

Department of Health Western Australia Human Research Ethics Committee

Project Summaries for Approved Proposals

April 2022 to June 2022 Quarter

Project summaries for proposals approved by the Department of Health Human Research Ethics Committee – April 2022 to June 2022 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 descriptions/summaries of projects approved in the April to June 2022 quarter.

Project Title	Investigation of cancer aggregation patterns in Western Australia
Principal Investigator	Sarah Ward
Institution	The University of Western Australia
Ethics Approval Date	Wednesday, 11 May 2022

This project will use a cohort of individuals from an existing dataset of linked health data. The overall aim of the project is to investigate cancer aggregation patterns in the Western Australian population. The specific aims include:

- 1. examining the familial aggregation of melanoma subtypes, by determining the extent to which melanomas in first-degree relatives of melanoma cases share the same body site of occurrence;
- 2. investigating the familial co-aggregation of cancers that are common in younger individuals;
- 3. investigating whether the incidence of cancers common in younger individuals co-aggregate within individuals.

Project Title	Does pneumococcal vaccination protect against cardiovascular disease? A health database linkage study
Principal Investigator	John Attia
Institution	The University of Newcastle
Ethics Approval Date	Wednesday, 11 May 2022

AUSPICE is a randomised, placebo-controlled trial to determine if pneumococcal vaccination decreases the incidence of major cardiovascular disease (CVD) events related to hardening of arteries (atherosclerosis), namely heart attacks (fatal and non-fatal acute coronary syndromes) and the most common form of stroke.

4,725 study participants were recruited (Feb 2016 -Dec 2017) through a mail-out, contracted through the Department of Human Services, for six Australian sites (Newcastle, Melbourne, Central Coast, Canberra, Perth, and Adelaide) and through advertising on social media. The participants, randomly allocated to either pneumococcal vaccine or placebo treatment, were aged 55–60 years of age at enrolment with no self-reported prior heart attack or stroke events but had at least 2 cardiovascular risk factors: high cholesterol, high blood pressure, or obesity. The lead site, University of Newcastle, NSW, will now ascertain the health outcomes of AUSPICE participants using fully consented data linkage to national and state-based health records.

Project Title	Food Insecurity and Food Stress in Western Australia
Principal Investigator	Christina Pollard
Institution	East Metropolitan Health Service
Ethics Approval Date	Wednesday, 11 May 2022

Food insecurity is a growing and complex issue that needs to be addressed in multiple dimensions. Food insecurity (FI) expresses the disruption of food consumption or eating patterns as a result of financial or other resources limitations. While FI is commonly believed an issue of poor countries, it appears to be a significant problem in a number of rich countries, including Australia, as a result of unequal resources distribution. The increasing occurrence of health and natural disasters, including the recent COVID-19 pandemic, have increased the prevalence of FI in wealthy countries associated with interrupted food and economic resources, particularly for vulnerable populations such as low-income households with children. A range of preventable health consequences are linked with FI. For instance, food insecurity in adults increases the risk of poor emotional and mental health (e.g., psychological distress, depression, anxiety, aggression, and trauma), lowest dietary quality, chronic disease and chronic disease risk factors. Food-insecure adults are also at risk of obesity than their counterparts. Consequences of FI is particularly a concern for households with children. Evidence shows that households with children aged under 15 years were more likely to experience FI than households without children. Children from food insecure families are more likely to consume unhealthy diet, higher consumption of energy-dense food, poor social interaction, emotional and behavioural problems, mental issues (e.g., depression), poor physical function, and weight extremes. Children living in food insecure households are also significantly more likely to skip school and perform poorly against desired academic outcomes. Despite existing evidence that demonstrate a range of costly and preventable health and developmental consequences linked with FI, there is a dearth of research measuring the extent, severity and impact of FI in Australia. Led by the East Metropolitan Health Service, the 18item Food Security Survey Module (FSSM), a gold standard tool for measuring FI among adults and children, has been incorporated into the WA Health and Wellbeing Surveillance System (HWSS) along with a single 'run out of food' item since 2017. Compared to a single 'run out of food' item used by Australia Health surveys, the 18-item module measures the extent, levels of severity, degree, experience as well as impact of FI on children and diet in general. This data has not been analysed across various population groups. Utilising the HWSS from 2017 to the most recent, the current research aimed to analyse the prevalence and levels of severity at the population level, and factors associated with FI in households with children. We will also compare the prevalence of FI from the single food security item with the 18-item FSSM among households with and without children. Translation of the findings into practice is planned through collaboration with policy developers.

Project Title	Phase 2: Diagnosing Innovation: A Human-Centred Design Approach to Cultivate Innovation in the Western Australian Health System
Principal Investigator	Christopher Kueh
Institution	Edith Cowan University
Ethics Approval Date	Wednesday, 8 June 2022

"This research project is the second phase of a multi-year research project collaboration between Edith Cowan University and the Department of Health, WA. The overall research study will use design-led research methodologies to support WA Health to understand, promote and nurture the development of an innovation culture within WA Health. The project will support WA Health to develop an internal culture that supports innovation and change. The project will culminate in a set of practical tools that will support WA Health to implement, test, and evaluate the development of an innovation culture. In this, the second phase of the project, the research is designed to look closely at specific health service providers and how a culture of innovation operates at a team level. This phase will focus on service provider teams who work in the area of mental health. The aim of this phase to is better understand individual teams, their unique challenges and culture, and to work collaboratively with the teams to co-design a framework for building innovation culture within teams. This framework will be further tested to support future development in innovation culture with mental health teams, health service providers and ultimately the system as a whole. The data from this phase of the research will create a foundation for the design of scalable team practices, toolkits, and potential roadmaps that could be tested by the system across teams in different specialisations across the system.

Project Title	The Ovarian Cancer Prognosis and Lifestyle (OPAL) Study [Data Linkage]
Principal Investigator	Penelope Webb
Institution	QIMR Berghofer Medical Research Institute
Ethics Approval Date	Wednesday, 13 April 2022

The Ovarian cancer Prognosis And Lifestyle (OPAL) Study was established in 2012 to evaluate the relation between potentially modifiable behaviours and quality of life and survival after a diagnosis of ovarian cancer. A total of 958 women diagnosed between 2012-2015 consented to take part in the OPAL study and, of them, 939 women consented to allow access to their medical records and for their data to be used for future research. The aim of the project is to link the OPAL cohort to state-based hospital, non-admitted patient (where available), ED and death data to obtain treatment information from 2012 to the latest available time-point in order to:

- a) fill in gaps in our current treatment/management information to improve our analyses looking at patient wellbeing and survival and treatment costs in OPAL; and
- b) assess the utility of routine data alone (hospital/MBS/PBS etc.) for determining patterns of treatment for cancer patients.

Project Title	Health Service Utilisation and Health Outcomes among Humanitarian Migrants in Western Australia: A Retrospective Cohort Analysis from 2007
Principal Investigator	Ana Rita Sequeira
Institution	Murdoch University
Ethics Approval Date	Wednesday, 11 May 2022

"Before COVID-19 and despite a continued steady intake of humanitarian migrants (HM) (refugees and people from refugee-like background) year upon year, health policies and services targeted at this vulnerable group have been inadequately informed by data on health service utilisation and health outcomes. In Western Australia, the Humanitarian Entrant Health Service (HEHS) provides post-arrival health assessment services to over 80% of new humanitarian arrivals (refugees and people from refugee-like backgrounds). For the first time in Australia, a data linkage focused on the refugee population will address significant gaps in the evidence necessary to shape policy, health services and interventions. Linking Humanitarian Entrant Health Service data to WA administrative data sources will provide a means to better understand how to address the most pressing health needs of humanitarian migrants.

The longitudinal and retrospective analysis of WA linked administrative data sources provide information on key outcomes in the refugee population in Western Australia, such as physical health, pregnancy outcomes and newborn outcomes.

Aim: To determine the health outcomes and health service utilisation of humanitarian migrants arriving in Western Australia from 2007.

Objective 1. Using the existing WA Humanitarian Entrant Health Service data set and linking it to the Midwives Notification System, to determine:

- a) maternal clinical outcomes (method of birth, maternal mode of separation and complications of pregnancy,)
- b) risk factors for clinical pregnancy outcomes (alcohol and smoking use during pregnancy)
- c) neonatal clinical outcomes (birthweight, gestation, mode of separation)
- d) health service utilisation (number of antenatal visits)

Objective 2. Using the existing WA Humanitarian Entrant Health Service data set and linking it to the Hospital Morbidity Data Collection, to determine:

- a) refugees' principal diagnosis when admitted to hospital (all principal diagnoses)
- b) refugees' most common co-morbidities (all co-morbidities)
- c) refugees' surgical admissions (All surgical admissions)
- d) refugees' length of stay associated with most prevalent diagnosis, co-morbidities and surgical admissions health service utilisation (number of admissions, length of stay and cost).

Objective 3. Using the existing WA Humanitarian Entrant Health Service data set and linking it to the Hospital Morbidity Data Collection, to characterise the study population by demographic characteristics such as age, sex, SEIFA and country of origin.

Objective 4. Using the existing WA Humanitarian Entrant Health Service data set and linking it to the Death Registry/Cause of Death file, to determine refugees' cause of death (due to all causes).

The study findings and recommendations will be disseminated across state government, refugee-health organisations, research institutions and the community. The novelty of this study will also warrant the dissemination of findings among interstate health organisations. The means of dissemination include meetings, seminars, conferences, reports, academic publications and policy briefs."

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