



Annual Research Report 2021

Princess Alexandra Hospital Pharmacy Department

February 2022

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Overall Summary



2021 Research Report Summary

Princess Alexandra Hospital Pharmacy Department

Students and Supervision



9 HDR candidates

who are department staff members undertaking a PhD or MPhil

14 

HDR candidates supervised by department staff members

22 

Quality Use of Medicines projects supervised by department staff members

6 

Department staff members who enrolled or completed post-graduate coursework degrees

Publications and Conferences



43

publications in peer-reviewed journals



34

conference oral or poster presentations delivered

Funding and Awards



\$265,000 attained

from funding or grants awarded to department staff members



10

awards or prizes won by department staff members



Department staff members are also involved with various other research-related, teaching, and training activities

Research Highlights – From The Director:

Clinical research is becoming a priority in the Pharmacy departments in Metro South Health (MSH). Whilst industry affiliated research has existed for many years, this has not been the case with practice-based research. However, recently, all departments have strived to be leaders in this field, which is an incredible goal for busy clinicians with relentless workloads. As a reward, the clinical research culture has started to evolve, and research outputs are growing.

Crucial to clinical research expansion has been the Pharmacy Research in Metro South (PRIMS) collaborative. This was initially designed to build capacity and provide a platform for collaborative research across MSH pharmacy departments. It now acts as a research hub and drives current research activities, skills, and opportunities. Its key goals are to develop an active network between MSH hospitals, universities, and research institutions (e.g., Translation Research Institute); and to nurture research and support higher degree research students and potential candidates.

MSH Pharmacy now nurtures a strong research culture which has dramatically increased HDR students, grants, and publications. This research report demonstrates the amazing output from busy clinicians, and I congratulate all those involved. It is wonderful that our research is focused on improving patient care through clinical redesign, extended scope practice, medication use surveillance and harm prevention.

Higher Degree Research Students

Enrolled

Chariclia Paradissis: 2019-2022, full-time PhD candidate, *Medication harm in patients after Acute Myocardial Infarction*, supervised by A/Prof Michael Barras, Prof Ian Coombes and A/Prof Neil Cottrell

Courtney Hill: 2021-2026, part-time PhD candidate, *Collaborative Optimisation of Medications*, supervised by A/Prof Michael Barras, Dr Nazanin Falconer and Prof Ian Coombes

Elizabeth Currey: 2021- 2023, part-time MPhil candidate, *A pharmacist to improve medication safety for critically ill patients in the Emergency Department*, supervised by Dr Nazanin Falconer and A/Prof Michael Barras

Keshia De Guzman: 2020-2023, full-time PhD candidate, *Economic and logistical factors influencing telehealth uptake and sustainability in primary care in Australia*, supervised by Dr Centaine Snoswell and Prof Anthony Smith

Marissa Ryan: 2021-2024, full-time PhD candidate, *Development, implementation, and evaluation of a cancer pharmacy telehealth model of care*, supervised by Dr Centaine Snoswell and Prof Elizabeth Ward

Ming Gene Chai: 2020-2022, full-time PhD candidate, *Personalising antimicrobial therapy to improve outcomes in patients with life-threatening infections*, supervised by Prof Jason Roberts and Dr Menino Cotta

Nameer Van Oosterom: 2018-2021, full-time PhD candidate, *Aspirin for the prophylaxis of venous thromboembolic events*, supervised by A/Prof Neil Cottrell and A/Prof Michael Barras

Natasha Taufatofua: 2017-2023 full-time PhD candidate, *Investigating the Cultural Context of Medication Adherence in a Maori and Pacific Islander population with Type 2 diabetes*, supervised by Dr Adam La Caze, A/Prof Neil Cottrell and Dr Heena Akbar

Timothy Tanzer: 2020-2022, full-time PhD candidate, *The Quality and Safe use of Clozapine*; supervised by A/Prof Dan Siskind, Prof Steve Kisely and A/Prof Michael Barras

Post-Graduate Degree Research Students

Enrolled

Bradley Jeffrey: Master of Public Health, The University of Tasmania

Kate Ziser: Master of Clinical Pharmacy, The University of Queensland

Leon Smareglia: Master of Clinical Pharmacy, The University of Queensland

Completed

Bradley Jeffrey: Completed 2021, Bachelor of Clinical Redesign with Honours and Graduate Certificate in Clinical Redesign

Courtney Hill: Completed 2021, Graduate Certificate of Clinical Redesign, The University of Tasmania

Nancy Wang: Completed 2020, Master of Clinical Pharmacy, The University of Queensland

Supervision

Higher Degree Research Supervision

Aspirin for the prophylaxis of venous thromboembolic events, Nameer Van Oosterom, PhD candidate, supervised by A/Prof Neil Cottrell and **A/Prof Michael Barras**

A pharmacist to improve medication safety for critically ill patients in the Emergency Department, Elizabeth Currey, MPhil candidate, supervised by **Dr Nazanin Falconer** and **A/Prof Michael Barras**

Collaborative Optimisation of Medications, Courtney Hill, PhD candidate, supervised by **Dr Nazanin Falconer** and **A/Prof Michael Barras**

Economic and logistical factors influencing telehealth uptake and sustainability in primary care in Australia, Keshia De Guzman, PhD candidate, supervised by **Dr Centaine Snoswell** and Prof Anthony Smith

Electronic medication management of anticoagulants and its impact on clinical outcome, Jodie Austin, PhD candidate, supervised by **A/Prof Michael Barras**, and Dr Clare Sullivan

Implementing a medication review pharmacy clinic and the potential impact on patient care, J Costello, PhD candidate, supervised by **A/Prof Michael Barras** and A/Prof Neil Cottrell

Medication harm in patients after Acute Myocardial Infarction, Chariclia Paradissis, PhD candidate, supervised by **A/Prof Michael Barras**, Prof Ian Coombes and A/Prof Neil Cottrell

Molecular and cellular studies on the role of matrix dependent mechanisms of atherosclerosis: role of transcription factor Smad and its phosphorylation; R Mohamed, PhD candidate, supervised by **A/Prof Michael Barras** and Dr Danielle Kamato

Occupational violence risk factors in the emergency department: can they be detected in triage, Cara-Joyce Cabilan, PhD candidate, supervised by Dr Rob Eley, Dr Amy Johnston and **Dr Centaine Snoswell**

Optimising Antibiotic Use in Australian Residential Aged Care Facilities, Dipti Khatri, PhD candidate, supervised by Prof Len Gray, Prof David Paterson, A/Prof Chris Freeman and **Dr Nazanin Falconer**

Pharmacist led post discharge medication review in patients at high-risk of medication related harm, A Kosteller, MPhil candidate, supervised by **A/Prof Michael Barras** and A/Prof Neil Cottrell

Pharmacy telehealth service for adult patients with cancer, Marissa Ryan, PhD candidate, supervised by **Dr Centaine Snoswell** and Prof Elizabeth Ward

The Quality and Safe use of Clozapine, Timothy Tanzer, PhD candidate, supervised by A/Prof Dan Siskind, Professor Stev Kisely and **A/Prof Michael Barras**

Venous thromboembolism in orthopaedic patients, C.Rose, PhD candidate, supervised by **A/Prof Michael Barras** and Lisa Nissen and Esther Lau

Majors and Post-Graduate Supervision

An evaluation of pharmacist's ability to assess evidence of drug harms, Anvir Dhaliwal (UQ Majors Project), supervised by **Dr Nazanin Falconer** and Dr Adam La Caze

Association of Medication Harm with Frailty, Mr Jonathan Lam (UQ Majors Project), supervised by **Dr Nazanin Falconer, A/Prof Michael Barras, Mr Duncan Long**, and Dr Leila Shafiee

Investigating the natural disaster preparedness of hospital pharmacists and pharmacies in a metropolitan capital city, Amelia Anderson (QUT Majors Project), supervised by Libby McCourt, Sam Hollingworth, and **A/Prof Michael Barras**

Quality Use of Medicines Projects

A retrospective audit of Microbial Keratitis trends at the Princess Alexandra Hospital: 2015-2020. (2021), supervised by **Ljubica Bukorovic, Scott Mitchell**, Dr Richard Sarafian, and Dr Andrew Apel

A retrospective review of medicines supplied under compassionate supply arrangement at Princess Alexandra Hospital. (2021), supervised by **Jane Dunsdon** and **Arna Lancashire**

Assessing the frequency of use of neuromuscular monitoring with neuromuscular blocking agents at PAH. (2021), supervised by **Claudia Jahnigen, Martha Ghaly** and **Tori Forrester**

Audit of Discharge Pain Management Plans in Acute Trauma Surgery Patients at the Princess Alexandra Hospital. (2021), supervised by **Victoria Forrester, Kristin Tynan, Andy Lo**, and **Bradley Jeffery**

Blood Glucose Management Post-Cardiac Surgery Re-audit. (2021), supervised by Belinda Badman, Hua Bing Yong, and Timothy Hockam

Clinical Impact of the 'Closing the Gap' (CTG) Medication Feasibility Trial at Princess Alexandra Hospital (PAH). (2021), supervised by **Jess Rankine, Scott Mitchell, Nazanin Falconer** and **Hua Bing Yong**

Diabetes Management for Aboriginal & Torres Strait Islander People during Cardiology Admission Post Intervention Audit. (2021), supervised by **Bing Yong**

Discharge Medication Record (DMR) Quality Assurance Audit. (2021), supervised by **Karl Winckel, Bindiya Patel, Jane, Dr Nazanin Falconer** and **Ms Julia Tisdall**

Evaluation of oral Levetiracetam use for seizure prophylaxis in TBI and PNSI. (2021), Supervised by **Natalie Murray, Brad Jeffrey** and **Dr Nazanin Falconer**

Evaluation of Prescribing Pattern for Unfractionated Heparin Compared to Low Molecular Weight Heparin for VTE Prophylaxis. (2021), supervised by **Jane Dunsdon, Arna Lancashire** and Dr Chris Morris

Evaluation of the patient safety and clinician workflow impact of a novel VTE dashboard. (2021), supervised by **Karl Winckel, Jane Dunsdon**, and Rodney Neale

Evaluation of rifaximin for Small Intestinal Bacterial Overgrowth (SIBO) at the Princess Alexandra Hospital (PAH). (2021), supervised by **Jane Dunsdon, Gavin Callaghan, Dr Neal Martin** and Dr Ayesha Shah

LMWH dosing and antiXa levels in obesity. (2021), supervised by **Karl Winckel, Kunaal Maharaj, Tara Van Der Vliet** and Rodney Neale

Metabolic screening in patients treated with antipsychotics in an acute adult psychiatric inpatient facility - third phase audit. (2021), supervised by **Lesley Smith**

Opioid prescribing in general medicine patients in an Australian Tertiary Hospital: a retrospective cohort study of opioid prescribing from Electronic Medical Record data. (2021), supervised by Christopher Morris, **Courtney Hill**, Thomas Olsen, and Ian Scott

Prophylaxis in Patients with Lower Limb Immobilisation in Emergency Department. (2021), supervised by **Jill Upton** and **Bella Swan**

Pulmonary arterial hypertension (PAH): literature review on efficacy and safety data of dual combination therapy. (2021), supervised by **Michael Whordley, Courtney Hill, Sam Leatham**, Dr Greg Kier, Dr Claire Ellender, and Judy Ross

Pulmonary Hypertension: A retrospective analysis of disease manifestations and response to therapy. (2021), supervised by **Michael Whordley, Claire Ellender** and **Courtney Hill**

Pulmonary Hypertension: An extension to the retrospective analysis of disease manifestation and response to therapy. (2021), supervised by **Michael Whordley, Claire Ellender** and **Courtney Hill**

Retrospective Audit of Discharge Pain Management Plans in Acute Trauma Surgery Patients at the Princess Alexandra Hospital. (2021), supervised by **Victoria Forrester, Kristin Tynan, Andy Lo**, and **Bradley Jeffery**

Sugar Sickness in Aboriginal & Torres Strait Islander Cardiology Patients- Hitting the Sweet Spot. (2021), supervised by **Bing Yong**

Transition of Care Medicines Information Audit. (2021), supervised by **Tamara Eid** and **Kathlin Tunnah**

Peer-Reviewed Publications

- Abidin, A Z., **Snowswell, C.L.**, Shafiee H.L., **Callaghan, G.**, and **Edmonds, M.** (2021). Influximab switching from reference product to biosimilar: a review of evidence regarding the clinical efficacy, safety profile and immunogenicity. *Journal of Pharmacy Practice and Research*, 51 (5), 358-373. doi: 10.1002/jppr.1754
- Andric, T., **Winckel, K.**, **Tanzer, T.**, Hollingworth, S., Isoardi, K., and Siskind, D. (2021). Bazett's correction formula overestimates the corrected QT among patients with antipsychotic induced tachycardia. *Schizophrenia Research*, 231, 22-23. Doi: 10.1016/j.schres.2021.02.022
- Austin, J. A.**, **Barras, M.** and Sullivan, Clair M. (2021). Safe and effective digital anticoagulation: a continuous iterative improvement approach. *ACI Open*, 05 (02), e116-e124. doi: 10.1055/s-0041-1736631
- Aziz, E., **Barras, M.**, **Snowswell, C.L.** and **Falconer, N.** (2021). Determining causality, severity and preventability of inpatient medication harm, including related hospital-acquired complications, using clinical coding data. *Pharmacy Growth, Research, Innovation and Training (Pharmacy GRIT)*, 46-52. doi: 10.24080/grit.1308
- Cabilan, C. .J., Eley, R., **Snowswell, C L.** and Johnston, A.N.B. (2021). What can we do about occupational violence in emergency departments? A survey of emergency staff. *Journal of Nursing Management*. doi: 10.1111/jonm.13294
- Callaghan, G.** and **Barras, M.** (2021). Medicines, including complementary medicines, to avoid in liver dysfunction. *Australian Pharmacist*.
- Chan, R.J., Buhagiar, S., Teleni, L., Simonsen, C., Turner, J., Rawson, C., Hart, N.H., Jones, L., Gordon, L., Joseph, R., Oluwaseyifunmi, A.A., Henderson, F., Rhee, J., **Ryan, M.**, **Carrington, C.**, and Mapp, S. (2021). Partnering with general practitioners to optimize survivorship for patients with lymphoma: a phase II randomized controlled trial (the GOSPEL I trial). *Trials*. 22, 12.
- Connell, A.H., Livori, A., Pizzi, J., Prosser, A., and **Ziser, K.**, Taking parental leave is not leaving! A discussion born of an SHPA baby boom. *Pharmacy Growth, Research, Innovation and Training (Pharmacy GRIT)*, Spring 2021, 98-103. Doi:10.24080/grit.1334.
- De Guzman, K.R.**, **Snowswell, C.L.**, Smith A.C., and Caffery L.J. Specialist consultation activity and costs in Australia before and after the COVID-19 pandemic. (2021). *Journal of Telemedicine and Telecare*, 27(10), 609-614. Doi: 10.1177/1357633X21104243
- De Guzman, K.R.**, **Snowswell, C.L.**, Caffery L.J., and Smith A.C. Economic evaluations of telehealth services in primary care: a systematic review. (2021). *Journal of Telemedicine and Telecare*. 0(0), 1-15. doi: 10.1177/1357633x211043380
- De Guzman, K.R.**, Vitangcol K.J. and Gupta D. (2021). Quantifying pharmacist involvement in NRT prescriptions on hospital discharge. *Pharmacy Growth, Research, Innovation and Training (Pharmacy GRIT)*, 4(4), 309-310.
- De Guzman, K.R.**, **Snowswell, C.L.**, Giles, C.M., Smith, A.C., and Haydon, H. (2021). General Practitioner perceptions of telehealth services in Australia: a qualitative study. *British Journal of General Practice Open*, BJGPO.2021.0182. doi: 10.3399/bjgpo.2021.0182

Falconer, N, Ryan, M, Badman, B, and Carrington, C. Death from diltiazem–ibrutinib interaction. (2021). *Aust Prescriber*, 44, 107-8. <https://doi.org/10.17.>

Falconer, N., Abdel-Hafez, A., Scott, I. A., Marxen, S., Canaris, S. and Barras, M. (2021). Systematic review of machine learning models for personalised dosing of heparin. *British Journal of Clinical Pharmacology*, 87(11), 4124-4139. doi: 10.1111/bcp.14852

Falconer, N., Snoswell, C.L., Morris, C. and Barras, M. (2021). The right time and place: the need for seven-day pharmacist service models. *Journal of Pharmacy Practice and Research*. doi: 10.1002/jppr.1761

Falconer, N., Barras, M., Abdel-Hafez, S., Radburn, S., and Cottrell, N. (2021). Evaluation of Two European Risk Models for Predicting Medication Harm in an Australian Patient cohort. *European Journal of Clinical Pharmacology*. doi: 10.1007/s00228-021-03271-1

Frier, S., Shuttleworth, L., and Ryan, M. (2021). From cancer to coronavirus: Harnessing the compounding skills of the cancer pharmacy team. *Pharmacy Growth, Research, Innovation and Training (Pharmacy GRIT)*, Autumn-Winter 2021;14-15.

Haydon, H.M., Caffery, L. J., **Snoswell, C.L.**, Thomas, E. E., Taylor, M., Budge, M., Probert, J. and Smith, A.C. (2021). Optimising specialist geriatric medicine services by telehealth. *Journal of Telemedicine and Telecare*, 27 (10), 674-679. doi: 10.1177/1357633x211041859

Haydon, H.M., Smith, A.C., **Snoswell, C.L.**, Thomas, E.E. and Caffery, L.J. (2021). Addressing concerns and adapting psychological techniques for videoconsultations: a practical guide. *Clinical Psychologist*, 25 (2), 1-8. doi: 10.1080/13284207.2021.1916904

Haydon, H.M., **Snoswell, C.L.**, Thomas, E.E., Broadbent, A., Caffery, L.J., Brydon, J., and Smith, A.C. (2021). Enhancing a community palliative care service with telehealth leads to efficiency gains and improves job satisfaction. *Journal of Telemedicine and Telecare*, 27 (10), 625-630. doi: 10.1177/1357633x211048952

James, H.S.E., Smith, A.C., Thomas, E.E., **Snoswell, C.L.**, Caffery, L.J. and Haydon, H.M. (2021). Exploring paramedics' intention to use a specialist palliative care telehealth service. *Progress in Palliative Care*, 29 (2), 1-8. doi: 10.1080/09699260.2020.1852657

Jeffery, B., and Winckel, K. (2021). Statins in AF-related strokes: A case report and literature review. *Pharmacy Growth, Research, Innovation and Training (Pharmacy GRIT)*, 4(4), 272-275.

Mehrotra, A., Bhatia, R.S. and **Snoswell, C L.** (2021). Paying for telemedicine after the pandemic. *JAMA*, 325 (5), 431-432. doi: 10.1001/jama.2020.25706

Paradissis, C., Cottrell, N., Coombes, I., Scott, I., Wang, W. and Barras, M. (2021). Patient harm from cardiovascular medications. *Therapeutic Advances in Drug Safety*, 12, doi: 10.1177/20420986211027451

Ryan, M., Carrington, C., Ward, E.C., Burns, C., Cuff, K., Mackinnon, M., and Snoswell C.L. (2021). Changing from telephone to teleconference for pre-treatment pharmacist consults in cancer services: Impacts to funding and time efficiency. *J Telemed Telecare*, 27(10), 680-684.

Ryan, M. and Carrington, C. Cutaneous melanoma: the role of oral targeted therapies. (2021). *Australian Pharmacist*.

Scott, I A., Abdel-Hafez, A., **Barras, M.** and Canaris, S. (2021). What is needed to mainstream artificial intelligence in health care? *Australian Health Review*, 45 (5), 591-596. doi: 10.1071/ah21034

Smith, A.C., Haydon, H. M., Thomas, E. E., **Snowell, C.L.** and Caffery, L. J. (2021). Extending dementia care into Indigenous communities. *Australian Journal of Dementia Care*, 10 (1), 19-23.

Siskind, D., Gallagher, E., **Winckel, K.**, Hollingworth, S., Kisely, S., Firth, J., Correll, C.U., and Marteen, W. (2021). Does switching antipsychotics ameliorate weight gain in patients with severe mental illness? A systematic review and meta-analysis. *Schizophrenia Bulletin*, 47(4), 948-958. doi: 10.1093/schbul/sbaa191

Siskind, D., Russell, A.W., Suetani, S., Flaws, D., Kisely, S., Moudgil, V., Northwood, K., Robinson, G., Scott, J.G., Stedmen, T., Warren, N., **Winckel, K.**, Cosgrove, P., and Baker, A. (2021). CoMET: a randomised controlled trial of co-commencement of metformin versus placebo as an adjunctive treatment to attenuate weight gain in patients with schizophrenia newly commenced on clozapine. *Therapeutic Advances in Psychopharmacology*, 11, doi: 10.1177/20451253211045248

Snowell C.L., De Guzman, K.R., and Barras, M. Pharmacist reducing medication risk in medical outpatient clinics: a retrospective study of 18 clinics. (2021). *Internal Medicine Journal*, doi: 10.1111/imj.15504

Snowell C.L., Chelberg G., De Guzman, K.R., Haydon H.H., Thomas E.E., Smith A.C., and Caffery L.J. (2021). The clinical effectiveness of telehealth: A systematic review of meta-analyses from 2010 to 2019. *Journal of telemedicine and telecare*, 0(0), 1-16. doi: 10.1177/1357633X211022907

Snowell, C.L., Draper, M.J. and Barras, M. (2021). An evaluation of pharmacist activity in hospital outpatient clinics. *Journal of Pharmacy Practice and Research*, 51 (4) , 328-332. doi: 10.1002/jppr.1729

Snowell, C.L., Whitty, J.A., Caffery, L.J., Kho, J., Horsham, C., Loescher, L.J., Vagenas, D., Gillespie, N., Soyer, H.P. and Janda, M. (2021). Consumer preference and willingness to pay for direct-to-consumer mobile teledermoscopy services in Australia. *Dermatology*, 1-10. doi: 10.1159/000517257

Snowell, C.L., Taylor, M.L., and Caffery, L.J. (2021). Why telehealth does not always save money for the health system. *Journal of Health Organization and Management*, ahead-of-print (ahead-of-print), 763-775. doi: 10.1108/jhom-04-2020-0159

Snowell, C.L., Stringer, H., Taylor, M. L., Caffery, L.J. and Smith, A.C. (2021). An overview of the effect of telehealth on mortality: a systematic review of meta-analyses. *Journal of Telemedicine and Telecare*, 1-10. doi: 10.1177/1357633x211023700

Snowell, C.L., Smith, A.C., Page, M. and Caffery, L.J. (2021). Patient preferences for specialist outpatient video consultations: a discrete choice experiment. *Journal of Telemedicine and Telecare*, 1357633X211022898. doi: 10.1177/1357633x211022898

Taylor, M.L., Thomas, E E., **Snowell, C.L.**, Smith, A.C. and Caffery, L.J. (2021). Does remote patient monitoring reduce acute care use? A systematic review. *BMJ Open*, 11 (3) e040232, doi: 10.1136/bmjopen-2020-040232

Thomas, E.E., Taylor, M.L., Banbury, A., **Snowell, C L.**, Haydon, H.M., Gallegos Rejas, V.M., Smith, A.C. and Caffery, L.J. (2021). Factors influencing the effectiveness of remote patient monitoring interventions: a realist review. *BMJ Open*, 11 (8) e051844, 1-9. doi: 10.1136/bmjopen-2021-051844

Tisdall, J., Callaghan, G., Ali, R., Hall, M. and Winckel, K. (2021). Nursing perspectives on technician led education sessions in a tertiary hospital. *Pharmacy Growth, Research, Innovation and Training (Pharmacy GRIT)*, 5(3), 125-127

Van Garderen, A. and **Snowell, C.L.** (2021). Text automation tool to improve pharmacist productivity and work capacity in a digital hospital: a pilot study. *Journal of Pharmacy Practice and Research*, 51 (5), 415-419. doi: 10.1002/jppr.1747

Van Oosterom, N., Barras, M., Cottrell N., and Bird, R. (2021) Platelet Function Assays for the Diagnosis of Aspirin Resistance. (2021). *Platelets*. 1-10, doi: 10.1080/09537104.2021.1942816

Ziser, K., Olding S.H., Patel, A.B., Batger, M.R., Peng, S., Brown, S.L, Grieve F.C., and Crane J.A. An Australian hospital pharmacy department's pandemic response plan to coronavirus disease of 2019. (2021). *Journal of Pharmacy Practice and Research*. 51, 406-409. <http://doi.org/10.1002/jppr.1753>

Conference Participation

Abdel-Hafez, A., Scott, I., **Falconer, N., Barras, M., Van Garderen, A., Marxen, S.**, and Canaris, S. Machine Learning to Predict Therapeutic Response to Unfractionated Heparin (Poster presentation). In: *Princess Alexandra Research Symposium 2021*

Anderson, A., **McCourt, L.**, Hollingworth, S. and **Barras, M.** Investigating the natural disaster preparedness of hospital pharmacists and pharmacies in a metropolitan capital city. In: *C5 Sustainability*, Friday 25th February, 1.50-3.31pm

Andric, T., **Winckel, K., Tanzer, T.**, Siskind, D., Hollingworth, S., Smith, L., and Isoardi, K. Inaccurate QT interval estimation in people taking antipsychotics: are we contributing to misinformed treatment decisions?. *National Medicines Symposium*, 18 May 2021, virtual

De Guzman, K.R., Snoswell, C.L., Smith A.C., and Caffery L.J. Telehealth activity and costs for specialist consultations in Australia as a result of the Coronavirus pandemic (Oral presentation). In: *Successes and Failures in Telehealth conference 2021 (SFT-2021)*, 3-5 November 2021, virtual

De Guzman, K.R., Snoswell, C.L., Caffery, L.J., and Smith A.C. (2021). Is telehealth in primary care cost-effective? A systematic review (Poster presentation). In: *ISPOR (International Society of Pharmacoeconomics and Outcomes Research) 2021 conference*, 17-20 May 2021, virtual

De Guzman, K.R., Snoswell, C.L., Caffery, L.J., and Smith A.C. (2021). A Systematic review of the cost-effectiveness of telehealth in primary care (Oral presentation). In: *iHEA (International Health Economics Association) congress 2021*, 12-15 July 2021, virtual

Falconer, N., Barras, M., Scott, I., **Snoswell, C.L.**, Ahmad, A., Lam, J., and Cottrell, N. Association Between Medication Harm and Frailty (Oral presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Falconer, N., Scott, I., **Snoswell, C.L.**, Ahmad, A., Lam, J., Cottrell, N., and **Barras M.** Performance of a modification of the Adverse Inpatient Medication Event (AIME) Model (Oral presentation). In: *Australian Pharmaceutical Society of Australia (ASPA) 2021*, virtual

Falconer, N., Scott, I., **Snoswell, C.L.**, Ahmad A., Lam, J., Cottrell, N., and **Barras M.** Performance of a modification of the Adverse Inpatient Medication Event (AIME) Model. Oral presentation in: *Medicines Management 2021*.

Frier, S., Shuttleworth, L., and **Ryan, M.** Developing a Training Programme for the Coronavirus Vaccine Roll Out (Poster Presentation). In: *Medicines Management 2021*.

Hill, C., Falconer, N., Snoswell C.L. and **Smareglia, L.** Collaborative Ordering of Medications (Poster Presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane (virtual).

Hill, C., Falconer, N., Snoswell C.L. and **Smareglia, L.** Collaborative Ordering of Medications (Poster Presentation). In: *Medicines Management 2021, The SHPA (Society of Hospital Pharmacists Australia) National Conference*, 25-27 November 2021, virtual

Lam, J., **Michael, B., Long, D.**, Scott, I., Shafiee-Hanjani, L., and **Nazanin, F.** Scoping Review of Studies Evaluating Frailty and Its Association with Medication Harm (Poster presentation)

Li, C., Winckel, K., Oliver, A., and Hollingworth S. Inpatient hypoglycaemia in a digital hospital: What does it look like in numbers. In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Madulid, D., and Shah, K. Clinical Assistant Led Medication History Taking. In: *Medicines Management 2021*

Paradissis, C., Coombes, I., Cottrell, N., Wang, W., and **Barras, M.** Medication harm causing unplanned re-hospitalisation after an Acute Myocardial Infarction. In: *Medicines Management 2021*

Phu, M., Murray, N., Mitchell, S., and Bell, R. Implementation of a dedicated Clinical Pharmacist into a multidisciplinary Brain Injury Rehabilitation Clinic. In: *Medicines Management 2021*

Ryan, M., Carrington, C., Ward E., Burns C., Cuff K., Mackinnon M., and **Snowswell C.L.** Increasing return on investment and efficiency by changing from telephone to telehealth for pharmacist consults in cancer care: Preliminary results (Oral presentation). In: *Successes and Failures in Telehealth 2021 (SFT-2021)*, 3-5 November 2021, Brisbane, virtual

Ryan, M., Carrington, C., Ward E., Burns C., Cuff K., Mackinnon M., and **Snowswell C.L.** Changing from telephone to teleconference for pre-treatment pharmacist consults in cancer services: Impacts to funding and time efficiency (Poster presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Ryan, M., Carrington, C., Badman, B., and Falconer, N. Death from diltiazem–ibrutinib interaction. (Poster presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Ryan, M., Carrington, C., and Snowswell, C.L. The use of ranitidine as a premedication to prevent paclitaxel hypersensitivity (Poster presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Ryan M., Falconer N., Badman B., and Carrington C. Death from diltiazem–ibrutinib interaction (Poster presentation). In: *Clinical Oncology Society of Australia (COSA) Annual Scientific Meeting 2021*, 16-18 Nov 2021, Melbourne, virtual

Ryan, M., Snowswell, C.L., and Carrington, C. Seeing the funding and time efficiency impacts by changing from telephone to videoconference pharmacy consults (Poster presentation). In: *Medicines Management 2021*

Ryan, M., Falconer N., Badman B., and Carrington, C. Fatal diltiazem-ibrutinib interaction (Oral presentation). In: *Medicines Management 2021*

Smith L and Tazsar T. *Moving Forward with Metabolic Monitoring: Pharmacist Management Making an Impact* (Poster presentation). In: *Medicines Management 2021*

Van Oosterom, N., Barras M., and Cottrell N. VTE prophylaxis after total hip and knee replacements; how does prescribing in Queensland compare to recommendations from major guidelines? (Poster Presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Van Oosterom, N., Barras, M., and Cottrell, N. Is aspirin appropriate for VTE prophylaxis after orthopaedic surgery? The risk of aspirin resistance (Poster Presentation). In: *Princess Alexandra Hospital Health Symposium 2021*, 24-27 August 2021, Brisbane, virtual

Van Oosterom, N., Barras, M., Cottrell, N. and Bird R. Aspirin resistance after total hip and knee arthroplasties (Poster Presentation). In: *International Society of Thrombosis and Haemostasis 2021 Virtual Congress*, July 2021, virtual

Van Oosterom, N., Barras M., and Cottrell N. Venous thromboembolism prophylaxis after total hip and knee arthroplasties – are the right patients receiving aspirin? (Oral Presentation). *Princess Alexandra Hospital Orthopaedic Research Showcase*, Oct 2021, virtual

Vitangcol K.J, Caffery L.J., **De Guzman, K.R.**, and **Snowell C.L.** The effect of financial incentives on telehealth service uptake in Australia (Poster presentation). In: *Successes and Failures in Telehealth conference 2021 (SFT-2021)*, 3-5 November 2021, Virtual.

Whatmough, S. Infliximab Biosimilars Changeover (Poster presentation). In: *Medicines Management 2021*

Winckel, K., Sullivan, S., Vongphakdi, M., and **Snowell C.L.** Inaccurate QT interval estimation in people taking antipsychotics: are we contributing to misinformed treatment decisions?. In: *National Medicines Symposium*, 18 May 2021, virtual

Wubishet, B.L., Merol, G., **Falconer, N.**, Hall, L., and Comans, T.A. Economic Evaluation of antimicrobial stewardship in primary care: A systematic review. In: *HSR Conference 2021*

Yong, H.B., Gou, W., Boyde, M., and **Wang, W.** Sugar Sickness in Aboriginal & Torres Strait Islander Cardiology Patients- Hitting the Sweet Spot (Poster presentation), In: *69th Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand*, 6-7 Aug 2021, virtual

Awards and Prizes

- 🏆 **Chariclia Paradissis**, 2021 Best Oral Presentation, 2021 (Student researcher, clinical sciences), Princess Alexandra Hospital Health Symposium.
- 🏆 Caffery Liam, **Centine Snowell**, Matt Page, Paul Scuffham and Anthony Smith, 2021 Best Paper, Successes and Failures in Telehealth conference 2021 (SFT-2021), *Quantifying the Societal Benefits from Telehealth*.
- 🏆 **Centine Snowell**, Anthony Smith, Matt Page, and Liam Caffery, 2021 Best Poster, Successes and Failures in Telehealth conference 2021 (SFT-2021), *What do Patients Value in an Outpatient Video Consultation? A Discrete Choice Experiment Determining Preferences and Willingness-to-pay*
- 🏆 **Keshia De Guzman**, Oral Presentation: Judge Award Winner, 2021 Faculty of Medicine HDR Symposium (Dec 2021), *A qualitative study on general practitioner perceptions of telephone and videoconference consultations in Australia*
- 🏆 **Nameer Van Oosterom**, 2020 Publication Award (Highly Commended), The University of Queensland, School of Pharmacy (Jul 2021)
- 🏆 **Nameer Van Oosterom**, Best Poster (Student researcher, clinical sciences), Princess Alexandra Hospital Health Symposium, *VTE Prophylaxis after total hip and knee replacements; how does prescribing in Queensland compare to recommendations from major guidelines*
- 🏆 **Nameer Van Oosterom**, Three Minute Thesis Competition Winner (People's Choice), The University of Queensland, School of Pharmacy (Jul 2021). *We are all different – Aspirin resistance and individualised treatment*. Link: <https://vimeo.com/565607750>
- 🏆 **Nameer Van Oosterom**, 2020 Publication Award (Highly Commended), The University of Queensland, School of Pharmacy (Jul 2021)
- 🏆 **Nazanin Falconer and Michael Barras**, 2021 Best Poster (Collaborative research, clinical sciences), Princess Alexandra Hospital Health Symposium, 2021. *Machine Learning to Predict Therapeutic Response to Unfractionated Heparin*
- 🏆 **Timothy Tanzer**, Oral Presentation, People's Choice Award, Faculty of Medicine Research and Innovation Week (Aug 2021), *Assessing drug-induced QT changes: Are we contributing to misinformed treatment decisions*

Funding and Grants

- 📄 **Ms Courtney Hill, A/Prof Michael Barras**, Prof Ian Scott, **Dr Nazanin Falconer**, Dr Christopher Morris, Prof Ian Coombes. Queensland Health Allied Health Practitioner Grant, (2021), \$30,000. *Pharmacist Led Deprescribing to improve patient outcomes across transitions of care.*
- 📄 Ms Jackie Costello, **A/Prof Michael Barras**, Dr Holly Foot, A/Prof Neil Cottrell. Queensland Health Allied Health Practitioner Grant (2021), \$30,000. *Patient outcomes from a Pharmacist Discharge Clinic (POP-D Study).*
- 📄 Mr Martin Canning, **A/Prof Michael Barras**, Prof Ian Coombes. Queensland Health Allied Health Practitioner Grant (2021), \$30,000. *Defining and evaluating the impact of evidence based pharmaceutical care bundles on patient outcomes.*
- 📄 Nicola Warren, Ruth Hubbard, Dan Siskind, Emily Gordon, Natasha Reid, Urska Anrautovska, **Nancy Wang**, Metro South Health Research Support Scheme (2021), \$74,986. *Improving services for frail patients with severe mental illness: implementation and feasibility of a frailty intervention.*
- 📄 A/Prof Palvannan Sivalingam, Prof Gerald Holtmann, **A/Prof Michael Barras**, A/Prof Anthony Russell, Dr Sarah Bowman, Prof Jeffery Lipman, Dr Steve Wallis, Dr Viral Chikani, Dr Tharindu Vithanage, Ms Allison Kearney. Serta Project Grant (2021), \$100,000. *Investigating metabolic acidosis in gastroenterology induced by colonoscopy preparation and sodium glucose transporter 2 inhibitors: the MAGICS study.*

Invited Participation

Speaker and Convenor – **Marissa Ryan**, Clinical Oncology Society of Australia (COSA) Cancer Pharmacists Group Foundation Course, 5 and 12 Jun 2021, virtual.

Speaker – **Marissa Ryan**, The Advanced Trainee Residency Program: The Princess Alexandra Hospital Experience. Brisbane Cancer Conference 2021, Brisbane, 25-26 Nov 2021

Speaker – **Nameer Van Oosterom**, Medical Grand Rounds, Princess Alexandra Hospital, *An aspirin a day may not keep the doctor away – the risk of aspirin resistance*, 30 August 2021

Presenter – **Nameer Van Oosterom**, 3 Minute Thesis, The University of Queensland, School of Pharmacy, *We are all different – Aspirin resistance and individualised treatment*, Jun 2021

Presenter – **Timothy Tanzer**, *Assessing drug-induced QT changes: Are we contributing to misinformed treatment decisions*. Faculty of Medicine Research and Innovation Week, 14 Sep 2021, virtual

Presenter – **Keshia De Guzman**, Faculty of Medicine Research and Innovation Week, *Economic and logistical factors influencing telehealth uptake and sustainability in primary care in Australia*, 14 Sep 2021, virtual

Presenter – **Keshia De Guzman**, Research Management, Digital Health HDR Cohort, *Specialist consultation activity and costs in Australia as a result of COVID-19 telehealth funding*, 26 Aug 2021, virtual

Presenter – **Keshia De Guzman**, UQ Centre for Health Services Research Forum, *Has anyone heard of this 'new thing' called telehealth?* 15 Jun 2021, virtual

Workshop Presenter and Coordinator – **Keshia De Guzman**, Successes and Failures in Telehealth conference 2021 (SFT-2021), *Workshop 1: Introduction to biostatistics for telehealth evaluation*, 3-5 November 2021, virtual

Seminar Tutor – **Hayley Michael**, Society of Hospital Pharmacists Australia (SHPA) Cardiology Symposium, 2021

Seminar Tutor – **Victoria Forrester**, Society of Hospital Pharmacists Australia (SHPA) Surgery and Perioperative Medicine Foundation Seminar, 2021

Seminar Tutor – **Kate Ziser**, Lead and presenter at Society of Hospital Pharmacists Australia (SHPA) Cardiology Extension Seminar, 2021

Participator- **Belinda Badman**, ALERT-ICU trial looking at sedation & analgesia practices in Intensive Care Units internationally. (HREC/2021/QMS/72178). Site data provided. Lead Investigators based at Wilkes University USA

Other Involvement in Research-related Activities

PAH Pharmacy Staff regularly act as peer-reviewers for academic journals inside and outside of the pharmacy discipline.

The Pharmacy Research in Metro South (PRIMS) committee is chaired from the PAH Pharmacy Department.

At least six Pharmacy Department staff hold academic appointments: Dr Judith Coombes (UQ, School of Pharmacy), Dr Nazanin Falconer (UQ, School of Pharmacy) and Faculty of Medicine Centre for Health Services Research), Dr Christine Carrington (UQ, School of Pharmacy), Mr Karl Winckel (UQ, School of Pharmacy), Dr Centaine Snoswell (UQ, School of Pharmacy and Faculty of Medicine), and A/Prof Michael Barras (UQ and QUT, School of Pharmacy and Sun-Yat Sen University).

A/Prof Michael Barras and Dr Centaine Snoswell are involved in grant-review panels for NHMRC (both) and Metro South (A/Prof Barras).

Courtney Hill is a continuing education co-ordinator for the Queensland branch of the Society of Hospital Pharmacists Australia, and in this role, she organises regular education sessions and events for hospital pharmacists throughout the state.

Dr Christine Carrington was part of the Expert Reference Group for the consultation and development process of the McGrath Model of Care and associated guidelines.

Dr Judith Coombes is a member of the executive editorial committee for Australian Prescriber.

Dr Nazanin Falconer is a member of the UQ Faculty of Medicine Low Negligible Risk Panel.

A/Prof Michael Barras and Dr Nazanin Falconer are members of the Metro South Clinical Application of Artificial Intelligence Group.

Authors of this report:

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