

Early Mobility in the Intensive Care Unit: Evaluation of a Mobility Protocol and the Effect on Patient Outcomes

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INTRODUCTION: Intensive care unit (ICU) interventions for early rehabilitation are linked with decreased length of stay (LOS) and days on mechanical ventilation (MV), as much as 47%, and is safe and well-tolerated by patients. Early mobility protocols focus on rehabilitation from the onset of critical illness, yet protocol adoption is inconsistent.

PURPOSE: This project evaluated the implementation of an early mobility protocol to increase mobility in ICU patients, and to decrease ICU LOS, hospital LOS, and days on MV.

METHODS: A descriptive, retrospective design was used, 6-weeks before and after protocol implementation, using aggregate medical record data for LOS, MV, and mobility activities. The protocol was an evidence-based tool to transition patients from supine to an upright ambulating position. Data was analyzed using descriptive statistics and independent t-tests.

RESULTS: The sample included 50 individuals before (mean age 65 ± 15) and 32 after protocol implementation (67.1 ± 12.53). Hospital LOS was greater before protocol implementation (11.42 ± 13.10) compared to afterwards (8.75 ± 5.86), and similar for other variables. Two outlying cases were removed for hospital LOS and data reanalyzed. There were non-significant differences for decreased hospital ($t=0.301$, $p=0.76$) and ICU LOS ($t=0.642$, $p=0.52$), and days on MV ($t=0.351$, $p=0.727$). The number of active mobility activities improved slightly from 2 activities pre- to 4 activities post-protocol.

CONCLUSION: Use of a mobility protocol is an important intervention, but staff support is key to a successful practice change. Recommendations for future projects include a longer timeframe for key variables, and further education and support of nurses for the practice change.