



General Practice Research

Western Sydney PHN Research

Conference and Workshop

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Acknowledgement of Country

I acknowledge the Traditional Owners of the country on which we meet today, the Gadigal people of the Eora nation, and recognise their continuing connection to land, waters and culture. I pay respect to their Elders past, present and emerging.



Objectives

To understand -

1. What are key drivers for participation in research in the General Practice environment
2. What factors should be addressed to optimise recruitment and participation in research projects
3. How can Western Sydney PHN support research with local partners and achieve outcomes aligned with key priorities



Why have research in General Practice?

- In order to be able to advocate for quality, patient centred, appropriately funded general practice we need **Australian generated Primary care specific evidence** .
- If we want to achieve the quadruple aim of health care – better experience for patient / better health outcomes for the community / lower cost of overall health care / better experience for the clinician – we need hard evidence of the benefits of investing in General Practice
- Most “evidence based” research has been generated in the siloed environment of disease focused specialties and fails to accommodate for the “real world” of multimorbidity and complexity



Why have research in General Practice?

1. Advocacy for strong general practice throughout Australia
2. Best-practice standards and guidelines that improve quality and safety of health services
3. Provision of well-distributed and aligned general practice workforce
4. Support high-quality general practice in our rural and Aboriginal and Torres Strait Islander communities
5. Increased investment and participation in general practice research in order to build on the ever-evolving evidence base of the profession



Specific barriers for GP research

- 1) Lack of time
- 2) Lack of financial remuneration
- 3) Lack of training and familiarity in research methods and conduct of research in general practice / including research protocols
- 4) Concerns around patient privacy, confidentiality, data integrity
- 5) Concerns around clarity of what was being investigated in the study.

<https://research.monash.edu/en/publications/research-in-general-practice-why-the-barriers-a-study-of-doctors>



How do we address these?

Clinical relevance to the GP and practice

A. Why me?

B. Why now?

C. What is the benefit to my patients?

- Improving patient care and service delivery
- Career enhancement
- Professional development



How?

Ease of participation in the research and financial implications

Remember GP are privately run businesses that need to deliver a patient centred health service and remain financially viable.

Participation in research cannot be just about “feel good” and needs to fit into the business and clinical systems and ongoing model of care for each practice setting.

Provision of training and support to the GP teams participating in the projects

Social networks for participating practices (PBRN)



How?

The level of involvement should be reflected in the support costs being made available.

- **Level 1 - database search +/- mailout**
- **Level 2 - data base + screening and consent / study off site**
- **Level 3 - specific intervention on site by project team**
- **Level 4 - specific intervention on site with GP team**

- A key to success is to involve the entire practice team (via Practice Manager and GP Champion) and ensure regular feedback and support is provided throughout the research project /intervention .



What?

As GPs, we ask different questions to our specialist colleagues, questions that flow from, and take account of, what makes our discipline unique. In addition, our clinical experience adds an important contextual lens to the interpretation of data collected in general practice.

<https://www1racgp.org.au/ajgp/2019/november/general-practice-research-priority-setting-in-aust>

| Overall Top priority (out of 67) 1-7 | 8-14 | 15-21 |
|---|--|---|
| 1. Quality of care | 8. Avoiding hospitalisations | 15. Obesity |
| 2. Evidence-based practice | 9. Chronic pain | 16. Health promotion and illness prevention |
| 3. Models of primary care delivery | 10. Quality use of medicines | 17. Social determinants of health |
| 4. Consumer focus | 11. Use of technology in primary care delivery | 18. Aboriginal and Torres Strait Islander peoples |
| 5. Multimorbidity management | 12. Alcohol and substance abuse disorders | 19. Family violence |
| 6. Mental health | 13. Aged care and ageing | 20. Non-pharmacological treatments (including exercise and counselling techniques such as active listening) |
| 7. Collaborative care | 14. Dementia | 21. Use of electronic data (eHealth records, data linkage) |



Disease related priorities

- 1 Mental health
- 2 Chronic pain
- 3 Alcohol and substance abuse disorders
- 4 Dementia
- 5 Obesity
- 6 Cardiovascular health (including hypertension, management of cardiovascular disease)
- 7 Cerebrovascular health (including stroke)
- 8 Diabetes mellitus (including diabetic retinopathy)
- 9 Cancer (including diagnosis and treatment cancer, cancer survivor support)
- 10 Arthritis and musculoskeletal conditions (including back pain, sprain, tendonitis, osteoporosis, fracture management and prevention)



Process of care priorities

- 1 Evidence-based practice
- 2 Collaborative care
- 3 Health promotion and illness prevention
- 4 Non-pharmacological treatments (including exercise and counselling techniques such as active listening)
- 5 Antimicrobial stewardship in primary care (new listing in round two)



Population health care priorities

- 1 Aged care and ageing
- 2 Social determinants of health
- 3 Aboriginal and Torres Strait Islander peoples
- 4 Family violence
- 5 Rural and remote populations (including telehealth)



Patient engagement

What are the issues that need to be addressed with respect to patient engagement and consent within the GP setting?



POEMs – patient oriented evidence that matters

Physicians of the Canadian Medical Association annually use a validated tool to rate POEMs for relevance to their patients in their practices

American Family Physician publishes a summary

<https://www.aafp.org/journals/afp/content/top-poems.html>

Topics include:

Hypertension

Infection

Pain management

Cardiovascular

Behavioural medicine

Screening and prevention

Practice guidelines

Top 20 Research Studies of 2019 for Primary Care Physicians

<https://www.aafp.org/afp/2020/0515/p608.html>



E.g. Hypertension

1. Does bedtime ingestion instead of morning ingestion of hypertension medications produce better cardiovascular disease risk reduction in adults with hypertension?

Hermida RC, Crespo JJ, Domínguez-Sardiña M, et al. Bedtime hypertension treatment improves cardiovascular risk reduction: the Hygia Chronotherapy Trial [published online October 22, 2019]. *Eur Heart J*. 2019. Accessed March 10, 2020. <https://academic.oup.com/eurheartj/advance-article/doi/10.1093/eurheartj/ehz754/5602478>

2. Is fully automated blood pressure measurement more accurate than manual sphygmomanometry?

Roerecke M, Kaczorowski J, Myers MG. Comparing automated office blood pressure readings with other methods of blood pressure measurement for identifying patients with possible hypertension. A systematic review and meta-analysis. *JAMA Intern Med*. 2019;179(3):351–362.

Bedtime dosing of antihypertensives improves outcomes. This study found a significant reduction in mortality and morbidity among patients who took their once-daily antihypertensive medications at bedtime instead of on awakening in the morning. Although there was no significant difference in adherence rates between bedtime and morning ingestion times in this study, individual experiences may differ in clinical practice.

Use automated blood pressure measurements to guide treatment. There are two takeaways from this analysis. (1) Automated measurement aligns better with ambulatory blood pressure monitoring (the best predictor of cardiovascular events) than manual measurement. (2) Manual readings are an average of 13.4 to 14.5 mm Hg (systolic) higher than daytime ambulatory or automated readings in patients with hypertension.

Cardiovascular



Are fasting lipid levels more predictive of cardiovascular outcomes than nonfasting lipid levels?

Mora S, Chang CL, Moorthy MV, et al. Association of nonfasting vs fasting lipid levels with risk of major coronary events in the Anglo-Scandinavian Cardiac Outcomes Trial—lipid lowering arm. *JAMA Intern Med.* 2019;179(7):898–905.

Are statins effective in patients older than 75 years?

Cholesterol Treatment Trialists' Collaboration. Efficacy and safety of statin therapy in older people: a meta-analysis of individual participant data from 28 randomised controlled trials. *Lancet.* 2019;393(10170):407–415

Does low-dose aspirin prevent cardiovascular events and cardiovascular-related death in otherwise healthy older people?

McNeil JJ, Wolfe R, Woods RL, et al.; ASPREE Investigator Group. Effect of aspirin on cardiovascular events and bleeding in the healthy elderly. *N Engl J Med.* 2018;379(16):1509–1518.

Do not require patients to fast for lipid level measurements. Guidelines recommend checking lipid levels in nonfasting patients. This is easier on patients, and the study found that nonfasting and fasting levels are equally predictive of subsequent cardiovascular events. Although triglyceride levels may be slightly higher in nonfasting patients, cholesterol levels are similar in both groups.

In patients older than 75 years without cardiovascular disease, statins are not effective for primary prevention. Statins are effective in preventing major coronary events in patients older than 75 years, but this effect is significant only in those with established cardiovascular disease. This is consistent with results from the ALLHAT trial, which also showed no benefit for primary prevention and additionally showed a trend toward harm in those older than 75 years.

Do not use low-dose aspirin for cardiovascular primary prevention in otherwise healthy older adults. Low-dose aspirin does not reduce the likelihood that these patients will experience a major cardiovascular event during nearly five years of follow-up.



Australian based research

- **ASPREE** was an international clinical trial to determine whether daily low-dose aspirin increased survival, free of dementia or physical disability for healthy older people. ASPREE was led by Monash University in Australia and the Berman Center for Outcomes and Clinical Research – Hennepin Healthcare Research Institute in the USA. The study was undertaken in Australia across all south-eastern States and the ACT with participants represented from metropolitan, regional or rural areas, and **all in collaboration with GPs**.
- The ‘gold standard’ trial – randomised, double blind, placebo-controlled trial of daily low dose aspirin (100mg) – was the first to investigate aspirin’s benefit versus risk in healthy older people without a history of cardiovascular disease, dementia or significant physical disability.
In 2018, the bi-national trial found that over an average of 4.7 years, aspirin did not prolong life free of persistent physical disability or dementia (disability free survival) in 19,114 healthy community dwelling people, most aged 70 years or older. Aspirin did not significantly reduce the risk of heart attacks or strokes, but the risk of serious bleeding among the aspirin takers was increased compared to the placebo group.



Australian based research

- Professor Clare Heal

Over the past ten years she has been principle investigator, or supervising co-investigator of seven successful practice based randomised controlled trials investigating the management of primary care based skin cancer surgery.

The results of these trials have been published in high impact medical journals, such as the British Medical Journal. In 2016 her study comparing sterile to clean boxed gloves was named one of the top 20 top international studies for Primary Care Physicians.



Thank
you