The Allied Health Clinical Research Office at Eastern Health was established as a joint initiative between Eastern Health and La Trobe University.

Many of the research activities receive direction through the Allied Health Research Committee, a committee with representatives from programs, allied health disciplines and research active clinicians. The committee aims to strengthen the evidence base of allied health practice by undertaking, mentoring and facilitating collaborative and multi-disciplinary clinical research projects across Eastern Health.

As well as conducting research, the Allied Health Clinical Research Office has an important role in research promotion and research training. A feature in 2013 was the Allied Health Research Forum held at Wantirna Health in June, with guest speaker Professor Hylton Menz. Research clinics are held across Eastern Health sites providing a forum where clinicians with a research idea can meet with an experienced clinical researcher. Research training opportunities in allied health include the allied health research training program called Stepping into Research, a program to introduce clinicians to research by completing a systematic review. The Allied Health Research Newsletter is also published quarterly by the Allied Health Clinical Research Office.

In 2012-13, the Allied Health Clinical Research Office is proud to highlight a number of completed research higher degrees in allied health. Katherine Harding graduated with a PhD for her research on triaging systems in allied health. Ross Iles graduated with a PhD for his research on motivational interviewing to assist with recovery after low back pain; and Cam Radia-George graduated with her Masters of Occupational Therapy by Research for her work in evaluating the measurement properties of the PC-PART.

The Allied Health Research Committee includes:

- Nick Taylor Professor of Physiotherapy EH (Chair)
- Katherine Harding Research Officer
- Euan Donley Social Work
- Anna Joy Ambulatory and Community Services
- Mel Myers Dietetics
- Michelle Kaminski Podiatry
- Kevin Mulrain Physiotherapy
- Judi Porter Dietetics
- Camilla Radia-George Occupational Therapy
- Lauren Lynch Speech Pathology
- Anne Thompson Transition Care Program
- Alison Wilby Psychology

The research outputs from Allied Health staff in 2012-13 reflect the continued growth in quality and quantity of research activity amongst allied health clinicians. Research themes of community integration, health service delivery and expanded roles for allied health will continue to be a focus of research activity in 2013-2014. Research opportunities amongst allied health staff, provision of training and support for clinicians at all levels of research participation, and opportunities for external funding to support future projects will continue to be pursued by the allied health research team.
Awards


Notable Funding/Grants

Investigating practices relating to malnutrition in Victorian cancer services – phase 1
Department of Health Berryman M, Wilton A. $7000.


Does motivational interviewing increase physical activity in people living in the community after a hip fracture? Faculty of Health Sciences, La Trobe University. O’Halloran P, Taylor N, Shields N, Blackstock F, Wintle E. $9,449.53.

Do additional allied health services for rehabilitation reduce length of stay without compromising patient outcomes? NHMRC Partnership Project Grant Taylor N, Brusco N, Watts J, Shields N, Sullivan N $233,079 (year 4).

Prescribing physical activity for patients with hip fracture during rehabilitation. Faculty of Health Sciences, La Trobe University. Taylor N, Shields N, Peiris C, Kennedy G. $5728.

Projects in progress

Projects in progress during the course of the past year have included:

Introducing an adapted version of constraint induced movement therapy (CIMT) into a community rehabilitation setting: does it improve upper extremity function when compared to usual care? (Ambulatory and community services) Lead researchers: Baldwin C. Associate researchers: Taylor N, Harding K.

This pilot randomised controlled trial aims to evaluate the effectiveness of low intensity CIMT, adapted for use in a community rehabilitation setting, compared with usual care in stroke patients with upper limb deficits.

Investigating malnutrition in the subacute setting (dietetics)
Lead researchers: Collins J. Associate researchers: Porter J, Huggins C, Truby H. This observational study of the nutritional status of 213 patients in the subacute setting has been extended to measure weight loss, readmission rates and mortality at one-year post-admission. An interventional study to extend the findings of the initial study is also currently in development.

Psychiatric assessment in the emergency department: A consumer perspective following a suicide attempt or deliberate self-harm (DSH) (social work)
Lead researchers: Donley E. Emergency departments are at the frontline of increasing presentation of mental health patients following a suicide attempt or DSH. An important part of measuring quality and effectiveness is to evaluate the perspectives of the consumer. The focus of this mixed methods via survey study is to examine mental health patient experiences of suicide risk assessment and management in the emergency department.

Preventing shoulder subluxation post stroke (ambulatory and community services)
Lead researchers: Emmerson K, Joy A, Wilson E, Scroggie G. The evidence base and Community Rehabilitation Program data to support a future pilot of the use of electrical stimulation for the prevention of shoulder subluxation following stroke across the continuum from the acute setting to sub-acute and community within Eastern Health.

Investigation of outcome measures for community rehabilitation (ambulatory and community services)
Lead researchers: Grant M, Robinson D, Harding K. The Angliss Community Rehabilitation team is currently conducting a study to compare the measurement properties of the Modified Falls Efficacy Scale in community rehabilitation patients with alternative outcome measures for this population, in order to determine the best outcome measure for use in this setting.

Validation of the Malnutrition Screening Tool (MST) for use in the Eastern Health Community Rehabilitation Program (dietetics, ambulatory and community services)
Lead researchers: L’Huillier H, Bertino S, Leopold C, Howell P. The purpose of this project is to determine whether the Malnutrition Screening Tool (MST) is a valid and reliable tool which can be used to screen for malnutrition risk within the Community Rehabilitation setting. The MST is routinely used across Eastern Health (EH) inpatient settings to screen for risk of malnutrition; however, there are presently no validated nutrition screening practices used within the EH Community Rehabilitation Program (CRP).

The effects of introducing a falls implementation pathway in community rehabilitation program setting (ambulatory and community services)
Lead researchers: Martin E, L’Huillier H. The aim of this project is to conduct a small scale pilot study to investigate whether the introduction of a falls implementation pathway for Community Rehabilitation Program clients (at Peter James Centre) reduces the incidence of falls in Community Rehabilitation Program patients and improves knowledge of falls risk factors amongst staff.

Barriers to implementing evidence based practice for Allied Health clinicians (multi-disciplinary)
Researcher: Taylor N, Bottrell J
Lead researchers: Bruder A. Associate researchers: Kennedy G, Taylor N.

Investigating the effect of the set-up of a leisure activity area in the rehabilitation unit on patients' activity levels during their inpatient rehabilitation stay.

Do additional allied health services for rehabilitation patients reduce length of stay without compromising patient outcomes? (Physiotherapy/occupational therapy/rehabilitation medicine)

Experience of early supported discharge for stroke survivors (ambulatory and community services)
Lead researchers: Power L, Kennedy Jones M, Smith J, Wilson E. This study will aim to understand and describe the subjective experience of participating in early supported discharge following stroke.

Exercise in rehabilitation after distal radius fracture (physiotherapy)
Lead researchers: Bruder A. Associate researchers: Taylor N, Bottrell J, Hua R, Shields N, Dodd K. This project aims to find out the role of exercise in restoring function after immobilisation for distal radius fracture using a randomised controlled trial design.

Development of a new scale to measure upper limb activity after shoulder fracture (physiotherapy)
Lead researchers: van de Water A. Associate researchers: Taylor N, Shields N, Bottrell J, Evans M. This project aims to develop a new scale to measure activity in people after proximal humeral fracture. The first step was to generate items on the new scale through the use of focus groups and review of the literature. Second, the new scale is being tested on patients with shoulder fracture.

Investigating common themes for why people volunteer their time to provide transport for a volunteer transport service at the Yarra Ranges Health Community Rehabilitation (occupational therapy, ambulatory and community services)
Lead researchers: Young K, Radia-George C. This project aims to identify common reasons why people volunteered their services in the Volunteer Transport Service at Yarra Ranges Health. A qualitative study will be conducted which will include an in-depth interview with current volunteers of this service to identify common themes and how they interrelate in order to better understand why people volunteer and how people adapt to retirement and the role of occupational therapy within this population.

The impact of using video-based home exercise programs along with electronic reminders on home exercise programs for patients after stroke (occupational therapy, ambulatory and community services)
Lead researchers: Emmerson K, Joy A. Associate researcher: Harding K. This randomised controlled trial aims to compare the effectiveness of home exercise programs using video and reminder functions on touchscreen tablets compared with traditional paper-based exercise programs.

Examining the relationship between client factors and post program exercise adherence in clients with chronic pain (ambulatory and community services)
Lead researchers: Marlow N. This study aims to describe patterns of exercise adherence in patients attending a chronic pain management program, and to investigate whether factors including client characteristics, pain severity and psychosocial responses to pain are associated with adherence to recommended exercise programs.

Overcoming barriers to improved long-term outcomes in type 2 diabetes and prediabetes in community health (ambulatory and community services)
Lead researchers: Stanford J. This study aims to evaluate the effectiveness of a multi-disciplinary, community-based diabetes management service.

Projects completed
Projects undertaken by the department and successfully completed during the course of the past year have included:

Activity of inpatients after hip fracture (physiotherapy)
Lead researcher: Arnold M. Associate researchers: Davenport S, Hua C, Balachandran S, Pagram A, et al. Activity levels of inpatients in the acute setting after surgery for hip fracture were monitored to identify if there is a difference in activity level between weekdays when therapy is provided and weekends when therapy is minimal. Physical activity levels were very low after surgery for hip fracture with patients averaging fewer than 50 steps per day prior to discharge home or to rehabilitation. There were no differences in activity levels between weekdays and weekends.

Investigating practices relating to malnutrition in Victorian cancer services – full technical report (dietetics)
Eastern Health lead researchers: Berryman M, Wilton A. This Department of Health funded project of Victorian cancer services resulted in a point prevalence survey of malnutrition rates in Eastern Health cancer services and provided information on outcomes and a range of associated risk factors which will help identify patients who could benefit from nutritional intervention. Additional information obtained included an overview of organisational practices related to malnutrition in cancer care and a series of recommendations to assist services tackling cancer malnutrition. Funding for phase II of the project has been announced.

Glycaemic impact of hospital food on patients with type 2 diabetes mellitus (dietetics)
Lead researchers: Chiu W-L, Gilfillan C, Wilton A. This pilot research project was developed to inform recommendations for the types of food to be offered for selection by hospitalised patients with type 2 Diabetes Mellitus at Maroondah Hospital.
The project was a joint project by Eastern Health Endocrine services and dietetics and data collection was supported by dietetic volunteers. Researchers investigated the effect of breakfast consumption on the blood glucose profile. Initial findings indicate that the availability of a wider range of food choices, including lower carbohydrate options, is desirable, with further studies required to investigate glycaemic benefits of introducing such food.

Psychometric properties of the Brunel Music Rating Inventory–2 (BMRI-2) with older adults: reliability and validity (ambulatory and community services)

Lead researchers: Clark I, Associate researchers: Taylor N, Baker F, Shoebridge G, Peiris C. The BMRI-2 was developed to facilitate the selection of motivating music for exercise. To date, the BMRI-2 has been tested and used with young healthy adults. The current study aimed to find out if the BMRI-2 is sufficiently reliable and valid for research with older adults in cardiac rehabilitation. The BRMI-2 demonstrated sound psychometric properties in this population and is therefore a suitable tool to assist in the selection of motivating music for exercise.

Additional Saturday rehabilitation improves functional independence and quality of life and reduces length of stay: clinical outcomes (physiotherapy, occupational therapy, sub–acut)

Lead researcher: Peiris C. Associate researchers: Taylor N, Shields N, Brusco N, Watts J. This randomised controlled trial of 996 rehabilitation patients demonstrated that providing an additional day of rehabilitation from physiotherapy and occupational therapy on a Saturday led to reduction in length of stay of about two days, and clinically significant improvements in functional independence and quality of life.

Physical activity during rehabilitation (physiotherapy, sub–acut)

Lead researchers: Peiris C. Associate researchers: Taylor N, Shields N. Physical activity of around 100 patients with lower limb orthopaedic conditions were monitored during inpatient rehabilitation. The first main finding was that activity levels were low with patients averaging around 400 steps a day. The second main finding was that providing additional rehabilitation led to significant increases in physical activity levels. The study raised the issue of whether patients receive sufficient physical activity during rehabilitation to prepare them adequately for discharge to independent living in the community.

Food intake and meal satisfaction of subacute patients (dietetics)

Lead researchers: Porter J, Wilton A, Collins J. This multi–health network research project incorporated numerous aspects of hospital food service management in order to answer the practice question – what do subacute patients eat and are they satisfied with the food they receive? Data collection was supported by final year dietetic students towards completion of project work for Monash University BND4021 Food Service Management. Researchers explored in detail actual food intakes of patients, the meal environment and the nutritional status of patients. Full data was obtained across two health networks for 230 patients, with data analysis currently underway.

Reliability of the PC-PART outcome measure for occupational therapy (occupational therapy)

Lead researchers: Radia–George C. Associate researchers: Imms C, Taylor N. This study investigated the inter–rater reliability and feasibility of using the PC-PART outcome measure to evaluate participation restriction in patients admitted to inpatient rehabilitation. Using five therapists and almost 100 patients, the study demonstrated that the PC-PART is sufficiently reliable to be able to evaluate group programs, and that the amount of extra time to administer the tool in addition to standard occupational therapy assessment was feasible.

Evaluation of the performance appraisal and feedback system at Eastern Health and job satisfaction within the Aged Care Assessment Services (social work)

Lead researchers: Re J. This project explored how the current performance appraisal system that is in place within the Eastern Health Aged Care Assessment Service impacts on overall staff job satisfaction for clinical staff. Results from a semi-structured questionnaire indicated overall satisfaction with the current appraisal system. Over half of respondents stated the documents needed to be more user–friendly and rated positive factors as being related to personal interactions. Sixty–five per cent of respondents stated that there should be two or more people providing feedback as part of the appraisal.

Get fit for hip and knee joint replacement surgery: a pre-operative program of education, self–management and exercise for people waiting for hip and knee joint replacement surgery (physiotherapy)

Lead researchers: Wallis J, Associate researchers: Fong C, Parslow S, Moorcroft B, Lundberg K, Man V, Levering R, Webster K, Taylor N. This project aimed to evaluate the effectiveness of a pre-operative exercise and self–management program in improving the self efficacy of patients waiting for joint replacement surgery for hip or knee osteoarthritis. We found that the program had little positive effect on self-efficacy or physical functioning for those waiting for surgery, questioning the benefit of this type of program.

Research Training

CURRENT HIGHER DEGREE RESEARCH STUDENTS (PHD, MASTERS BY RESEARCH)

Bruder A. PhD (year 3). Exercise in the rehabilitation of fractures of the distal radius. La Trobe University, P/T

Brusco N. PhD (year 3). A health economic analysis of providing extra rehabilitation. La Trobe University, P/T

Clark I. PhD (year 2). Music’s influence on the physical activity levels of older adults in healthcare settings. La Trobe University, P/T

Collins J. PhD (year 2). Exploring malnutrition in the subacute setting. Monash University, F/T


Conference including proceedings, papers, posters

INTERNATIONAL

Brennan E. Support CALD health students as they LEAP into clinical placements. 16th International Congress of Dietetics. Sydney, September 2012.


Corken M. Rethinking the evidence for vitamin B6 supplementation in haemodialysis patients. 16th International Congress of Dietetics. Sydney, September 2012.


Venn E. Leadership and evidence in providing student dietetic clinical practice placements. 16th International Congress on Dietetics. Sydney, September 2012.


Wilton A. LEAP to improve meals for CALD patients. 16th International Congress of Dietetics. Sydney, September 2012.

NATIONAL


Hilbig, A. Is there such a thing as helicopter supervising? Australian & New Zealand Association for Health Professional Educators Conference. Melbourne, June 2013.


Parslow S. Improving outcomes for hip fracture patients with multiple medical problems in a surgical ward environment.


Su V, Rynsent A. Information and support group for parents administering the Lidcombe Program. Speech Pathology Australia National Conference. Gold Coast, July 2013.


ACCESSING PROGRAM ACTIVITY REPORTS

Eastern Health is committed to building a culture of research and ensuring such research is embedded in everyday clinical practice. Eastern Health contributes to local, national and international research activity. This document forms part of the broader sixth annual 2013 Eastern Health Research Report reflecting the high-calibre research, commitment and strength of research programs across Eastern Health. A hard copy of the complete 2013 Research Report including program activity reports is available by contacting The Office of Research & Ethics on 9895 9551 or via download from www.easternhealth.org.au

Readers note: Where projects are collaborative with our respective research partners, Eastern Health staff names are in bold.

Clinical program reports available include:

- Allied Health
- Cardiology
- Eastern Health Clinical School and Eastern Clinical Research Unit (ECRU)
- Eastern Clinical Research Unit – Translational Division (ECRU–TRD)
- Eastern Health Clinical School Research Division, Medical Student Programs
- Emergency services
- Endocrinology
- Gastroenterology and Hepatology
- Geriatric
- Haematology
- Integrated Renal and Obstetric services
- Intensive Care services
- Mental Health programs
- Neuroscience
- Nursing and Midwifery
- Oncology
- Palliative Care
- Pharmacy
- Respiratory and Sleep Medicine
- Rheumatology
- Surgical Research Group
- Turning Point