

Physician and Physical Therapist Communication is Associated With Earlier Mobility and Decreased Length of Stay in the Neuroscience Population

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Background and Purpose: There is growing interest in methods for early rehabilitation in patients with acute neurologic conditions. The purpose of this study was to identify whether increased coordination between the physical therapist and an attending cerebrovascular neurosurgeon through daily multidisciplinary rounds would correlate with positive changes in overall care.

Hypothesis: We evaluated the hypothesis that a physical therapist participating in cerebrovascular neuroscience rounds would decrease the time to initial physical therapy (PT) consult, decrease hospital length of stay (LOS), decrease Intensive Care Unit (ICU) LOS, and decrease ventilator days.

Methods: A retrospective review was performed of 235 patients who were admitted to the neuroscience service under a single cerebrovascular neurosurgeon over a 16-month period (April 2014 through July 2015) in a level-I trauma hospital. The study consisted of an eight-month pre-intervention period (n=117) where the physical therapist did not attend physician rounds

and an eight-month post-intervention period (n=118).

Results: In the post-intervention group the PT assessment occurred on average 1.57 days sooner than before the physical therapist participated in neuroscience physician rounds (p<0.001). Hospital LOS decreased by an average of 3.46 days (p=0.04) and ICU LOS decreased on average by 1.83 days (p=0.05) in the post-intervention group. Ventilator days decreased on average by 0.55 days, which was not statistically significant (p=0.26).

Conclusions: In conclusion, daily coordination with multidisciplinary rounds between the physician and the physical therapist was associated with decreased time to initial PT assessment, decreased hospital LOS, and decreased ICU LOS in the neuroscience population.