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**A Multicase Study of a Prolonged Critical  
Illness in the Intensive Care Unit: Patient,  
Family and Nurses' Trajectories**

**A thesis presented in fulfilment of the requirements for the  
degree of  
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**Massey University  
Palmerston North  
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**Claire Maree Minton  
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## Abstract

A critical illness necessitating admission to an Intensive Care Unit (ICU) is a profoundly stressful event for patients and families. It is important nurses understand these experiences, to provide appropriate care. For most patients admitted to an ICU in New Zealand their stay is of short duration. However, as a consequence of advances in life-sustaining therapies a new group of patients has emerged. This cohort survives their initial critical illness but become dependent on life-saving interventions for a prolonged period, necessitating a protracted ICU stay.

This purpose of this study was to explore the experiences of the patient, their family and healthcare professionals during the trajectory of a prolonged critical illness in an ICU. A qualitative instrumental multicase study approach was used, informed by the Chronic Illness Trajectory Framework. Data collection involved six linked cases (patient, family and clinicians) in four ICUs over a two-year period utilising observations, conversations, interviews and document analysis.

Longitudinal data analysis revealed four sub-phases in the trajectory of a prolonged critical illness. These sub-phases were determined by the patients' physiological condition, with each sub-phase also representing different psychosocial needs. The patients' physiologically debilitated state made them prone to complications and added to the complexity of their illness trajectory. Families' trajectory, dominated by uncertainty, were informed by the patients' trajectory. Families worked hard to relieve the uncertainty by looking for signs of improvement. As their trajectory progressed the 'wear and tear' of prolonged uncertainty became more evident. Nurses' work was informed by the patients' trajectory, with different sub-phases representing different challenges. During the mid-phase, distress related to the uncertainty about positive patient outcomes and the suffering some patients endured. During the emerging with a failed body sub-phase, nurses were challenged to meet all patients' needs due to their overwhelming work priorities.

The identification of the specific sub-phases of a prolonged critical illness trajectory can result in interventions being targeted to each sub-phase to improve outcomes and experiences. Research and education can also be targeted to each sub-phase to explore specific issues and problems to continue to advance this body of knowledge.

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## Abbreviations

CAM	Confusion assessment method
CCI	Chronic critical illness
CCNS	Critical Care Nurses Section
CCU	Coronary care unit
CPAP	Continuous positive pressure ventilation
DHB	District Health Board
DRG	Diagnosis-related group
ERS	European Respiratory Society
FTE	Full-time-equivalent
HDU	High dependency unit
HPCA	Health Practitioners Competency Assurance Act
ICU	Intensive Care Unit
ITU	Intensive Therapy Unit
JFICM	Joint Faculty of Intensive Care Medicine
LOS	Length of stay
LTAC	Long-term acute care
MSAS-C	Memorial Symptom Assessment Scale
NFR	Not for resuscitation
NOK	Next of kin
PFCC	Patient-family-centred-care
PMV	Prolonged mechanical ventilation
SBT	Spontaneous breathing trial
SCU	Special care unit
USA	United States of America
WFCCN	World Federation of Critical Care Nurses



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