Government of Western Australia
Department of Health

Human Research Ethics Committee

Project Summaries for Approved Proposals

July to September 2012 Quarter

Delivering a Healthy WA

Project Summaries for Proposals Approved by the Department of Health WA Human Research Ethics Committee - July to September 2012.

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 Department of Health WA Human Research Ethics Committee (DOH HREC). This document contains summaries for research projects approved by DOH HREC for the period July to September 2012.

Project Title	**The Australian Perinatal Mental Health Reforms: Using Population Data to Evaluate Their Impact on Service Utilisation and Related Cost Effectiveness**		
Principal Investigator	Professor Marie-Paule Austin		
Institution	University of New South Wales, School of Psychiatry		
Start Date	1 May 2012	**Finish Date**	30 April 2015
Maternal mental health problems associated with a pregnancy and the infant's first year can include significant illness and costs for mother, infant, and family and impact the health of the next generation. In the last decade many perinatal mental health initiatives, including the National Perinatal Depression Initiative have been implemented in Australia. As yet it is not understood how well these have succeeded in improving maternal and infant mental health outcomes. This unique project will use population health data to examine the impact of the reforms on maternal and infant health outcomes, service utilisation and the likely cost-effectiveness of those reforms.			

Project Title	**Australian Early Development Index: (AEDI): Infrastructure Linkage**		
Principal Investigator	Ms Ann Blunden		
Institution	Department of Health		
Start Date	12 September 2012	**Finish Date**	Ongoing
The Australian Early Development Index (AEDI) is a population measure of children's development in communities across Australia. The AEDI can provide value in the research of child development, especially when linked to other health related datasets.			

Project Title	**Accurate Measurement of Physical Activity and Sedentary Time Among Colon Cancer Survivors (The ACCEL Study)**
Principal Investigator	Mr Terry Boyle
Institution	Western Australian Institute for Medical Research (WAIMR)

Start Date	1 August 2012	**Finish Date**	31 August 2013

Colon cancer survivors who are physically active after diagnosis have reduced risk of having colon cancer relapse and a reduced risk of dying. Self-report questionnaires indicate that approximately 30-35% of colon cancer survivors are physically active. However, self-reported physical activity is inaccurate and prone to overestimation. New research with breast and prostate cancer survivors using more objective indicators of physical activity (i.e. accelerometers) suggests that the percentage of survivors who are active is closer to 5%. Using accelerometers, Western Australian Institute for Medical Research will accurately determine the percentage of time that colon cancer survivors are physically active and sedentary, and will investigate whether objectively determined activity and sedentary behaviour are associated with health outcomes such as quality of life and fatigue.

Project Title	**Effectiveness of Rotavirus Vaccination in Western Australia: A Case-Control Study**		
Principal Investigator	Associate Professor Angus Cook		
Institution	University of Western Australia		
Start Date	1 November 2012	**Finish Date**	31 March 2014

Human rotavirus infection is the foremost cause of acute and severe dehydrating gastroenteritis leading to hospitalisation and death in infants and young children worldwide. To date there has been no review, in Western Australia of the prevalence and burden of rotavirus infection, even after it became a notifiable infection. Furthermore, the efficacy of the vaccination program, initiated in 2007, has not been assessed in Western Australia.

This project aims to investigate the effect of the introduction of the vaccine on disease rates in Western Australia.

Project Title	**Mortality Among Juvenile Offenders in Western Australia: A Retrospective Population-Based Cohort Study**		
Principal Investigator	Dr Rebecca Glauert		
Institution	Telethon Institute for Child Health Research		
Start Date	1 October 2012	**Finish Date**	31 December 2015

A recognised and significant issue amongst young offenders is the greater risk of death when compared with the general population. Understanding the causes of the excess in mortality among young criminals is vital in order to design and advise on prevention strategies.

The present study intends to fill the gap created by the lack of studies in Western Australia by examining mortality rates among young offenders in contact with the justice system, the strength of the association between contact with the system and the risk of dying, and causes and predictors of death among those offenders who die at a young age.

Project Title	**A Population-based Study on the Effect of Childhood Onset Type 1 Diabetes on School Performance**		
Principal Investigator	Clinical Professor Timothy W Jones		
Institution	Princess Margaret Hospital (PMH), Clinical Care Unit		
Start Date	1 July 2012	**Finish Date**	31 December 2013

Princess Margaret Hospital Clinical Care Unit will compare school performance data from all children and adolescents in Western Australia with Type 1 Diabetes, with data from their non-diabetic age, sex and school matched peers. School performance measures that will be used consist of state and national reading, writing and numeracy testing which are available since 1999.

This will allow us to address topical questions on whether those with Type 1 Diabetes have relatively poorer cognitive performance than their peers, accurately quantifying any observed difference, to provide insights into the life course and prognosis for those living with this incurable chronic disease.

Project Title	**Validating 3M Outcome Quality Indicators as a Potential Tool to Enhance Quality of Care in the Australian Hospital Setting – A Collaborative Study**		
Principal Investigator	Dr Amanda Ling		
Institution	Department of Health		
Start Date	1 September 2012	**Finish Date**	30 September 2013

This audit is a collaborative study between 3M Australia and WA Health. This audit will occur in two phases. Phase one of the audit involves releasing encrypted and de-identified acute episodes in the 2010/11 Hospital Morbidity Data System dataset to 3M Australia to enhance the dataset with additional outcome variables. 3M Australia will return the enhanced data set to WA Health and with a comparison of actual and expected rates of complications and readmissions against State, Australian (if possible) and Unites States of America norms. This information will be reviewed internally by WA Health.

Phase two of the project requires further analysis of the enhanced dataset by the WA Health researchers to evaluate the potential of the 3M tool for safety and quality. This process will require the review and validation of complication and readmission assignments, evaluating the implications for clinical practice and comparison incidences within aggregate groups.

Project Title	**Management of Penile Cancer**		
Principal Investigator	Dr Kevin McMillan		
Institution	Department of Urology, Fremantle Hospital		
Start Date	1 July 2012	**Finish Date**	31 October 2012

The purpose of the project is to describe the epidemiology, the distribution of stage and mortality of patients diagnosed with penile cancer between 1990 and 2010 in Western Australia. In 2011 Fremantle Hospital became the tertiary referral centre for penile cancer in Western Australia, with an aim to improve patient outcomes by centralizing care to a centre of excellence. The project will provide a previously undescribed data set, and may allow future comparative analysis to the prospective audit data currently being collected by the urology department.

Project Title	**Analysis of differences in bowel cancer outcomes between NBCSP participants and non-NBCSP participants in Australia**		
Principal Investigator	Mr David Meere		
Institution	Australian Institute of Health and Welfare (AIHW)		
Start Date	1 July 2012	**Finish Date**	30 June 2014

The performance of the National Bowel Cancer Screening Program (NBCSP) has been monitored annually in reports produced by the AIHW. However, outcome data for participants with a positive Faecal Occult Blood Test (FOBT) screen are limited due to time lags in seeking diagnostic procedures (that is, a colonoscopy) and also from non-mandatory report form return by colonoscopists and histopathology laboratories. This has led to inconclusive evaluation of some aspects of the performance of the Program.

The aims of the project are, for those aged 50, 55 and 65 who were invited into the NBCSP between 2006-2008 inclusive:

Primary objective:

1. For the combined jurisdictions with staging data available, describe difference in cancer stage/spread in those whose bowel cancer was detected by the NBCSP, compared to those who were invited but didn't participate in the NBCSP (and were later diagnosed with bowel cancer). It is hypothesised a down-staging of bowel cancers will have occurred for cancers detected by the NBCSP compared to cancers in those who did not participate.

Secondary objectives:

2. Determine aggregate stage/spread information for bowel cancers diagnosed (from 2006 onwards) in those aged 50-75 who had not been invited into the NBCSP for comparison with the above.
3. Describe any differences in mortality rates between those who did and did not screen in the NBCSP.
4. Investigate characteristics of missed cancers (those with a negative screen who were later found to have bowel cancer).
5. Describe the positive predictive value of the screening test.
6. Describe the negative predictive value of the screening test.
7. Demonstrate the feasibility and gain experience in linkage of data from the NBCSP Register, Australian Cancer Database and the National Death Index to evaluate NBCSP outcomes, with the view of requesting future ongoing linkages if successful.

Project Title	**Estimation of the Annual Prevalence, Burden of Disease, Health Service Utilisation and Survival of Patients Diagnosed with Cancer in Western Australia**		
Principal Investigator	Associate Professor Rachael Moorin		
Institution	Curtin University of Technology		
Start Date	1 August 2012	**Finish Date**	31 December 2013
This study has been commissioned by the Cancer Council of Western Australia and aims to provide information about the number of people living with cancer in Western Australia from 1998 to 2011 in terms of gender, age and other important demographic information. The study will determine how this has changed over time, how long ago they were diagnosed, what type of cancer they have, where they reside and information about their use of hospitals in Western Australia.			

Project Title	**The Epidemiology of Moderate and Serious Injury Among Western Australian Cyclists**		
Principal Investigator	Ms Diana Rosman		
Institution	Department of Health		
Start Date	1 August 2012	**Finish Date**	30 January 2014
This study will investigate the epidemiology of moderate and serious injury among Western Australian bicyclists from 1995-2010, using hospital separation, trauma registry, death registry and Main Roads Western Australia data, linked through the Western Australian Data Linkage System. It will characterise injured cyclists in terms of the socio-demographics, the types of injuries sustained and the nature and characteristics of crashes they are involved in. This study will also investigate the relationship between injury severity and geographical and spatial factors.			

Project Title	**Calculating Injury Severity Scores from Hospital, Trauma and Death Records in Western Australia**		
Principal Investigator	Ms Diana Rosman		
Institution	Department of Health		
Start Date	1 August 2012	**Finish Date**	31 December 2014
This project will calculate the likelihood of surviving a particular injury. Each type of injury will be assigned a number between 0 and 1, representing the proportion of people who survive (i.e. those who do not die within 60 days) with that injury.			

Project Title	**Detailed Multivariate Analysis of Factors Influencing the Occurrences and Outcome of Road Crashes and Injuries Using Linked Hospital, Roads, Death, Insurance, Trauma and Licensing Data**		
Principal Investigator	Ms Diana Rosman		
Institution	Department of Health		
Start Date	1 September 2012	**Finish Date**	31 December 2014

This project will use a range of multivariate modelling techniques to investigate details about road crashes (e.g. type of crash, driver/passenger characteristics, crash location, road structure, vehicle attributes, emergency response and treatment provided) to better understand when and how they occur and what can be done to prevent them or at least reduce their severity when they do occur.

Initially the Department of Health will focus on the relative contribution of risk factors for serious injury and the financial and social costs so that subsequently cost effective prevention strategies can be developed.

Project Title	**Health Watch, The Australian Institute of Petroleum Health Surveillance Program**		
Principal Investigator	Professor Malcolm Sim		
Institution	Monash University		
Start Date	1 January 2005	**Finish Date**	28 February 2013

The Health Watch program is an epidemiological health surveillance program to monitor major health outcomes in the cohort of employees working in the petroleum industry in Australia. Surveillance includes deaths from any cause (all-cause mortality) and the incidence of cancer. These outcomes are reported back to cohort membership directly and to the funding body and the stake holders through regular meeting of the Health Watch Advisory Committee.

The fact that the study is carried out by a university which is independent of the petroleum companies, provides regular feedback and does not provide data to the companies except on an aggregated basis, is key to its continued support.

The collected data allow comparison of mortality and cancer morbidity between petroleum industry workers and the general population to identify disease(s) of occupational origin. As the cohort ages, more deaths and cancer cases will arise so continued follow up is scientifically important. The commitment to the project from the participants suggests that follow up is also ethically important.

Project Title	**Influenza Vaccination Uptake in Pregnant Women in Western Australia**
Principal Investigator	Ms Silje Taksdal
Institution	Communicable Disease Control Directorate, Department of Health

Start Date	29 October 2012	**Finish Date**	30 June 2013

Due to increased risk of complications relating to influenza infection during pregnancy, pregnant women in Australia have been eligible for free influenza vaccination since 2009. In March 2012, the Department of Health published the Operational Directive, Influenza Vaccination for Pregnant Women (OD 0363/12), which recommends that all pregnant women are offered flu vaccination as part of their routine antenatal care regardless of gestation and geographical location.

This study aims to determine the uptake of seasonal flu vaccination in pregnant women in Western Australia, women's knowledge and attitudes to flu vaccination in pregnancy, and barriers or enablers to flu vaccinations in pregnant women. The data will be collected using Computer Assisted Telephone Interviews (CATI) of a random sample of 400 women who have recently given birth.

Note: minor amendments have been made to summaries to comply with the Department of Health *WA Health Writing Style Guide*.


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