



## **Continuous Physiological Monitoring Improves Patient Outcomes**

STELLPFLUG, PIERSON, ROLOFF, MOSMAN, GROSS, MARSH, WILLIS, GABRIELSON AMERICAN JOURNAL OF NURSING APRIL 2021, MAYO CLINIC

In 2016, Mayo Clinic identified a need to improve early recognition of patient deterioration and timely intervention. The unit's clinical nurse specialist (CNS) conducted a retrospective review of patients' electronic health record (EHR) data and found that sepsis and acute hypoxic respiratory failure were most frequently associated with patient deterioration. Additionally, it was noted that although the nursing staff assessed vital signs at standard intervals of every four or eight hours, there were still patient deteriorations that occurred between the spot check vital sign time intervals. This led to the formation of a Quality Improvement team to address the problem.

## **Quality Improvement Project Objective & Methods**

The purpose of this Quality Improvement (QI) project was to improve both recognition of the early signs of deterioration and communication among multidisciplinary care team members. The project was conducted on a 27-bed general medicine unit at Mayo Clinic, Rochester, MN. To improve detection of patient deterioration, wrist-worn digital physiological monitoring devices (ViSi Mobile) were implemented to provide continuous vital signs for all the patients admitted to the unit.

## **Notable Highlights**



## Results

The QI team achieved the desired outcome of improved recognition of early signs of patient deterioration between standard vital sign checks and nursing assessments, reduced the number of transferred patients to the ICU after RRT intervention, and reduced the ICU length of stay.

Nurse satisfaction with the use of the continuous monitoring device was positive, with 74% of nurses surveyed reporting that information provided by the device enhanced decision-making. The goal was to be able to identify these early signs in more than 90% of patients. Mayo Clinic was able to exceed that goal, attaining 97%, by utilizing ViSi Mobile.

Link to Full Article: https://www.soterawireless.com/ajn\_Continuous\_Physiological\_Monitoring\_Improves

www.soterawireless.com | 858-373-4824

PN-004047 Rev A CO#04914