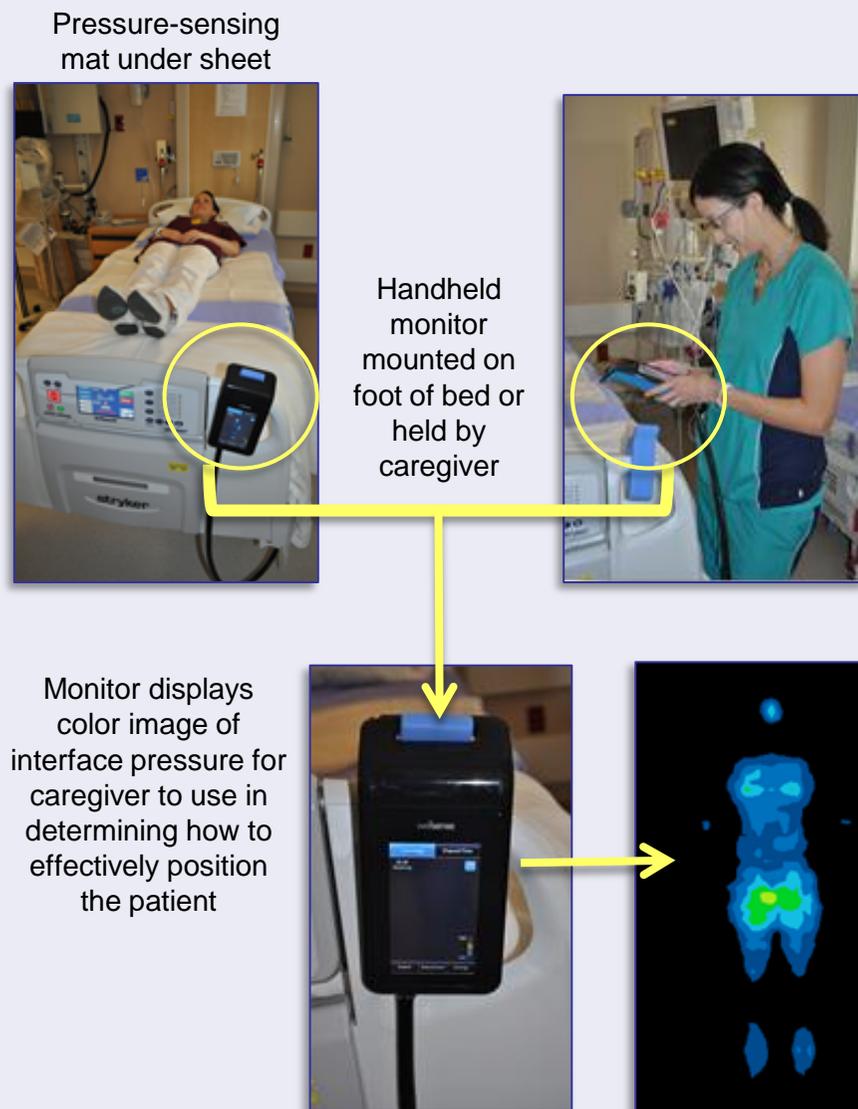
## Purpose/Problem

Approximately 50% of the most dangerous pressure ulcers that occur in the acute-care setting are preventable.<sup>1</sup> Studies have shown that routine repositioning does not unload all areas of high pressure.<sup>2</sup> The challenge is how to prevent pressure ulcers when the causative agent, pressure, is not visually assessable.

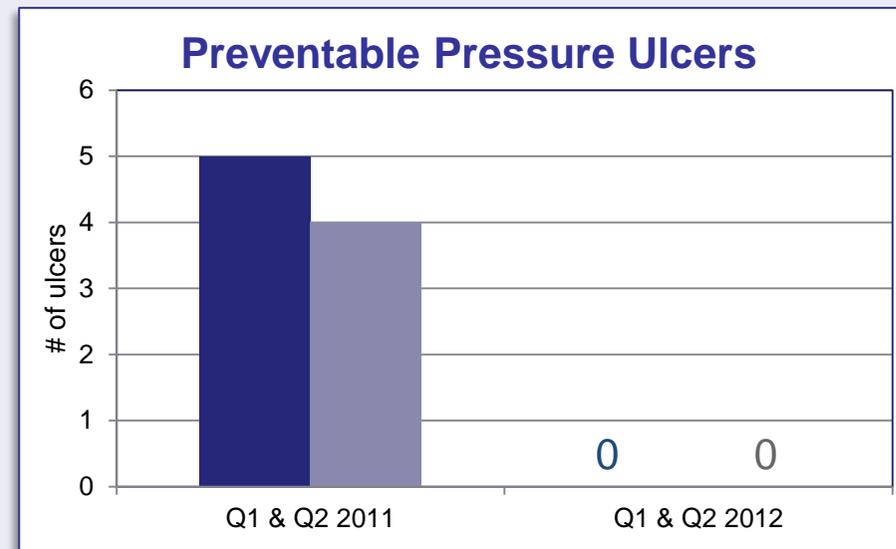
## Methods

A continuous bedside pressure mapping system (CBPM) provides visual imaging of interface pressures in real-time beneath a patient in bed. Twenty (20) CBPM systems were installed into the Intensive Care Unit (ICU) during the 4<sup>th</sup> quarter of 2011 to provide the visual assessment tool for the bedside nurses to position patients in better pressure redistribution positions and reduce high pressures. No other product- or nursing-related intervention changes were made in the ICU during this period of time.

## Continuous Bedside Pressure Mapping System



## Outcomes



## Estimated Cost Savings

Potential Pressure Ulcers Prevented in Q1 & Q2 of 2012.....	9
Cost of one Acquired Pressure Ulcer to the VA Health System <sup>3</sup> .....	\$73,021
<i>Potential Savings to the VA Health System in Q1 &amp; Q2 2012 (6 month savings).....</i>	<i>\$657,189</i>

## Outcomes Summary

Preventable pressure ulcers were tracked for the first and second quarter of 2012 with the CBPM systems in place. No preventable pressure ulcers occurred during those quarters. For a historical comparison, the first two quarters of 2011 were noted to have 5 and 4 preventable pressure ulcers, respectively. Bedside nursing feedback on the ease of use and usefulness of the CBPM system was very positive.

## Conclusions

In the quest to prevent preventable pressure ulcers, CBPM provided visual feedback to the ICU bedside staff to identify better positions for patients in bed that would decrease high pressures beneath them. Outcomes suggest implementing CBPM into a pressure ulcer program assists with preventing preventable pressure ulcers and saving .

## References

1. <http://www.healthcare.gov/compare/partnership-for-patients/safety/ulcers.html>. Accessed May 29, 2012.
2. Peterson M, et al. Patient Repositioning and Pressure Ulcer Risk: Monitoring Interface Pressures. Poster presented at the 12th NPUAP Biennial Conference. Las Vegas, Nevada. February 2011.
3. <http://www.hsrd.research.va.gov/meetings/2011/abstract-display.cfm?RecordID=510>. Accessed August 27, 2012.

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