Government of **Western Australia**
North Metropolitan Health Service
Sir Charles Gairdner Osborne Park Health Care Group

Sir Charles Gairdner Hospital and Osborne Park Health Care Group

Human Research Ethics Committee

Project Summaries for Approved Projects

January to March 2024 Quarter

Project summaries for proposals approved by the SCGOPHCG Human Research Ethics Committee – January to March 2024 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 SCGOPHCG HREC. It contains summaries of projects approved in the January to March 2024 quarter.

Project Title	Subarachnoid Haemorrhage Aneurysm RErupture Prediction And Patient Expressed Results Study 5 - The effect of pre-treatment re-bleeding on long term patient reported outcomes.
Coordinating Principal Investigator	Dr Arosha Dissanayake
Institution	Sir Charles Gairdner Hospital
Approval Date	10 January 2024

In this study we will determine the effect of pre-treatment re-bleeding on PROMs by administering the recently described SOS-SAH tool to survivors who are 1 or more years post aSAH or their carers.

This will be a prospective, propensity score matched cohort study in which aSAH patients who suffered pre-treatment re-bleeding will be matched on a 1:4 basis to aSAH patients who did not suffer pre-treatment rebleeding. We will also measure the occurrence of delayed cerebral ischaemia during the in-patient admission, the number of endovascular vasospasm treatment episodes administered to each participant during their acute in hospital stay and the presence of ischaemic stroke on cerebral neuro-imaging after discharge following aSAH.

This will be done to ensure that the two cohorts are matched not only with regard to the initial propensity for a good outcome following aSAH diagnosis but also with regard to the severity of delayed cerebral ischaemia suffered prior to discharge.

Project Title	Atrial pacing for optimisation of cardiac output in patients post cardiac surgery (APACS)
Coordinating Principal Investigator	Dr Matthew Anstey
Institution	Sir Charles Gairdner Hospital
Approval Date	16 January 2024

Patients who have cardiac surgery have atrial and ventricular wires placed for pacing the heart after the surgery. Currently the optimal heart rate is not known and is changed several times a day.

We aim to us a cardiac output monitor via the Swan Ganz catheter (routinely placed) to measure the cardiac output at different set heart rates (using the pacing wires)

We aim to test heart rates of 60, 75, 90, 110 and hence to use patients as their own controls and after 10 minutes at that set rate identify what the cardiac output is and hence identify the pacing rate the results in the best cardiac output.

Project Title	Assessment of treatment and outcomes in patients with haematologic disorders
Coordinating Principal Investigator	Dr Chan Cheah
Institution	Fiona Stanley Hospital Royal Perth Hospital Sir Charles Gairdner Hospital
Approval Date	19 January 2024

This project will review the management and outcomes of patients treated for haematologic disorders at Sir Charles Gairdner Hospital and its approved collaborative sites. We aim to include patients with haematologic disorders undergoing treatment or monitoring. The outcomes will document local practice to enable internal and external benchmarking as well as provide summary data that be used in more systemic analysis of patient care for these malignancies in the Australian setting.

Accrued outcome data will also allow historical benchmarking of clinical practice in the setting of evolving treatment strategies - an important component in the translation of published clinical trial data to a local population. In addition to the site specific benefit of the research findings, comparison and collaboration of deidentified summary data of similar audits at other

institutions in Western Australia and Australia allows more general themes in patient care to be identified and allows for cross-centre comparisons and benchmarking.

Project Title	Total contact casting duration for the clinical remission of active Charcot neuro-osteoarthropathy: a retrospective cohort study
Coordinating Principal Investigator	Dr Deborah Schoen
Institution	Sir Charles Gairdner Hospital
Approval Date	31 January 2024
This retrospective audit aims to find out how long total contact casting (TCC) treatment should be for the remission of active Charcot foot, therefore, answering the common patient question of how long they need to wear it. It is widely recognised that TCC is the preferred treatment for active Charcot foot however, there is currently no global standard time for TCC duration. There are significant inconsistencies in population-based studies worldwide and limited Australian data regarding TCC duration. This study hopes to contribute to, and provide a comparison with, existing global data. It will be conducted at Sir Charles Gairdner Hospital (SCGH) in Western Australia. This collaboration will explore the following objectives: determine the duration of TCC treatment for active Charcot Neuro-osteoarthropathy (CNO) remission, investigate the step-down therapy types following the discontinuation of TCC, and identify complications associated with stopping TCC before the recommended or planned period of casting.	

Project Title	Chronic Subdural Haemorrhage Embolisation Registry
Coordinating Principal Investigator	Dr Timothy Phillips
Institution	Sir Charles Gairdner Hospital
Approval Date	01 February 2024
This research project is simply a database or a registry which aims to collect relevant and de-identified medical information about the people having this procedure, and then examine the statistics to learn if there are ways the procedure could be improved to make it safer or more	

effective, and whether there are certain factors that make some people more or less likely to benefit from the procedure.

Chronic subdural haemorrhage (also known as subdural haematoma) is a life-threatening condition where blood and other fluids collect inside a person's head, within the membranes that surround the brain. The inside of the skull is a fixed space and this expanding collection of blood and fluid pushes on the brain underneath it. This can cause temporary or permanent brain damage, and the risk of death is 10-25%. It occurs most commonly in people over the age of 65 and may or may not be started by being bumped on the head. Unlike other bleeding problems which may be due to a hole in one blood vessel, this condition is due to thousands of tiny fragile blood vessels within the membranes that continually bleed into the membrane. The bleeding stimulates more tiny blood vessels to grow, and those new blood vessels can also bleed. This cycle of blood vessels bleeding and growing and bleeding again continues.

Previously the only available treatment was a neurosurgical operation to drain the blood and fluid out through a large or a small hole in the skull. Despite this operation up to 30% would continue to have more bleeding, probably due to the cycle of bleeding and new blood vessels growing. In the last 5-7 years a new treatment method has been developed and is currently part of the standard of care in all high-end interventional neuroradiology departments in Australia. This procedure involves navigating a tiny tube under x-ray guidance from the wrist or the groin through the inside of the person's arteries all the way to the inside of their skull. Once in position a slow flowing liquid is injected into the blood vessels to block them off and stop the cycle of bleeding and new vessel growth.

Project Title	The role of FIBTEM to EXTEM clotting time ratio to improve the diagnostic accuracy of ROTEM®Sigma FIBTEM to identity hypofibrinogenaemia post cardiopulmonary bypass.
Coordinating Principal Investigator	Dr James Preuss
Institution	Sir Charles Gairdner Hospital
Approval Date	01 February 2024

Rotational thromboelastometry (ROTEM) is a bedside investigation which measures the interaction of platelets and clotting factors to produce a clot. The four major tests of ROTEM include INTEM, EXTEM, HEPTEM and FIBTEM. These tests use different catalysts to assess different aspects of the body's ability to make clot, thus providing information to target transfusion where it is needed most.

Fibrinogen is an essential protein in the blood responsible for clotting and is commonly deficient in bleeding patients following cardiac surgery. Fibrinogen can be measured by the FIBTEM test in ROTEM, but the gold standard remains to be laboratory testing. The downside of laboratory testing is that it can take >45 minutes to perform, whereas ROTEM can provide results in approximately 12 to 15 minutes.

The thickness of the FIBTEM trace is known to accurately rule out low fibrinogen, meaning patients with a negative test result almost certainly have a normal fibrinogen level. However, identifying patients with low fibrinogen remains less accurate with a false positive rate of 18%. This overestimates the number of patients with low fibrinogen, and may lead to unnecessary fibrinogen administration.

A hypothesis generating pilot study published in 2022 investigated the additional influence of other test elements of ROTEM, the time it takes for clot to form in FIBTEM to EXTEM tests known as the clotting time. Incorporating the ratio of clotting time (CTR) between the FIBTEM and EXTEM test, in addition to the thickness of the FIBTEM trace, improved the accuracy, in particular reducing the false positive rate. This study found that with the addition of FIBTEM/EXTEM CTR, to the normal ROTEM cut off values, the positive predictive value increased from 0.82 to 1, meaning the false positive rate fell from 18% to 0%, without reducing the sensitivity or negative predictive value. Given this previous study was small and designed as hypothesis generating only, we plan to assess the improvement in diagnostic accuracy in a larger prospective study.

Project Title	The efficacy of the forced oscillation technique to detect upper airway disorders
Coordinating Principal Investigator	Professor Alan James
Institution	Sir Charles Gairdner Hospital
Approval Date	09 February 2024

Cough and breathlessness are among the most common symptoms presenting to primary care. Chronic cough and breathlessness related to upper airway conditions such as laryngeal hypersensitivity (LHS) and inducible laryngeal obstruction (ILO) or the respiratory muscles (dysfunctional breathing, DB), are frequent and often misdiagnosed as asthma or chronic obstructive pulmonary disease (COPD). In primary practice, inappropriate investigations and ineffective treatment due to lack of awareness may result in delayed diagnosis and treatment, leading to increased healthcare costs. Given that these conditions are relatively common, respond well to specific treatments but are not easily recognised, a simple, non-invasive test is required to help screen patients with nonspecific symptoms in primary care.

The forced oscillation technique (FOT) is a simple and quick (<15 minutes) test which uses reflected pressure waves to measure lung and airway mechanical properties during brief periods of quiet, normal breathing. Recently, it has been suggested that measurement of breath-by-breath changes in lung mechanics using FOT may distinguish patients with upper airway problems and dysfunctional breathing.

The objectives of this study are to 1) assess the accuracy and utility of FOT to detect upper airway dysfunction and DB and; 2) distinguish these disorders from asthma and COPD. These objectives will be addressed prospectively in patients attending the Joint Speech

Pathology and Airways Clinic (JSPAC) at Sir Charles Gairdner Hospital (SCGH) and retrospectively using data from the Busselton Respiratory Survey (HREC 2019-230).

Project Title	DESTINY-Lung03 A Phase Ib Multicenter, Open-label Dose-escalation Study to Evaluate the Safety and Tolerability of Trastuzumab Deruxtecan (T-DXd) and Durvalumab in Combination with Cisplatin, Carboplatin or Pemetrexed in First-line Treatment of Patients with Advanced or Metastatic Non-squamous Non-small Cell Lung Cancer (NSCLC) and Human Epidermal Growth Factor Receptor 2 Overexpression (HER2+)
Coordinating Principal Investigator	Dr Joanne Tonkin
Institution	Sir Charles Gairdner Hospital
Approval Date	12 February 2024

This is a phase 1b study of Trastuzumab Deruxtecan as a single agent vs Trastuzumab Deruxtecan and MEDI5752 compared to the same combination plus either Cisplatin or Carboplatin or Pemetrexed. A total of approximately 136 people will be enrolled.

The study is composed of 2 parts. SCGH will only participate in part 3 - dose-expansion in treatment naïve patients with metastatic disease. Analysis from part 1 of the study has determined the treatments to be Trastuzumab Deruxtecan + MEDI5752 with or without carboplatin. In addition to safety and tolerability, the study will also assess preliminary efficacy based upon ORR, DoR, DCR, OS, PFS among treatment groups.

Project Title	Clipping and decompression versus coiling then decompression following aneurysmal intracerebral hematoma needing acute surgery: a single center cohort study, systematic review and meta-analysis
Coordinating Principal Investigator	Dr Arosha Dissanayake
Institution	Sir Charles Gairdner Hospital
Approval Date	14 February 2024

Between 4% and 43% of aneurysmal subarachnoid haemorrhage (aSAH) cases present with a concomitant intracerebral haematoma (ICH). If managed conservatively, mortality for such cases is estimated at 80-100% compared to 33-50% for aSAH without ICH whilst clot evacuation without securing the aneurysm is associated with 75% to 100% mortality.

For this reason emergency evacuation of a large ICH is a Class 1 recommendation in the American Heart Association/American Stroke Association 2023 Guideline for the Management of Patients With Aneurysmal Subarachnoid Haemorrhage. Both clipping with simultaneous clot evacuation and endovascular coiling followed by clot evacuation are recognized as treatment modalities dependent on the size of the ICH, the degree of mass effect, conscious state compromise and the time taken for completed treatment. Due to the importance of rapid clot evacuation; the guidelines suggest clinicians 'generally favor surgery without delay with concomitant aneurysm clipping' though no evidence Class is allocated to this recommendation.

In this project we will report the in-patient mortality and 3-month good functional outcomes rates for consecutive patients who had acute surgery for an ICH due to a ruptured saccular aneurysm treated in Western Australia (WA) over a 15 year period. We will also perform a systematic review and meta-analysis of all existing published English language studies reporting outcomes following endovascular coiling and clot evacuation incorporating the findings from WA to better inform decision making regarding optimal treatment.

Project Title	LEADER PAD - Low dose colchicinE in pAtients with peripheral artery DiseasE to address residual vascular Risk: A randomized trial
Coordinating Principal Investigator	Professor Shirley Jansen
Institution	Sir Charles Gairdner Hospital Royal Perth Hospital Fiona Stanley Hospital Royal Adelaide Hospital Concord Repatriation General Hospital Canberra Hospital The Townsville Hospital
Approval Date	23 February 2024

Peripheral artery disease (PAD) is caused by fatty deposit build-up within an inflamed artery that obstructs blood flow in the legs.

In cardiac trials colchicine has reduced vascular complication rates by about 25%, but it has not been studied in people with PAD.

The objective of this trial is to examine the efficacy and safety of colchicine 0.5 mg/daily in reducing the incidence of cardiovascular death, myocardial infarction, stroke or severe

episode of acute limb ischemia requiring an intervention including major vascular amputation in PAD patients

The LEADER-PAD trial is a phase 3 multinational, multicenter randomized, double blind, placebo-controlled trial with an active run-in period (about 2 weeks), comparing low dose colchicine 0.5 mg/daily with placebo in patients with PAD. Number = 6150 pts with an expected trial treatment period up to 3-5 years. Participants will have bi-annual clinic safety visits and in between phone assessments.

Project Title	The impact of hospital restructuring on the wellbeing, job satisfaction and intention to stay of nurses.
Coordinating Principal Investigator	Dr Gemma Doleman
Institution	Sir Charles Gairdner Hospital Osborne Park Hospital
Approval Date	28 February 2024

The literature highlights the impact of wellbeing on nurses, healthcare organisations, and patient outcomes. As healthcare organisations recover from the pandemic, strategies to manage nurse wellbeing, job satisfaction and organisational commitment are needed in order to improve absenteeism and turnover rates. One such strategy is the restructure of leadership in order to increase the support offered to clinical nurses. However, there is currently limited research exploring the impact of leadership restructure on the wellbeing, job satisfaction and intention to stay of nurses. Therefore, the aim of this project is to determine the impact of a hospital leadership restructure on the wellbeing, job satisfaction and intention to stay of nurses.

The study will employ a one group pre-post quasi- experimental research design. This will involve surveying nurses working across SCGOPHCG before and after leadership restructuring. The restructure will see changes to the executive support offered at the hospital. Those working on the maternity ward and casual staff working for external agencies will not be invited to participate.

Data analysis will be undertaken using SPSS software. Descriptive statistics will be used for demographic data, the number of observed activities and activity categories. Descriptive statistics will be presented in terms of frequencies and percentages. T-tests for normally distributed data and Mann-Whitney u test for non-normally distributed data will be used to examine differences between the pre and post-test survey responses. Survey responses will be compared between demographic categories using chi-squared tests. The data will be examined for skewness and variance graphically and using means and standard deviations and for outliers using Z- scores and missing values.

Project Title	Stereotactic external-beam radiotherapy (SBRT) for early hepatocellular carcinoma: a retrospective analysis.
Coordinating Principal Investigator	Dr Darragh Egan
Institution	Sir Charles Gairdner Hospital Royal Adelaide Hospital Lyell McEwin Hospital Flinders Medical Centre Royal Darwin Hospital
Approval Date	06 March 2024

Hepatocellular carcinoma (HCC) is a major global health problem, being the fourth leading cause of cancer related death. The current management of HCC is based on the Barcelona Clinic Liver Cancer (BCLC) staging system . Whilst liver transplantation is a curative option, this is a finite resource and requires patients to have early-stage disease and be suitable for major surgery. Liver resection has similar limitations. Percutaneous ablation is considered the standard option for early-stage HCC, however it has limitations in treating tumours in unfavourable locations as well as treating larger tumours. When patients cannot have curative treatments, we shift to non-curative therapies such as trans-arterial chemoembolization (TACE).

Stereotactic external-beam radiotherapy (SBRT) shows promise as a safe and effective therapy both for curative intent and in the context of advanced stage HCC. The existing Australian consensus recommendations state that SBRT is an option for local tumour control if not amenable to resection or ablation. SBRT is delivered to the liver in a targeted fashion which factors in location of other organs and risk of radiation toxicity. Delivering this in multiple treatments allows us to achieve this therapeutic ratio of tumour control vs damage to nearby tissue, a unique feature of SBRT. SBRT has been shown to be effective (94% freedom from local progression (FFLP) at 18 months), however has only been studied in very small sample sizes within Australia. In this study we aim to evaluate the efficacy and safety of SBRT in 3 states in Australia, totalling over 200 patients.

This is a retrospective, multi-centre, low-risk study to be conducted at Sir Charles Gairdner Hospital (SCGH) with 4 other sites in SA and NT. We will include all patients treated with SBRT from December 2014 to May 2022, we expect approximately 100 cases from SCGH. These patients will be identified from both the HCC and CyberKnife registry. The objective of this study is to evaluate the efficacy and safety of using SBRT to treat small HCCs. Multiple demographic and clinical variables will be obtained via detailed retrospective review of all HCC cases over an 8-year period, including treatment follow-up. Patient data will be followed up for a minimum of 3mths and a maximum of 5 years post-treatment, where available.

Project Title	OPERATE: Older Persons Early Recognition, Access and Treatment in Emergencies - NMHS Intervention Evaluation
Coordinating Principal Investigator	Professor Antonio Celenza
Institution	Sir Charles Gairdner Hospital Osborne Park Hospital
Approval Date	13 March 2024

The current project contributes to the larger overall project OPERATE (Older Persons Early Recognition, Access and Treatment in Emergencies) which addresses the "Models of Care to Improve the Efficiency and Effectiveness of Acute Care Grant Opportunity 2022" announced by the Medical Research Future Fund (MRFF) of improving health outcomes in patients requiring acute care and reducing pressure on Australian Emergency Departments (EDs).

OPERATE is aimed at improving health care and outcomes, and decreasing the reliance of attending the Emergency Department (ED) for patients aged 65 years or over who are presenting to EDs requiring acute care, at risk of presenting, or requiring an emergency ambulance within North Metropolitan Health Service (NMHS). With this study we aim to evaluate existing clinical and health services (interventions) that can provide alternative care pathways to the elderly population across NMHS, including Sir Charles Gairdner Hospital (SCGH) and Osborne Park Hospital (OPH)

Project Title	Subarachnoid Haemorrhage Aneurysm RErupture Prediction And Patient Expressed Results Study 7 - The effect of treatment timing and modality on the risk of pre-treatment rebleeding
Coordinating Principal Investigator	Dr Arosha Dissanayake
Institution	Sir Charles Gairdner Hospital
Approval Date	13 March 2024

Pre-treatment rebleeding following aneurysmal subarachnoid hemorrhage (aSAH) independently increases the risk of death and a poor neurological outcome. Over three-quarters of re-bleeds occur within 12 hours of the initial bleed leading to recent guidelines recommending that aneurysm occlusion occurs as ‘early as feasible…preferably within 24 hours of onset’. A recent systematic review by Phuong Nguyen et al. found that large, nation-wide inpatient samples as well as single center cohorts of consecutive, unselected aSAH patients managed without an overwhelming imbalance in favour of any one treatment modality that time-to-treatment is shorter for those undergoing endovascular as opposed to

microsurgical treatment. Another important in-hospital determinant of time-to-treatment is the intentional delaying of aneurysm treatment for patients who present with a poor grade aSAH, especially if they are elderly and/or medically comorbid. This is typically undertaken whilst awaiting signs of neurological improvement in response to critical care resuscitative measures and/or cerebrospinal fluid diversion. Importantly; there is no direct evidence in the existing literature that either the intended-treatment-acuity, the intended-treatment-modality or received-treatment-modality are independently associated with a risk of pre-treatment re-bleeding or with the time to definitive aneurysm treatment.

This study will use a large single center cohort of consecutive saccular aneurysmal subarachnoid haemorrhage patients to investigate whether these independent associations exist.

Project Title	Developing therapies for acquired and inherited diseases using genomic medicine
Coordinating Principal Investigator	Professor Sulev Koks
Institution	Sir Charles Gairdner Hospital Royal Perth Hospital Perth Children's Hospital Perron Institute for Neurological and Translational Science Murdoch University Hollywood Medical Centre
Approval Date	22 March 2024

The project is aiming to provide a better understanding of acquired and inherited diseases (neurological, neuromuscular, inflammatory, renal and cardiovascular conditions); to characterise genes, genetic variants and pathological processes with the aim to identify possible therapeutic options using participant/patient skin, blood or urine samples. These diseases currently have limited effective treatment options and may respond to a personalised genetic therapy.

Project Title	Laparoscopic Right Hemicolectomy Outcomes: A Ten-Year Single Centre Experience
Coordinating Principal Investigator	Dr Mary Mei Khuan Teoh
Institution	Sir Charles Gairdner Hospital
Approval Date	27 March 2024

The surgical treatment for colorectal cancer is arguably a field that has undergone pioneering advancements from open surgeries to the current minimally invasive surgeries, which has seen a reduction in complications and significant impact on patient recovery. Of those complications, incisional hernias (IH) are recognised as a common complication that significantly impacts a patient's quality of life (QoL) and body image, as well as being an economic and healthcare burden.

Many studies have aimed to identify modifiable factors to reduce IH rates amongst patients, one of which includes the alteration of the extraction site. The alteration of the standard midline incision to an off-midline specimen extraction site remains as a debatable issue.

Previous studies have also shown that surgical site infections (SSI) to be strong risk factors for the development of IH, as well as BMI. However, these studies have a poor description of the overall methodology such such as reporting of routine SSI prophylaxis use such as antibiotics and wound protectors, as well as SSI rates in these studies. Further studies will require a robust methodology and data collection of potentially confounding variables to strengthen this evidence. Additionally, IH is known to be a burden to the patients as it is often a limiting factor to various activities of daily living (ADL) and can impact their body-image. Despite this, there are few patient-reported outcomes that have been described in available literature that explore symptomatic vs. asymptomatic hernias, quality of life (QoL), or cosmesis.

Thus, we aim to carry out a retrospective study that evaluates midline vs. transverse (mid/upper right abdomen) extraction site in laparoscopic right hemicolectomies performed in the past decade in our high-volume colorectal institution. The primary outcome of which will be the comparison of the incidence of IH at these sites and the secondary outcomes being SSI, wound dehiscence (WD), seroma, haematoma.

Project Title	Oncogenic Drivers in Advanced Squamous Non-Small-Cell Lung Cancer: a real-world assessment.
Coordinating Principal Investigator	Dr Wade Huish
Institution	Sir Charles Gairdner Hospital PathWest QEII
Approval Date	27 March 2024

Non-small cell lung cancer (NSCLC) is an important disease because it is a leading cause of cancer-related deaths worldwide. Oncogenic drivers are relatively common in the non-squamous population, and routine molecular testing has been conducted at our pathology centre. Up to 15% of these non-squamous lung cancer patients have a targetable mutation such as EGFR / ALK / ROS. These targetable mutations are associated with better clinical outcomes. Previously the squamous cell carcinoma (SCC) patients would not have routine molecular testing done, as the incidence of targetable mutations is low, and there was a lack of pharmaceutical benefit scheme (PBS) subsidised treatment options to warrant testing. This changed in 2023 when the MET inhibitor, tepotinib, was added to the PBS. The incidence of MET mutations in SCC is reported to be 5%. Routine testing of SCC samples has commenced since early 2023 at SCGH and the real-world incidence of targetable mutations in the West Australian SCC cohort has not been known prior to this.

The project aims to observe and characterise the incidence of mutations in squamous non-small cell lung cancer patients at Sir Charles Gairdner Hospital. The aim is to measure the incidence of targetable mutations in a real-world population of advanced or metastatic non-small cell lung cancer cohort. Other aims include describing the clinicopathological features of patients with squamous NSCLC that feature oncogenic drivers, with those who don’t have oncogenic drivers. The project will aim to compare the real-world incidence of actionable mutations in the squamous vs non-squamous NSCLC patients. This study is justified, as this information will provide real-world data on the incidence of targetable mutations, and clinical outcomes in a previously under-tested cohort.

Project Title	The rural general surgical caseload: a Western Australian perspective
Coordinating Principal Investigator	Dr Stephanie Babic
Institution	Albany Hospital Bunbury Hospital
Approval Date	27 March 2024

Rural general surgeons in Australia must be adequately skilled and prepared to tackle a varied surgical caseload. This becomes more pertinent for surgeons working at smaller and more remote sites. Several studies have been published on the rural surgical caseload in other Australian states showing that rural general surgeons perform quite staggering rates of procedures that would not traditionally fall within the field of general surgery. To date, there are no studies that have assessed these rates in Western Australia.

This study is a retrospective multi-centre review of general surgical operative data across two main regional centres in Western Australia; Albany Health Campus (AHC) and Bunbury Regional Hospital (BRH). Data will be extracted from Theatre Management System (TMS) software from 2013 – 2023 inclusive to assess the rates of general surgical versus non-general surgical procedures performed by the General Surgery teams at AHC and BRH. Procedure numbers will be further sub-categorised based on non-general surgical specialty, general surgical sub-specialty and adult or paediatric status. It is anticipated that the general surgeons at both sites will perform a high number of non-general surgical procedures, in accordance with the interstate literature. It is further anticipated that the caseload at AHC will show more variance than BRH due to its relative distance from tertiary hospital centres.

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