

## Evaluation of a wireless, portable, wearable multi-parameter vital signs monitor in hospitalized neurological and neurosurgical patients

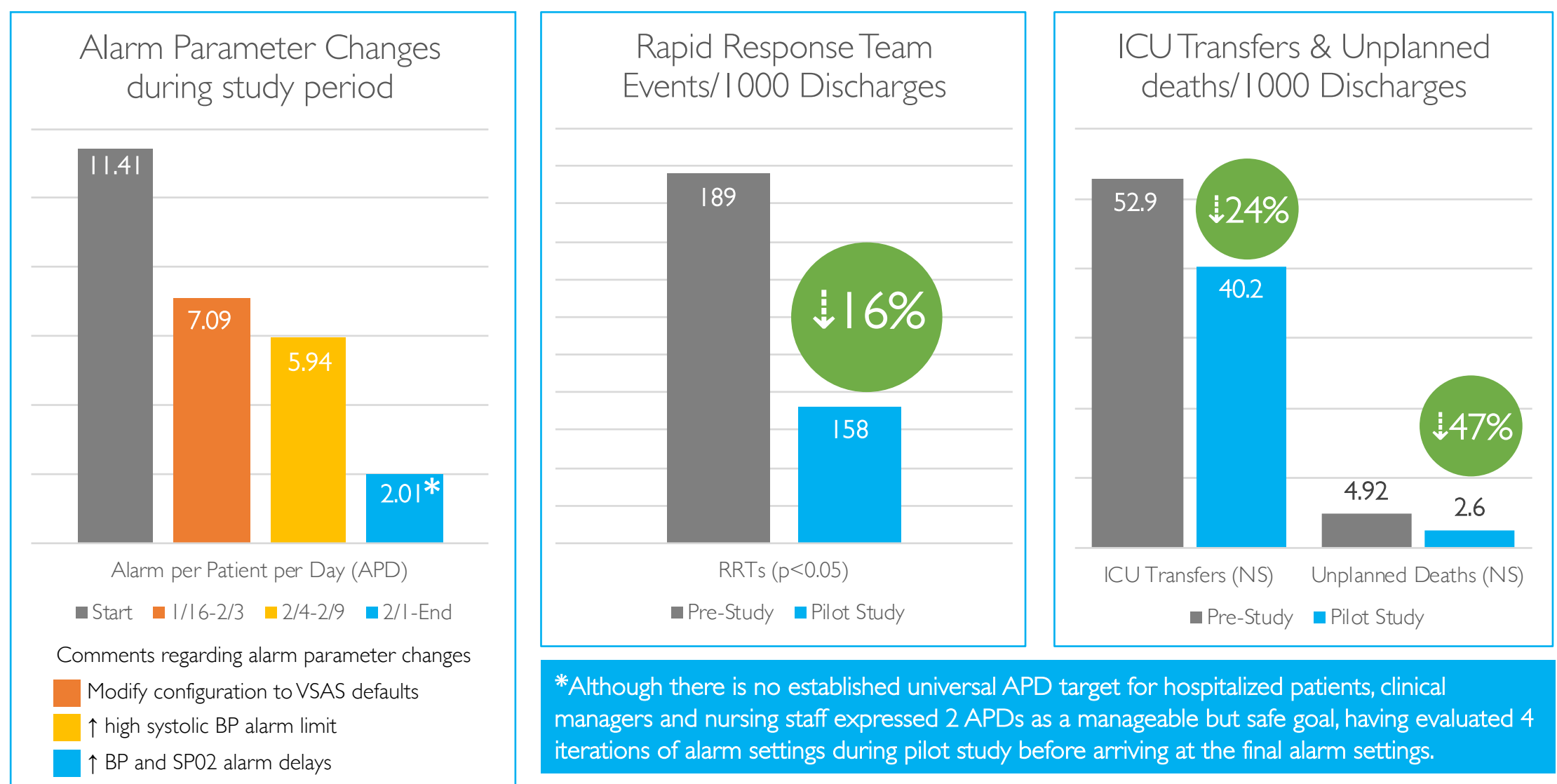
WELLER, FOARD, HARWOOD, JOURNAL OF CLINICAL MONITORING AND COMPUTING, NOVEMBER 28, 2017 | WAKE FOREST UNIVERSITY SCHOOL OF MEDICINE  
Link to Full Article: <https://www.ncbi.nlm.nih.gov/pubmed/29214598>

Despite studies showing the benefits of continual, multi-parameter vital sign (VS) monitoring in general non-ICU patients, as demonstrated by a decrease in total length of stay in both hospital and intensive care unit days and a lower incidence of cardiac arrest<sup>1</sup>, alarm fatigue poses a concern and burden on nurses.

### Study Objective & Methods

A prospective, observational, 5-month pilot study in a 26-bed adult, neurological/ neurosurgical unit (non-ICU) at Wake Forest was conducted. ViSi Mobile was used to assess the impact of continual, multi-parameter VS monitoring on alarm rates, rapid response team (RRT) calls, intensive care unit (ICU) transfers, and unplanned deaths before and during the pilot study.

### Highlights



### Keeping An Eye on Life

Up to 75% of adverse events and preventable deaths occur outside the ICU in unmonitored beds<sup>2</sup>. With Sotera Wireless' ViSi Mobile Surveillance Monitoring System, clinicians are empowered to detect early signs of deterioration in virtually any care setting, enabling early intervention and rapid response.

When early detection matters, ViSi Mobile can make the difference. Transform the way vital signs are monitored with ViSi Mobile today.

<sup>1</sup>Brown H, Terrence J, Vasquez P, Bates DW, Zimlichman E. Continuous monitoring in an inpatient medical-surgical unit: a controlled clinical trial. Am J Med. 2014;127(3):226-32.  
<sup>2</sup>[http://www.ihl.org/education/conferences/APACForum2012/Documents/I2\\_Presentation\\_Diagnostics\\_Haraden.pdf](http://www.ihl.org/education/conferences/APACForum2012/Documents/I2_Presentation_Diagnostics_Haraden.pdf)

### RESULTS

- Reduction in non-actionable alarms enabling effective vital signs surveillance while minimizing overall alarm burden
- RRT events during study period decreased significantly after implementation
- Albeit statistically non-significant, reduction in ICU transfers and unplanned deaths were observed pre and during study