# Pharmacy Department

2023

2023 was a strong year for research output from the Pharmacy Department. There were 28 new full papers, research letters or editorials published in peer review journals, and 29 papers or posters presented at conferences. We have two PhD candidates in the department and two staff who were successful in their applications for research scholarships/fellowships. Twentynine staff co-authored at least one journal publication in 2023 – several for the first time. In addition, we saw several staff present their first paper/poster at a national conference. [Publication date: March 2024]

# Research Report



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#### Overview

2023 was a strong year for research output from the Pharmacy Department, following two years of slightly lower output during the disrupted COVID-19 pandemic years. (Figure). There were 28 new full papers, research letters or editorials published in peer review journals, and 29 papers or posters presented at conferences in 2023.

The Figure, below, highlights the Pharmacy Department's strong research track record and sustained commitment to quality improvement, with 163 peer reviewed journal papers and 152 conference papers and posters presented over the last 7 years. Additional outputs that are not reflected in these data include other publication types (e.g. letters to the editor, book chapters, reports), contributions to workshops, seminars and webinars, and research training for pharmacy students, intern pharmacists and others.

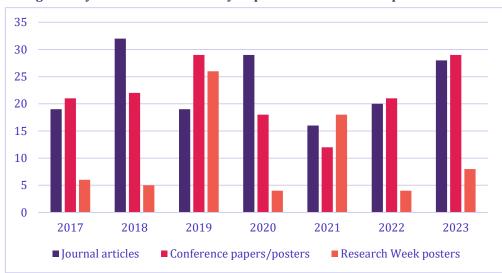


Figure. Key measures of Pharmacy Department research output 2017-2023

#### **HIGHLIGHTS**

#### Transition from ward-based to team-based pharmacy services

Project leads: Jacinta Castello, Jayne Droney, Tim Tran

As part of the hospital's initiative to improve ambulance offload, the pharmacy transitioned its clinical pharmacy service from a ward based to a unit-based approach. This initiative has allowed pharmacists to work alongside certain medical/surgical units to undertake expanded roles such as partnered pharmacist medication charting on admission and discharge. Preliminary results have demonstrated that this has reduced afternoon discharges by 10% and has increased the number of 10am discharges and transit lounge utilisation. Qualitative feedback from medical staff has reinforced the improvement in patient flow. In addition to this, medical staff have found that the incorporation of the pharmacist to their team has improved their efficiency and workload, reduced medication errors through earlier medication reconciliation and has also led to improved learning through their collaboration with pharmacists.

#### Multidisciplinary health services approaches to low-risk penicillin allergy delabeling

Project leads: Elise Mitri (Pharmacist), Professor Jason Trubiano

Elise Mitri, is a Drug Allergy pharmacist at Austin Health, and a PhD candidate in the Department of Infectious Diseases, at Austin Health and Peter Doherty Institute for Infection and Immunity, University of Melbourne. Elise was awarded the inaugural National Allergy Centre of Excellence PhD Scholarship for three years.

It is well documented nationally and internationally that antibiotic allergy labels increase the risk of inappropriate antimicrobial prescribing, antimicrobial resistance and negatively impact broader health service outcomes, such as hospital length of stay. Improving access to antibiotic allergy delabeling pathways through multidisciplinary led health service programs will assist in combating antimicrobial resistance. This project is exploring the role of Australian pharmacists in antibiotic allergy management and may provide evidence to support expanding pharmacists' scope of practice to include delabelling of low risk penicillin allergies.

## Collaboration with our Muslim patients and local community to support medicine management during Ramadan.

Project leads: Simone Taylor, Phung To, Ayat Abdullah, Huda Elmi



- 1. Huda Elmi, Simone Taylor, Ayat Abdullah (Pharmacists)
- 2. A word cloud created by the students during discussion about how they would explain Ramadan to a non-Muslim friend.

During a routine medical record audit exploring reasons for patients refusing medicines prescribed for them in hospital, it was identified that some patients were refusing important medicines, including antibiotics, because they were fasting during Ramadan.

Assisted by pharmacy students and pharmacists of Muslim background, we interviewed 103 Muslim patients admitted to hospital prior to or during Ramadan 2021. We found that some patients were choosing not to fast, and others were changing or stopping medicines so that they could fast. Sometimes this impacted adversely on their health. Our patients wanted their health professionals to have a better understanding of how important Ramadan is. They wanted to form a partnership with their health professionals to come up with a plan for their medicines.

In 2022-2023, a suite of resources was developed on the hospital's intranet page for staff to use during Ramadan, to plan medicine regimens around patients' fasting wishes. Austin Health pharmacists and year level coordinators from East Preston Islamic College co-developed a series of student lesson plans to introduce year 8 students to the hospital context and the range of health careers available. The students created a 3-minute video to explain the significance of Ramadan and how it is celebrated. The video was available on the hospital intranet and was played during key Pharmacy and General Medicine meetings. Hospital staff awareness and confidence in navigating conversations regarding medicine management during Ramadan 2023 were increased. Results stemming from this project were included in North Eastern Public Health Unit communications during Ramadan 2023. This project won the Austin Health Research Fest Consumer Engagement Award in October 2023.

#### Pharmaceutical Waste Audit to inform future waste minimisation and diversion interventions.

Project team: Simone Taylor, Steph Jones, Lisa Ho, Jane Compton-Cook and Monash University 4<sup>th</sup> year students in collaboration with Austin Health Sustainability Unit (Bailey McMaster, Sarah Bandey)





Pharmaceutical waste must be incinerated to  $1100^{\circ}$ C. UK data estimates that 1kg of incinerated pharmaceutical waste emits 1kg of carbon dioxide. The aim of this project was to describe the pharmaceutical waste generated within the hospital pharmacy and identify opportunities for waste diversion or reduction.

An audit methodology was developed using the principles described by Massachusetts General Hospital. The pharmaceutical waste audit was undertaken across all pharmacy locations across the 3 campuses over seven days. A total of 89 kg of pharmaceutical waste was collected over the 7-days, that could be reduced to 72 kg following detailed sorting. The total volume of unsorted waste was 555 L, which was reduced to 242 L following sorting. Detailed sorting has the potential to reduce the cost and carbon dioxide emissions associated with pharmaceutical waste disposal. Areas for future intervention include diversion of cardboard medication boxes to confidential or cardboard waste streams, collaboration with manufacturers to identify more environmentally friendly ways to dispose of drugs of dependence, a trial of blister package recycling and identification of alternatives to plastic tablet vials for inpatient dispensing of solid dose forms.

#### LOOKING FORWARD

Following the annual pharmacy conferences in late 2023, we held our Pharmacy Department Planning Forum to identify projects for 2024 that align with Austin Health and Pharmacy Forecast Australia 2023 priority areas. We are trailing the Ideascale platform to 'crowdsource' ideas and have a large repository of ideas for future projects for students through to residents and pharmacists.

Dr Simone Taylor Senior Pharmacist – Emergency Medicine and Research

Dr Rohan Elliott Senior Pharmacist – Aged Care, Poisons and Research

March 2024

#### **Publications**

Peer reviewed journal articles, research letters and editorials (n = 33), letters to the editor (n = 1) and professional guidelines/reports (n = 1) published in 2023. NB. Publications that were also included in the 2022 Annual Report as an 'online early' or 'E-pub' publication (n = 5) are indicated with an asterix\*, hence there were a total of 28 new peer reviewed journal articles/editorials in 2023.

#### 1. QUALITY USE OF MEDICINES

#### **Aged Care**

**Mouchaileh, N.** Vitamin B12 deficiency in older people: a practical approach to recognition and management. *Journal of Pharmacy Practice and Research* 2023; 53: 350-358. https://doi.org/10.1002/jppr.1897

**Elliott RA, Taylor SE.** Medicine-related interventions to support safe transitions for care home residents post hospital discharge: do hospital delivered interventions have a role? *International Journal of Clinical Pharmacy*; 2023; 45(3):787-788 [*Letter to the Editor*]. <a href="https://doi.org/10.1007/s11096-023-01579-9">https://doi.org/10.1007/s11096-023-01579-9</a>

**Elliott RA.** Farewell to the Geriatric Therapeutics Review series. The end of the beginning. *Journal of Pharmacy Practice and Research* 2023; 53: 299-301 [editorial]. https://doi.org/10.1002/jppr.1900

Cross AJ, Geethadevi GM, Magin P, Baker AL, Bonevski B, ... **Elliott RA**, et al. A novel, multidomain, primary care nurse-led and mHealth-assisted intervention for dementia risk reduction in middle-aged adults (HAPPI MIND): study protocol for a cluster randomised controlled trial. *BMJ Open* 2023; 13:e073709. <a href="https://doi.org/10.1136/bmjopen-2023-073709">https://doi.org/10.1136/bmjopen-2023-073709</a>

#### **Emergency Medicine**

**Harding AM, Mitri E,** Yeoh, M. Improving the safety of anticoagulation initiation in patients discharged from the emergency department. *Emergency Medicine Australasia* 2023; 35(1): 162-4 https://doi.org/10.1111/1742-6723.14104 \*

D'lima J, **Taylor SE, Mitri EA, Harding AM**, Lai J, Manias E. Assessment of inter-rater reliability of screening tools to identify patients at risk of medication-related problems across the emergency department continuum of care. *Australasian Emergency Care* Published online: 14 November 2023. <a href="https://doi.org/10.1016/j.auec.2023.10.005">https://doi.org/10.1016/j.auec.2023.10.005</a>

**Taylor SE, Joules E, Harding AM**. *I*mplementation of a pragmatic emergency department patients' own medications procedure to improve medication safety: an interrupted time series. *Australasian Emergency Care* 2023; 26: 271-278 <a href="https://doi.org/10.1016/j.auec.2023.02.004">https://doi.org/10.1016/j.auec.2023.02.004</a>

**Pradham J, Taylor S, Harding AM**, Lam QT. Implications of differences between point-of-care blood gas analyser and laboratory analyser potassium results on hyperkalaemia diagnosis & treatment. *Internal Medicine Journal* 2023; 53: 2035-2041. <a href="https://doi.org/10.1111/imj.16020">https://doi.org/10.1111/imj.16020</a>

#### **Infectious Diseases**

Motaganahalli S, **Batrouney A, Perera D**, Vogrin S, Trubiano JA. Retrospective study of outcomes of short versus long duration of antibiotic therapy for residual osteomyelitis in surgically resected diabetic foot infection. *Journal of Antimicrobial Chemotherapy* 2023; 78(1): 284-288. Published online: 24 November 2022, <a href="https://doi.org/10.1093/jac/dkac390">https://doi.org/10.1093/jac/dkac390</a> \*

**Mitri E,** Reynolds G, Hornung C, **Trubiano J**. Low-risk penicillin allergy delabeling: a scoping review of direct oral challenge practice, implementation, and multi-disciplinary approaches. *Expert Review of Anti-infective Therapy*. Published online: 21 Dec 2023. <a href="https://doi.org/10.1080/14787210.2023.2296068">https://doi.org/10.1080/14787210.2023.2296068</a>

**Perera D,** Vogrin S, **Khumra S**, Motaganahalli S, **Batrouney A, Urbancic K, Devchand M, Mitri E,** Clements R, Nunn A, Reynolds G, **Trubiano JA**. Impact of a sustained, collaborative antimicrobial stewardship programme in spinal cord injury patients. *JAC Antimicrobial Resistance* 2023 Nov 22; 5(6): dlad111. https://doi.org/10.1093/jacamr/dlad111.

Copaescu AM, Vogrin S, James F, Chua KYL, Rose MT, De Luca J, Waldron J, Awad A, Godsell J, **Mitri E**, Lambros B, Douglas A, Koudja R, Isabwe G, Genest G, Fein M, Radojicic C, Collier A, Luga P, Stone C, Ben-Shosan M, Turner N, Holmes N, Phillips E, **Trubiano JA**. Efficacy of a clinical decision rule to enable direct oral challenge in patients with low-risk penicillin allergy: The PALACE randomized clinical trial. *JAMA Internal Medicine* 2023;183(9): 944-952. https://doi.org/10.1001/jamainternmed.2023.2986.

**Trubiano JA,** Vogrin S, **Mitri E,** Hall R, Copaescu A, Waldron J, De Luca J, Rose M, Mackay G, Lambros B, Douglas A, Holmes N, Chua K. The Who, What, When, and Where of Inpatient Direct Oral Penicillin Challenge-Implications for Health Services Implementation. *Clinical Infectious Diseases* 2023; 77(1): 19-22. https://doi.org/10.1093/cid/ciad156.

Reynolds G, **Urbancic KF**, Fong CY, **Trubiano J**. Invasive fungal infection following venetoclax and posaconazole co-administration. *British Journal of Haematology* 2023; 203(4): 593-598. https://doi.org/10.1111%2Fbjh.19116

Ludikhuize J, Marshall D, **Devchand M**, Walker ST, Talman A, Taylor C, McIntyre T, **Trubiano J**, Jones DA. Improving the management of medical emergency team calls due to suspected infections: A beforeafter study. *Critical Care and Resuscitation*. 2023; 25(3): 136-139. https://doi.org/10.1016%2Fj.ccrj.2023.06.004

Brusco NK, **Bury S**, Chua KYL, Vogrin S, Holmes NE, **Trubiano J**. Penicillin Allergy Delabeling Program: an exploratory economic evaluation in the Australian context. *Internal Medicine Journal*. 2023: 53(1): 74-83. <a href="https://dx.doi.org/10.1111%2Fimj.15532">https://dx.doi.org/10.1111%2Fimj.15532</a>

#### Inflammatory bowel disease

**Hilley P,** Con D, Choy MC, Srinivasan A, De Cruz P. Upadacitinib in end stage renal disease: a case of acute severe ulcerative colitis. *JGH Open* 2023; 7(12): 1012-1015. <a href="https://doi.org/10.1002/jgh3.13015">https://doi.org/10.1002/jgh3.13015</a>

Eqbal A, **Hilley P**, Choy M, Srinivasan, De Cruz P. Outcomes out to 12 months after sequential use of high-dose tofacitinib following infliximab in acute severe ulcerative colitis. *Internal Medicine Journal* 2023; 53(8): 1497-1500 https://doi.org/10.1111/imj.16192

#### Oncology

Tong E, Edwards G, Hua P, Mitra B, Van Dyk E, Yip G, Coutsouvelis J, **Siderov J**, et al. Implementation of partnered pharmacist medication charting (PPMC) in haematology and oncology inpatients. *Journal of Oncology Pharmacy Practice*, Published online: 23 June 2023.

https://doi.org/10.1177/1078155223118046

Ryan M, Lam N, Wright K, **Siderov J**. Clinical Oncology Society of Australia Position Statement: 2022 Update to the safe handling of monoclonal antibodies in healthcare settings. *Asia-Pacific Journal of Clinical Oncology* 2023; 19: 723-30. <a href="http://dx.doi.org/10.1111/ajco.13943">http://dx.doi.org/10.1111/ajco.13943</a>

Nicolae R, Uccellini A, **Siderov J**, et al. Taxane-induced neuropathy: How serious is this problem for patients with early breast cancer? *Asia Pacific Journal of Clinical Oncology* 2023; 19(2): e118-e127 <a href="https://doi.org/10.1111/ajco.13804">https://doi.org/10.1111/ajco.13804</a>\*

Stewart T, Dowling M, Janson B, **Siderov J**, Xie J, Grigg A, Khot, A. Acute kidney injury in patients receiving high-dose etoposide phosphate as conditioning prior to hematopoietic stem cell transplantation in hematologic malignancies may be associated with elevated body mass index. *Leukemia & Lymphoma* 2023; 64(1): 253-255 [*Research letter*].

https://doi.org/10.1080/10428194.2022.2136945

Chan T, Malik S, Blackmore E, Wong J, Wade H, **Siderov J**, et al. Administration of oral systemic anticancer therapy (SACT) via enteral feeding tubes and other methods. [*Guideline*] Version 2.0. September 2023. *British Oncology Pharmacy Association*. Available at <a href="https://www.bopa.org.uk">https://www.bopa.org.uk</a>

#### 2. MEDICATION SAFETY AND PHARMACOVIGILANCE

**Elliott RA, Taylor SE**, Koo SMK, Nguyen AD, Liu E, Loh G. Accuracy of medication histories derived from an Australian cloud-based repository of prescribed and dispensed medication records. *Internal Medicine Journal* 2023; 53(6): 1002-1009. <a href="https://doi.org/10.1111/imj.15857">https://doi.org/10.1111/imj.15857</a>\*

**Uzunbay Z, Elliott RA, Taylor S, Sepe D, Ferraro EJ.** Accuracy of medication labels on community pharmacy-prepared dose administration aids: An observational study. *Exploratory Research in Clinical and Social Pharmacy* 2023; 11 (Sep): 100318. <a href="https://doi.org/10.1016/j.rcsop.2023.100318">https://doi.org/10.1016/j.rcsop.2023.100318</a>

**McLachlan G, Broomfield A, Elliott RA**. Completeness and accuracy of adverse drug reaction documentation in electronic medical records at a tertiary care public hospital. *Health Information Management Journal* 2023; 52: 108-111. <a href="https://doi.org/10.1177/18333583211057741">doi.org/10.1177/18333583211057741</a> \*

Mamunuwa N, Jayamanne S, Wijekoon N, Coombes J, **Perera D**, Shanika T, Mohamed F, Lynch C, De Silva A, Dawson A. Duplication errors due to brand name confusion; It is not always the name - short case series. *Clinical Case Reports* 2023; 11(9): e7795 <a href="https://dx.doi.org/10.1002%2Fccr3.7795">https://dx.doi.org/10.1002%2Fccr3.7795</a>

#### 3. PHARMACY SERVICE DESIGN AND DELIVERY (HEALTH SERVICES RESEARCH)

Leung MTY, Marquina C, Turner JP, Ilomaki J, **Tran T**, Bell SB. Hip fracture incidence and post-fracture mortality in Victoria, Australia: a state-wide cohort study. *Archives of Osteoporosis* 2023; 18(1): 56 https://doi.org/10.1007/s11657-023-01254-6

**Su E, Aminian P**, McMaster C, **Eyles J**, Frauman AG, **Garrett K, Taylor SE, Liew DFL**. Design and implementation of an electronic opioid management plan to support consistent communication of opioid analgesia prescribing intentions to patients and general practitioners. *Journal of Pharmacy Practice and Research*. 2023; 53(4):186-194. <a href="https://doi.org/10.1002/jppr.1872">https://doi.org/10.1002/jppr.1872</a>

**Su L, Liew D,** Donnely J, **Elliott RA.** Medicines stewardship. *Australian Prescriber* 2023; 46: 24-8. <a href="https://doi.org/10.18773/austprescr.2023.010">https://doi.org/10.18773/austprescr.2023.010</a>

Davies JF, **Trajceska L**, Weinberg L. The financial and environmental impact of purchased anaesthetic agents in an Australian tertiary hospital. *Anaesthesia and Intensive Care* 2023; 51(2): 141-148 <a href="https://doi.org/10.1177/0310057X221129291">https://doi.org/10.1177/0310057X221129291</a>

#### 4. TOXICOLOGY

Norvill A. How to save a life with naloxone. Australian Pharmacist 2023; 42(2): 28-36

Hodgson SE, **McKenzie C**, May TW, **Greene SL**. A comparison of the accuracy of mushroom identification applications using digital photographs. *Toxicology* 2023; 61(3): 166-172. https://doi.org/10.1080/15563650.2022.2162917

**Syrjanen R**, Schumann J, Fitzgerald J, Gerostamoulos D, Abouchedid R, ..., **Greene SL**. The Emerging Drugs Network of Australia – Victoria Clinical Registry: A state-wide illicit substance surveillance and alert network. *Emergency Medicine Australasia* 2023; 35: 82–88. <a href="https://doi.org/10.1111/1742-6723.14059">https://doi.org/10.1111/1742-6723.14059</a>

**Syrjanen R**, Schumann J, Hodgson SE, Abouchedid R, Rotella J, Graudins A, **Greene SL**. From signal to alert: A cluster of exposures to counterfeit alprazolam tablets containing five novel benzodiazepines. *Emergency Medicine Australasia* 2023; 35: 165–167. <a href="https://doi.org/10.1111/1742-6723.14108">https://doi.org/10.1111/1742-6723.14108</a>

## Conference/Seminar Oral Presentations and Posters

Research papers and posters, and continuing professional development lectures/workshops, presented externally in 2023.

#### 1. QUALITY USE OF MEDICINES

#### **Aged Care**

**Shiu A,** Duncan G, Darzins P, Abdelmotaleb R, Zamani M. Redefining the transfer medication management plan for subacute inpatients - A Pilot Study. *Australia New Zealand Society for Geriatric Medicine Annual Scientific Meeting 2023*, Brisbane (10-12 May 2023)

Godbee K, Cross A, George J, ... **Elliott R**, et al. Dementia risk factors among middle-aged adults in Australian primary care participating in a practice nurse-led multi-domain dementia prevention trial. *Australian Dementia Research Forum*, Gold Coast 2023 (May 29-31)

#### **Infectious Diseases**

**Mitri E**, Narayanasamy S, Holmes N, Ierano C, Roberts J, Fernando S, **Trubiano J**. RECONCILE: A Multi-Disciplinary Survey of Penicillin Allergy Delabelling and Future Pharmacist-led Antibiotic Allergy Service Delivery. Poster 231 *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

**Mitri E.** The international Network of Antibiotic Allergy Nations (iNAAN) study: Building the case for Multi-Disciplinary Antibiotic Allergy Delabelling. *National Centre for Antimicrobial Stewardship (NCAS)* Forbes Week Symposium, The Doherty Institute; 2023 December 7, Melbourne, Australia

**Mitri E,** James F, Fletcher L, Turner M, Ierano C, Roberts J, Fernando S, De Luca J, **Trubiano J.** The National Inpatient Penicillin Allergy Database, A Framework for Health Services Penicillin Allergy Research. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47<sup>th</sup> National Conference*, Cairns (2-4 November 2022)

**Mitri E,** Rose M. Antibiotic Allergy in the Immunocompromised Host. *National Centre for Infections in Cancer (NCIC) Symposium: Pathways to better infection care in cancer*; 2023 October 6, Melbourne, Australia

**Mitri E**. Light Touch Approaches to Low-Risk Penicillin Allergy Delabelling: The Rise of the Pharmacist. *Drug Hypersensitivity Symposium*; 2023 May 20, The Doherty Institute, Melbourne, Australia

**Devchand M.** Time to check again? A statewide improvement project focused on penicillin allergy assessment and delabelling. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

#### **Inflammatory Bowel Disease**

Eqbal A, **Hilley P**, Gilmore R, Li Wai Suen C, Choy M, De Cruz P. P419 Outcomes at one year after sequential use of high-dose tofacitinib following infliximab in Acute Severe Ulcerative Colitis. 18<sup>th</sup> Congress of *European Crohn's and Colitis Organisation (ECCO)*. Denmark. (1-4 March 2023)

 Abstract published in: J Crohn's and Colitis. 2023;17 (suppl 1): i548-549 https://doi.org/10.1093/ecco-jcc/jjac190.0549

**Hilley P**, Wong D, Ma R, Peterson A, De Cruz P. P028 Transitioning patients from intravenous to subcutaneous infliximab and vedolizumab for inflammatory bowel disease – what is the opportunity cost of improving access to health care? 18<sup>th</sup> Congress of *European Crohn's and Colitis Organisation (ECCO)*. Denmark. (1-4 March 2023)

Abstract published in: J Crohn's and Colitis. 2023;17 (suppl 1): i197-198.
https://doi.org/10.1093/ecco-jcc/jjac190.0158

#### Oncology

**Siderov J.** Workshop for colorectal cancer. COSA Cancer Pharmacy Group Foundation Seminar (June 2023)

**Siderov J.** Workshop for understanding a chemotherapy protocol. COSA Cancer Pharmacy Group Foundation Seminar (June 2023)

#### 2. MEDICATION SAFETY AND PHARMACOVIGILANCE

**Phung To. Michael Ching,** Philip Zeglinski, **Ljubica Trajceska, Yvonne Lau,** Kate Schimmelbusch, **Kent Garrett.** Stability of intravenous oxycodone in compound sodium lactate solution. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

**Taylor S, To P, Abdullah A, Elmi H**, Okur H. Medicine-related conversations with our Muslim patients during Ramadan – a hospital and Islamic secondary school collaboration.

- Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47<sup>th</sup> National Conference, Cairns (2-4 November 2022)
- International Forum on Quality and Safety in Healthcare, Melbourne (30 October 1 November 2023).

**Taylor SE, Jones S**, Chan Y, Golbahar K, Kullar N, Herathmudiyanselage H, Huang N, McMaster B, Bandey S. A pharmacy department pharmaceutical waste audit to inform future interventions: an observational study.

- Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47<sup>th</sup> National Conference, Cairns (2-4 November 2022)
- *International Forum on Quality and Safety in Healthcare, Melbourne* (30 October 1 November 2023).

**Baleswaran P, Taylor S, Richardson B, Ting C.** Can we ditch the fax yet? Maybe not quite... *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47<sup>th</sup> National Conference*, Cairns (2-4 November 2022)

**Su E, Palmer C, Eyles J, McGrath A, Ho L,** Irwin N, Sullivan A. Electronic warfarin home monitoring with Hospital in the Home: Using technology to improve critical communication. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

**Deery C , Harris D, Vellampel A, Wang C, Lisa Ho.** Is it time to wean midorine? A review of midodrine use post ICU discharge. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

**Chou T, Bonadio J, Baleswaran P, Palermo C, Lee M, Ho L.** Can we handle the waste? A review of the disposal of patient controlled analgesia infusions. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47<sup>th</sup> National Conference,* Cairns (2-4 November 2022)

#### 3. PHARMACY SERVICE DESIGN AND DELIVERY (HEALTH SERVICES RESEARCH)

**Atwal B, Richardson B**, Hardidge A, Delahunt M, **Than J**, Walkley E, **Tran T**. An expanded pharmacy service for an Orthopaedic Enhanced Recovery Program to reduce length of stay. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference, Cairns (2-4 November 2022)* 

**Castello J, Richardson B, Nguyen S, Tran T.** Expanded, unit-based clinical pharmacy service to improve patient flow and staff satisfaction. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference, Cairns (2-4 November 2022)* 

**Lau J.** Hepatobiliary Pharmacy Breakthrough: Liver'n the Expanded Unit-based Pharmacist's Dream (Resident of the Year presentation). *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

Harris D, Ho L, Taylor S, Paralejas H, Dang T. Multidisciplinary approach to managing hospital medication shortages – continuity of care, patient safety and financial implications. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47<sup>th</sup> National Conference*, Cairns (2-4 November 2022)

**Lau J, Nguyen S, Tran T,** Horrigan, Yeoh J, Martin L. Designing and implementing a virtual cardiac hospital in the home pharmacy service - an innovative approach. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

Hussainy SY, Rogers JR, Aliye N, Johnson J, Hickman L, **Taylor SE**, **Elliott R**, et al. Investigating the research behaviours of hospital pharmacy staff: capabilities, opportunities and motivations underpinning engagement. *FIP Congress*, Brisbane 2023 (24-28 September)

Anderson B, **Taylor S**, Catanzariti R, Pont L. Training expectations for technicians performing clinical roles. A series of Australian pharmacy workforce focus groups. *Medicines Management 2023, The Society of Hospital Pharmacists of Australia 47th National Conference*, Cairns (2-4 November 2022)

#### 4. TOXICOLOGY

**Hormiz R, Stanley B, Elliott R.** Why do disability group homes call the Poisons Information Centre? A retrospective audit. *TAPNA (Toxicology and Poisons Network Australasia) Annual Scientific Meeting* 2023, Perth (26-28 April 2023)

**Stanley B, Elliott R**. Standardising toxicology-related abbreviations used in poisons information centre clinic notes. *TAPNA (Toxicology and Poisons Network Australasia) Annual Scientific Meeting 2023*, Perth (26-28 April 2023)

Roberts D, Turner C, **Browning J, Elliott R**, et al. Baby spinach contaminated with datura stramonium: roles of poison information centres in toxic outbreaks. *TAPNA (Toxicology and Poisons Network Australasia) Annual Scientific Meeting 2023*, Perth (26-28 April 2023)

#### **AUSTIN HEALTH RESEARCH FEST 2023 POSTERS**

The following posters were presented at the Austin Health Research Fest 2023, in October:

**Su E, Palmer C, Eyles J, McGrath A, Ho L,** Irwin N, Sullivan A. Electronic warfarin home monitoring with Hospital in the Home: using technology to improve critical communication.

**Taylor S, To P, Abdullah A, Elmi H**, Okur H. Medicine-related conversations with our Muslim patients during Ramadan – a hospital and Islamic secondary school collaboration.

**Taylor SE, Jones S**, Chan Y, Golbahar K, Kullar N, Herathmudiyanselage H, Huang N, McMaster B, Bandey S. A pharmacy department pharmaceutical waste audit to inform future interventions: an observational study.

**Chou T, Meaklim A, Taylor S**, Forster B, Godsil S. Development and evaluation of a medicine information resource for patients requiring ketogenic diet therapy for drug resistant epilepsy.

**To TP, Ching MS,** Zeglinski P, **Trajceska L, Lau Y**, Schimmelbusch K. Stability of intravenous oxycodone in compound sodium lactate (Hartmann's) solution.

Baleswaran P, Taylor S, Richardson B, Ting C. Can we ditch the fax yet? Maybe not quite...

**Chou T, Baleswaran P, Bonadio J, Ho L, Palermo C, Lee M.** Can we handle the waste? A review of the disposal of Patient Controlled Analgesia infusion bags.

**Deery C, Vellampel A, Wang C, Ho L, Harris D.** Is it time to wean the midodrine? A review of midodrine use post ICU discharge.

#### Grants and awards

#### **Grants**

Penm J, Angley M, **Elliott R**, et al. Literature review and environmental scan: Medication management at transitions of care stewardship Framework Medication Management at transitions of Care Stewardship Framework. *Australian Commission for Safety and Quality in Healthcare* 2023 (\$64,119)

#### **Prizes and awards**

**Jasmine Lau.** Resident of the Year finalist. Project title: Hepatobiliary Pharmacy Breakthrough: Liver'n the Expanded Unit-based Pharmacist's Dream.

**Rita Hormiz.** Best presentation by a Specialist in Poisons Information (SPI). Presentation title: Why do disability group homes call the Poisons Information Centre? A retrospective audit. *TAPNA (Toxicology and Poisons Network Australasia) Annual Scientific Meeting 2023*, Perth (26-28 April 2023)

**Simone Taylor, Phung To, Huda Elmi, Ayat Abdullah**. Consumer Engagement Award, First place, Austin Health ResearchFest 2023.Project title: Medicine-related conversations with our Muslim patients during Ramadan – a hospital and Islamic secondary school collaboration.

**Chou T, Meaklim A, Taylor S**, et al. Consumer Engagement Award Third place, Austin Health ResearchFest 2023 Project title: A pharmacy department pharmaceutical waste audit to inform future interventions: an observational study

#### Fellowships/scholarships

**Patrick Hilley,** Melbourne Academic Centre for Health (MACH) - Health Services Research Fellowship. Project title: "Can novel virtual biologic clinics be used to help achieve values-based healthcare in inflammatory bowel disease?" [Commenced July 2022, ongoing]

**Elise Mitri,** National Allergy Centre of Excellence (NACE) Postgraduate (PhD) scholarship. Project: "Multidisciplinary health services approaches to low-risk penicillin allergy delabelling".

#### **Higher education and training**

**Angela Shiu.** Master of Clinical Pharmacy, Monash University. Research project: Redefining the transfer medication management plan for subacute inpatients. A Pilot Study. [Awarded September 2023]

**Angela Shiu.** Certificate of completion: SHPA Advanced Training Residency Program - Geriatric Medicine [2023]

#### Australia and New Zealand College of Advanced Pharmacy (ANZCAP) recognition

ANZCAP was created in 2023 to enable pharmacists and pharmacy technicians to be recognised for their experience, expertise and specialty skills. Recognition can be achieved at the levels of resident (ANZCAP-Res), registrar (ANZCAP-Reg) and fellow (FANZCAP). The area(s) of specialty in which recognition was granted is provided in brackets. The pharmacists listed below were recognised in 2023:

- Misha Devchand, FANZCAP (Infectious Diseases)
- Rohan Elliott, FANZCAP (Geriatric Medicine, Research)
- Angela Shiu ANZCAP-Reg (Geriatric Medicine, Transitions of Care)
- Jim Siderov FANZCAP (Oncology Haematology)
- Simone Taylor, FANZCAP (Emergency Medicine, Research)

## Research degree involvement

#### 1. PHD CANDIDATES

#### **Karen Urbancic**

Antifungal stewardship in immunocompromised patients including solid organ transplant and haematology patients, National Centre for Antimicrobial Stewardship, University of Melbourne (parttime, 2016 – ongoing)

#### Elise Mitri

Multidisciplinary health services approaches to low-risk penicillin allergy delabelling, Department of Infectious Diseases, at Austin Health and Peter Doherty Institute for Infection and Immunity, University of Melbourne (2023 – ongoing)

#### 2. RESEARCH SUPERVISION

#### **Simone Taylor**

Brett Anderson. Advancing hospital pharmacy technician roles in the Australian context. *PhD*, University of Sydney, NSW (part-time, 2021 - ongoing)

#### 3. RESEARCH DEGREE PANEL MEMBERSHIPS

#### **Rohan Elliott**

Laura Dowd. Promoting the safe and effective use of opioids and other analgesics in residential aged care facilities. *PhD*, Monash University (2020 – 2023)

Brigid McInerney. Strategies to support psychotropic adverse drug event monitoring in residential care. PhD, *Monash University* (2022 – ongoing)

#### **Simone Taylor**

Elizabeth Doran. Risk assessment of poisoned patients by non-expert clinicians. *PhD*, University of Queensland (part-time 2020 – ongoing)

Charicilia Paradissis, Medication harm in patients after acute myocardial infarction (AMI). *PhD,* University of Queensland (full-time 2019 – 2023)

## Intern Foundation Program Projects for 2023

#### Prasanna Baleswaren

Title: Can we ditch the fax yet? Maybe not quite...

Supervisors: Simone Taylor, Belinda Richardson, Christine Ting

#### **James Bonadio**

Title: Achieving a smooth continuum of care: mapping the community warfarin dosing service workflow

Supervisors: Anne McGrath, Simone Taylor

#### **Terrence Chou**

Title: Development and evaluation of a medicine information resource for patients requiring ketogenic diet therapy for drug resistant epilepsy

Supervisors: Alana Meaklim, Simone Taylor

#### **Caity Deery**

Title: Evaluation of adverse drug reaction documentation on hospital discharge to aged care

Supervisors: Nadia Mouchaileh, Jessica Dayment, Rohan Elliott

#### **Emma Picone**

Title: Supported decision making and informed consent for commencement of psychotropic medications

Supervisors: Alice Frank, Daniela Sepe, Rohan Elliott

#### **Anjaly Vellampel**

Title: Role of interim residential care medication administration charts on continuity of care from ED/SSU to RACF

Supervisors: Simone Taylor, Ruth Colley, Andrew Harding

#### **Colin Wang**

Title: Medication errors and adverse events in vascular unit patients

Supervisors: Jayne Droney, Tim Tran

## Ongoing projects

#### 1. QUALITY USE OF MEDICINES

#### **Aged Care**

**Dayment J, Mouchaileh N, Elliott R, Taylor S**. Evaluation of continuity of care for patients administered denosumab in hospital.

**Elliott RA, Taylor SE,** Barned K, Howell T, Lalic S, Weeks G. Access to medication administration orders and medication supplies at residential aged care facilities post transfer from hospital.

**Mouchaileh N, Elliott R, Taylor S**, Barned K, Howell T, Lalic S, Rashed S, Khoshaba. Medication transcription errors during hospital transfers of care: a multi-centre study.

#### **Emergency Medicine**

**Taylor SE, Mitri E, Harding AM** et al. Development and validation of screening tools for medicine-related problems at patient presentation and after discharge from the emergency department.

Ferma M, Harding A, Green S. Oxycodone use in ankle injury.

**Lu G, Taylor SE, Harding A**, Green S. Interventions to optimise prescribing of strong oral opioids to be taken following emergency department discharge: a systematic review.

Bui C, Harding AM, Taylor SE, Mansouri N. Nurse Initiated Analgesia in the Emergency Department.

#### **Infectious Diseases**

**Urbancic KF**, Kong DCM, Johnson PDR, Slavin MA, Thursky K. Antifungal stewardship in Australian hospitals: defining the current scope and future targets.

**Trubiano J, Urbancic K**, Grigg A, Cohan E, Fong C, Wong E. Posaconazole plasma concentrations in haematology patients and the utility of therapeutic drug monitoring with the oral tablet formulation (multisite project – RMH, Austin)

#### 2. MEDICATION SAFETY AND PHARMACOVIGILANCE

**Aminian P, Dayment J, McCormack E.** Identifying patients at high risk of opioid-related harm in a busy tertiary hospital; where do we start?

#### 3. PHARMACY SERVICE DESIGN AND DELIVERY (HEALTH SERVICES RESEARCH)

**Atwal B, Richardson B**, Hardidge A, Delahunt M, **Than J**, Walkley E, **Tran T**. An expanded pharmacy service for an Orthopaedic Enhanced Recovery Program to reduce length of stay.

**Lau J, Nguyen S, Tran T**, Horrigan, Yeoh J, Martin L. Designing and implementing a virtual cardiac hospital in the home pharmacy service - an innovative approach.

**Shiu A, Tran T.** Evaluation of a comprehensive pharmacy service delivered to Better@Home subacute patients.

#### 4. TOXICOLOGY

Greene S. The Emerging Drugs Network of Australia VIC (EDNAV) project

Wong A, Elliott RA. Impact of COVID-19 on calls to the Poisons Information Centre

Cairns R, Wright N, **Elliott R**, Wylie C, Lynch A, **Greene S**, et al. Boosting public health research with a national poisoning dataset

**Hormiz R, Stanley B, Elliott R**. Disability group home medication incidents: an audit of poisons information centre calls.

**Di Giovine O, Elliott R, Browning J**. Insulin self-administration errors reported to a poisons information centre.

Dempsey R, **Elliott R, Zia K**, Wong A. The impact of rescheduling of nicotine e-cigarettes on related calls to the Victorian Poisons Information Centre

**White J, Elliott R**. A 10-year retrospective review of exposures to volatile nitrites reported to the Victorian Poison Information Centre.

### Research Collaborators

#### **AUSTIN HEALTH DEPARTMENTS**

- Aged Care
- Clinical Pharmacology
- Clinical Toxicology
- Emergency
- Gastroenterology
- General Medicine
- Infectious Diseases
- Oncology
- Orthopaedics
- Victorian Poisons Information Centre

#### **UNIVERSITIES**

- Deakin University
- La Trobe University
- Monash University
- RMIT University
- University of Melbourne
- University of Queensland
- University of Technology, Sydney

#### **AUSTRALIAN HOSPITALS**

- Barwon Health (VIC)
- Eastern Health (VIC)
- Monash Health (VIC)
- Northeast Health Wangaratta (VIC)
- Royal Melbourne Hospital (VIC)
- St Vincent's Hospital (VIC)
- Peter MacCallum Cancer Centre (VIC)
- The Northern Hospital (VIC)

#### **OTHER ORGANISATIONS**

• North Western Primary Health Network