THE IMPACT OF ENHANCED CRITICAL CARE WEEKEND PHYSIOTHERAPY SERVICE Provision

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Introduction: Physiotherapists (PTs), essential members of the interdisciplinary critical care team, routinely provide care on weekends (WE), albeit, at reduced capacity. One year ago at 2 sites of our facility, an acute care quaternary academic hospital, WE staffing was increased from 1 (PRE) to 3 (POST) PTs for patients in the Medical-Surgical Intensive Care (MSICU), the Cardiovascular and Coronary Intensive Care Units (CVICU) and on the wards.

Objectives: Volumes treated, new referrals, types of treatment, and conditions treated before (PRE) and after (POST) implementation of increased PT WE coverage were compared. PTs’ perspectives of the new WE coverage model were also studied.

Methods: A retrospective chart review was conducted on all patients receiving WE PT during two time periods: PRE: January 1-May 5 2013 (40 days) and POST: May 11-December 31 2013 (74 days). An electronic survey distributed to all PTs (23) working at the study sites during both PRE and POST periods evaluated PTs’ perspective of the changed model regarding types of treatments, workload, impact on outcomes, and what works/needs improvement. Demographic characteristics and perception ratings were computed as frequencies. Number, types of patients and treatments provided in each clinical area per treatment day were calculated as mean ± standard deviation. To test for differences between PRE and POST, independent t-tests (continuous data) or c² tests (categorical data) were conducted (α=0.05).

Results: Survey respondents (n=17) were primarily female (82.4%), baccalaureate trained (58.8%) and had worked more than 10 years (64.7%). Greater than 85% of PTs provided a combination of chest/mobility treatments and felt adequately trained to provide coverage on assigned areas. Between 50-70% agreed WE PT was value-added and patients benefitted from PT-specific treatment with improved function and decreased complications. Less than 50% felt increased WE PT decreased ICU length of stay. There was a significant increase in the average number of patients per treatment day receiving treatment PRE vs POST in all 3 clinical areas (MSICU PRE=1.2±1.4, POST=3.4±3.1; CVICU PRE=1.4±1.2, POST=2.8±2.0; wards PRE=1.6±1.4, POST=4.1±2.8, p=0.00) and number of new patients in MSICU only (PRE=0.3±0.5, POST=1.0±1.1, p=0.04). Enhancing WE PT service resulted in a significant increase in number of mobility treatments (MSICU, PRE=0.4±0.6, POST=3.9±2.4; CVICU PRE=0.4±0.6, POST=2.7±1.6; wards PRE=1.1±1.1, POST=4.4±2.9, p=0.00), screenings (MSICU, PRE=0.7±1.0, POST=2.9±1.7; CVICU PRE=0.9±0.8, POST=1.7±1.3; wards PRE=0.7±1.0, POST=2.3±1.5, p=0.00) and numbers of patients treated post-surgically (MSICU, PRE=1.2±0.6, POST=3.0±1.5; CVICU PRE=3.5±1.8, POST=7.2±2.4; wards PRE=4.2±2.3, POST=6.1±2.7, p=0.00) and post-transplant (MSICU only, PRE=2.0±1.2, POST=5.1±2.2, p=0.00). There were no significant differences PRE-POST in the number of chest treatments, combination of chest/mobility treatments or discharges in any of the clinical areas.

Conclusion: Results from the current study provide evidence that enhancing PT coverage on WE allows more critically ill patients to receive care, in particular, mobility treatments. The
majority of PTs in our organization supported the changed model of care and felt it was of
benefit for patient function/outcome and continuity of care. Future studies will need to focus on
measuring the impact of the increased PT WE service provision on outcomes, preventing
complications and length of ICU stay.

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