WACHS Human Research Ethics Committee

Summaries of Approved Projects

January to June 2016

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Project Summaries for WACHS HREC Approved Projects – January to June 2016

The material contained in this document is made available to assist researchers, institutions and the general public in searching for projects that have ethics approval from the WA Country Health Service Human Research Ethics Committee (WACHS HREC). It contains lay summaries for projects approved between January and June 2016.

Please refer to the end of this document for explanations of specific terminology used throughout this report.

Project Title	2015/42 - The epidemiology of amphetamine type stimulant related hospital presentations and admissions in Hedland, Western Australia			
Co-ordinating Principal Investigator	Dr Mathew Coleman			
Institution	WA Health (WACHS)	WA Health (WACHS)		
WACHS Region(s)	Pilbara			
Target Population	People who may be involved in illegal activity			
Start Date	1 February 2016	Finish Date	1 February 2017	

This study will examine the epidemiology of amphetamine type stimulants (ATS) via a retrospective analysis of medical records at Hedland Health Campus from 2010 to 2015. The study will determine the number of admissions to hospital and presentations to the emergency department throughout the study period that were related to ATS use. It is anticipated that the study will show increasing rates of admissions to hospital and presentations to emergency department related to ATS use over the period. This research seeks to identify patterns in ATS related presentations and identify at-risk groups. This will provide baseline data for future research and may help inform resource planning.

Project Title	2016/02 - A collaborative mumps outbreak investigation for the Kimberley			
Co-ordinating Principal Investigator	Ms Ashley Eastwood			
Institution	WA Health (WACHS)			
WACHS Region(s)	Kimberley			
Target Population	Children and/or young people (i.e. <18 years); Aboriginal and/or Torres Strait Islander peoples			
Start Date	17 February 2016	Finish Date	17 August 2016	

In 2015, there was an outbreak of mumps predominantly among Aboriginal people in the Kimberley. During public health management of this outbreak, preliminary data analysis showed 80% of cases were already fully immunised. In an earlier outbreak in 2007-2008 in the Kimberley, just over 50% were fully immunised. This project will further analyse all public health data collected by Kimberley Public Health Unit (KPHU) as part of outbreak management. The aims are to describe the characteristics of Aboriginal people diagnosed with mumps as a notifiable condition, including their vaccination history, age, social circumstances, com-morbidities, genotype, access to health care and map geographic mobility and epi-links; and convene an Aboriginal reference group to discuss these findings, consider their implications and develop guidance for KPHU for future disease control responses including community-wide initiatives.

Project Title	2015/39 - Outcome and survival in Aboriginal and Torres Strait Islander people and non-Indigenous Australians with non-cystic fibrosis bronchiectasis in the Kimberley region of Western Australia			
Co-ordinating Principal Investigator	Dr Justin Barton			
Institution	WA Health (SMHS)			
WACHS Region(s)	Kimberley			
Target Population	Aboriginal and/or Torres Strait Islander peoples			
Start Date	1 February 2016	Finish Date	1 February 2017	

Non cystic fibrosis (non-CF) bronchiectasis is a chronic lung condition characterised by permanent dilation of airways leading to recurrent chest infections, decline in lung function and often, premature death. Indigenous Australians suffer from non-CF bronchiectasis at significantly higher rates than non-Indigenous Australians. However, little is known about aetiological factors and risk factors for progression and poor outcomes. A prior component of this study has looked at a cohort of Indigenous Australians from central Australia, however, it is not known if this data is generalisable to other Indigenous populations. The aims of this project are;

- 1. To describe the natural history and of adult non-cystic fibrosis bronchiectasis in a cohort of Indigenous Australian's from the Kimberly region of Western Australia;
- 2. Identify risk factors for frequent exacerbations and premature mortality;
- 3. Determine local sputum microbiobial patterns and audit antibiotic use in both acute exacerbation and long term management; and
- 4. Contribute to the development of a scoring system and algorithm for survival.

Project Title	2015/40 - Characterising the microbiome of pregnancy			
Co-ordinating Principal Investigator	Professor Julie Quinlivan			
Institution	University of Notre Da	University of Notre Dame		
WACHS Region(s)	Pilbara			
Target Population	Women who are pregnant and the human fetus			
Start Date	23 February 2016	Finish Date	30 June 2017	

Pre-term birth (PTB) is the leading cause of perinatal morbidity and mortality worldwide. Over the past two decades, intrauterine infection has been proposed as a leading contributor of PTB. The analysis of previous study results found intrauterine infection was the leading association with cerebral palsy and neurological deficits in young children. The majority of infections are thought to arise from ascension of vaginal bacteria through the cervix, although haematogenous invasion via the placenta has also been postulated as a mechanism of infection. The recent development of culture independent tools has resulted in broadening of our understanding of the vaginal microbiome. This project is part of an international study designed to explore the microbiome of pregnant women and involves a sample of approximately 100 pregnant women from a Western Australian rural location.

Project Title	2016/07 - Progression of chronic kidney disease to end stage: A retrospective cohort study from the Kimberley region			
Co-ordinating Principal Investigator	Dr Emma Griffiths			
Institution	University of Western	University of Western Australia		
WACHS Region(s)	Kimberley			
Target Population	Aboriginal and/or Torres Strait Islander peoples			
Start Date	7 April 2016	Finish Date	7 April 2017	

Chronic kidney disease (CKD) is a significant health problem within Australia, accounting for almost \$900 million in health care expenditure in 2004-2005. Rates of detected CKD in the Kimberley region continue to increase. Within Australia, rural and remote Aboriginal and Torres Strait Islander people are some of the most significantly affected by CKD. This is reflected by higher incidence rates of CKD within this population, particularly end-stage kidney disease. In spite of the growing field of literature on CKD and the associated risk factors involved in its progression, a large evidence gap still exists with respect to the reproduction of these findings within the vulnerable Aboriginal group. This study will therefore aim to investigate the effect of acute kidney injury on the progression of pre-existing CKD in Aboriginal patients within the Kimberley and enhance the evidence base for CKD.

Project Title	2016/06 - Evaluating the implementation of the dementia and delirium care with volunteers program			
Co-ordinating Principal Investigator	Dr Craig Sinclair			
Institution	University of Western Australia			
WACHS Region(s)	Great Southern			
Target Population	People highly dependent on medical care; People with a cognitive impairment, an intellectual disability or a mental illness			
Start Date	20 April 2016 Finish Date 20 April 2018			
The Confused Hospitalised Older Persons (CHOPS) initiative has been developed and				

implemented across a number of metropolitan and regional hospitals in New South Wales. The intervention uses screening techniques to proactively identify inpatients with cognitive impairment, and employs volunteers to assist in patient management and safety. This two year project will evaluate the effectiveness of implementing specific components of the CHOPS initiative. The intervention will train a cohort of community volunteers to provide one-to-one support, person-centred engagement and diversion activities for inpatients with cognitive impairment.

Project Title	2016/09 - Engagement for change: Engaging health professionals and community members in nurse practitioner role development in a rural primary health setting				
Co-ordinating Principal Investigator	Professor Sandra Dunn				
Institution	Charles Darwin University				
WACHS Region(s)	Wheatbelt				
Target Population	No primary participant category				
Start Date	22 April 2016 Finish Date 22 October 2016				
Using a mixed method	l of survey and themati	c analysis from focus arou	ups this study will explore		

Using a mixed method of survey and thematic analysis from focus groups, this study will explore service delivery priorities and the perceptions of the nurse practitioner (NP) role of both local community members and health care professionals. It is expected that collaboration with the general and health communities will improve understanding and acceptance of the NP role. Results of the study will be used to shape the NP role and activities within the primary health care environment in the Wheatbelt.

Project Title	2015/41 - Major primary post-partum haemorrhage affecting vaginal births in nulliparous women at Bunbury Hospital - A case control study			
Co-ordinating Principal Investigator	Dr Andrew Kirke			
Institution	University of Western Australia			
WACHS Region(s)	South West			
Target Population	Women who are pregnant and the human fetus			
Start Date	1 May 2016	Finish Date	1 June 2017	

Major primary post-partum haemorrhage (PPH) is the loss of 1000mls or more blood in the first 24 hours after childbirth. PPH is a leading cause of maternal morbidity and mortality globally and locally. It occurs in 6% of births at Bunbury Hospital (BH) and is a rapid and unpredictable event that requires prompt intervention. In Western Australia, 17.3% of births in 2011 occurred in non-metropolitan locations where there are fewer options for referral of risky events. Previous analysis of births at Bunbury Hospital have found that women giving birth to their first baby are more likely to experience major primary PPH than those who have given birth previously. The proposed project is a case-control study, which aims to investigate the risk factors contributing to this discrepancy. Given the limitations of rural health practice, understanding the risk factors of PPH could improve birth outcomes at Bunbury Hospital. The results of this study will help clinicians and policy makers to implement management strategies to prevent and reduce the morbidity and mortality associated with PPH.

Project Title	2016/08 - Younger people with type 2 diabetes WACHS service providers survey			
Co-ordinating Principal Investigator	Ms Carole Rainsford			
Institution	WA Health (WACHS)	WA Health (WACHS)		
WACHS Region(s)	All WACHS Regions			
Target Population	No primary participant category			
Start Date	10 May 2016	Finish Date	11 December 2016	

The WA Country Health Service chronic conditions team is very keen to gain insights into the experience of health services in managing younger people aged 0-39 years living with type two diabetes or diabetes in pregnancy, particularly from the perspective of WACHS site based service providers or non-government organisations. Regional service and clinician feedback indicates concern regarding younger people presenting to regional health service with type 2 diabetes and complications of diabetes. On further enquiry, data to determine this demographic and tailor diabetes management strategies is not easily identified and warrants further enquiry.

Project Title	2016/05 - The rural medical education officer: An overview of the non- clinical rural medical education officer			
Co-ordinating Principal Investigator	Ms Rael Rivers			
Institution	WA Health (WACHS)			
WACHS Region(s)	Great Southern, South West, Midwest, Goldfields, Pilbara and Kimberley			
Target Population	No primary participan	No primary participant category		
Start Date	10 May 2016 Finish Date 10 May 2017			
particularly in a rural s improvement activity t	etting. This research is o assist in determining	icted on the role of the nor being conducted as part the scope of the rural Mer	dical Education Officer	

(MEO) skill set, the challenges of being a MEO in a rural hospital setting and to highlight the important role a rural MEO can play in the continued care and guidance of junior doctors in the regions.

Project Title	2016/10 - Multidisciplinary teams: Understanding patient care by understanding team interactions			
Co-ordinating Principal Investigator	Professor Cristina Gibson			
Institution	University of Western Australia			
WACHS Region(s)	South West			
Target Population	No primary participant category			
Start Date	17 May 2016	Finish Date	31 December 2017	

The overarching goal of this study is to improve quality of patient care in hospitals. Quality in delivery of hospital care remains one of the major issues for hospitals. Within the multidisciplinary patient care teams, the researchers will investigate and analyse interpersonal relationships and communication patterns. Frequent, timely, high quality and problem-solving communication between team members, supported by shared goals, shared knowledge and mutual respect, leads to better coordination of care. The research will measure the coordination between team members to assess the quality of interaction within the multidisciplinary team. In addition, the research will identify ways of improving the patient care outcomes by assessing the utility of organisational practices such as multidisciplinary training, multidisciplinary meetings and use of boundary spanners such as case coordinators.

Project Title	2016/11 - Evaluation in health promotion: Gathering evidence to improve effectiveness		
Co-ordinating Principal Investigator	Associate Professor Ben Smith		
Institution	Monash University		
WACHS Region(s)	Goldfields and Wheatbelt		
Target Population	No primary participant category		
Start Date	24 May 2016	Finish Date	31 December 2018

Health promotion plays a vital role in addressing the population health challenges facing Australia. Effective evaluation of health promotion initiatives has many benefits, and can contribute to the quality and effectiveness of strategies, facilitate organisational learning and capacity building, inform program planning and policy decisions, enable accountability to funders and recipients of a program, and increase the likelihood of program sustainability. This project aims to identify the range of factors that influence how evaluation is conducted and used in Australian health promotion and prevention programs, as well as investigating ways that evaluation capacity could be improved. Additionally, the study will examine how evaluation is undertaken by government and non-government agencies and to explore how individual, organisational and system level factors influence practice.

Project Title	2016/14 - Treatment of non-ST elevation acute coronary syndromes at Albany Health Campus: An audit of guideline adherence and patient re-admission outcomes		
Co-ordinating Principal Investigator	Dr Brendan McQuillan		
Institution	University of Western Australia		
WACHS Region(s)	Great Southern		
Target Population	No primary participant category		
Start Date	8 June 2016	Finish Date	8 July 2017

Acute coronary syndromes (ACS) is the epithet given to a group of conditions, colloquially known as heart attacks, which result in the reduction of blood flow to the muscles of the heart. The ACS account for a huge burden of disease within Australia and around the world with the costs associated with treatment of the condition running into the billions. Thus, these conditions warrant investigation to ensure that current practices used in treating ACS are being applied in an appropriate manner and are efficacious. Previous studies into this area in Australia has identified that care of ACS in rural areas is often sub-par when compared to treatment of the same conditions in the metropolitan area. As such this study will seek to investigate the degree of adherence to the Australian Heart Foundation Guidelines for the Management of Acute Coronary Syndromes.

Project Title	2016/15 - An analysis of bariatric patient handling risks and risk management strategies within the Western Australian Country Health Service		
Co-ordinating Principal Investigator	Dr Martyn Cross		
Institution	Edith Cowan University		
WACHS Region(s)	All WACHS regions		
Target Population	No primary participant category		
Start Date	13 June 2016	Finish Date	13 June 2017

There has been significant awareness to general patient handling risks and injuries, however there has been relatively little consideration to the bariatric (obese) patient handling subset of similar risks. Research demonstrates the increase in bariatric patients requiring hospital admission matches the increase in population obesity rates. Given that obesity projections predict that in 2035 approximately 35% of the population will be overweight and 42% of the population will be obese, increased hospitals admissions of obese or overweight patients is likely which may result in an increased requirement of patient handling tasks of these heavier patients. Furthermore, obesity is more frequent in rural and remote areas compared to urban areas. This research will be examining bariatric patient handling risk to health care workers within WA Country Health Service.

Project Title	2016/13 - Food pricing policy study		
Co-ordinating Principal Investigator	Ms Megan Ferguson		
Institution	Menzies School of Health Research		
WACHS Region(s)	Midwest, Goldfields, Pilbara and Kimberley		
Target Population	No primary participant category		
Start Date	17 June 2016	Finish Date	17 June 2017

Poor nutrition is linked to the poor health status of Indigenous Australians living in remote communities. Affordability of food is known to be one of the key drivers in food choice. Food pricing policy may play a role in contributing to improved health outcomes. This study aims to:

- 1. Identify and characterise the types of food pricing policies which are or have been in place in remote community stores that aim to improve health outcomes; and
- 2. Describe the process of development, including the evidence considered and the criteria used to assess options.

Project Title	2016/03 - Neonatal subgaleal haemorrhage in regional Western Australia: An audit		
Co-ordinating Principal Investigator	Dr Paul Sander		
Institution	WA Health (WACHS)		
WACHS Region(s)	Goldfields		
Target Population	Women who are pregnant and the human fetus; Children and/or young people (i.e.<18 years); People highly dependent on medical care		
Start Date	30 June 2016	Finish Date	30 June 2017
Subgaleal haemorrhage is an accumulation of blood in the loose connective tissue of the subgaleal			

Subgaleal haemorrhage is an accumulation of blood in the loose connective tissue of the subgaleal space. It is a potentially preventable adverse event that can have serious complications including cerebral palsy. There is little published information about the complications of delivery in rural and remote centres in Australia. Over recent years paediatric staff have noticed an increase in the incidence of babies being born with subgaleal haemorrhage at Kalgoorlie Health Campus. This project aims to quantify the incidence of complications of delivery, their associated risk factors and neonatal outcome at a regional Western Australian hospital, with particular attention to subgaleal haemorrhage.

Project Title	2016/16 - An exploration of rural midwives' experiences related to maintaining their midwifery registration		
Co-ordinating Principal Investigator	Associate Professor Ravani Duggan		
Institution	Curtin University		
WACHS Region(s)	All WACHS regions		
Target Population	No primary participant category		
Start Date	10 June 2016	Finish Date	10 June 2017

The number of midwives in Australia has reduced by 20% in the last five years. Over the same period approximately 30 dual trained nurses-midwives rescinded their registration in rural Western Australia. This is concerning because it is a considerable portion of the WACHS rural midwifery workforce estimated to be 500 head count. A skilled midwifery force is required in the rural areas to ensure good maternal outcomes. This project aims to explore the reasons why midwives rescind their registration and the issues they face as rural midwives.

Project Title	2016/17 - Defying the odds: Exploring the impact of perinatal outcomes, maternal social and health outcomes and level of culturally appropriate service availability on the health of Western Australian Aboriginal infants and children		
Co-ordinating Principal Investigator	Dr Bridgette McNamara		
Institution	Baker IDI Heart and Diabetes Institute		
WACHS Region(s)	Great Southern, South West and Goldfields		
Target Population	Children and/or young people (i.e. <18 years); Aboriginal and/or Torres Strait Islander peoples		
Start Date	10 June 2016	Finish Date	1 July 2019

A healthy start to life is essential for life-long health and wellbeing. It is well known that Aboriginal children have significantly poorer health outcomes compared to non-Aboriginal children. However, the geographic variation in Aboriginal child health outcomes is currently unclear along with the impact that health and social services have had on child health outcomes. This information is vital to help inform the development of new effective health services and support the maintenance of existing programs that are making a difference, in order to help Aboriginal children to defy the odds and thrive. This study aims to identify the determinants of infant and child health outcomes that derive from the perinatal period and maternal and grand-maternal medical history using whole-of-population linked health data from multi-generational Aboriginal families in Western Australia from 1980 to 2013. This project will also examine how Aboriginal early childhood health outcomes vary across different regions and across families with different characteristics. Furthermore, data from existing health and social services in WA will also be collected in order to examine the impact of these services on child health outcomes.

Glossary

Co-ordinating Principal Investigator:

The individual who takes overall responsibility for the research project and submits the project for ethical and scientific review for multi-centre projects. They are responsible for ongoing communication with the Human Research Ethics Committee and passing on any outcomes from this to the Principal Investigators. For single-centre research, the CPI and Principal Investigator's roles are synonymous.

Institution:

The organisation that the Coordinating Principal Investigator is associated with.

- WACHS Regions:
 - Goldfields
 - Great Southern
 - Kimberley
 - Midwest
 - Pilbara
 - South West
 - Wheatbelt

Target Population:

According to Chapter 4.1 of the National Statement, in addition to the ethical considerations pertaining to all research participants, specific issues arise in the design, conduct and ethical review of research involving the following primary participant categories:

- Women who are pregnant and the human foetus;
- Children and young people (i.e. <18 years);
- People in dependent or unequal relationships;
- People highly dependent on medical care who may be unable to give consent;
- People with a cognitive impairment, an intellectual disability or a mental illness;
- People who may be involved in illegal activities;
- Aboriginal and/or Torres Strait Islander peoples;
- People in other countries;
- People whose primary language is other than English.