

Human Research Ethics Committee

Project Summaries for Approved Proposals

January to March 2015 Quarter

Delivering a Healthy WA

Project summaries for proposals approved by the Department of Health Human Research Ethics Committee - January to March 2015 quarter.

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 Human Research Ethics Committee (DOH HREC). It contains lay summaries available for the January to March 2015 quarter.

Project Title	A study to investigate the ratio of breslow thickness to skin thickness as a prognostic factor in patients with malignant melanoma		
Principal Investigator	Dr Duncan Taylor		
Institution	Sir Charles Gairdner Hospital		
Start Date	15 September 2014	Finish Date	30 January 2016

Breslow thickness, a measure of melanoma tumour thickness in millimeters, has been found to be one of the most powerful predictors of survival in patients with malignant melanoma. However, skin thickness varies considerably between different races and age-groups, between men and women, and between different regions of the body surface and the amount of sun-exposure over time. It has not been reported whether the ratio of the Breslow thickness to the thickness of the surrounding normal skin has prognostic significance.

This study aims to investigate the relationship between the ratio of Breslow thickness and the thickness of the adjacent skin and whether this has any prognostic significance in malignant melanoma.

Project Title	Analysis of the implementation of breast cancer multi-disciplinary team decisions		
Principal Investigator	Dr Neli Slavova-Azmanova		
Institution	University of Western Australia		
Start Date	1 December 2012	Finish Date	31 December 2016

Multidisciplinary care is widely accepted in Australia; however, at present there is a paucity of strong evidence of the efficacy of Multidisciplinary Team Meetings (MDMs) in improving treatment according to guidelines and improving cancer outcomes. As MDMs are costly and time consuming, it is important to establish the impact of MDM decision making on patient outcomes and what factors affect adherence to treatment recommendations.

This study will assess conformity of the MDM recommendations with treatment guidelines and implementation of the MDM decisions, reasons for deviation, and what the impact is on patients' outcomes. Thus, the research will provide practical feedback on existing MDM practices.

Project Title	Evaluation of the healthier workplace WA project – healthy worker module		
Principal Investigator	Associate Professor Michael Rosenberg		
Institution	University of Western Australia		
Start Date	3 November 2014	Finish Date	31 December 2016

As part of the evaluation of the Healthier Workplace WA project, data from the Healthy Worker Module (as part of the WA Health and Wellbeing Surveillance System (HWSS)) will be analysed in conjunction with other data from the HWSS. The purpose of the study is to investigate the impact of employment on employees' lifestyle factors and the impact of healthy workplace initiatives on employees' lifestyle factors.

Project Title	Atrioventricular septal defects in children and fetuses: a 20 year review		
Principal Investigator	Dr Luke Eckersley		
Institution	Princess Margaret Hospital		
Start Date	1 November 2014	Finish Date	1 November 2015

Atrioventricular septal defect (AVSD) is a relatively common form of congenital heart disease which is frequently associated with Trisomy 21 (Down syndrome). It invariably requires a cardiac operation, usually in the first six months of life. Since 2000 in WA, screening for Trisomy 21 has occurred in the first trimester of pregnancy. It is not known if this has changed the number of babies born with AVSDs.

In this study, the aim is to gather data on children and fetuses born between 1990 and 2009 diagnosed with AVSD. The period before the first trimester screening for Trisomy 21 (pre-2000), and the period after will be compared. The hypothesis is that there has been a reduction in AVSD patients born alive with Trisomy 21, but no change in the surgical outcomes.

The results of this work will guide the expectation for the care required for future patients with AVSD, and allow the best possible service delivery. It will also allow more accurate counselling following an antenatal diagnosis of AVSD.

Project Title	Determining the burden and costs of pressure injuries treated in Western Australia, 2007-2013		
Principal Investigator	Dr Laura Miller		
Institution	Department of Health		
Start Date	1 August 2015	Finish Date	31 December 2017

Pressure injuries are a universal problem in healthcare facilities around the world and are largely preventable. They cause considerable pain and suffering to patients and result in increased health care costs.

There are three data sources which capture information on pressure injuries in Western Australia; however each data source has limitations when analysed in isolation. Linking the three datasets will maximise the information captured on pressure injuries, to estimate burden and cost of pressure injuries to the public hospital system between 2007 and 2013.

Project Title	Implementing an outreach support program for family carers of older people discharged from an acute medical assessment unit: cost consequences for the Western Australian health care system		
Principal Investigator	Associate Professor Christine Toye		
Institution	Sir Charles Gairdner Hospital		
Start Date	10 January 2015	Finish Date	14 November 2016

This research will entail a trial of the Further Enabling Care at Home (FECH) program. This program includes assessing the support needs of older patient's family carers at the time of the patient's hospital discharge and helping to address these needs by facilitating contact with existing support resources.

Costs from the hospitalisation of older patients are escalating. The FECH program has the potential to decrease these costs by helping to ensure adequate support for carers, including when the patient experiences a health crisis that might usually precipitate a return to hospital.

The study aim is to determine this program's impacts upon the family carers, the patients for whom they provide care, and costs to WA Health. To do this, family carers will be assigned to receive the usual care or usual care plus the new program. The outcomes between the two groups will be compared in terms of:

- 1. Family preparedness to sustain the caregiving role;
- 2. Re-presentations/re-admissions of care recipients to hospital, and the length of stay when readmissions do occur; and
- 3. Costs to the healthcare system.

Feedback will also be sought on the program from family carers, patients and the hospital staff to aid in program refinements.

Project Title	Developing a model of care for the long term follow-up of childhood cancer survivors		
Principal Investigator	Dr Jordana McLoone		
Institution	University of New South Wales		
Start Date	30 November 2014Finish Date30 June 2015		

During the survivorship phase, issues related to childhood cancer treatment focus on the management of late effects, rehabilitation, health promotion, and psychosocial support. Currently, no Australian or New Zealand data exists to inform us of the best model of care in this group. International studies suggest that as the risk of late affects increases with age, attendance at long term follow-up (LTFU) clinic decreases, bringing attention to the need to remove the significant barriers that currently limit survivors' attendance to LTFU. This research aims to discover survivors' care preferences, medical and information needs, and barriers to attending LTFU care.

Project Title	Oral health service planning		
Principal Investigator	Associate Professor David Whyatt		
Institution	University of Western Australia		
Start Date	1 January 2015	Finish Date	31 December 2020

This study proposes to model the accessibility of existing publicly funded dental clinics and the impact of dental service accessibility on attendance. Data to be used include the routinely collected service data from publicly-funded dental clinics. Furthermore, the relationship between the cohort's attendance to dental clinics and the admissions and emergency department presentations for dental health-related episodes will be examined. The results of the study will inform the planning of additional dental clinics to maximise equity of access to dental services and maximise outcomes for the WA population and WA Health.

Project Title	Human capability and the progress of Indigenous people		
Principal Investigator	Winthrop Professor Stephen Zubrick		
Institution	Telethon Kids Institute		
Start Date	1 January 2015Finish Date31 January 2019		
This is a PhD project that uses the personal interview information originally collected in 2000/01 from 1999 families in the Western Australian Aboriginal Child Health Survey. There were 5289 Aboriginal			

children living in these families and their parents (mainly mothers, grandmothers and aunts) provided information about how these children were growing and developing. The school teachers were also interviewed. The focus of this PhD project is on how the 5289 children in the survey have developed over the past 15 years since their parents were originally interviewed about them. As there is no longer contact with the families, this project will link administrative data held by the Department of Health and the Department of Education about these children in order to help understand how they have developed over time. This will tell us if these children have had health and mental health problems as they have grown up and it will also tell us how well these children were doing in school. The families originally gave their consent for data linkage to be used to see how these children developed.

Project Title	Management of mining dusts exposure cohorts		
Principal Investigator	Professor Nicholas de Klerk		
Institution	Telethon Kids Institute		
Start Date	31 October 2014	Finish Date	Ongoing

The key research question is how much mining dusts and fumes affect the health, physical and mental, of both exposed workers and communities. The overall aim is to maintain to extinction and regularly update existing occupational and non-occupational cohorts to continue to improve our understanding of the physical and mental health problems associated with exposure to occupational dusts and fumes. Specific aims include;

1. Maintain to extinction three existing cohorts (the former Wittenoom workers, Wittenoom ex-residents and Kalgoorlie Goldminers) so that data is available for future research;

2. Update information on cohorts via data-linkage, death records and questionnaires; and

3. Share data in a way that maintains privacy and confidentiality of cohort members.

Project Title	Effectiveness of quadrivalent and trivalent influenza vaccines in preventing influenza in health care workers in WA in 2015			
Principal Investigator	Dr Robyn Gibbs			
Institution	Department of Health			
Start Date	1 March 2015	Finish Date	31 March 2016	
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Influenza vaccine effectiveness can vary from year to year, depending on the match between the vaccine strains and circulating viruses. It is therefore important to annually monitor the effectiveness of seasonal influenza vaccines. Furthermore, in 2015 employees of WA Health will be offered a quadrivalent influenza vaccine (QIV) in addition to previously available trivalent influenza vaccine (TIV). Because QIV will offer protection against four strains of influenza virus it is important to monitor and compare the effectiveness of this vaccine to TIV. The proposed project is a prospective cohort study that will use surveillance systems in Australia to measure and compare the incidence of influenza-like illness (ILI) and confirmed influenza in vaccinated and unvaccinated health care workers in 2015. This data will be used to estimate the vaccine effectiveness of QIV and TIV.

Project Title	Factors predicting ovarian cancer: a population-based cohort study of 350,000 women followed for up to 45 years		
Principal Investigator	Dr Louise Stewart		
Institution	Curtin University		
Start Date	1 June 2015	Finish Date	31 December 2017

This study is designed to identify risk factors for developing ovarian cancer. Of particular interest are women who have underlying medical conditions that require them to have just one ovary or fallopian tube removed. It is believed underlying medical conditions that require this type of surgery may also predispose these women to an increased risk of developing ovarian cancer later on in life.

To conduct this study a large cohort of all women born between 1945 and 1975 (approximately 350,000) who have been to hospital in WA at any time in their life will be identified. The medical history of these women up until 2014 will be followed. Using hospital records, detailed information will be collected on a wide range of known ovarian cancer risk and protective factors such as the number of children a woman has had and whether they had infertility problems or diagnosis of any gynaecological medical conditions. Comparisons will then be made between the patterns of the risk and protective factors for women who did not go onto to develop ovarian cancer with those women who did develop ovarian cancer.

This project will build on previous work that examined risk factors for ovarian cancer in a cohort of approximately 20,000 women seeking treatment for infertility. Previous research found that women who had one ovary or an ovary and fallopian tube removed (without hysterectomy) had four times the risk of ovarian cancer compared with women who did not have this procedure. If this finding is able to be confirmed in a much larger sample it may be possible to identify women at increased risk of ovarian cancer as many as 10 years before they would otherwise be diagnosed.

Project Title	Mining dust-related diseases in Western Australia [Short title: Dust diseases in WA]			
Principal Investigator	Professor Nicholas de Klerk			
Institution	Telethon Kids Institute			
Start Date	1 March 2015	Finish Date	28 February 2019	

Both occupational and non-occupational exposures to asbestos have been associated with a number of malignant and non-malignant diseases, such as mesothelioma, lung cancer, asbestosis, diffuse pleural thickening and pleural plaques. Although the relationships between exposure and disease are well established some uncertainties remain. Therefore, the overall aim of this study, or series of studies, is to continue to improve our understanding of the physical and mental health impacts of occupational and non-occupational exposures to asbestos. Specific aims are to;

1. Improve our understanding of dose-response relationships between asbestos and asbestos-related diseases;

2. Investigate additional effects of lifestyle factors and other occupational exposures on asbestosrelated diseases;

3. Investigate the effects of childhood exposure to asbestos on chronic disease in later life;

4. Investigate the impact of known exposure to asbestos on mental health; and

5. Develop predictive models for lung cancer risk that can inform a screening program for the early detection of lung cancer.

This program of research is a continuation of the long running cohort studies of the former Wittenoom mine and mill workers (n = 7000, est. 1975) and the ex-residents of the town of Wittenoom (n = 5,000, est. 1993). A third cohort of non-Wittenoom asbestos exposed workers participating in an annual health surveillance program, the Asbestos Review Program (ARP, n = 1925, est 1989), has been established and will be included in this study. This study will use both data linkage and self-administered questionnaires.

Project Title	Evaluation of the 'time of diagnosis protocol/service' [Short title: Time of diagnosis evaluation]			
Principal Investigator	Ms Sian Churcher			
Institution	Department of Health			
Start Date	23 March 2015	Finish Date	3 June 2015	

In 2009 the Time of Diagnosis (TODx) service was initiated in WA. The service was developed after surveying doctors had made their first positive HIV diagnosis in the preceding 12 months. These doctors overwhelmingly requested written information and the opportunity to discuss patient care options with an experienced infectious disease physician or nurse. The TODx service was subsequently developed to ensure that general practitioners (GPs) were appropriately supported at the time of diagnosing a patient. This support is primarily based on linking a diagnosing GP with an infectious disease physician or nurse, who acts as a 'clinical mentor' to the GP, by providing information on patient care and guidance on referrals. The aim of the study is to investigate whether TODx is functioning effectively (as intended), whether it is still valid, and to determine the satisfaction/perspectives of key stakeholders involved with the service, particularly GPs.

Project Title	Demand and supply modelling for WA hospital services [Short title: Health service modelling]			
Principal Investigator	Ms Margo O'Neill			
Institution	Department of Health			
Start Date	31 January 2015	Finish Date	31 January 2020	

The Clinical Modelling Unit (CMU) forecasts future activity for hospitals in WA using inpatient, emergency department (ED) and outpatient information. Currently these forecasts are independent of each other and relate to separations, presentations or occasions of services.

Linked data would enable the CMU to create models that show the interactions between services, in the first instance this would be ED and inpatient services.

The project aims to link the Inpatient and ED activity and analyse the interactions between services at the patient level to improve the robustness of the forecasts and develop scenarios for service improvement.

