LONG-TERM PATIENT OUTCOMES AFTER PROLONGED MECHANICAL VENTILATION: THE TOWARDS RECOVER STUDY

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Introduction: There are no detailed in-person multi-centre 2-year follow-up data on patients requiring prolonged mechanical ventilation and no data on how to risk stratify for early rehabilitation intervention.

Objectives: To characterize the functional, psychological, and HRQOL outcomes in survivors of prolonged mechanical ventilation and their caregivers. We hypothesize that older age, greater burden of comorbid illness at ICU admission and ICU LOS are associated with poor functional, neuropsychological, QOL outcomes and increased cost and healthcare utilization at 1 and 2 years after ICU discharge.

Methods: Towards RECOVER is a multi-centre prospective Canadian cohort study designed to evaluate detailed outcomes at 3, 6, 12, and 24 months after ICU to inform risk stratification for an early and ongoing rehabilitation intervention for patients mechanically ventilated for 7 or more days and their family caregivers.

Results: To date, 640 patients are enrolled and we report descriptive statistics on 477. Patient characteristics are: median age 58, 41% F, median APACHE II 22, median vent days 17, median ICU LOS 28 d and hospital LOS 42 d. Motor Subscale of Functional Independence Measure (FIM- range 18-126) at 7d and 12 months: was 33 and 81 respectively; 6MWD at 7d and 12 months was 0m and 450m respectively. Physical component score of SF-36 was 34 and 39 at 3 and 12 months respectively. BDI-II measure was 10 at 3 months and 8 at 12 months and the IES-R was 13 and 11 at 3 and 12 months respectively. In multivariable modelling, older age, greater Elixhauser comorbidity score and longer ICU LOS were significantly associated with 7 d FIM Motor subscale score (all p=45,ICULOS >=18: FIM=52; a>=45,ICULOS =24: FIM=62; a=24: FIM=88]

Recursive Partitioning Model for 7d FIM based on Patient age and ICU LOS