

Pharmacy Department

2021

This year has seen two of our staff achieve their PhD, one of our residents awarded the Victorian Resident of the Year and one of our Interns awarded an Honorable Mention – Hospital Pharmacy Award (one of three only awards provided amongst the cohort of approximately 180 interns statewide). Several new projects have been undertaken, including projects involving ten Monash University 4th year pharmacy students, that we expect to navigate to publication in 2022. The year ended with a total of 24 publications and several others submitted and undergoing peer review.
[Publication date: April 2022]

Research Report



TABLE OF CONTENTS

Contents

Overview _____	1
Publications _____	5
Conference/Seminar Presentations _____	8
Grants and awards _____	11
Research degree involvement _____	12
Intern Foundation Program projects _____	14
Ongoing projects _____	15
Research Collaborators _____	17

Overview

HIGHLIGHTS

Two Doctorates achieved

Two of our pharmacists received their PhD this year, completing 6-7 years of work on a part-time basis. Dr Tim Tran received his PhD from Monash University for his thesis entitled "Expanding pharmacists' roles in medication management for surgical inpatients". Dr Phung To received her PhD from University of Melbourne for her thesis entitled "Improving the management of medications in patients with oral restrictions".

Resident pharmacists' success

Our two resident pharmacists, Natalie Thorp and James Ford presented their residency projects at the Victorian Resident of the Year heats run by the Society of Hospital Pharmacists of Australia in November. Natalie's project reported on medication transcription errors at the time of transfer from acute to subacute care. James' project evaluated the impact of hospital outreach medication reviews on reducing opioid use following joint replacement surgery. James was successful in reaching the national Resident of the Year Finals to be presented early in 2022. This will be the third time that the Resident of the Year awards have been held and, on each occasion, an Austin Health resident pharmacist has presented at the national final.

Intern pharmacists' project success

Six of our intern pharmacists presented their projects at the Monash University Intern Foundation Program presentation evening in November. One of our interns, Jasmin Pradhan, received the Honourable Mention – Hospital Pharmacy Award for her project: "Concordance of emergency department blood gas analyser and pathology laboratory potassium concentrations: implications for hyperkalaemia management". Jasmin was one of approximately 180 interns who presented, and she received one of three awards announced on the night.

Austin Health Research Fest and Pharmacy Research Forum

Pharmacy staff contributed to at least 18 of the 200 posters presented at Austin Health Research Fest in 2021, which is a significant effort! Following Research Fest, the pharmacy department held our third annual Research Forum at which staff and students presented some of the projects they had completed over the previous 12 months. Our pharmacy residents, interns and students had the opportunity to practice their presentations that they would later present at Monash University or SHPA forums and inform the pharmacy department of the projects that they had undertaken. We were fortunate enough to have Professor Mary O'Reilly, Acting Chief Medical Officer, attend the interns' presentations and contribute to some valuable and thought-provoking discussion.

KEY PROJECTS COMPLETED IN 2021

The following is only a selection of the breadth of projects that the department undertook in 2021. Several were published in 2021, and others are expected to be published in the coming year. Findings of these projects are informing future projects and advocacy within Austin Health, state-wide and nationally.

1. *Access to medication administration orders and medication supplies at residential aged care facilities following transfer from hospital.*

This was a multicentre project led by Austin Health pharmacists, A/Prof Rohan Elliott and Dr Simone Taylor. Data was collected by Monash University fourth year pharmacy students across ten Melbourne hospitals and involved over 150 residential aged care facilities (RACFs). Telephone interviews were conducted with RACFs around 72 hours after patients were discharged from a participating hospital.

The multicentre data is consistent with findings of our previous single site studies undertaken at Austin Health. When patients are discharged without a hospital prepared interim residential care medication administration chart, they are more likely to miss doses in the first 24-72 hours post-discharge. They are also more likely to require a locum general practitioner (who does not know the patient) to prepare their RACF long-term medication chart, rather than their usual general practitioner preparing the chart at a time that is more convenient to them.

This work has formed the basis of our discussions with the Australian Commission on Safety and Quality in Health Care as they update the national Guiding Principles of Medication Management in Residential Aged Care Facilities.

2. *Enhancing pharmacists' roles in antimicrobial stewardship.*

Sharmila Khumra is nearing completion of her Master of Pharmaceutical Science at Monash University on a part-time basis. In 2021, Sharmila published two papers related to her thesis. The first evaluated intravenous to oral antimicrobial switch in a hospital with a tightly regulated antimicrobial stewardship program (*British Journal on Clinical Pharmacology* 2021; 87: 3354–8). The second paper was a nationwide survey that explored the practice, confidence, and educational needs of hospital pharmacists in reviewing antimicrobial prescribing (*BMC Medical Education* 2021; 21: 235. doi.org/10.1186/s12909-021-02664-1)

3. *The CANBACK trial: a randomised, controlled clinical trial of oral cannabidiol for people presenting to the emergency department with acute low back pain.*

Dr Michael Ching, Senior Pharmacist – Clinical Trials, was part of a collaboration with the emergency department to evaluate oral cannabidiol in acute back pain. This study was published in the *Medical Journal of Australia* (*Med J Aust* 2021; 214 (8): 370-375). Michael played a significant role in coordinating the logistics of access to this medicinal cannabis product and a corresponding placebo control, in addition to patient randomisation. The study found that cannabidiol was not superior to placebo as an adjunct for relieving acute non-traumatic low back pain in the emergency department.

4. Medication transcription errors associated with electronic prescribing during internal hospital transfers of care.

A problem with electronic medication management systems (eMMS) in Victoria, such as Cerner, is the discontinuation of medication charts during some internal hospital transfers of care (e.g. transfers from acute to subacute care). This is due to a technical requirement to separate encounter types for state funding purposes. A study conducted at Austin Health, by Senior Pharmacist - Aged Care, Nadia Mouchaileh, and Resident Pharmacist, Natalie Thorp, found that 65% of patients transferred from acute to subacute care encountered at least one medication transcription error.

This study has informed the development of a multicentre collaboration that will evaluate the prevalence and potential clinical impacts of these errors and medication administration delays in 2022. The study findings will be used to raise awareness of this problem with the Department of Health and Human Services, hospital administrators and eMMS managers, and inform the development of risk-mitigation solutions.

5. Medication management during Ramadan: a cross sectional study.

Ramadan fasting is one of five duties of Islam and involves abstinence from all food and drink from sunrise to sunset. Although there are exemptions from fasting, such as illness or taking medications, some Muslims with medical and surgical conditions choose to fast for a range of reasons. Our interest in exploring this issue stemmed from some patients refusing medication doses whilst in hospital, due to their fasting.

During Ramadan 2021, a linguistically and culturally diverse group of hospital pharmacists and Monash University fourth year pharmacy students interviewed Austin Health Muslim patients about their medication taking practices during Ramadan. This mixed methods study was led by Dr Phung To and Dr Simone Taylor, in collaboration with Iman Zayegh, a community pharmacist with expertise in advising patients about modifying their medication regimens during periods of fasting.

The study found that almost half of our Muslim patients fasted for Ramadan. Most of these patients altered their medication regimen to facilitate fasting, often without input from their healthcare professionals. Several patients reported having experienced medication-related adverse effects associated with altering their medication regimen, such as hypoglycaemia in diabetic patients. Patients reported diverse views and experiences around medication practices during Ramadan and past relationships with healthcare professionals influenced this practice. Participants asked that healthcare professionals partner with their Muslim patients to optimise medication management and health outcomes for Ramadan.

6. *Evaluation of a novel advanced pharmacy technician role: discharge Medication Education Technician.*

This project undertaken at Austin Health saw the development of a comprehensive training program to credential a hospital pharmacy technician (HPT) to provide discharge medication education to a defined group of surgery centre patients under indirect supervision of clinical pharmacists. (Journal of Pharmacy Practice and Research 2021;51(5):396-405). Upon completing the program, the HPT was designated a medication education technician (MEdTech). Consecutive overnight-staying patients were assigned to receive education by the MEdTech or pharmacists according to staff availability. Patient satisfaction with their education experience was measured via telephone calls the day following discharge.

Two hundred patients provided feedback (100 educated by the MEdTech and 100 by pharmacists). All patients reported high levels of overall satisfaction with their education experience, irrespective of which pharmacy staff member provided the education; a finding supported by the qualitative feedback.

This study supports advanced practice HPTs assisting with the provision of medication information to patients. This novel workforce model could facilitate pharmacists working in advanced-scope roles by having advanced HPTs undertake uncomplicated aspects of clinical pharmacy within a defined scope of practice and with specific pharmacist referral criteria.

LOOKING FORWARD

After a busy 2021 undertaking several new projects and some challenges in achieving timely peer review of submitted papers, we look forward to navigating several projects through to publication in the coming year. We also look forward to working with the staff in the Office for Research, led by their new Manager, Heidi Gaulke, as they undertake their significant work to update and streamline the organisation's ethical and governance review processes. A further goal for this coming year will be to develop collaborations with the newly formed Clinical Analytics and Reporting Unit (formerly Business Intelligence Unit) and Chief Pharmacy Informatics Officer, Christine Ting, to improve our data access and linkage capacity. The work of Phung To must be acknowledged, for her leadership in developing these relationships and capacity.

Dr Simone Taylor
Senior Pharmacist – Emergency Medicine and Research

Dr Rohan Elliott
Senior Pharmacist – Aged Care and Research
Manager, Victorian Poisons Information Centre.

April 2022

Publications

Papers, editorials and letters published in peer reviewed journals in 2021. Publications that were also included in the 2020 Pharmacy Department Research Report as an 'online early' or 'E-pub' publication are indicated with an asterix.*

1. QUALITY USE OF MEDICINES

Aged Care

Elliott RA, Tran T, Taylor SE. Wastage of medications supplied by hospitals to facilitate continuity of care when patients are discharged to residential care facilities in Victoria, Australia: An observational study. *Australasian Journal on Ageing* 2021; 40(3): 323-327. <https://doi.org/10.1111/ajag.12925>

Emergency Medicine

Elmi H, Pisasale D, Taylor S, Kebire O, Abbott L. Ketamine - is the current 200 mg product fit for purpose in the emergency department? *Emergency Medicine Australasia*. 2021; 33(1): 155-156* <https://doi.org/10.1111/1742-6723.13695>

Eggink KM, **Taylor SE,** Judkins S, Taylor DMcD. Prescription medication use by emergency department doctors to improve work and academic performance, and to manage stress and anxiety. *Emergency Medicine Australasia*. 2021; 33(2): 369-371. <https://doi.org/10.1111/1742-6723.13733>

Nguyen JP, Harding AM, Greene SL Estimating the proportion of patients who transition to long-term opioid use following oxycodone initiation in the emergency department. *Emergency Medicine Australasia*. 2021; 33(3): 442-446* <https://doi.org/10.1111/1742-6723.13644>

Joules E, Yeoh M. (2021), Overuse of opioids for acute migraine in an Australian emergency department. *Emergency Medicine Australasia*. 2021; 33(6): 1133-1134. <https://doi.org/10.1111/1742-6723.13851>

Bebee B, Taylor DM, Bourke E, Pollack K, Foster L, **Ching M,** Wong A. The CANBACK trial: a randomised, controlled clinical trial of oral cannabidiol for people presenting to the emergency department with acute low back pain. *Medical Journal of Australia* 2021; 214: 370-375. <https://doi.org/10.5694/mja2.51014>

Hodgson S, **Harding A,** Bourke EM, Taylor DM, **Greene S.** A prospective, randomised, double-blind trial of intravenous chlorpromazine versus intravenous prochlorperazine for the treatment of acute migraine in adults presenting to the emergency department. (STELAR trial). *Headache*. 2021; 61(4):603-611. <https://doi.org/10.1111/head.14091>

Taylor SE, Taylor DM, **Pisasale D, Booth K,** Lippmann J. Regular medication use by active scuba divers with a declared comorbid medical condition and victims of scuba and snorkelling-related fatalities. *Diving Hyperbaric Medicine* 2021; 51(3): 264-270. <https://doi.org/10.28920/dhm51.3.264-270>

Infectious Diseases

Chua KYL, Vogrin S, **Bury S**, Douglas A, Holmes NE, Tan N, Brusco NK, Hall R, Lambros B, Lean J, Stevenson W, **Devchand M**, **Garrett K**, Thursky K, Grayson ML, Slavin MA, Phillips EJ, **Trubiano JA**. The Penicillin allergy delabeling program: A multicenter whole-of-hospital health services intervention and comparative effectiveness study. *Clinical Infectious Diseases* 2021; 73(3): 487-496* <https://doi.org/10.1093/cid/ciaa653>

Khanina A, **Urbancic KF**, Haeusler GM, Kong DCM, Douglas AP, Tio SY, Worth LJ, Slavin MA, Thursky KA. Establishing essential metrics for antifungal stewardship in hospitals: the results of an international Delphi survey. *Journal Antimicrobial Chemotherapy* 2021; 76(1): 253-262* <https://doi.org/10.1093/jac/dkaa409>

Narayanasamy S, Nation RL, **Mahony AA**, Grayson ML, Kwong KC, Sherry NL, **Khumra S**, Ellis, Frauman AG, Holmes NE. Cure of Limb-Threatening XDR *Pseudomonas aeruginosa* Infection: Combining Genome Sequencing, Therapeutic Drug Level Monitoring, and Surgical Debridement (case report) *Open Forum Infectious Diseases*. 2021; 8(1): ofaa572. <https://doi.org/10.1093/ofid/ofaa572>

Cairns KA, Avent M, Buono E, Cheah R, **Devchand M**, **Khumra S**, Rawlins M, Roberts JA, Xenos K, Munro C. Standard of practice in infectious diseases for pharmacy services. *Journal of Pharmacy Practice and Research* 2021; 51(3): 247-264. <http://dx.doi.org/10.1002/jppr.1744>

Khumra S, **Mahony AA**, Bergen PJ, **Elliott RA**. Evaluation of intravenous to oral antimicrobial switch at a hospital with a tightly regulated antimicrobial stewardship program. *British Journal of Clinical Pharmacology* 2021; 87(8): 3354-8. <https://doi.org/10.1111/bcp.14734>

Khumra S, **Mahony AA**, Bergen PJ, Page AT, **Elliott RA**. Exploring the practice, confidence and educational needs of hospital pharmacists in reviewing antimicrobial prescribing: a cross-sectional, nationwide survey. *BMC Medical Education* 2021; 21: 235. <https://doi.org/10.1186/s12909-021-02664-1>

2. MEDICATION SAFETY AND PHARMACOVIGILANCE

McLachlan GB, **Keith C**, **Wood C**. The cost of pharmacovigilance: a time and motion study of an adverse drug reaction program. *International Journal of Pharmacy Practice*. 2021; 29(5): 521-523. <https://doi.org/10.1093/ijpp/riab037>

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* (Published online 21 December 2021, <https://doi.org/10.1177/18333583211057741>)

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

Tran T, Taylor SE, George J, Chan V, Mitri E, Elliott RA. Pharmacist-assisted prescribing in an Australian hospital: a qualitative study of hospital medical officers' and nursing staff perspectives. *Journal of Pharmacy Practice and Research* (Published online 5 December 2021, <https://doi.org/10.1002/jppr.1766>)

Anderson BJ, Carroll ME, Taylor SE, Chow A. Perceptions of hospital pharmacists and pharmacy technicians towards expanding roles for hospital pharmacy technicians: a cross sectional survey. *Journal of Pharmacy Practice and Research*, 2021; 51(3): 216-224* <https://doi.org/10.1002/jppr.1697>

Anderson BJ, Taylor SE, Mitchell SM, Carroll ME, Verde A, Sepe D, El-Katateny E, Droney J, Than J, Hilley P. Evaluation of a novel advanced pharmacy technician role: discharge Medication Education Technician. *Journal of Pharmacy Practice and Research*, 2021; 51(5): 396-405. <https://doi.org/10.1002/jppr.1752>

4. TOXICOLOGY

Bourke EM, **Macleod D, Robinson J, Greene S.** Iatrogenic Medication Errors reported to the Victorian Poisons Information Centre. *Internal Medicine Journal* 2021; 51(11): 1862-1868* <https://doi.org/10.1111/imj.14940>

West H, Fitzgerald J, Hopkins K, Li E, Clark N, Tzanetis S, **Greene SL**, Reid GE. Early warning system for illicit drug use at large public events: trace residue analysis of discarded drug packaging samples. *Journal of American Society for Mass Spectrometry*. 2021; 32(10): 2604-2614. <https://doi.org/10.1021/jasms.1c00232>

Smith JL, Soderstrom J, Dawson A, Alfred S, **Greene S**, Isoardi K, McCutcheon D, Oosthuizen F, Ezard N, Burcham J, Fatovich DM; EDNA Investigators. The Emerging Drugs Network of Australia: A toxicosurveillance system of illicit and emerging drugs in the emergency department. *Emergency Medicine Australasia*. 2021 Aug 12. <https://doi.org/10.1111/1742-6723.13839> (Published ahead of print)

5. OTHER PUBLICATIONS (not peer-reviewed)

Liew D, Chan V, Kochman A, Su E, McMaster C, Garrett K, Frauman A. Evidence informing the inclusion of gabapentinoids and tramadol on Victoria's SafeScript: a 2021 update. [Commissioned report]

Christophi C, Khor R, Michael M, Murali K, Nikfarjam M, Rocca R, **Siderov J**, et al. Expert working group. Optimal care pathway for people with pancreatic cancer. 2nd edition. Cancer Council Victoria, Melbourne. Available at: <https://www.cancer.org.au/assets/pdf/pancreatic-cancer-2nd-edition>

Conference/Seminar Oral Presentations and Posters

Research papers and posters, and continuing professional development lectures/workshops, presented externally in 2021. (Abstracts accepted for SHPA MM2021 will be presented in May 2022, and therefore included in the 2022 report)

1. QUALITY USE OF MEDICINES

Aged Care

Elliott R. The pharmacist's role in geriatric medicine. 6th International Conference on Clinical Pharmacy: CPCON (online), Manipal, India 2021 (January 8-9)

Oncology

Stewart T, Khot A, Darling M, Grigg A, Janson B, **Siderov J**, Xie S. Acute kidney injury in patients receiving high-dose etoposide phosphate prior to hematopoietic stem cell transplant is associated with high body mass index – a multisite retrospective analysis. Proc BLOOD 2021: (abstract H048)

Vasileff H, Coutsouvelis J, O'Connor S, Powell M, Rowan G, **Siderov J**, et al. Advancing Cancer Pharmacy Practice – SHPA Advanced Training Residency in Cancer Services. Proc COSA 2021: (abstract 351)

2. MEDICATION SAFETY AND PHARMACOVIGILANCE

Liew D. Data science and the quality use of medicines: a tool for large scale understanding, improvement and assessment. National Medicines Symposium (online). 2021 (May 18).

McMaster C. Predicting recurrent readmission for targeted medication intervention using artificial intelligence. National Medicines Symposium (online). 2021 (May 18).

Su E, Hu R, Aminian P, Tran T, Trajceska L, Garrett K, Frauman AG, Meyer I, **Liew D.** Excessive opioid prescribing on discharge following surgery would persist despite regulatory changes and institutional guidance. National Medicines Symposium (e-poster). 2021 (May 18).

Su E, LoPresti K, Sparham E, **Aminian P, Liew D.** Prescribing, patient, and hospital admission characteristics are all associated with opioid incident reports in hospital inpatients. National Medicines Symposium (e-poster). 2021 (May 18).

Ting C. Target Zero HAC VTE. International Forum on Quality and Safety in Healthcare (e-poster). 2021 (September 8-10)

Abdullah A, Abdullah N, Khan N, Huang K, Sakinah Shirzad S, Taylor SE, To TP. Medication management during Ramadan: a cross sectional study. International Conference of Undergraduate Research (online). 2021(September 28-29).

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

Ford J, Tran T, Taylor S, Antoine S, Veevers B, Elliott R. Evaluation of a Post-Discharge Hospital Outreach Medication Review on opioid Use following knee arthroplasty, Victorian Branch Resident of the Year Award presentation (4 November)

Verde A, Anderson B, Taylor S, Maggs K. Educating the support level pharmacy workforce – culture change that is a win-win for all. National Allied Health Conference. (online) 2021 (9-12 August)

4. TOXICOLOGY

Elliott R. Impact of COVID-19 on poisons information centres. Toxicology and Poisons Network Australasia (TAPNA) Annual Scientific Meeting, Newcastle 2021 (May 5-7).

Norvill A. Hand sanitiser ingestions have increased in young children during the COVID-19 pandemic. (TAPNA) Annual Scientific Meeting, Newcastle 2021 (May 5-7).

AUSTIN HEALTH RESEARCH FEST 2021 POSTERS

The following posters were presented at the Austin Health Research Fest 2021, October.

Allied Health: https://padlet.com/ResearchFest/2021_AlliedHealth

AH09 **Natalie Thorp, Nadia Mouchaileh.** Austin Health Cross-Campus Medication Reconciliation Audit.

AH10 **Simone Taylor, The-Phung To,** Ayat Abdullah, Nur Abdullah, Kerry Huang, Naemah Khan, Sakinah Shirzad, **Huda Elmi,** Iman Zayegh. Medication management practices of Muslim patients hospitalised prior to or during Ramadan: an observational study.

AH11 **Stephanie Jones, Phung To, Rohan Elliott.** A retrospective audit of doses omitted inappropriately for medications with directions specifying take 'with or after food' in patients fasting for a procedure.

AH12 **The-Phung To, Simone Taylor,** Ayat Abdullah, Nur Abdullah, Kerry Huang, Naemah Khan, Sakinah Shirzad, **Huda Elmi,** Iman Zayegh. Qualitative exploration of Australian Muslim patients' perceptions and experiences regarding medication management during Ramadan.

AH13 **Lisa Phan, Nadia Mouchaileh, Rohan Elliott.** An evaluation of the documentation of patients' pre-admission levodopa regimens and the frequency of levodopa admission prescribing errors in patients with Parkinson's disease.

AH14 **Olivia Reid, Janet Ngo, Rohan Elliott,** Samanta Lalic, **Elizabeth Su.** Are we overdosing older people with paracetamol in hospital?

AH15 and QI05 **Kate Lowe, Catherine Wood, Lisa Ho, Amanda Ting, Jasmine Lau, Emily Ferraro,** Beth Veevers, Shari Antoine, Deborah Stevens, Sarah McKernin, Katrina Capell, **Simone Taylor.** Feasibility of a smoking cessation program to support hospitalised respiratory and cardiology patients across the continuum of care.

2. **Anaesthesia:** https://padlet.com/ResearchFest/2021_Anaesth

AN02 and N10 Talman A, **Trajceska L**, Desmond F. Audit of the compliance and accuracy of the documentation of disposal of unused controlled drugs in operating theatres at Austin Health.

3. **Critical Care:** https://padlet.com/ResearchFest/2021_CritEmergAgedHaem

CE02 **Jasmin Pradhan, Andrew Harding, Simone Taylor**, Que Lam, Yvonne Reidy. Concordance of emergency department blood gas analyser and pathology laboratory potassium concentrations: implications for hyperkalaemia.

4. **Infectious Diseases:** https://padlet.com/ResearchFest/2021_IDandMedIm

ID24 Wendy Zhao, **Misha Devchand**, Natasha E Holmes (no abstract available)

ID25 Christine Wade, **Lisa Hui**, Natasha Holmes (no abstract available)

ID26 Chua KYL, Vogrin S, Douglas A, Copaescu A, **Bury S**, Brusco T, Hall R, Lambros B, Stevenson Lambros B, Stevenson W, Drewett G, **Devchand M**, Holmes NE, **Trubiano JA** (no abstract available)

5. **Nursing:** https://padlet.com/ResearchFest/2021_Nursing

N02 Kate LoPresti, Emma Sparham, **Andrew Harding, Simone Taylor, Fran Tanner**, Leanne Mills, Bernadette Twomey. Evaluation of after hours medication borrowing practices between inpatient wards.

N10 and AN02 Talman A, **Trajceska L**, Desmond F. Audit of the compliance and accuracy of the documentation of disposal of unused controlled drugs in operating theatres at Austin Health .

N15 Chua KYL, Vogrin S, Douglas A, Copaescu A, **Bury S**, Brusco T, Hall R, Lambros B, Stevenson W, Drewett G, **Devchand M**, Holmes NE, **Trubiano JA**. Antibiotic allergy de-labelling.

6. **Quality Improvement:** https://padlet.com/ResearchFest/2021_QI

QI05 **Kate Lowe, Catherine Wood, Lisa Ho, Amanda Ting, Jasmine Lau, Emily Ferraro**, Beth Veevers, Shari Antoine, Deborah Stevens, Sarah McKernin, Katrina Capell, **Simone Taylor**. Feasibility of a smoking cessation program to support hospitalised respiratory and cardiology patients across the continuum of care.

7. **Rheumatology and Gastroenterology:** https://padlet.com/ResearchFest/2021_RheumGastro

RG14 **Patrick Hilley**, Darren Wong, Madeline Roberts, Ronald Ma, and Peter De Cruz. Health economic implications of transitioning from intravenous to subcutaneous infliximab for inflammatory bowel disease - an opportunity to reduce costs associated with health care delivery.

RG15 **Patrick Hilley**, Christopher Li Wai Suen, Ashish Srinivasan, Matthew C Choy, Peter De Cruz Variations in disease monitoring between IBD patients on intravenous and subcutaneous biologic agents .



Grants and awards

Phung To, PhD, University of Melbourne: Medication management during periods of restricted oral intake

Tim Tran, PhD, Monash University: Expanding pharmacists' roles in medication management for surgical inpatients

James Ford, Victorian Pharmacy Resident of the Year, for his project: "Evaluation of a Post-Discharge Hospital Outreach Medication Review on opioid use following knee arthroplasty", Society of Hospital Pharmacists of Australia (Victorian Branch), November 2021

Jasmine Pradhan, Honourable Mention – Hospital Pharmacy Award for her project: "Concordance of emergency department blood gas analyser and pathology laboratory potassium concentrations: implications for hyperkalaemia management", Intern Foundation Program, Monash University, November 2021

Jim Siderov, Re-certification, Board Certified Oncology Pharmacist (BCOP) Board of Pharmaceutical Specialties, Washington DC, USA

Research degree involvement

1. PHD CANDIDATES

Phung To

Medication management during periods of restricted oral intake, University of Melbourne. PhD awarded February 2021.

Tim Tran

Expanding pharmacists' roles in medication management for surgical inpatients. Monash University. PhD awarded December 2021.

Karen Urbancic

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

2. MASTER OF PHARMACEUTICAL SCIENCE CANDIDATES

Sharmila Melvani

Enhancing pharmacists' roles in antimicrobial stewardship. Monash University (part-time, 2016 - ongoing)

3. RESEARCH SUPERVISION

Rohan Elliott

Julia Salanowski. Pharmacist provision of medicines information via bedside whiteboards during inpatient stays to improve patient engagement and self-efficacy. *M Clin Pharm*, Monash University (part-time, 2021 - ongoing)

Sharmila Melvani. Enhancing pharmacists' roles in antimicrobial stewardship. *M Pharm Sc*, Monash University (part-time, 2016 - ongoing)

Tim Tran. Expanding pharmacists' roles in medication management for surgical inpatients. *PhD*, Monash University. Completed 2021.

Eric Arsanious, Rachel Goodman, Emily Huynh, Claudia Rosenbrock, Sarah Wan, *4th year Inquiry students*, Monash University. Access to medication administration orders and medication supplies at residential aged care facilities post transfer from hospital.

Simone Taylor

Tim Tran. Expanding pharmacists' roles in medication management for surgical inpatients. *PhD*, Monash University. Completed 2021

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

Eric Arsanious, Rachel Goodman, Emily Huynh, Claudia Rosenbrock, Sarah Wan, *4th year Inquiry students*, Monash University. Access to medication administration orders and medication supplies at residential aged care facilities post transfer from hospital.

Ayat Abdullah, Nur Abdullah, Naemah Khan, Kerry Huang, Sakinah Shirzad, *4th year Inquiry students*, Monash University. Medication management during Ramadan: a cross sectional study.

Jessica D'Lima. *BMedSci (Honours)*, University of Melbourne. Evaluation of Inter-rater Reliability of Screening Tools to Identify the Risk of Medication Related Problems Across the Continuum of Emergency Department Care.

Tim Tran

Isabel Jones, Theana Bethavas, Roy Khadira, Sarah Zalzala. *BPharm (Honours)*, RMIT University. Opioid use in inpatient rehabilitation.

Phung To

Ayat Abdullah, Nur Abdullah, Naemah Khan, Kerry Huang, Sakinah Shirzad, *4th year Inquiry students*, Monash University. Medication management during Ramadan: a cross sectional study.

Lucy Morison

Isabel Jones, Theana Bethavas, Roy Khadira, Sarah Zalzala. *BPharm (Honours)*, RMIT University. Opioid use in inpatient rehabilitation.

4. 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 – 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 – ongoing)

Intern Foundation Program Projects for 2021

Lisa Phan

An evaluation of the documentation of patients' pre-admission levodopa regimens and the frequency of levodopa admission prescribing errors in patients with Parkinson's disease.

Supervisors: **Nadia Mouchaileh, Rohan Elliott**

Steph Jones

A retrospective audit of doses omitted inappropriately for medications with directions specifying take 'with or after food' in patients fasting for a procedure.

Supervisors: **Phung To, Rohan Elliott**

Richa Dudhani

Medication errors at transition points in and out of hospital in orthopaedic patients.

Supervisors: **Tim Tran, Olivia Reid, Rohan Elliott**

Michelle Chen

A prospective audit of Emergency Department management of acute asthma in adult patients.

Supervisors: **Ruth Colley, Andrew Harding, Simone Taylor**

Kate Lowe

Feasibility of a smoking cessation program to support hospitalised respiratory and cardiology patients across the continuum of care.

Supervisors: **Catherine Wood, Lisa Ho, Simone Taylor**

Jasmin Pradhan

Concordance of emergency department blood gas analyser and pathology laboratory potassium concentrations: implications for hyperkalaemia management.

Supervisors: **Andrew Harding, Simone Taylor**

Ongoing projects

1. QUALITY USE OF MEDICINES

Aged Care

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.

Taylor SE, Joules E, Verde A, Ali Z. Management of Patient's Own Medications brought into the Emergency Department and Short Stay Unit.

Verde A, Joules E, Harding A. Emergency Department warfarin discharge plan audit.

Harding A, Mitri E, Wells G, Wellington D. An innovative electronic anticoagulation alert system to improve continuity of patient care on discharge from an 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.

Infectious Diseases

Khumra S, Mahony A, Bergen P, Stewart K, Elliott R. Coaching ward pharmacists in antimicrobial stewardship to improve antimicrobial prescribing.

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?



Uzunbay Z, Elliott R, Taylor S, Joules E, Ferraro E, Sepe D. Accuracy of labels on community pharmacy prepared dose administration aids (DAA) labels.

3. TOXICOLOGY

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

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

Elliott RA, Greene S. National Poisoning Dataset project



Research Collaborators

AUSTIN HEALTH DEPARTMENTS

- Aged Care
- Clinical Pharmacology
- Clinical Toxicology
- Emergency
- 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)
- Monash Health (VIC)
- Northeast Health – Wangaratta (VIC)
- Royal Melbourne Hospital (VIC)
- St Vincent’s Hospital (VIC)
- Flinders Medical Centre (SA)
- Prince of Wales Hospital (NSW)
- Princess Alexandra Hospital (QLD)
- The Prince Charles Hospital (QLD)
- The Townsville Hospital (QLD)

OTHER ORGANISATIONS

- North Western Primary Health Network