#### JM O'Hara Research Fund research outcomes



Lead investigator: Dr Sandra Salter

Research team: Dr Alan Leeb, Dr Kenneth Lee,

Mr Ian Peters, Prof Lisa Nissen

2019 \$40,000

The AIM-CP study sought to implement and evaluate a program called SmartVax as a tool for actively monitoring safety following immunisation in pharmacy. SmartVax has been used widely in general practice in Western Australia for many years.

The study demonstrated that when SmartVax (an SMSbased active surveillance system) was integrated within community pharmacies, pharmacist immunisers reported an extensive range of perceived benefits; these include the usability of SmartVax, the ease of patient follow-up facilitated by the system and enhancement of the patient-pharmacist relationship, which were apparent during semi-structured interviews with pharmacist-immunisers.

Ultimately the research team aims to investigate the safety of any vaccine given by pharmacists and contribute to national active vaccine safety surveillance programs using their tested model, which integrated MedAdvisor's PlusOne vaccination recording software with the SmartVax active vaccine surveillance tool.

Further to the original study, the team has been awarded further funding from WA Health to monitor the safety of COVID-19 vaccines given in WA pharmacies.

As of September 2021, AusVaxSafety is working with UWA and medication management platform MedAdvisor to monitor the safety of the Moderna COVID-19 vaccine as it starts to be rolled out around Australia. The Moderna vaccine will only be offered in pharmacies.

Lead investigator: Dr Fei Sim

Research team: Dr Leanne Chalmers, Dr Petra Czarniak, Prof Jeff Hughes, Dr Ya Ping Lee, Kiran Parsons, Dr Richard Parsons, Emeritus Prof Bruce Sunderland

Research Assistant: Rebecca Iacob

2018 \$45,061

The study aimed to evaluate the feasibility of point-ofcare (POC) C-reactive protein (CRP) testing to support Western Australian community pharmacists' management of respiratory tract infections (RTIs).

CRP is an inflammatory biomarker that reliably differentiates self-limiting RTIs from bacterial infections requiring antibiotics. Testing of a patient's CRP level upon presentation is a service that has been available in many European primary care settings.

Researchers produced a training package, including guidelines for the management of RTIs and protocols for the implementation of a CRP testing service, which was validated by an expert infectious diseases physician. Participating pharmacists made recommendations based on patients' CRP levels and findings from their routine assessment (RA) through questioning.

Overall, POC CRP testing was identified as a feasible and acceptable tool to facilitate community pharmacy as a triage point for RTI. These findings form a basis and framework for a large-scale implementation study, including economic modelling, to facilitate pharmacist remuneration for consultations related to RTI which incorporate antimicrobial stewardship.

The Medicines Management Mapping Project: Using risk stratification and care coordination to bridge the care continuum gap.

Deirdre Criddle, Frank Sanfilippo, Christopher Etherton-Beer, Kevin Murray, David Lui, Peter Smart, Carolyne Wood, Benjamin Devine and Rhonda Clifford

2017 \$45,458

By increasing referral to pharmacist led medication management services, this project aimed to reduce the risk of medication misadventure across care transitions for patient's considered high risk of readmission.

The following research questions were considered;

- 1. Will the proposed model, using PHarmacie-R to risk stratify patients (the intervention) increase access to medication management services post discharge compared with those receiving usual care?
- 2. Will the proposed model using PHarmacie-R to risk stratify patients (the intervention) reduce the hospital health utilisation (emergency department visits, hospital admission and length-of-stay) at 30 or 90 days post discharge compared with those receiving usual care?

#### Hypothesis:

The use of an evidence based bedside risk tool administered by hospital pharmacists leads to identification and early referral of high-risk patients to appropriate medicines management services in the community setting.

#### Conclusion:

A hospital-initiated medication review pathway was successfully established, engaging a discharge liaison pharmacist using a bedside risk tool to identify 'at-risk' patients. Both community and hospital pharmacists were used to provide timely, targeted services. This demonstrated the feasibility of engaging pharmacists to improve care across the care continuum to reduce medication-related harm. The early re-presentation rate noted in "at risk" patients in this small study was concerning, and warrants a review of the timeliness of the early post discharge medication review for very high risk, complex patients. .

"Hospital and community pharmacists, working together across care transitions, for the benefit of our most vulnerable patients.

This is actually happening!"

Deirdre Criddle SHPA

#### **Professional Services by Pharmacists in WA**

Determination of the prevalence and factors influencing the provision of enhanced and extended professional services by pharmacists in Western Australia

Czarniak P

2016 \$47,000

#### **Professional Services by Pharmacists in WA**

This research identified that community pharmacies and pharmacists in WA offer many different enhanced and extended professional services although most services appear to not be remunerated.

#### **Professional Services by Pharmacists in WA**

Pharmacists provide professional services for a number of reasons that include enhancing relationships with patients, to provide health promotion opportunities and for the professional satisfaction of pharmacists and to enhance their role. However, time constraints of pharmacists, inadequate remuneration and a lack of adequate return on investment are the main barriers for pharmacists offering the services.

Pharmacy bodies need to be much more active in seeking secure remuneration for a range of these services. The findings from this study provide the basis for these negotiations.

### **Enhancing primary care processes** in community pharmacy

To enhance primary care consultations between pharmacy staff and consumers by developing and evaluating an evidenced based behaviour change intervention in community pharmacy.

Liza Seubert, Laetitia Hattingh, Rhonda Clifford.

2015 \$38,530

## **Enhancing primary care processes** in community pharmacy

Direct and Indirect Output

- 1 Intervention strategy developed
- 1 Feasibility test conducted
- 1 Peer review publication submitted
- Increased consumer confidence and knowledge about the capabilities of community pharmacists

## **Enhancing primary care processes** in community pharmacy

"Enhanced primary care consultations have the potential to improve patient outcomes and increased awareness of community pharmacist's qualifications and role in primary health care."

Liza Seubert Academic and former community pharmacy owner

Identifying a role for the community pharmacist in the management of mental health consumers.

Deena Ashoorian, Rhonda Clifford, Rowan Davidson, Daniel Rock.

2012- \$7.700

A new paradigm for the partnership management of medications for mental health consumers in the community. 2013- \$11,000

Deena Ashoorian, Rhonda Clifford, Rowan Davidson, Daniel Rock.

#### **Direct and Indirect Output**

- 5 Peer-reviewed publication
- 3 National conference presentations
- 3 International conference presentations
- Finalist in The 3 Minute Thesis oration
- ABC radio interview
- Lotterywest funding for implementation of M3Q: 2018-2019
- 16 Invited speaker conferences/ workshops: 2014-2018
- 4 media releases: 2014-2018
- PhD thesis: 2016
- PSWA Innovator Award: 2014

The grant provided the start-up funds for important research into the area of mental health, which resulted in the development, validation and trial of a novel side effect tool, the M3Q.

This tool has been of benefit to clinicians, pharmacists and mental health consumers, resulting in our profession collaborating with the peak mental health consumer body and the Office of the Chief Psychiatrist in WA. "

Dr Deena Ashoorian

The researchers are currently engaged in implementation of the M3Q together with CoMHWA in mental health services in North Metro, South Metro, East and the Wheatbelt area. The implementation includes evaluation of the use of the tool in practice. Osborne Park Mental Health Services is the pilot centre.

Pharmacists' response to anaphylaxis in the community: the PRAC study

Salter SM, Sanfilippo FS, Loh RKS, Clifford RM.

2012 \$9390

**Direct and Indirect Output** 

- Two Peer reviewed publications
- Three National conference presentations
- National checklist developed: ASCIA Anaphylaxis Checklist for Pharmacists
- Finalist in The 3 Minute Thesis oration
- ABC radio national interview
- PhD completion
- Motivation for ongoing anaphylaxis research in pharmacy
- Four media releases
- NHMRC Centre for Food and Allergy Research membership
- National Allergy Strategy

"The fundamental stepping-stone that the JM O'Hara Grant provided has enabled the development of an anaphylaxis research centre in WA, and specifically in Pharmacy – something that is entirely unique to Australia."

Dr Sandra Salter

#### Continued anaphylaxis research

The JM O'Hara Grant supported the first pharmacy-focussed anaphylaxis research in Australia.

Ongoing research beyond the Grant engaged consumer groups and the National Allergy Strategy to identify EpiPen behaviours in anaphylaxis patients and carers. This was presented nationally and internationally.

Creation of Anaphylaxis Checklist for Pharmacists



- Five key messages
- How to care for anaphylaxis patients
- This is not a 'once-a-day' remedy ... making a mistake with anaphylaxis can be fatal

Continued interest in anaphylaxis beyond the Grant:

Reporting systems for Anaphylaxis in Australia: a project investigating the potential for WA community pharmacists to lead the way with anaphylaxis surveillance in Australia. Collaborating with the National Allergy Strategy and Perth Children's Hospital, Department of Immunology.

National Allergy Strategy Food Allergy Prevention Project: a national collaboration with the NAS and partners at The University of Western Australia, University of Adelaide, University of Sydney and the Centre for Food & Allergy Research.

Concordance of deprescribing recommendations made by pharmacists and medical practitioners for frail older people living in residential aged care.

AT Page, R Clifford, C Etherton-Beer, K Potter.

2014 \$7,700

#### Direct and Indirect output

- 1 National conference presentation
- 1 International conference presentation
- 2 "3" Minute thesis orations
- 1 ABC radio interview
- 1 Peer reviewed publication
- 5 Invited National conference presentations
- 2 International conference presentations
- 2 National conference presentations
- 1 Podcast interview

"This grant was my first successful grant. It started my track record. I validated a tool to support deprescribing, and show that pharmacists and doctors made similar decisions. This work has informed subsequent grants. The effect of this small grant on my research can not be underestimated." Dr Amy Page AACP

- Deprescribing is now improving the quality use of medicines in older Australians around the world, with Australia (and this team) leading the way
- Deprescribing is an essential part of prescribing, and this work has moved the path forward towards pharmacist prescribing
- This work also identified that prescribing in dementia patients was substandard, and guidelines are now being implemented by the team