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**PARTNERSHIP FOR EDUCATION,  
EVALUATION AND RESEARCH**

GROWING PRIMARY HEALTH CARE RESEARCH IN WESTERN SYDNEY

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# INTRODUCTION

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**We are pleased to present the first edition of Partnership for Education, Evaluation and Research Western Sydney (PEER - WS) *Growing Primary Health Care Research in western Sydney*. This publication provides a snapshot of research initiatives aiming to enhance health care and deliver better health outcomes for the local community.**

PEER-WS reflects a longstanding and productive relationship between WentWest Ltd and the academic departments of general practice at the University of Sydney (Westmead) and University of Western Sydney. The partnership builds on the three organisation's commitment to quality general practice and primary care across the region, and actively seeks opportunities to promote, support and coordinate innovation in primary health care delivery, teaching and research in western Sydney.



Joanne Graham (left), WentWest Research Project Officer; Conjoint Professor Diana O'Halloran (2nd left), WentWest Board Chairperson; Professor Jennifer Reath (3rd left), University of Western Sydney Lead Researcher; Professor Tim Usherwood (centre), University of Sydney and PEER-WS Chairperson; Georgina van de Water (3rd right), WentWest Chief Operating Officer; Dr Michael Crampton (2nd right), WentWest Clinical Director; and Adjunct Associate Professor Walter Kmet, WentWest CEO (right).

This booklet showcases five research collaborations amongst the PEER-WS partners, aligned to the five Key Result Areas in WentWest's Strategic Plan 2013-17:

- 1. Knowing our community**
- 2. Workforce quality, capacity and performance**
- 3. Integrated and coordinated care**
- 4. Teaching, education and research**
- 5. Organisational excellence and sustainability**

**THE PARTNERSHIP BUILDS ON THE THREE ORGANISATION'S COMMITMENT TO QUALITY GENERAL PRACTICE AND PRIMARY CARE ACROSS THE REGION, AND ACTIVELY SEEKS OPPORTUNITIES TO PROMOTE, SUPPORT AND COORDINATE INNOVATION IN PRIMARY HEALTH CARE DELIVERY, TEACHING AND RESEARCH IN WESTERN SYDNEY.**

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### Knowing our community

It is well known that western Sydney has high rates of type 2 diabetes, a major risk factor for cardiovascular disease and diseases of the eyes and kidneys. The *MEAL* project aims to map 'food deserts' where people's diets reflect their proximity to fast food outlets.

### Workforce quality, capacity and performance

Infection of the middle ear in children can potentially lead to ongoing hearing loss for weeks, months or years, with significant impact on the child's education. The *Improving GP Treatment of Childhood Ear Disease* study has shown that after targeted training, GPs' diagnosis and management of childhood ear disease was changed by the use of tympanometry or pneumatic otoscopy.

### Integrated and coordinated care

Cardiovascular disease kills one Australian every 12 minutes. Consumers can reduce their risk by implementing healthy lifestyle changes. The *TORPEDO* study evaluates an integrated quality improvement intervention in primary care settings to address barriers to cardiovascular risk assessment and management.

### Teaching, education and research

WentWest, the University of Sydney and the University of Western Sydney have a long and proud history of collaboration through their shared program of general practice supervisor development. *Registrars are from Mars, Supervisors are from Venus* has provided a deeper understanding of the learning and teaching styles of general practice registrars and their supervisors which will inform future teaching and education in this setting.

### Organisational excellence and sustainability

In 2012 WentWest Western Sydney Medicare Local and Western Sydney Local Health District established a formal partnership to work together in the best interests of the western Sydney community, addressing six agreed Common Health Priorities and supporting each other's programs. The *Partners in Health* project provides an early evaluation of this partnership, using a program logic model to identify strengths, achievements, challenges and opportunities for improvement, and to inform ongoing development of integrated healthcare within western Sydney.

**Professor Tim Usherwood**  
Chairperson  
**PEER-WS**

For further information regarding PEER-WS and its initiatives please contact the Clinical Governance and Research Project Officer at WentWest on (02) 8811 7100.

## MEAL PROJECT

Mapping food Environments in Australian Localities Project

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### UWS Research Team

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**Dr Thomas Astell-Burt**

Lead Researcher

**Professor Anthony Maeder**

**Dr Xiaoqi Feng.**

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### Funding Period

2013-2014

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### Introduction

Western Sydney is a diabetes hot-spot with four of the five local government areas experiencing rates of diabetes above the NSW and national averages. These rates contribute to high levels of chronic disease and place a considerable strain on our health resources. Contributing to this troubling trend are modifiable lifestyle risk factors such as poor diets and sedentary lifestyles. These risk factors can be influenced by poor urban planning and design which shape our potential to make healthy choices. Evidence suggests people that live close to fast food retailers and are a long distance from healthier options may be nudged towards diets high in fat, salt and low in nutritional content. In the USA, this type of context is often referred to as a 'food desert'.

### Project Purpose

The aim of the project is to assess the potential and begin to work towards developing a similar mapping of 'food deserts' in Australia.

### Significant Findings

There is nothing of a comparable nature to the 'food deserts' project in Australia, therefore there is an opportunity to replicate and customise the USA's approach towards mapping 'food deserts' and 'food environments' more generally across Australia.

To guide and support the project's implementation and applicability, the project team has engaged key partners including: Western Sydney Diabetes Prevention and Management Committee, Western



Back row: Dr Thomas Astell-Burt and Professor Anthony Maeder. Front row: Dr Xiaoqi Feng.

Sydney Regional Organisation of Councils, The Australian Prevention Partnership Centre, the NHMRC Centre for Research Excellence in Healthy Liveable Communities, the NSW Department for Planning and Environment, and the NSW Cancer Council.

### Research Outcomes

The interest and support received from decision makers in key health and urban planning organisations are a positive indication of the anticipated impact the research will have in assisting our understanding of 'food deserts' within a local context.



**EVIDENCE SUGGESTS PEOPLE THAT LIVE CLOSE TO FAST FOOD RETAILERS AND ARE A LONG DISTANCE FROM HEALTHIER OPTIONS MAY BE NUDGED TOWARDS DIETS HIGH IN FAT, SALT AND LOW IN NUTRITIONAL CONTENT. IN THE USA, THIS TYPE OF CONTEXT IS OFTEN REFERRED TO AS A 'FOOD DESERT'.**

## IMPROVING GP TREATMENT OF CHILDHOOD EAR DISEASE

Effectiveness and acceptability of tympanometry and pneumatic otoscopy in general practitioner diagnosis and management of childhood ear disease.

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### UWS Research Team

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**Dr Penny Abbott**

Lead Researcher

**Professor Jennifer Reath**

**Dr Sara Rosenkranz**

**Dr Hasantha Gunasekera**

**Professor Wendy Hu**

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### Funding Period

2011-2012

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### Introduction

Ear infections are one of the most common reasons children see General Practitioners (GPs). Infection of the middle ear in children can potentially lead to ongoing hearing loss for weeks, months or years. It is important that GPs are skilled and able to undertake accurate diagnosis and assessment of middle ear disease in order to prevent complications such as hearing loss, which can contribute to learning and behaviour problems. National and international guidelines recommend that pneumatic otoscopy or tympanometry should be routinely used as these techniques assist with a more accurate diagnosis of middle ear infections (as they detect the movement of the ear drum); however non-pneumatic otoscopy is more commonly used by GPs (observing the static appearance of the ear drum).

### Project Purpose

The research examined how, after targeted short training, GPs diagnosis and management of childhood ear disease was changed by the use of tympanometry or pneumatic otoscopy. The project examined changes in diagnoses and intended management after examining 347 children's ears using non-pneumatic otoscopy and then again after using tympanometry or pneumatic otoscopy.

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### Significant Findings

Tympanometry was more likely than pneumatic otoscopy to change GP diagnoses and to increase GP plans to follow-up with children to make sure their ear disease had fully resolved. It was found that GPs preferred tympanometry due to ease of interpretation, and also it appeared to require less training than pneumatic otoscopy for GPs to feel confident in its use. However, the cost of purchasing a tympanometer inhibited GPs' intention to use tympanometry in the future.

### Research Outcomes

This study has provided strong evidence to suggest that the use of tympanometry and pneumatic otoscopy by GPs does change diagnosis and management, and provides information about the enablers and barriers to the GP uptake of these techniques. This will inform training initiatives and future work in the important area of childhood ear disease.



Photo courtesy of Dr Penny Abbott, University of Western Sydney.

**THIS STUDY HAS PROVIDED STRONG EVIDENCE TO SUGGEST THAT THE USE OF TYMPANOMETRY AND PNEUMATIC OTOSCOPY BY GPs DOES CHANGE DIAGNOSIS AND MANAGEMENT.**

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### THE TORPEDO STUDY

Evaluation of a novel electronic decision support tool for cardiovascular risk management

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#### Research Team

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**Associate Professor David Peiris**  
George Institute, University of Sydney and  
University of Western Sydney

**Professor Tim Usherwood**  
University of Sydney

**Professor Anushka Patel**  
George Institute, University of Sydney

**Professor Mark Harris**  
University of New South Wales

**Associate Professor Noel Hayman**  
Inala Indigenous Health Service

**Dr Katie Panaretto**  
James Cook University

**Associate Professor Julie Redfern**  
George Institute, University of Sydney

**Professor Nick Zwar**  
University of New South Wales

**Professor Stephen Colagiuri**  
University of Sydney

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#### Funding Period

2011-2014

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#### Introduction

Cardiovascular disease (CVD) is one of Australia's largest health problems, killing one person every 12 minutes\*. The most socially disadvantaged areas often have the highest prevalence of lifestyle related risk factors. These risk factors contribute to the high rates of CVD and other chronic diseases in western Sydney. This project seeks to evaluate a quality improvement (QI) intervention in primary health care settings to address barriers to cardiovascular risk assessment and management. The intervention comprises decision support software and a risk communication tool (HealthTracker-CVD) running in real-time on the GP's desktop, supported by audit and feedback tools and clinical workforce training.

#### Project Purpose

The primary objective of the *TORPEDO* study is to assess whether health services allocated to receive the intervention demonstrate:

- An increased proportion of patients receiving appropriate and timely measurement of their risk factors.
- Increased prescribing of guideline-recommended treatment for patients at high risk of cardiovascular disease.



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### Significant Findings

In total, 40 general practices and 20 Aboriginal health services were allocated either to receive the QI intervention (including Health Tracker-CVD) or no additional QI support. Data has been collected at baseline and after 12 months for regularly attending patients aged 35+ years (if Aboriginal or Torres Strait Islander) or 45+ years if non-Indigenous.

### Research Outcomes

The findings of this study will aim to inform the potential roll-out of HealthTracker-CVD to general practices and Aboriginal health services across Australia. The NSW Ministry of Health is currently funding installation of HealthTracker-CVD in Aboriginal medical services in New South Wales. The study findings will also contribute to ongoing development of electronic decision support for people at risk of CVD, including web-based support tools currently being trialled by the George Institute and its partners.



**CARDIOVASCULAR DISEASE (CVD)  
IS ONE OF AUSTRALIA'S LARGEST  
HEALTH PROBLEMS, KILLING ONE  
PERSON EVERY 12 MINUTES\***

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\* Heart Foundation Website (2014)

## REGISTRARS ARE FROM MARS, SUPERVISORS ARE FROM VENUS

The implications of registrar learning and supervisor teaching styles

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### Research Team

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**Dr Hamshi Singh,**

Registrar Medical Educator,  
WentWest

Academic General Practice Registrar 2013,  
University of Sydney

**Professor Tim Usherwood,**

Supervisor,  
University of Sydney

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### Funding Period

2013-2014

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### Introduction

WentWest as a Regional Training Provider (RTP) provides its 150 registrars with a distinctive learning experience. This includes supervision from a pool of over 130 experienced general practitioners for several six month terms. Each registrar in the practice is unique and it is important for the supervisor to recognise and respond to individual registrar learning needs. Reciprocally, it is important for the registrar to be able to adapt to the different teaching techniques of their supervisors.

### Project Purpose

The aim of this study was to measure supervisor's teaching styles and their registrar's learning styles to determine how different combinations of these impact on the learning and teaching relationship. The model of teaching and learning styles used in this study described five teaching styles: personal role model, facilitator, delegator, formal authority and expert. The model also described six learning styles: dependent, independent, avoidant, participant, competitive and collaborative.

### Significant Findings

In total there were 186 registrars and supervisors were recruited from RTPs around Australia. Participants completed an online questionnaire to determine their predominant teaching and learning styles. Preliminary data analysis highlighted that the majority of supervisors were facilitators in style that emphasised the personal nature of the teacher and learner interaction.



They guided discussion with the registrar rather than simply providing information. The majority of registrars were found to be collaborators who liked to share information and learned best cooperatively with others.

#### **Research Outcomes**

It is acknowledged that learning and teaching styles are a controversial concept. They are likely to change over time, based on past and current experiences. The aim of this research was to investigate how registrars and supervisors adapted to teaching and learning techniques that may be incongruous with their own, and used these skills to maximise their experience in the unique apprenticeship model that underpins general practice training in Australia.

**EACH REGISTRAR IN THE PRACTICE IS UNIQUE AND IT IS IMPORTANT FOR THE SUPERVISOR TO RECOGNISE AND RESPOND TO INDIVIDUAL REGISTRAR LEARNING NEEDS.**

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## PARTNERS IN HEALTH

Evaluation of the effectiveness of a partnership agreement between WentWest and the Western Sydney Local Health District.

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### Research Team

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**Professor Jennifer Reath**  
Lead Researcher  
University of Western Sydney

**Dr Penny Burns**  
University of Western Sydney

**Dr Ron Brooker**  
University of Western Sydney

**Dr Penny Abbott**  
University of Western Sydney

**Professor Tim Usherwood**  
University of Sydney

**Mr Brogan Renshaw**  
University of Western Sydney

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### Funding Period

2013-2014

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### Introduction

In July 2011 WentWest was awarded the first Medicare Local contract in the Sydney region and formed the Western Sydney Medicare Local (WSML). The WSML's partnership agreement with the Western Sydney Local Health District (WSLHD) demonstrates a joint commitment to shared clinical priority areas aimed at improving the health of the western Sydney community. These priorities are based on local need and national benchmarks, underpinned by consumer and community engagement.

### Project Purpose and Methods

UWS was commissioned by WentWest in 2013 to develop and implement an evaluation of the effectiveness of the partnership in delivering better outcomes focusing on the agreed health priority areas including:

1. Maintenance of a collaborative relationship to address common health related and system issues more efficiently by pooling resources and working more cooperatively;
2. Collaboration to address agreed Common Health Priorities, and support each other's programs, projects and committees in these areas; and
3. Improvement of health outcomes within significantly disadvantaged communities, particularly Aboriginal and culturally and linguistically diverse communities.

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A joint Reference Group was established to oversee the evaluation of the partnership and an evaluation framework was developed using a Program Logic Model. Indicators were assigned to each of the components and a mixed methods research approach used to investigate progress in the partnership.

### Significant Findings

The leadership and governance, along with the previous history of collaboration between the two organisations are strengths of the partnership, as is the trust built over time. The commitment demonstrated by shared strategic approaches reflected in the commitment of resources by both organisations and the shared strategic approaches are beginning to result in joint projects including Western Sydney HealthPathways. The challenges of systems change and the uncertainty reflected in role changes within organisations and future funding are perceived as barriers to the work of the partnership.

### Research Outcomes

This research has established a useful framework for ongoing evaluation of a partnership engaged in complex, evolving systems change aimed at improving integration of health care in western Sydney.



WentWest CEO, Walter Kmet (left) and Western Sydney Local Health District CEO, Danny O'Connor (right).



Michelle Warwick (left), WentWest Partnership Manager; Brogan Renshaw (2nd left), University of Western Sydney Research Officer; Professor Jennifer Reath (3rd left), University of Western Sydney Lead Researcher; Dr Kim Hill (centre), Western Sydney Local Health District Executive Medical Director; Dr Penelope Burns (3rd right), University of Western Sydney Senior Lecturer; Professor Tim Usherwood (2nd right), University of Sydney and PEER-WS Chairperson; Adjunct Associate Professor Walter Kmet (right), WentWest CEO.

**THE LEADERSHIP AND GOVERNANCE, ALONG WITH THE PREVIOUS HISTORY OF COLLABORATION BETWEEN THE TWO ORGANISATIONS ARE STRENGTHS OF THE PARTNERSHIP, AS IS THE TRUST BUILT OVER TIME.**

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## OTHER RESEARCH AND EVALUATION PROJECTS UNDERTAKEN BY PEER PARTNERS IN WESTERN SYDNEY

RESEARCHERS	DESCRIPTION
Peiris D, Usherwood T, Harris M, Rodgers A, Hayman N, Panaretto K, Chow C, Redfern J, Lau A.	Consumer Navigation of Electronic Cardiovascular Tools – The CONNECT study.
Reath J, Gunasekera H, Leach A, Abbott P, Askew D, Giroi F, CIG Kong K, Bond C, Hu W	Randomised controlled trial of antimicrobial treatment versus watchful waiting for acute otitis media without perforation in low risk Aboriginal children.
Reath J, Abbott P, Anning B, Brooker R, Kurti L	Strengthening the roles of Aboriginal Mentors and Educators in GP training.
Boden Institute	SHAPE Healthy Lifestyle Program: Evaluation Study of the Effectiveness of the SHAPE Program (analysing patient data).
Boden Institute	Diabetes Prevention Program: Testing the acceptability and effectiveness of different intervention modalities.
Education Integration Partnership	Vertical Integration (VI) in Primary Health Care Training and Education: an evaluation of the collaborative teaching modules in Greater Western Sydney clusters.
Reath J, Dadich A, Abbott P, Hosseinzadeh H, Hu W, Usherwood T, Kang M	NSW STI Programs Unit GP and STI evaluation research.

START DATE	DURATION	STATUS	FUNDING SOURCE	WESTERN SYDNEY PARTNERS INVOLVED
2013	36 months	Current	NHMRC	USyd WW
2013	48 months	Current	NHMRC	USyd UWS AMSWWS
2012	10 months	Current	GPET	UWS WW
2012	12 months	Completed	WSML	USyd WW
June 2013	18 months	Current	ANPHA	USyd WW
July 2011	12 months	Completed	GPET	USyd UWS WW
2011	18 months	Report completed Papers in progress	NSW STI Programs Unit	USyd UWS

## OTHER RESEARCH AND EVALUATION PROJECTS UNDERTAKEN BY PEER PARTNERS IN WESTERN SYDNEY

CONTINUED

RESEARCHERS	DESCRIPTION
Reath J, Kang M, Dalziell R, Hardy J, Dean C, Alexander F, Taylor C, Dennison P, Usherwood T	Western Sydney Primary Care Teaching Network project – The impact of interdisciplinary clinical placements on knowledge and attitudes of medical, nursing, physiotherapy and dentistry students.
Reath J, Usherwood T, Chang J	Western Sydney Primary Care Integrated Teaching Network – Development and evaluation of a vertical and horizontal integrated teaching network in Western Sydney/ AGPT.
Watt K, Abbott P, Reath J, Gordon E	Cross-cultural training of GP registrars – Who is responsible? Assessing the perceptions and training needs of GP supervisors in Western Sydney.
Sebastian R, Usherwood T	CALD women's awareness and understanding of heart disease risk.
Baskoti B, Usherwood T	Vertically integrated teaching and learning in general practice – a qualitative inquiry.
Alam M, Usherwood T	Access to psychological services amongst Pakistani families in western Sydney.
Watt K, Abbott P, Reath J	Community transitions for migrant women leaving Justice health.
Saini J, Abbott P, Reath J	Factors influencing medical student intention to work in urban areas of disadvantage after graduation.



START DATE	DURATION	STATUS	FUNDING SOURCE	WESTERN SYDNEY PARTNERS INVOLVED
2011	24 months	Data analysis stage	Department of Health and Ageing - ICTC Program	USyd UWS WW
2011	12 months	Data collection completed WW coord. Jenny consulting	GPET	USyd UWS WW
2013	12 months	Ethics approved Recruiting participants	GPET	UWS WW
2013	12 months	Current	GPET	USyd WW
2014	12 months	Funded	GPET	USyd WW
2014	12 months	Funded	GPET	USyd WW
2014	12 months	Funded	GPET	UWS WW
2014	12 months	Funded	GPET	UWS WW

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## THE PEER-WS OBJECTIVES FOR WESTERN SYDNEY ARE TO:

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- **PROVIDE A PLATFORM** for the development and coordination of integrated Primary Health Care (PHC) teaching.

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- **SUPPORT THE DEVELOPMENT** of a quality PHC and teaching and research network including centres of excellence and new practice/ service models.

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- **PROVIDE A PLATFORM** for developing, attracting and coordinating PHC research opportunities.

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- **PROVIDE ADVICE AND RECOMMENDATIONS** on research proposals and evaluation activities to WentWest and other organisations in western Sydney.

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- **PROMOTE, EVALUATE AND SUPPORT** innovation in PHC delivery, teaching and research.

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- **PROMOTE COMMUNITY ENGAGEMENT** in teaching and research in western Sydney.

**PEER-WS MEMBERS MEET BIMONTHLY TO  
PROGRESS PLANNING AND REPORTING OF  
COLLABORATIVE TEACHING AND RESEARCH  
INITIATIVES ACROSS THE REGION.**

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PEER-WS partners working together  
to enhance primary health care  
research in western Sydney.

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