

Snapshot of Australian primary health care research 2012



Contents

This snapshot of recent Australian research projects demonstrates the potential for primary health care research to improve the health of Australians.

- Foreword **3**
- 1 Complementary and alternative medicines in primary health care **4**
- 2 The prevalence of vitamin B12 deficiency in newly arrived refugees in Australia **6**
- 3 Meeting the needs of caregivers of patients with advanced cancer **8**
- 4 Equity and chronic condition care in general practice **10**
- 5 Developing an oral health literacy intervention for Aboriginal adults in a regional community **12**
- 6 How do adolescent and young adult siblings of cancer patients fit into current Australia health service delivery? Health care professional perceptions **14**
- 7 Smoking cessation and smoking continuance after hospitalisation for acute coronary syndrome **16**
- 8 Treatment of bacterial vaginosis: a randomised control trial **18**
- 9 Evaluation of a Team Care Arrangement support program in general practice **20**
- 10 The Fremantle Primary Prevention Study – a multicentre randomised trial of absolute cardiovascular risk reduction **22**
- 11 Health improvement and prevention study **24**
- Centres of Research Excellence **26**



This publication was funded by the Australian Government Department of Health and Ageing. The views expressed in the publication do not necessarily represent the position of the Australian Government.

Foreword



I am delighted to present the *Snapshot of Australian primary health care research 2012*. This publication builds on the success

of previous Snapshot issues and exhibits some of the outstanding primary health care research undertaken within Australia.

The Australian Government continues to put into action the comprehensive health reform agenda to create a fairer, more sustainable health system. Primary health care is a key priority for this Government, and a key component of our health system.

The Government, through the Primary Health Care Research, Evaluation and Development (PHCRED) Strategy, wholeheartedly supports the important contribution that primary health care research is making to our health system. Innovative thinking, informed by the best evidence, can have significant benefits for our wellbeing, and can help to reduce the burden on the hospital system.

The eleven research projects showcased in *Snapshot 2012* provide examples of Australian primary health care research that have produced policy and/or practice relevant findings specific to the health reform agenda and to Australia's First National Primary Health Care Strategy.

These research projects cover a wide spectrum of health priorities, including prevention, health literacy, chronic disease care, integrative health care, smoking cessation, and caregiver needs.

They also address the needs of hard to reach groups such as refugees, youth and indigenous people and present the findings of randomised controlled trials on infection control and cardiovascular risk reduction.

Primary health care research is imperative for driving improvements to benefit all Australians, and I applaud the researchers for their work featured in *Snapshot 2012*.

This work adds to the body of knowledge and evidence of primary health care research, and actively promulgates primary health care research to engender effective knowledge exchange.

Ellen McIntyre
Director

Primary Health Care Research and Information Service

1 Complementary & alternative medicines in primary health care



Judy Singer
University Centre for Rural Health,
School of Public Health,
University of Sydney

Funding:

PHCRED Strategy Researcher
Development Program

Two-thirds of Australians use complementary and alternative medicines (CAM), particularly for the treatment of pain and stress related to chronic diseases. Interest in CAM use continues to grow among consumers and clinicians alike, however the integration of CAM practices in mainstream health services is a relatively new development.

This study provides the first investigation into the perspective of those with a fundamental role in the instigation and operation of CAM in health care: health service clinical managers.

Through in-depth interviews with managers – including those from services dealing with drug and alcohol rehabilitation, refugee mental health, women’s health and sexual assault, palliative care, and chronic conditions – the study revealed

successful strategies for integrating mainstream services and CAM practices such as acupuncture, naturopathy, western herbal medicine and massage.

The study has illuminated the workings of innovative, integrated approaches to health promotion and chronic disease management, issues at the heart of Australia’s inaugural Primary Health Care Strategy. Its insights based on the practice wisdom of clinical managers show the potential value of CAM in filling ‘therapeutic gaps’ in existing health care practices, enhancing quality of life, providing greater health care choices and a point of entry to services that also enabled better access to biomedical and psychological treatments.

f *The study has illuminated the workings of innovative, integrated approaches to health promotion and chronic disease management, issues at the heart of Australia's inaugural Primary Health Care Strategy* **;**



For more information...
[www.phcris.org.au/roar/
projects/8771](http://www.phcris.org.au/roar/projects/8771)



The prevalence of Vitamin B12 deficiency in newly arrived refugees in Australia



Jill Benson
Discipline of General Practice,
University of Adelaide, and Migrant
Health Service

Funding:

PHCRED Seeding Grant

Team members:

Christine Phillips, Margaret Kay,
Murray Webber, Alison Ratcliff,
Ignacio Correa-Velez, Michelle Lorimer,
members of RHeaNA and the staff
of the refugee health services who
assisted with the project

A clinical query in one health service that could not be answered by a search of international literature was the catalyst for this influential research into Vitamin B12 deficiency among newly arrived refugees.

Australia accepts about 13 000 refugees each year, from varying source countries and with varying health profiles. There is often little evidence to guide policy and clinical responses leaving refugee health care providers isolated and unable to confirm whether the illness of patients attending one clinic is part of a larger pattern.

This collaborative research involving five refugee health services across Australia and the Refugee Health Network of Australia (RHeaNA) screened 918 newly arrived refugees and found 17% had Vitamin B12 deficiency.

Rates were even higher for refugees from Bhutan and Iran (one-third) and Afghanistan (one-quarter).

The study has confirmed the need for routine Vitamin B12 deficiency screening for all newly arrived refugees. It has also demonstrated that collaborations among primary health care services can result in better care, better policy information, and better knowledge to share among all health providers.

As the largest international study on Vitamin B12 deficiency in refugees, the project is likely to inform protocols for Australia and other countries that accept refugees as well.



[the study] demonstrated that collaborations among primary health care services can result in better care, better policy information, and better knowledge to share among all health providers



For more information...
www.phcris.org.au/roar/projects/8776



3 Meeting the needs of caregivers of patients with advanced cancer



Geoffrey Mitchell
Centre for Primary Care Research
University of Queensland

Funding:

PHCRED NHMRC Fellowship

Team members:

Afaf Girgis, Moyez Jiwa,
David Sibbritt, Letitia Burridge

The momentous amount of unpaid care provided by carers is such that without them the burden of caring for severely unwell people would be unsustainable in Australia.

The act of caring, however, can cause carers to suffer physically, psychologically and financially. Carer fatigue lowers the quality of life of both patients and carers, reduces choice of place of death, and is a major reason for the hospitalisation of patients at the end of life. Despite these important consequences, there are few resources in place to address carer needs systematically.

This innovative project trialled a GP-based intervention for carers of advanced cancer patients, comprising a checklist to guide a GP consultation focused on carer needs and a compendium of resources to support GP care of carer issues.

With 392 carer and 166 GP participants it was the largest trial of a caregiver intervention in the world, and the only trial of a GP-based carer intervention in the field of life-limiting illness.

The study's model of integrated GP care has produced tangible outcomes that have the potential to improve palliative care practice and policy: it engages carer needs in a systematic manner; engages GP in complex care with specialist teams; and gives specialists a means of addressing a problem for which there have been few resources available.

The study's model of integrated GP care has produced tangible outcomes that have the potential to improve palliative care practice and policy



For more information...
www.phcris.org.au/roar/projects/5942



4 Equity and chronic condition care in general practice



John Furler
General Practice
University of Melbourne

Funding:

PHCRED NHMRC Fellowship

Team members:

Doris Young, Christine Walker, Margarite Vale, James Best, Leonie Segal, Trisha Dunning, James Dunbar, Ralph Audehm, Nabil Sulaiman, Jane Gunn, Renata Kokanovic, Danielle Newton, Chris Dowrick, Helen Herrman, Emily Hansen, Carl May

Australia may like to think of itself as an equitable country, but unfortunately, when it comes to chronic diseases, some of us are worse off than others. Social disadvantage plays a huge role in the prevalence of disease with income, education level, and access to opportunities and resources affecting health outcomes.

These inequities are seen every day in general practice. This research aimed to evaluate how clinicians implement health programs for chronic disease in the context of social disadvantage and vulnerability.

Two studies were involved, each within a collaborative team of researchers: the first focused on practice nurses providing telephone coaching for patients with poorly controlled diabetes; the second was an observational study of cross-cultural depression care in general practice.

What the researchers identified was how practice nurses walk a fine line in trying to balance the social and emotional needs of patients from disadvantaged backgrounds with the need to achieve diabetes control targets. In the depression study the researchers identified cultural and social stigma issues. Actively and sensitively negotiating across these differences was an important strategy for improving patient care.

This work supports the growing body of research that calls for an 'equity lens' to be focused on the delivery of health services for our most vulnerable members of society.

f *This research aimed to evaluate how clinicians implement health programs for chronic disease in the context of social disadvantage and vulnerability* **;**



For more information...
[www.phcris.org.au/roar/
projects/8772](http://www.phcris.org.au/roar/projects/8772)



5 Developing an oral health literacy intervention for Aboriginal adults in a regional community



Helen Mills
Centre for Rural Health and
Community Development
Spencer Gulf Rural Health School

Funding:

PHCRED Strategy Researcher
Development Program
NHMRC Project Grant

Team members:

Gary Misan, Lisa Jamieson, Eleanor
Parker, Lynnette Stuart, Roz Karger,
Talia Stuart

Empowering people to take better care of themselves is an important part of successful preventive health care – particularly in Indigenous communities. This project in South Australia involved teaching local community members to present information on oral health care to other community members.

The aim was to improve oral health knowledge (OHK) on the factors that influence things like tooth decay and gum disease, and then to provide people with the ability to do something about it (oral health self-efficacy or 'OHSE').

Two Aboriginal project officers worked with the project manager to develop and present four education sessions known as 'the intervention', which were well attended and evaluated afterwards through questionnaires and interviews.

The researchers found significant improvements in the participants' level of OHK and OHSE. The participants said they now understood the relationship between oral health and general health, and the benefits of fluoride and regular brushing. Some shared the information with other family members and made changes to their health behaviours.

A good knowledge of oral health care is necessary as many preventable conditions such as tooth decay, gum disease and tooth loss can also affect self-esteem and have a negative impact on overall health. This project demonstrated that a culturally sensitive program of education – that builds both knowledge and confidence – can be well accepted and lead to positive health outcomes.

f *The aim was to improve oral health knowledge on the factors that influence things like tooth decay and gum disease, and then to provide people [particularly in Indigenous communities] with the ability to do something about it* **;**



For more information...
[www.phcris.org.au/roar/
projects/8773](http://www.phcris.org.au/roar/projects/8773)



6 How do adolescent and young adult siblings of cancer patients fit into current Australia health service delivery?



Marika Franklin
Discipline of General Practice
University of Sydney

Funding:

PHCRED Strategy Researcher
Development Program

Team members:

Amanda Rosso-Buckton,
Pandora Patterson

When a child is diagnosed with cancer it has a profound effect on all family members, and siblings are at risk of significant social, emotional and behavioural problems.

Sibling needs are widely unmet and recent professional guidelines on adolescent and young adult (AYA) cancer care identify the importance of addressing this gap. This study sought to answer the critical question of how siblings are catered for in current service delivery.

In interviews with oncologists, clinical nurse consultants, oncology psychologists and social workers, the study found professionals recognised the impact a child's cancer diagnosis had on siblings. However, how to extend routine psychosocial care to them was acknowledged as challenging and unclear.

Through its insights into professional perceptions, the study has highlighted the invisibility of siblings in current models of AYA cancer care.

Importantly, it identified barriers to the delivery of psychosocial care for AYA siblings in oncology, as well as ways to enhance care. These findings can be used to help professionals improve service delivery and sibling well-being. The results are being used by the organisation for young people living with cancer, CanTeen, to inform a series of papers to translate research into practice implications for professionals.

Through its insights into professional perceptions, the study has highlighted the invisibility of siblings in current models of adolescent and young adult cancer care



For more information...
www.phcris.org.au/roar/projects/8777



7 Smoking cessation and smoking continuance after hospitalisation for acute coronary syndrome



Emily Hansen
School of Sociology and Social
Work / Menzies Research Institute
Tasmania,
University of Tasmania

Funding:

PHCRED NHMRC Fellowship

Team members:

Mark Nelson,
Petya Fitzpatrick

For smokers who experience a heart attack, stopping smoking is the single most effective thing they can do to prevent another, more serious, event.

But despite the powerful preventive benefits offered by smoking cessation, and the fact that many smokers are receptive to quitting after a hospitalisation, the majority will resume regular smoking within the year.

This study sought to understand this situation by speaking to people about their experiences of quitting and smoking after hospitalisation for acute coronary syndrome.

The study's questionnaire and in-depth interviews with 35 people revealed opportunities and complications.

It found considerable scope for GPs to offer better smoking cessation support to patients with established cardiovascular disease, particularly after hospitalisation when the majority are highly motivated to do so. It also demonstrated the complex and highly social nature of smoking and smoking cessation.

Smoking and cardiovascular disease are well-recognised health issues that fall squarely into the ambit of primary health care efforts in prevention, chronic disease management, and reducing health inequities. By focusing on the views and experiences of smokers and ex-smokers, this research provides compelling evidence that can be used to strengthen policies and interventions to reduce smoking rates.

f By focusing on the views and experiences of smokers and ex-smokers, this research provides compelling evidence that can be used to strengthen policies and interventions to reduce smoking rates **;**



For more information...
[www.phcris.org.au/roar/
projects/8774](http://www.phcris.org.au/roar/projects/8774)



8 Treatment of bacterial vaginosis: a randomised control trial



Marie Pirotta
General Practice
University of Melbourne

Funding:

PHCRED NHMRC Fellowship
NHMRC Project Grant

Team members:

Catriona Bradshaw,
Deborah De Guingand,
Jane Hocking, Anna Morton,
Suzanne Garland, Glenda Fehle,
Andrea Morrow, Sandra Walker,
Lenka Vodstrcil,
Christopher Kit Fairley

Whether adding vaginal probiotics or antibiotics to standard treatment would reduce the recurrence rate of bacterial vaginosis (BV) is the question this world-first research set out to answer.

BV is one of the most common causes of vaginal discharge and itching to afflict women. Not only is it unpleasant for women, it is also associated with a range of poor health outcomes including preterm birth, spontaneous abortion, and enhanced transmission of sexually transmitted infections, including HIV. With recommended treatment of oral metronidazole, more than 50% of women experience recurrence of BV in 12 months; whether this represents relapse or re-infection is not known.

BV remains poorly understood and, because of its high recurrence rate, frustrated clinicians have been known to try novel treatments to improve cure rates for their patients.

These have included adding vaginal antibiotics and vaginal probiotics to the recommended oral antibiotic treatment of metronidazole.

However, after following 450 women in a trial of probiotics, antibiotics and placebo in addition to oral metronidazole, this research found there was no benefit in adding to standard treatment.

This is the first time these combination treatments have been studied and the results provide important information for women sufferers and primary health care doctors and nurses trying to manage the problem.

f ...after following 450 women in a trial of probiotics, antibiotics and placebo in addition to oral metronidazole, this research found there was no benefit in adding to standard treatment **;**



For more information...
[www.phcris.org.au/roar/
projects/8778](http://www.phcris.org.au/roar/projects/8778)



Evaluation of a Team Care Arrangement support program in general practice



Rhonda Fleming
Primary Health Care
Townsville Mackay Medicare Local

Funding:

PHCRED Strategy Researcher
Development Program

Team members:

Tracy Cheffins, Isaac Gardner,
Barry Lollo, Julie Twomey

As the burden of chronic disease continues to grow, governments are actively looking for ways to keep people healthier and more productive for longer. One such initiative is the use of Team Care Arrangements (TCA).

TCAs involve a GP identifying a patient with a particular chronic illness, like diabetes, who could benefit from seeing other allied health care professions, like a dietician or physiotherapist, to improve their overall health. A GP's development of a TCA enables these patients to access allied health professionals through Medicare.

But previous research has shown that the rate of completion of these TCAs is low – so these researchers set out to find out why, and how rates could be improved.

They did two audits of 20 randomly selected TCAs from four different general practices and found that overall completion rates only increased from 38.7% to 40 % between audits, but in one practice rates improved from 30% to 60%.

The main factors that contributed to completion rate increases included: GPs selecting patients carefully, providing a wide choice of allied health professionals to see, and clearly communicating the goals of the TCA and how it works.

By identifying strategies to improve TCA completion rates, this locally derived evidence is vital to facilitating change at the practice level and to informing health care policy that benefits chronic disease care.

By identifying strategies to improve TCA completion rates, this locally derived evidence is vital to facilitating change at the practice level and to informing health care policy that benefits chronic disease care



For more information...
[www.phcris.org.au/roar/
projects/8775](http://www.phcris.org.au/roar/projects/8775)

10

The Fremantle Primary Prevention Study - a multicentre randomised trial of absolute cardiovascular risk reduction



Tom Brett
General Practice and Primary Health
Care Research Unit
The University of Notre Dame Australia

Funding:

PHCRED Strategy Researcher
Development Program

PHCRED Strategy Research:
Capacity Building Initiative Grant
& Capacity Building Initiative Bursary

Team members:

Diane Arnold-Reed, Robert Moorhead,
Cam Phan, Max Bulsara, Dana Hince,
Aurora Popescu, Frances Cadden,
William Walker, Hilary Fine

Cardiovascular disease is a leading cause of death worldwide affecting one in six Australians in their lifetime. Could more frequent and planned GP visits reduce the risk of developing this silent killer? According to the Fremantle Primary Prevention Study, the answer is yes.

The trial followed 1 200 West Australian GP patients who were randomly split into two groups. The first group received intensive follow-up care which involved five three-monthly check-ups. The second group received their usual care.

The study used the New Zealand Risk Calculator to estimate the cumulative risk for patients developing a cardiovascular event over the following five years. Until recently too much reliance has been placed on estimating and managing single risk factors.

Much greater benefits are achieved by reducing 'absolute' or combined risk from the interaction of a larger range of risk factors including smoking, raised blood pressure, overweight, diabetes, high cholesterol levels and lack of exercise.

What the researchers found was that those in the intensive follow-up group had a significantly lower risk of having a cardiovascular event than those in the group that had their usual care. The patients reported that their overall health had improved as well.

The study showed that a targeted approach by primary health providers using risk calculators can help reduce the risk of developing cardiovascular disease.

The study showed that a targeted approach by primary health providers using risk calculators can help reduce the risk of developing cardiovascular disease



For more information...
www.phcris.org.au/roar/projects/8762



11

Health improvement and prevention study



Mark Harris
Centre for Primary Health Care and
Equity
University of New South Wales

Funding:

PHCRED NHMRC Fellowship
NHMRC Project Grant

Team members:

Mahnaz Fanaian, Megan Passey,
David Lyle, Upali Jayasinghe,
Rachel Laws, Gawaine Powell Davies,
Suzanne McKenzie, Heike Shutze,
Qing Wan

Inadequate prevention of chronic diseases is costly in both health and economic terms. This is particularly true for cardiovascular disease: it is the leading cause of disease burden in Australia, much of which is preventable.

General practice is well-placed to offer preventive care, however GPs seldom refer high risk patients to the more intensive lifestyle interventions that have been shown to be effective in disease prevention.

This unique trial involving 699 patients in 30 general practices in urban and rural NSW tested the impact of an intervention that closely linked lifestyle programs with routine general practice care. It involved a GP health check, referral of at risk patients to individual allied health assessment and goal setting, followed by a group program focused on diet and physical activity.

The study confirmed health behaviour improvements for those patients in the intervention group, while also demonstrating the feasibility of a group intervention complementing general practice health checks.

Preventive care, including supporting people's healthy lifestyles, is a key element of the National Primary Health Care Strategy. Using established clinical and funding frameworks for preventive care, this study has shown the viability of an intervention to achieve sustained lifestyle changes that will help prevent cardiovascular disease and diabetes.

f Using established clinical and funding frameworks for preventive care, this study has shown the viability of an intervention to achieve sustained lifestyle changes that will help prevent cardiovascular disease and diabetes **;**



For more information...
www.phcris.org.au/roar/projects/8529



Centres of Research Excellence

Australian Primary Health Care Research Institute



Australian National University

The Australian Primary Health Care Research Institute (APHCRI) at the Australian National University has established five Centres of Research Excellence to undertake research focused on key health reform challenges. These multi-institutional Centres are funded to coordinate innovative, high quality and multidisciplinary research in primary health care policy and system improvement.

CRE in Primary Health Care Microsystems



AIM: to improve the quality, governance, performance and sustainability of Australian primary health care through the conduct of high quality priority-driven research using the clinical microsystem approach.

TEAM:

- Claire Jackson, University of Queensland
- James Dunbar, Greater Green Triangle University Department of Rural Health
- Paul Batalden, Dartmouth Medical School, US
- Jeff Fuller, Flinders University
- Julie Johnson, University of New South Wales
- Caroline Nicholson, Mater Health Services
- Shelley Wilkinson, Mater Mothers' Hospital

www.aphcricremicrosystems.org.au

CRE for the Prevention of Chronic Conditions in rural and remote high risk populations

AIM: to evaluate models for primary health care services for Indigenous and other high risk groups in rural and remote areas, with a focus on improving service delivery regarding the prevention and management of chronic diseases such as diabetes, renal and heart conditions, and mental ill-health, as well as the complications arising from these.

TEAM:

- Robyn McDermott & Kerin O'Dea, The Sansom Institute for Health Research, UniSA
- Kathryn Panaretto, Queensland Aboriginal and Islander Health Council
- Alan Clough & Kim Usher, James Cook University
- Leonie Segal, The Health Economics and Social Policy Group, UniSA

www.unisa.edu.au/sansominstitute/cre/

CRE in Rural and Remote Primary Health Care



AIM: develop: a better understanding of health behaviour relating to primary health care service utilisation in rural and remote Australia; better measures of access to guide resource allocation relating to primary health care in small rural and remote communities; a comprehensive framework for evaluating the impact of rural and remote primary health care services on access and equity of health outcomes; evidence-based models of sustainable primary health care for different rural and remote contexts.

TEAM:

- John Humphreys & Matthew McGrail, School of Rural Health, Monash University
- John Wakerman, Centre for Remote Health, a joint centre of Flinders University and Charles Darwin University
- David Perkins & David Lyle, Broken Hill University Department of Rural Health, The University of Sydney

www.crerrphc.org.au/

CRE for Indigenous primary care intervention research in chronic disease



AIM: improve the quality of care, quality of life and outcomes of chronic disease; examine the impact, utility and effectiveness of the federal government's 'Closing the Gap' chronic disease package elements within partner primary care services, with a view to maximising benefit for patients and informing policy development; develop a cadre of Indigenous primary care researchers with the skills and support to contribute to their communities' needs in chronic disease.

TEAM:

- Alex Brown & Samantha Togni, Baker IDI Heart and Diabetes Institute Central Australia
- Alan Cass & Maree Hackett, The George Institute for Global Health
- Sandra Eades, Baker IDI Heart and Diabetes Institute, Melbourne
- Josée Lavoie, University of Northern British Columbia

www.kvc.org.au

CRE in Urban Aboriginal Child Health

AIM: to understand the health needs and health trajectories of urban Aboriginal children; to identify barriers to best-practice primary care for urban Aboriginal children and strategies to address these; to evaluate the impact on the health care of urban Aboriginal children of an integrated Aboriginal Community Controlled Health Services (ACCHS)-led quality improvement program; to translate evidence from the CRE research into practice and policy; and to build research capacity for improving urban Aboriginal child health.

TEAM:

- Emily Banks, Sally Redman, Anna Williamson, The Sax Institute
- Jonathan Craig, Sydney School of Public Health, University of Sydney
- Sandra Bailey, Aboriginal Health and Medical Research Council
- Catherine D'Este, School of Medicine and Public Health, University of Newcastle
- Hasantha Gunasekera, Children's Hospital at Westmead, University of Sydney
- Dea Thiele, Darryl Wright, Selena Lyons, Debbie Barwick, participating Aboriginal Community Controlled Health Services
- with collaborating researchers

Snapshot of Australian primary health care research 2012 is produced by the Primary Health Care Research and Information Service.

Editorial team: Amanda Carne, Ellen McIntyre, Louise Baird

Writer: Edwina Light

Graphic Design: Andrew Vincent, Andrew Vincent Graphic Design

Printed: June 2012

ISBN: 978-0-9808191-8-2

For more information see www.phcris.org.au