# ALLIED HEALTH RESEARCH NEWS

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## Allied Health Researchers take Giant Steps

On Friday 27th May, Annie Lewis and Katherine Harding flew the Eastern Health Flag at the Safer Care Victoria ‘Giant Steps’ Conference. They presented their work on reducing waiting times for the Eastern Health outpatient epilepsy clinic using the STAT model.

The study used an interrupted time series design, where data were collected over 28 months and the “interruption” was the implementation of the STAT model. Waiting time and number on the waitlist were tracked throughout the study periods.

At the beginning of the study, the epilepsy clinic had a waitlist of 600 people. This is important as early access to treatment is associated with improved seizure status. The study commenced with a targeted backlog reduction strategy, using a waitlist audit and a very small amount of extra resources to run a few additional clinic sessions. The waitlist was almost eliminated, thanks in part to identification of a large number of people on the list in error, or who no longer required the service.

One problem with “waitlist blitz” type approaches is that waiting lists tend to grow back. To try to prevent this, the STAT model was applied. This involved using service data to calculate demand for new appointments. The correct number of new appointments were reserved for new patients each week. In addition, the model of care was reviewed to reduce pressure on review appointments. The neurologists were asked to triage ongoing care (rather than access to a first appointment).

The results were a significantly reduced waiting list and a reduction in variation of waiting time. This was most beneficial to referred patients who were categorised as low priority, who were usually pushed down the list by more urgent case.

Engagement from the audience at this conference was strong and a number of meetings with policy makers has put STAT on the agenda at the Department of Health, Safer Care Victoria and Australian Healthcare and Hospitals Association.

## “Stepping into Research” Allied Health Research Training Scheme

**Welcome and congratulations to 2022’s class of Stepping into Research. Thirteen aspiring researchers have been successful in their application and will be embarking on a systematic review in the coming months.**

This program is a unique opportunity offered by the EH Allied Health Research Office and has seen 4 in 10 clinicians go on to publish their work, and 1 in 10 enrol in higher degrees.

The quality of the applications this year was excellent, and we have participants from a variety of professions and programs with a diverse range of topics. We look forward to hearing the results from participants’ projects at next year’s Allied Health research forum.

**Ana Mello**

Barriers and enablers for asylum seekers accessing mental health services

**Anthony Chiodo**

Effectiveness of education alone effective in reducing morbidity associated with chronic back pain, compared with combination therapies or usual care

**Christine Lee**

The effect of coffee prior to an MPI study on diagnostic accuracy for stress adenoise gated SPECT perfusion imaging

**Danni Gould**

Intensive physiotherapy for children and adolescents with functional neurological disorder compared to usual care

**Kat Pryde**

Physiotherapy interventions for people with a life-limiting illness

**Kate Morris**

Flexible Endoscopic Evaluation of Swallow (FEES) compared with clinical swallowing examination (CSE) only

**Matoula Wicks**

Online vs in person strength training programs for older adults

**Megan Madonna**

Online parent education group programs for addressing feeding behaviours in children

**Ricky Hansen**

Barriers and enablers for implementing modified constraint-induced movement therapy as an upper-limb intervention for stroke survivors in a sub-acute care

**Sarah Chen**

Sensory-specific training combined with motor function training for patients with lower limb sensory loss after a stroke

**Sarah Lau**

Outcomes from bariatric surgery in the Australian public vs private systems

**Sophia Cotroneo**

Social work interventions for complex alcohol and other drug (AOD) clients

**Haoji Sima & Paul Kelly**

The use of radiographer Preliminary Image Evaluation (PIE) systems for patients presenting to ED

## The STAT model reduced waiting time for paediatric community health services

Community based therapy services for children, such as speech and language therapy, occupational therapy and physiotherapy are often faced with high demand and long waiting lists. The consequences of waiting for these services can be significant, as children miss out on important window of opportunity for treatment as their young brains develop and they move through educational milestones such as starting school.

The CSTAT project, led by Katherine Harding, Annie Lewis and Nick Taylor, trialled the application of Specific Timely Appointments for Triage (the STAT model) in five paediatric community health services in the Eastern Region of Melbourne, including Eastern Health. The project was funded by the Department of Families, Fairness and Housing, as well as the Medical Research Future Fund (MRFF) trhrough a Translating Research Into Practice Fellowship held by Principal Investigator Dr Katherine Harding.

The six participating sites attended 4 workshops over 6 months, working through the steps to implement STAT. STAT is a demand-drive model for access and triage, developed at Eastern Health and La Trobe University, that has been shown to reduce waiting time for health services in a broad variety of settings. STAT begins with calculations of typical demand, and preserves sufficient appointments in clinician schedules for new patients to be booked straight in for an initial assessment.

After assessment, clinicians triage patients into treatment pathways, based on urgency of need and availability of services in the context of current demand. Prior to introducing STAT, a one-off, targeted strategy is used to reduce the existing backlog of patients on the waiting list.

Results of the trial show that waiting time reduced by 33% from 57 days for children referred to the services in the pre-intervention period compared to 38 days for those referred post-intervention (p<0.01). The number of children on the waiting list reduced from 335 pre intervention to 100 following the backlog reduction strategies.

Services used a variety of strategies to reduce their backlogs, including wait list audits and temporary additional hours for part time staff. Lack of availability of paediatric allied health professionals was a major challenge for all of the services.

The achievement of these service providers and their success with implementation of the STAT model is particularly impressive given that the trial took place within the context of COVID-19, when many ambulatory and community services experienced major disruptions. While other services have been experiencing significant increases in waiting times during the pandemic, these services were able to resist this trend and maintain or improve their waiting times over the same time period.

Thanks to all the staff who participated in the trial. The findings are currently being prepared for
submission to a peer-reviewed journal.

## Access to online training to revolutionise clinical trials

 The recently endorsed and mandatory accreditation process outlined by the Australian Commission on Safety and Quality in Health Care requires health services to provide effective clinical governance and improve the safety and quality of care for those involved in clinical trials. Education, training and competencies are key components of achieving this.
Monash Partners is working to support all our health service partners in accreditation in Clinical Research Governance. This includes a state-wide partnership to lead an initiative to transform professional development in the clinical trial space, led by Monash Partners, Melbourne Academic Centre for Health and Western Alliance, additionally supported by the Parkville Cancer Clinical Trials Unit, Victorian Comprehensive Cancer Consortium, Melbourne Children’s Trials Centre and Alfred Health.

The Victorian Clinical Trials Education Centre (V-CTEC) is a not-for-profit, Victoria wide, member-based education centre, with a dedicated Learning Management System (LMS) hosting a suite of evidence-based, interactive clinical trials education opportunities suitable for a range of learning needs.

It enables Eastern Health professionals involved in clinical trials to high quality, world class training at no cost to the end user. V-CTEC aligns its training offerings to support organisations in meeting accreditation requirements and builds clinical research capacity in Victoria, supporting health services with implementation of the National Clinical Trials Governance Framework.

It also provides Victoria’s rural and regional workforce, who often face greater barriers than their metropolitan counterparts, the opportunity to access affordable quality clinical trials training opportunities.

The training available through V-CTEC will be valuable for: investigators, study coordinators, research nurses and clinical trial assistants, clinical trial pharmacists, Human Research Ethics Committee and governance officers, clinical and non-clinical research staff, general staff in departments that interact with clinical trials, employees involved in clinical trials from hospitals, community health settings, universities, and any location where clinical trial research is undertaken.

Monash Partners welcomes this opportunity to collaborate to address such a significant priority for our health and research community.

**Access the training:**
Access the Victorian Clinical Trials Education Centre (V-CTEC) Learning Management System at:
https://vctec.myopenlms.net/

## PhD Spotlight: Rebecca Sullivan

Rebecca Sullivan is a PhD candidate and Certified Practising Speech Pathologist with over 16 years’ experience working with people with communication disability after stroke (aphasia, dysarthria and apraxia of speech).
Rebecca became interested in the safety of patients with communication disability after a series of quality improvement events addressing falls in the subacute wards at Eastern Health. With the help of the Allied Health Research team, she participated in the ‘Stepping into Research’ Research Training Program, and completed an audit of medical records that investigated an association between severe communication disability and falls among patients in inpatient rehabilitation after stroke. After a member of the audience tweeted about the latter paper during a conference, Rebecca was recruited to a PhD via Twitter! Rebecca enrolled in a PhD in 2019 at the University of Technology Sydney, co-supervised by Katherine Harding at Eastern Health. Her
research is funded by an Australian Government Training Program Scholarship and a Jumbunna Postgraduate Research Scholarship.

Communication disability occurs in approximately one third of patients with stroke. Patients with communication disability following stroke have unique risk factors for falls including difficulties communicating their needs (e.g., going to the toilet) and following instructions to complete tasks safely (e.g., transfers). However, patients with communication disability after stroke are often excluded from falls research.

Rebecca’s research aims to understand more about the falls of patients with communication disability after stroke during their inpatient rehabilitation stay. She has examined the content of medical records entries and incident reports of over 300 falls from 109 patients. She is now seeking participants for focus group discussions on falls in patients with communication disability - so keep an eye out for the information sheet and consent form. Participation will help with understanding more about patients with stroke and communication disability in hospital who experience falls during inpatient rehabilitation, so that we can develop ways to reduce risks for this vulnerable population.

## RedCap: a new way to store data

How many of you have spent countless hours setting up Excel perfectly for a project, only to get to the end and looking for missing data, re-coding and combining endless tabs into SPSS?

Thankfully, there is a new solution that can streamline your data capture and take data management to the next level. REDCap is a secure web platform for building and managing online databases and surveys available to Eastern Health staff. REDCap's offers a vast array of tools that can be tailored to virtually any data collection strategy from surveys to trials. The program automatically codes your data and can be automatically exported into Excel and statistical packages. However, learning a new software is daunting so we want to help you get started!

**What do I use RedCap for?**

Users should consider RedCap if they are managing large sets of data. This commonly includes:

· Online surveys

· Longitudinal databases of service and patient data

· Management of randomised controlled trials

**Where do I start?**

You will need to create a RedCap account. You can login using your Eastern Health credentials athttps://redcap.easternhealth.org.au/ and asked to enter your basic details and verify your account. From here you are ready to get started! If you have a university affiliation, you may also be able to access RedCap via your institution’s account.

**Creating a Project**

To create a project, you will need to submit a request to Eastern Health ICT with the project details and evidence of approval from either Eastern Health Research Ethics (for research projects) or your operational manager (for service or quality improvement projects).

A project will then be created for you and placed into “Development” status and from here you can edit your project type, design your measures and surveys, assign users and test your survey links and data entry.

Once you are ready to collect real data you can request ICT to move the project from “Development” into “Production”. Note that once in production you cannot make any edits to the project without contacting ICT so be sure to have tested your project thoroughly before this stage.

**What are the advantages to using RedCap?**

· Paperless storage of research data

· Automatic tracking of users

· Dissemination of online surveys

· Ability to automatically apply formulas to score questionnaires

· Easy monitoring of records and the completeness of research data

· Automatic exports into analysis software

**To access RedCap, follow this link:**

https://redcap.easternhealth.org.au/

##  Conference News

 **In person conferences are BACK!! it has been great to see our Eastern Health Allied Health clinicians accepted to represent at these recent and upcoming conferences**

**Australian Academy of Health and Medical Sciences 10th May 2021**

**Nick Taylor (invited)** *Stepping into Research in Allied Health*

**Australian Society of Medical Imaging and Radiation Therapy (ASMIRT), 19-22 May 2021**

**Zoe Moran, Amber Loh** *X-ray imaging of the shoulder: a national survey of Australian radiographers to understand current imaging practices and protocols*

**Paul Kelly** *Plaster of Paris Imaging: A new way of thinking!*

**Amy Dennett** *Impact of medical imaging research and translation positions in Victorian health services*

**Giant Steps 26-27th May 2021**

**Annie Lewis, Katherine Harding (invited)**

*Patients over patience: reducing waiting in outpatient settings*

**Australasian Sonographers Association Annual
International Conference, 27-29th May 2022**

**Amy Dennett (invited)** *Introduction to statistics in medical imaging*

**Drug and Alcohol Nurses Association Conference, August 2022**

**James Gooden (invited)** *Cognitive Impairment in AOD Clients: Perspectives from Neuropsychological Practice*

## Eastern Health Medical Imaging Technicians make their conference debut at the Australian Society of Medical Imaging and Radiation Therapy Conference (ASMIRT)

The climate for research within our allied health science disciplines (radiography, sonography, nuclear medicine) is on the rise since the integration of a Grade 4 Research lead into the Medical Imaging Department in 2019. Over the past 3 years we have had a number of exciting projects happening in the department which are now coming to fruition. In 2020, we had a false start with our first opportunity to present at the annual Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) thwarted by COVID-19. Thankfully, in-person conferences are back and our medical imaging techs were excited to head north to sunny Cairns to share their work.

Eastern Health had 3 abstracts accepted for presentation, including an oral presentation presented by graduate MITs Zoe Moran and Amber Loh who completed a fantastic and engaging presentation in the toughest timeslot of the conference—final session of the final day! They presented some exciting findings on a national survey conducted in late 2020 which benchmarked the current practices of Australian radiographers completing
shoulder x-rays. This work will inform the development of future standardised protocols for shoulder xray imaging both within and beyond Eastern Health. Congratulations to our radiography team!

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## Euan’s Musings

**Euan Donley works with the Psychiatric and Emergency Response Team and is a regular columnist for Allied Health Research News. Dr Euan has been to many conferences and has a bag in his cupboard full of conference pens.**

I had the wonderful opportunity to work on a research study with some emerging researchers.  At this time I don’t think I broke them.  Although one did jokingly say, “I’m never doing research ever again, this has been horrid, and stop it with the Star Wars references”. Funny guy. We had some good times talking about Star Wars.

I met with him briefly afterwards and he asked me, what is so good about conferences?  He has never been to one before. Hence, in my musings today. I thought it would be worth reflecting on what I have enjoyed about some conferences over the years.

The free pens are great.  There is a special skill in managing to get a free pen, looking interested in what the person in the booth is talking about, while not giving away your e-mail address.  I encourage you to start a game with your fellow delegates to see who can get the most pens without offending the booth holders or disclosing your information.  Extra points if you are at a rival health network or recruitment booth in front of your manager.

On the topic of freebies, I present the following order of the best gifts to get;  drink bottles, glasses cleaner, stress balls, lollies, notepads, highlighters.  Take a big bag because you will also need to take all the stupid brochures to get the real goodies.  Practice your nodding and smiling too.  The more you seem interested, the less creepy you feel taking the goodies.  That’s what I tell myself.

The food is usually also great.  The queues to get the food, not so great.  But it is a real highlight to enjoy a range of foods and it is one of the few places you do not feel judged going back for seconds and thirds because it is usually over catered.  Special shout out to all my fellow delegates who manage to sneak a cake into the next presentation.  An even bigger shout out to anyone who can carry their cake or drink up when they are presenting.  You have my instant respect and attention.

Hotels are also surprisingly fun if you are interstate or inter-national.  You can pretend you are on holiday or even in a spy movie.  I feel I just overshared.

Oh, the talks, networking, presenting experience and other presentations are fine.  Whatever.

## Allied Health Research Achievements

**Publications**

Dennett AM, Tang CY, Chiu A, Osadnik C, Granger CL, Taylor NF, Campbell KL, Barton C. A cancer exercise toolkit developed using co-design: mixed methods study. JMIR Cancer. 2022. 21;8(2):e34903

Bayer JK, Brown A, Prendergast LA, Bretherton L, Hiscock H, Mihalopoulos C, Nelson-Lowe M, Gilbertson T, Noone K, Bischof N, Beechey C, Muliadi F, Rapee RM. Follow-up of the Cool Little Kids translational trial into middle childhood. J Child Psychol Psychiatry. 2022. 63(1):88-98

King O, Pinson J, Dennett AM, Williams C, Davis A, Snowdon D. Allied health assistants’ perspectives of their role in healthcare settings: A qualitative study. Health Soc Care Comm. 2022 (early online)

Harding KE, Camden C, Lewis AK, Perreault K, Taylor NF. Service redesign interventions to reduce waiting time for paediatric rehabilitation and therapy services: A systematic review of the literature. Health Soc Care Comm. 2022 (early online)

Dennett A, Harding KE, Peiris C, Shields N, Barton C, Lynch L, Parente P, Lim D, taylor NF. Efficacy of group exercise-based cancer rehabilitation delivered via telehealth (TeleCaRe): a randomised controlled trial protocol. JMIR Research Protocols (In press)

Peiris CL, Harding KE; Porter J; Shields N; Gilfillan C; Taylor N. Understanding the hidden epidemic of metabolic syndrome in people accessing community rehabilitation: a cross-sectional study of physical activity, dietary intake and health literacy. Disabil and Rehab. 2022. 27;1-9

Farlie M, French F, Haines T, Taylor NF, Williams C. The impact of additional allied health staffing on rehabilitation outcomes at discharge from a sub-acute geriatric evaluation and management unit: a quasi-experimental, pre-post intervention study. Clinical Rehabilitation (in press).

Gibbs A, Wallis JA, Taylor NF, Kemp J, Barton C. Osteoarthritis management care pathways are complex and inefficient: a qualitative study of physiotherapist perspectives from specialized osteoarthritis services. Musculoskeletal Care (in press).

Chaovalit S, Dodd KJ, Taylor NF. Caregivers’ perceptions of a high repetition sit-to-stand exercise program for children with cerebral palsy who have mobility limitations. Physical & Occupational Therapy in Pediatrics (in press)

Lucas J, Leggat S, Taylor NF. Association between use of clinical governance systems at the frontline and patient safety: a pre-post study. International Journal of Health Governance (In press)