

The Alfred Physiotherapy Department's research focus is on physical activity and rehabilitation in hospitalised patients and people with chronic illness. Active research programs investigate physiotherapy interventions for respiratory disorders, early mobilisation following surgery, physical activity in chronic disease, and physiotherapy in intensive care.

Carol Hodgson completed her PhD in 2010, investigating the effects of recruitment manoeuvres for ventilated patients with acute lung injury and acute respiratory distress syndrome. Her PhD studies, conducted with the Intensive Care research team, included a randomised controlled trial examining the effectiveness of a novel protective ventilation strategy in these critically ill patients. This study, funded by the Intensive Care Foundation, Australian and New Zealand College of Anaesthetists, Alfred Research Trusts and NHMRC, showed promising effects on oxygenation and lung inflammatory markers over a seven day period compared with the control group.

A randomised controlled trial of early mobilisation following ankle surgery, led by physiotherapist Lara Kimmel, was completed in 2010. This study showed that early ambulation on the first postoperative day resulted in a decreased length of stay, without an increased rate of readmission or wound complications, compared to a control group who rested in bed until the second postoperative day. The results of this study indicate that early ambulation following internal fixation of ankle fracture is safe, with benefits for both patients and the health service, and is now standard practice at The Alfred.

Caroline Nicolson recently concluded a randomised controlled trial comparing the inhalation of hypertonic saline to isotonic saline in patients with bronchiectasis. Improvements in lung function and quality of life were evident in both groups over 12 months of follow-up. This trial suggests that saline inhalation may be a promising treatment for people with bronchiectasis, a condition for which there are few existing treatments that improve long-term wellbeing.

The department has a growing interest in translation of research into practice. Alfred physiotherapists have participated in updating the online Pulmonary Rehabilitation Toolkit (Anne Holland and Annemarie Lee), evaluation of the uptake of 'Physiotherapy for Cystic Fibrosis in Australia: a Consensus Statement' (Brenda Button and Anne Holland), a study investigating the use of evidence in physiotherapy practice for treatment of patients following cardiac surgery (Kate Hayes and Anne Holland) and development of a tool to measure evidence-based practice in allied health professionals (Anne Holland and Tshepo Rasekaba).

Current Projects

- Randomised controlled trial of exercise training for bronchiectasis (A Lee)
- Shorter versus longer rehabilitation following lung transplantation – a randomised controlled trial (L Fuller)
- Telerehabilitation for chronic obstructive pulmonary disease (COPD) (A Holland)
- Randomised controlled trial of home-based versus hospital-based pulmonary rehabilitation for COPD (A Holland)

- A pilot study of exercise training for pulmonary arterial hypertension (P Munro)
- Randomised controlled trial of exercise training for people with a left ventricular assist device (K Hayes)
- Advance care planning and pulmonary rehabilitation: participation and patient perspectives (A Holland)
- Variations in care for people with COPD across health care networks (A Holland)
- Prevalence and impact of incontinence in adult men with COPD (A Burge)
- Prevalence and impact of incontinence in adult men with cystic fibrosis (CF) (B Button)
- How do allied health professionals keep up to date with current evidence? (A Holland)
- Physiotherapy for CF in Australia: uptake and acceptance of the consensus statement (A Holland, B Button)
- Positive expiratory pressure therapy during acute exacerbations of COPD – a randomised controlled trial (C Osadnik)
- Splinting for axillary burns – a randomised controlled trial (A Kolmus)
- Predicting discharge to rehabilitation following ankle fracture (L Kimmel)
- Quality of life in H1N1 survivors (C Hodgson)
- Quality of life in ARDS survivors following ECMO (T Everard)
- Predictors of outcome following chest trauma (M Dixon)
- Physical activity in people living with HIV/AIDS (S Fillipas)
- Self-reported exercise and activity levels in a population of people with Parkinson's disease (K Richardson)
- Physical activity following hip and knee arthroplasty (P Harding)
- Physical activity in adults with CF: a longitudinal study (N Cox)

Cochrane Reviews

- Early mobilisation for elbow fracture in adults (P Harding)
- Airway clearance techniques for COPD (C Osadnik)
- Airway clearance techniques for bronchiectasis (A Lee)
- Breathing exercises for COPD (A Holland)
- Interventions to improve physical activity in people with CF (N Cox)

*Dr Carol Hodgson,
ANZIC-RC Senior
Research Fellow and
ICU physiotherapist,
investigates improved
outcomes for critically
ill patients.*



Postgraduate Students

6 PhD Students
1 Other Doctoral Student
3 Masters Students

Publications

10 Journal Articles