**Eastern health Allied Health Clinical research Office**

**Allied Health Research News, Issue 52, September 2020**

**Keep up to date with Allied Health Research news on Workplace!**

Welcome to everyone who has joined our Allied Health Research News Group on Workplace. This is an open group for sharing all of our fantastic achievements in research, and keep you up to date on opportunities to learn about or get involved in research.

Anyone can post on the group, so hop on to:

* Share news of a project
* Show us your conference posters
* Disseminate your publications
* Ask a research question
* Give a shout out to your colleagues for their research achievements

A second group, The Mental Health Research Network Group is also available on Workplace for allied health working in mental health, or anyone at Eastern Health interested in mental health research. And don’t forget that you can also keep up to date with Allied Health Research news by following us on Twitter. We’d appreciate your help us to make sure that we have more followers than our influential columnist, Euan Donley (see p. 6).

**2020 Allied Health Research Forum**

Our 2020 Allied Health Research Forum due to be held on the 7th May had to be cancelled due to COIVD-19, but the 3 Minute Presentation will be back in a new format in October.

Introducing our first ever Eastern Health Virtual Allied Health 3 Minute Presentation Competition!

Thursday 15th October, 1.00-2.30pm.

3MP competition entrants are asked to present a project (proposed or completed) in strictly 3 minutes over Zoom, with a single PowerPoint slide. Allied Health clinicians at Eastern Health are eligible to enter the competition. Our esteemed panel of judges will award a prize for the best presentation, and the audience will also vote for a “People’s Choice” award.

**Innovations in Cancer Telerehabilitation**

COVID-19 has forced us to reshape the way we view and deliver cancer rehabilitation at Eastern Health. In response, the oncology rehabilitation service at Eastern Health has rapidly developed a novel telerehabilitation model.

Telerehabilitation has previously been shown to be effective for improving patient outcomes in a variety of populations including people with cancer, cardiac, pulmonary and musculoskeletal conditions. Research has shown that for people with advanced cancer, tele-rehabilitation can lead to improved mobility, reduced pain and shorter hospital length of stay with hospital readmissions when
compared to usual care without rehabilitation. Cancer survivors are also accepting of
telehealth technology, describing it as convenient, reassuring and minimising treatment burden.

Despite evidence that telehealth can be an efficient and acceptable mode of service delivery, implementation of telerehabilitation was limited in clinical practice until the start of the COVID-19 pandemic. The introduction of social distancing meant that the team was unable to deliver traditional, group-based chronic disease models, leading to the rapid development of a flexible, multi-disciplinary model of telerehabilitation to keep our most vulnerable patients safe.

The new model of care developed at Eastern Health is delivered by a physiotherapist and nurse and comprises the following elements:

* Weekly 1:1 health coaching via phone or video conferencing
* Weekly online group exercise and multidisciplinary education delivered via WebEx
* Access to an interactive online portal
comprising multidisciplinary cancer
information resources and webinars
* Video or written home exercise program

In order to make decisions about the future of our cancer rehabilitation service beyond COVID-19, it is important to understand how well the telehealth service works. Physiotherapist **Amy Dennett**, is currently conducting a process evaluation to assess feasibility, costs and patient satisfaction of the new model. The work is supported by a COVID-19 response grant from Medibank Private and Optus, administered by La Trobe University. This funding will also extend support to the current program through provision of modern infrastructure including 5G technology and remote monitoring.

Amy and the research team anticipate that this program evaluation will inform the future of cancer rehabilitation well beyond the passing of the pandemic, ensuring access to best practice care for cancer
survivors.

Lions Club support medical imaging research with **funding for anthropormorphic phantom**

An exciting new research project can now commence in the medical imaging department thanks to the arrival of an anthropomorphic phantom kindly funded y the hard working members of the Lions Club of Blackburn. Anthropomorphic phantoms are objects that can be used to simulate patients. They are
designed to have similar tissue characteristics to normal biological organisms,can therefore be used to develop different imaging techniques and test x-ray exposure doses. Anthropomorphic phantoms are invaluable for research as they provide true anatomical detail when x-rayed, but can be subjected to multiple exposures without risk.

In the 2018-2019 financial year, Eastern Health performed 134,205 general x-ray examinations across three major facilities. This equates to over 335,000 x-ray exposures which represents a significant radiation risk to the community. Current standards and practices are based on the premise that any radiation dose, no matter how small, could result in detrimental health effects such as cancer or genetic damage. As registered users of x-ray (ionising) radiation, Medical Imaging Technologists are and are mandated to keep the x-ray radiation levels to a minimum using the principles of ALARA (As Low as Reasonably Allowable) whilst maintaining the diagnostic quality. The production of the x-ray image is based on the balance between the amount of radiation produced over time, and the
degree of penetration required to effectively pass through the tissue and bone.

It is known that an increase in penetration reduces the amounts of radiation required, but has also an effect on the diagnostic quality of the x-ray image. With the advent of digital imaging and post
processing enhancements, higher penetration values can be achieved requiring less radiation to produce the x-ray image.

This research project will follow a 2017 investigation on the theoretical possibility of reducing patient dose for extremity imaging. The aim is to establish the lowest possible threshold in radiation
exposure that still maintains the diagnostic quality. We hope that the findings will lead to significant reductions in x-ray radiation exposure for consumers of medical imaging at Eastern Health and
beyond. In future we hope to be able to extend the research to include all regions of the anatomy.

**Claire Farrell becomes first Medical Imaging participant from Stepping into Research to have their systematic review accepted for publication**

In 2019, the Stepping into Research training program included participants from Medical Imaging for the first time. We are excited to announce that radiographer **Claire Farrell**, with the support of her mentors Amy Dennett and Joanne Pinson, has become the first medical imaging graduate of the program to publish her review.

Claire looked at the impact of CT-Attenuation correction (CT-AC) on quality of myocardial perfusion imaging in coronary artery disease. CT-AC is an image manipulation procedure using CT aiming to
reduce artefact in an image. The review found unclear evidence from three studies about the
benefit of CTAC for improving image quality. As there are potential radiation exposure risks with the addition of CTAC, patient and clinician factors should inform the decision to use of CTAC in this population.

Claire’s review has been accepted for publication in the Asia Oceania Journal of Nuclear Medicine and Biology .

**It’s just like face-timing a family member”: Consumer experiences of telehealth during COVID-19**

The COVID-19 epidemic has led to a rapid transition to telehealth across Eastern Health. We used a phone survey to ask patients who had recently received a telehealth consultation (using phone or video) about their experience. This is what they said.

* **82%** got what they wanted from the appointment, 14% partially got what they wanted and 3% didn’t get what they wanted.
* **52% of patients surveyed** said their telehealth experience was **better than expected.**  45%, said it was what they expected and 3% said it was worse than expected.
* **70%** had **no trouble** with the technology, 23% reported some trouble and 7% reported a lot of trouble.

The most positive aspects of telehealth were:

* Not having to travel
* Clinicians were capable,knowledgeable and reassuring
* Still able to make progress and have needs met

Most common challenges

* Technology/connectivity issues
* Harder to engage with the health worker
* Inability to do physical examination
* lack of access to clinic equipment and resources
* Confusion about the process

Tips respondents would give to others

* Reassurance that it will be OK
* Be prepared. Have questions ready and find a quiet space
* Be open, honest and relax!

When asked about how they would prefer to receive a similar service in the future, 49% said face to face

29% said Telehealth, and 21% were unsure.

**PhD Scholarship Opportunity**

La Trobe University is offering up to three graduate research scholarships for students to undertake a joint PhD with Sheffield Hallam University, UK. If successful, you will begin your studies at La Trobe University where you will spend the majority of your time, but you will also spend 12 months at Sheffield Hallam University (travel and accommodation allowances included).

Former EH physiotherapist Dr Casey Peiris is leading a project aimed at improving management of metabolic syndrome in primary care. This project would be suitable for a range of allied health clinicians including physiotherapists and dietitians.

Metabolic syndrome is a clustering of risk factors that put an individual at increased risk of developing chronic disease. The diagnosis of metabolic syndrome provides a key opportunity for primary care practitioners to intervene to prevent progression to chronic disease through lifestyle change.

The candidate will work closely with researchers in Melbourne and Sheffield to explore current perceptions and management of metabolic syndrome in primary care in both countries to improve the way metabolic syndrome is recognised and managed.

**Wanted: Dietitians for casual research work**

We are currently looking for dietitians to join the MIHip study (motivational interviewing after hip fracture),on a casual basis. The role involves delivering individual telephone-based dietary advice to one arm of the MIHip randomised controlled trial. Other tasks include clinical record keeping and returning completed clinical records to the research team, as per the study processes. Availability during week day office hours is preferable. Previous research experience is desirable but not essential as training will be provided. For more information or to submit an expression of interest please contact Beccy Morris (MIHip Trial Coordinator) via email: Rebecca.morris@easternhealth.org.au; or telephone: 0416 560 917. Closing date: 5pm 25th September 2020.

**Euan’s Musings: Being an influencer in research**

So I have followers on twitter.I don’t mean to brag or anything but that is two people who can’t wait for me to tweet about my disappointment in The Rise of Skywalker or my delight with The Mandalorian.If I chose to upload a photo of the baked potato I made last night, I can be guaranteed of a thumbs up emoticon or smiling emoji.And that isn’t even telling you about my 12 instagram (or as we in the biz like to call it, “Insta”) followers.

Given I am officially an “influencer”, this power comes a level of responsibility, and one that I take seriously. I therefore I thought I could share my thoughts on how to be an influencer in research.

Let’s move away from my other life as an internet superstar and consider what you can do around your orkplace.I lose interest in this topic, I’ll present them in point form so I can get back to my outrage about the lack of Star Wars related face masks (#R2D2 too).

1/ If you are a manager, foster a research culture. Set time aside at staff meetings to discuss any research happening or new research that may inspire.

2/ If you are doing research, involve others where you can.is likely to lead to future opportunities.

3/ Show people how easy it can be, or that it does not have to be Lancet-style hard.

4/ If you see some interesting research, tell people about it.

5/ Contribute to this newsletter (please note that irreverent light hearted articles on research related issues is well and truly spoken for).

6/ Support research you like on social media.

As you can see, it is pretty easy to be an influencer in research.those around you flourish. I’m off now to start a ‘tic toc’ account in the sound knowledge all of my private information will remain just that forever.

Dr Euan works in mental health in the hope it will support him with his narcissist personality given his high social media profile.

**Allied Health Research Achievements**

**Publications**

**Sullivan R**, Harding KE, Skinner I, Hemsley B. Falls in hospital patients with acquired communication disability secondary to stroke: A systematic review and meta-analysis. International Journal of Language & Communication Disorders [in press]

**Dennett A**, Cauchi T, Harding KE, Kelly P, Ashby G, Taylor NF. Research interest, experience and confidence of allied health professionals working in medical imaging: a cross-sectional survey. Journal of Medical Radiation Sciences [in press]

**Taylor NF,** Peiris CL, Thompson AL, Prendergast LA, Harding KE, Hau R, Shields N. Association between physical activity and short-term physical function changes after hip fracture: an observational study. Physiotherapy Research International [early online].

**Donley E**. Elder abuse identification by an Australian health service: a five year social work audit. Australian Social Work [in press]

**Chisholm J.** Peer worker perspective on their potential role in the success of implementing recovery-oriented practice in a clinical mental health setting. Journal of Evidence-Based Social Work [early online]

**Allchin B**. Leadership perspective on key elements influencing implementing a family focused intervention in mental health services. Psychiatric and Mental Health Nursing [early online]

**Allchin B**, O’Hanlon B, Weimand BM, Boyer, Cripps G,B,S, Wynne B, and Goodyear M. (2020) An explanatory model of factors enabling sustainability of let’s talk in an adult mental health service: a participatory case study.J Ment Health Syst[early online]

**Allchin B**, Weimand BM, O’Hanlon B and Goodyear M. Continued capacity: Factors of importance for organizations to support continued Let's Talk practice – a mixed-methods study. Int J Mental Health Nurs. [early online]

**Mildred H**, Hunter L, Goldsworthy B, Brann P. Embedding The “Family Oriented Collaboration Utilising Strengths” (Focus) Clinic In A Child And Youth Mental Health Service And University Partnership, in a compendium ed. Hoyt, Young & Rycroft.

**Williamson P**&P.sense of it together: Youth & families co-create sensory modulation assessment and intervention in community mental health settings to optimise daily life. Occupational Therapy Journal.[early online]

**Hemalatha J**.Evidence based approaches for working with anxiety and depression in older adults in RACFs, Clinical Psychologist [in press]

**Wundersitz C**, Caelli A, Georgy J, Musovic A, Manning R, Prause M, Janet Robertson J, Taylor NF. Conducting community rehabilitation review sessions via videoconference: A feasibility study. Australian Journal of Rural Health [in press]

**Dennett AM,** Cauchi T, Harding KE, Kelly P, Ashby G, Taylor NF. Research interest, experience and confidence of allied health professionals working in medical imaging: a cross-sectional survey. Journal of Medical Radiation Sciences [in press]

**Farrell C**, Pinson J and Dennett A. CT-Attenuation correction and its impact on image quality of myocardial perfusion imaging in coronary artery disease: A systematic review. Asia Oceania Journal of Nuclear Medicine and Biology [in press]

**Congratulations!**

**Kellie Emmerson** (Occupational Therapy) has passed her PhD with her thesis titled “Video-based instructions for prescription of home exercise programs in rehabilitation“.
Congratulations Dr Emmerson!