Definitional Criteria for Patient Transitions Relevant to Prolonged and Long-term Mechanical Ventilation: A Delphi Study

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**Purpose:** To develop consensus based definitional criteria of key transition points across the care continuum for patients requiring, or at risk of, prolonged and long-term mechanical ventilation (PMV/LTMV).

**Methods:** Four round (R) Delphi study using purposeful sampling of experts across professional groups, Canadian provinces, adult/paediatric specialists, in acute care, LTMV and home ventilation. R1 comprised an email questionnaire seeking all criteria perceived should and should not define seven transition points identified during a prior one-day workshop. R2 listed a summary of responses following content analysis and requested agreement rating on a 5-point scale. Subsequent rounds confirmed responses. Consensus was set at ≥70% participant agreement.

**Results:** 38/73 invited experts completed all rounds; 14 from acute care, 14 institutional LTMV, 10 home ventilation; 5 specialized in paediatrics. R1 generated 291 statements of what should define transitions; 221 what should not. Statements were collapsed into 150 definitional criteria. Consensus was reached on 14/20 (70%) criteria defining transition from ventilation during acute illness to PMV and 21/25 (84%) criteria on transition from PMV to LTMV with physiological stability having the highest consensus for both (97.4% and 100%). Duration of ventilation did not achieve consensus for either transition. Reverse transition i.e. PMV/LTMV to acute critical care achieved consensus on 13/18 (72%) items with highest consensus for loss of physiological stability. Consensus was reached on 24/26 (92%) criteria for transition from institutional to community care. Nine (35%) criteria reached 100% consensus: informed choice; patient stability; informal caregiver support; caregiver knowledge/skill; environment modification; supportive network; adequately funded equipment; ongoing access to interprofessional care; and timeliness in securing resources. Consensus was achieved for 15/17 (88%) criteria for transition from no ventilation to requiring LTMV, 16/20 (80%) transition from paediatric to adult LTMV, and 21/24 (88%) active treatment to end of life care for PMV/LTMV patients.

**Conclusion:** Using Delphi-derived expert consensus we identified a minimum set of criteria that should be in place during key care transitions for PMV/LTMV.

**Clinical Implications:** Consensus definitions of key transition points may inform more seamless integrated care for this patient population.

Currently 324 words; MAX 325. No tables/figures allowed