

Strong Today, Stronger Tomorrow

Vanderbilt Creates a Culture of Early Mobility in the Medical ICU

The research is clear – early mobility is a critical factor in improving patient outcomes. When caring for the most gravely ill, however, it sometimes feels counterintuitive to undertake the stressful task of getting those patients up and moving.

As a premier academic medical center and renowned research institution, the leadership at Vanderbilt University Medical Center readily recognized hard data should trump hesitation when it comes to early ambulation ... even among the critically ill patients in the Medical Intensive Care Unit. “Muscle strength declines 3-11 percent with each day of bed rest,” noted Quality Improvement Analyst Kristen Clifford, BSN, RN4, who divides her time between bedside care and QIA activities in the Medical ICU. Patients with delayed mobility, she continued, are also at increased risk for pressure ulcers, falls and pneumonia. Additionally, they potentially face increased morbidity, mortality, length of stay and cost of care.

Making Mobility a Priority

Clifford noted four Vanderbilt physicians had undertaken a pilot program to study delirium and cognitive impairment in the ICU that focused on five measures, including early mobility. “We saw a trend that when those attendings were assigned in the ICU, we were doing a really good job of early mobility ... but when those attendings weren’t on, our mobility practices stagnated a bit.”

Building off that onsite observation and the relevant research, Clifford said the unit embarked on an initiative to improve practices and make early mobility a standard of care in the Medical ICU. Launched in November 2016, “Strong Today, Stronger Tomorrow: Creating a Culture of Early Mobility in the Medical ICU” took a multi-pronged approach to making mobility a priority every day, across every shift. Measures included a benchmark survey addressing general mobility practices and comfort levels, assessment of resources, rounding tools, and education.

The unit adopted the Johns Hopkins Highest Level of Mobility Scale, which assigns a score of one to eight as patients move from bed to chair to standing to walking. Clifford said it was important to both evaluate the comfort level of nurses in addressing patient mobility and assess the relevant tools provided by the hospital to ensure enough care partners, walkers and travel ventilators were on hand to make it feasible to meet the enhanced standards of care.

“We modified our rounding tool and added mobility,” she said of placing additional emphasis on the new mobility protocol during multidisciplinary rounds to make sure everyone was on the same page in terms of expectations. “We talked about where the patient was right now and what the goal was for that day.”

Clifford added the expectation was that those goals would be addressed throughout the day and evening. “You could work with them before bed and/or get them up early for breakfast to help start their day off on a better foot,” she noted of the significant role night shift nurses have played in helping patients reach mobility milestones.

An extensive education effort was at the core of the pilot project. Respiratory therapists worked with nurses to help ventilator-assisted patients with

ambulation, and small in-service groups provided hands-on practice with the new protocol and relevant equipment. “We also provided educational pamphlets for families,” Clifford said. “Families often want to help but feel helpless. Patients who are intubated and sedated and can’t do early mobility, could still do range-of-motion (exercises) daily, and nurses and families can help.”

Clifford said incentives for staff and recognition of a job well done were also crucial pieces to moving Strong Today, Stronger Tomorrow from a ‘pilot project’ to an embedded part of the culture in the Medical ICU. “Anytime you’re rolling out a new project you want to engage staff and make sure you have buy-in,” she pointed out. In addition to launch parties for both day and night

shifts, Clifford said there were bracelets and ink pens with the slogan, and monthly mobility champions were recognized for a year and received a small gift card for the onsite coffee shop. Clifford noted the staff engagement events and recognitions were paid for through a donation from a family who previously had been served by the Medical ICU.

Sustained Momentum

With implementation of the quality improvement pilot, an early mobility tracker was deployed daily for three months across all shifts to measure adherence and progress. Clifford said the hope was to see increases in daily mobility and complementary decreases in conditions, such as pressure ulcers, that are linked to patients who are sedentary.

“We had about 65 percent of our patients being mobilized daily during our implementation phase ... 349 patients out of 550,” noted Clifford. “Our monthly fall and pressure ulcer rates also fell during implementation.”

Comparing the number of pressure ulcers reported during November/December/January – the three months the hospital tends to see patients at the highest acuity level – over a three-year period further highlighted the impact of the mobility protocol. Clifford said eight pressure ulcers were documented during the three winter months in FY 2015 before launching the project, four in FY 2016 as the project was being implemented, and zero in FY 2017.

While she expected to see improvement during the active phase of the pilot project, Clifford has been most excited about the sustained improvement, which indicates a true culture shift. “One year post-implementation, the average number of patients being mobilized at least once per shift was 88 percent,” she said of the continued growth. “I feel great about it. It’s a patient satisfier. It’s a family satisfier. It’s helping build muscle strength. Everyone has bought into the project.”

Building on the successful implementation and sustained momentum seen in the Medical ICU, Vanderbilt is beginning to roll out the mobility project in other units and is currently working to embed the mobility protocol into the hospital’s electronic health record and clinical support system.

Working together, providers, patients and families are making early mobility a priority so patients who are strong today can be even stronger tomorrow.

The Tennessee Center for Patient Safety, a department of the Tennessee Hospital Association, develops and shares hospital and health system success stories and promotes best practices.



Kristen Clifford

