

Calvary

Mater Newcastle

Continuing the Mission of the Sisters of the Little Company of Mary

Review of Operations

2018-19





Contents

The Spirit of Calvary	2
Management and Community Advisory Council	4
Report from the General Manager	6
Report from the Community Advisory Council	8
Department Reports	11
Activity and Statistical Information	57
Year in Review	58
A Snapshot of our Year	61
Research and Teaching Reports	62
Financial Report 2018-19	80



Acknowledgement of Land and Traditional Owners

Calvary Mater Newcastle acknowledges the Traditional Custodians and Owners of the lands of the Awabakal Nation on which our service operates. We acknowledge that these Custodians have walked upon and cared for these lands for thousands of years.

We acknowledge the continued deep spiritual attachment and relationship of Aboriginal and Torres Strait Islander peoples to this country and commit ourselves to the ongoing journey of Reconciliation.

Aboriginal and Torres Strait Islander people are respectfully advised that this publication may contain the words, names, images and/or descriptions of people who have passed away.

The Spirit of Calvary

Calvary Mater Newcastle is a service of the Calvary group that operates public and private hospitals, retirement communities, and community care services in four states and two territories in Australia.

Our Mission identifies why we exist

We strive to bring the healing ministry of Jesus to those who are sick, dying and in need through 'being for others':

- In the Spirit of Mary standing by her Son on Calvary.
- Through the provision of quality, responsive and compassionate health, community and aged care services based on Gospel values, and
- In celebration of the rich heritage and story of the Sisters of the Little Company of Mary.

Our Vision identifies what we are striving to become

As a Catholic health, community and aged care provider, to excel and be recognised, as a continuing source of healing, hope and nurturing to the people and communities we serve.

Our Values are visible in how we act and treat each other

We are stewards of the rich heritage of care and compassion of the Little Company of Mary.

We are guided by our values:



Hospitality

Demonstrates our response to the desire to be welcomed, to feel wanted and to belong. It is our responsibility to extend hospitality to all who come into contact with our services by promoting connectedness, listening and responding openly.



Healing

Demonstrates our desire to respond to the whole person by caring for their spiritual, psychological, social and physical wellbeing. It is our responsibility to value and consider the whole person, and to promote healing through reconnecting, reconciling and building relationships.



Stewardship

Recognises that as individuals and as a community all we have has been given to us as a gift. It is our responsibility to manage these precious resources effectively for the future. We are responsible for striving for excellence, developing personal talents, material possessions, for our environment and handing on the tradition of the Sisters of the Little Company of Mary.



Respect

Recognises the value and dignity of every person who is associated with our services. It is our responsibility to care for all with whom we come into contact, with justice and compassion no matter what the circumstances, and we are prepared to stand up for what we believe and challenge behaviour that is contrary to our values.

Spirit of Calvary

Being for others

Hospitality
Healing
Stewardship
Respect

Everyone is welcome.

You matter. We care about you.

Your family, those who care for you, and the wider community we serve, matter.

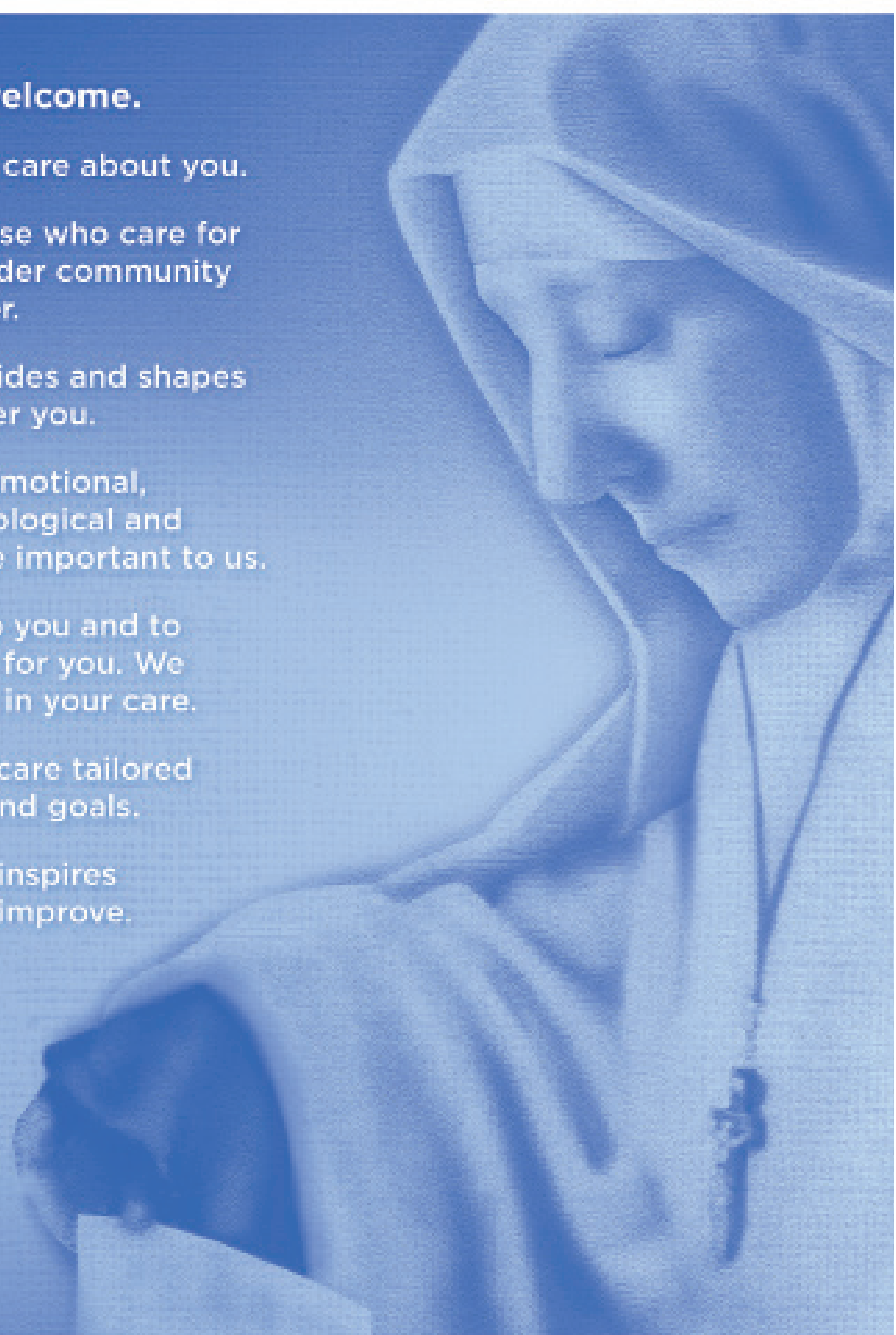
Your dignity guides and shapes the care we offer you.

Your physical, emotional, spiritual, psychological and social needs are important to us.

We will listen to you and to those who care for you. We will involve you in your care.

We will deliver care tailored to your needs and goals.

Your wellbeing inspires us to learn and improve.



Management and Community Advisory Council

Hospital Executive

- Chief Executive Officer: Greg Flint / General Manager: Mark Jeffrey
- Director of Medical Services: Dr MaryAnn Ferreux / Tracy Muscat
- Director of Nursing: Roslyn Everingham
- Director of Finance and Corporate Services: Wayne Wells
- Director of Mission: Mary Ringstad

Service Managers

- Associate Director of Medical Services: Tracy Muscat / Rachel Meek
- Associate Director of Nursing: Kim Kolmajer

Department Managers

- Alcohol and Drug Unit Nurse Unit Manager: Jason Scott
- Chief Hospital Scientist: Dr Jennette Sakoff
- Chief Medical Physicist: John Simpson
- Chief Radiation Therapist: Karen Jovanovic
- Clinical Dean: Dr Tim Walker
- Clinical Information Manager: Nicole Crockett
- Coronary Care Nurse Unit Manager: Anne Thomson
- Day Treatment Centre Nurse Unit Manager: Marissa Ledlin
- Department of Palliative Care Nurse Unit Manager: Jessica Scaife
- Desktop Services Manager: Clinton Starrett
- Director Alcohol and Drug Services: Dr Craig Sadler
- Director of Anaesthetics: Dr Allysan Armstrong-Brown
- Director Clinical Pharmacology and Toxicology and Director of Prevocational Education and Training: Professor Ian Whyte
- Director Consultation-Liaison Psychiatry: Professor Gregory Carter
- Director Department of General Medicine: Dr Michael Hayes
- Director Department of Palliative Care: Dr Rachel Hughes
- Director Emergency Department: Dr Johann Gildenhuis
- Director Haematology: Professor Philip Rowlings
- Director Hunter Drug Information Service: Felicity Prior
- Director Intensive Care Unit: Dr Katrina Ellem
- Director of Cardiology: Dr Angela Worthington
- Director of Medical Oncology: Dr Tony Bonaventura
- Director of Pharmacy: Rosemary James
- Director of Radiation Oncology: Dr Mahesh Kumar

- Director of Surgery: Dr Ralph Gourlay
- Director of Social Work: Lyn Herd
- Emergency Department Nurse Manager: Jo-Anne Berry and Rebecca Robertson
- Emergency Department Clinical Nurse Unit Manager: Kim Blayden
- Emergency Department Clinical Nurse Unit Manager: Jacinta Carr / Maree O'Connor
- Financial Controller: Petula Steele
- Human Resources Manager: Michael Hodgson
- Health Information Services and Information Communications Technology Manager: Heather Alexander
- Intensive Care Nurse Unit Manager: Leanne Bradford
- Junior Medical Officer Manager: Angela Lawrence / Victoria Wall
- Management Accounting Manager: Neville Brown
- Medical Centre Nurse Unit Manager / Hospital in the Home: Kelly Crawford
- Medical Centre Front Office Manager: Rebecca Cruickshank
- Nurse Manager Surgical Services: Cheryl Cooley
- Network and Systems Manager: Beau Dwyer
- Nurse Manager Clinical Resources: Jason Robards, Katrina Gunn, Helen Hanbury, Maria Dolahenty, Rebecca Hahn, Beth Curry, Brad Roach, Alison Lee, Paul Genders and David Newby
- Nutrition and Dietetics Manager: Andrew Court
- Occupational Therapist in Charge: Andrew Wakely
- Operating Theatre Suite Nurse Manager: Chris Aartsen
- Operating Theatre Suite Clinical Nurse Unit Manager: Stanley Meyers
- Pastoral Care Manager: April Macneill
- Patient Services Manager: Brad Rochester
- Payroll Manager: Kerrie Chapman
- Physiotherapist in Charge: Judy Holland
- Pre-Procedures Nurse Unit Manager: Emma Brady
- Public Affairs and Communications Manager: Helen Ellis
- Quality Manager: Jeanette Upton
- Radiation Oncology Nurse Unit Manager: Ashley Powell
- Speech Pathologist in Charge: Patricia Potter
- Staff Development Coordinator: Judith Thompson
- Supply Services Manager: Anne McCormack
- Supply Services Supervisor: David Millington
- Ward 4B Surgical Inpatient Nurse Unit Manager: Lara Riley
- Ward 4C Medical Nurse Unit Manager: Carolyn Walker

- Ward 5A/MAAZ Nurse Unit Manager: Tracey Coates
- Ward 5B Oncology Nurse Unit Manager: Linda Liversidge
- Wards 5C/D Haematology Nurse Unit Manager: Linzi Nolan

- Greg Flint, Chief Executive Officer / Mark Jeffrey, General Manager
- Mary Ringstad, Director of Mission
- Wayne Wells, Director of Finance and Corporate Services
- Helen Ellis, Public Affairs and Communications Manager

Community Advisory Council

- Chairperson: Cathy Tate, Consumer Representative

Members:

- Teresa Brierley, Consumer Representative
- Kay Fordham, Consumer Representative
- Susan Russell, Consumer Representative
- Steven Tipper, Consumer Representative
- Brenda Ainsworth, Calvary National Director Public Hospitals



Report from the General Manager

It is my privilege to present the 2018-19 Review of Operations Report for Calvary Mater Newcastle.

The report represents the hospital's commitment in continuing to provide high quality services to the Hunter community and our responsibility to provide safe, reliable and timely care. Our results demonstrate that there is a compassionate team dedicated to caring for our community. This has been achieved as the demand for health services continues to grow and as we continue to deliver improvements and innovation.

Calvary Mater Newcastle is the major cancer care centre for Hunter New England Local Health District (HNE Health). It provides a range of medical and surgical services as an affiliated health organisation under the Health Services Act 1997. Calvary Mater Newcastle is also a major research and clinical trial centre with local, national and international research collaborations and activities taking place.

These services are delivered through a service agreement with HNE Health to provide public hospital services. Under this agreement, Calvary Mater Newcastle has delivered on a range of targets, key performance indicators, and quality and safety measures.

As Calvary Mater Newcastle continues to deliver excellent patient-centred care, it is facing a number of strategic challenges and opportunities:

- Ensuring communities, consumers and clinicians are central to health service planning, design, delivery and evaluation, particularly in tackling chronic disease.
- Driving improvements in relation to quality, safety and efficiency through clinical streams in partnership with the Hunter New England Local Health District.
- Collaborating with our health care partners to better connect care for our patients as part of a broader health care system.
- Responding to demand for health care services from an ageing and growing population as well as continuing to provide care outside the catchment area as a provider of specialist tertiary services.
- Introducing innovative solutions and new technologies and treatments while managing rising costs.
- Aligning resources to meet current service needs in areas of future growth.
- Attracting and developing an increasingly specialised and multidisciplinary workforce.

- Recognising and promoting our achievements locally, nationally and internationally through collaboration in research activities and innovation.

These directions are underpinned by The Spirit of Calvary's values of Hospitality, Healing, Stewardship and Respect which enables us to achieve our vision of providing world-class health services.

During the year the hospital bid farewell to its Chief Executive Officer, Greg Flint, who retired from Calvary Mater Newcastle after more than 40 years' service in the health sector. I was appointed as General Manager following Greg's retirement, and extend my appreciation to staff for their warm Calvary welcome and their assistance and support to me settling into this role.

2018-19 was a very busy year for Calvary Mater Newcastle as displayed in the activity results. There were many challenges, particularly during peak periods of demand, and

"The contribution of staff to the community cannot be overstated and we would like to recognise our staff for their dedication and commitment to our patients, their families and carers."

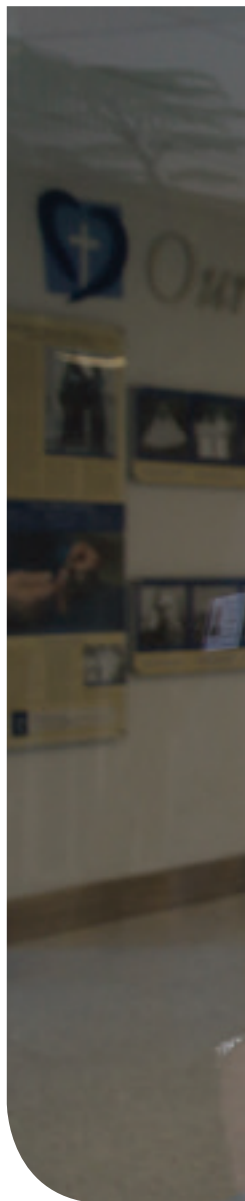
staff dealt with these challenges in a most professional and caring manner. The contribution of staff to the community cannot be overstated and we would like to recognise our staff for their dedication and commitment to our patients, their families and carers. Together, all the things we do every day make a profound difference in the lives of our patients, our community and each other.

Preparations for the accreditation survey, to be held in September, 2019, continued during the year. I would like to take this opportunity to acknowledge the immense effort that staff across the organisation make to this process. Their contribution is most gratefully appreciated and is a clear demonstration of their commitment to Calvary Mater Newcastle and the Calvary mission and values.

The hospital celebrated Mary Potter Day on 22 November 2018 with a Celebration of Service to recognise the long service of our staff. The Mary Potter Award for staff member of the year was awarded to Payroll Manager, Kerrie Chapman.

As always our volunteers and Auxiliary members have been a vital component in the day-to-day running of the hospital. This financial year the Auxiliary presented a cheque to the hospital for the sum of \$316,000 from their tireless fundraising work.

Calvary Mater Newcastle staff were nominated for numerous awards during the year and whilst some were not announced until after the end of the period of this report,





there were a number of successful nominations for prestigious awards. At the 2019 HNE Health Excellence Awards, the Department of Palliative Care Bereavement Team won the Volunteer of the Year (team) Award and haematologist Anoop Enjeti was part of the District's Venous Thromboembolism (VTE) Prevention Program team that received the Patient Safety First Award.

The Medical Oncology Research (MOR) Clinical Trials Group received the Australasian Gastro-Intestinal Trials Group Outstanding Site Award. Professor Geoff Isbister was appointed a Member of the Order of Australia (AM) in the Queen's Birthday 2019 Honours List for significant service to medical research in the field of toxicology. Dr Bhavi Ravindran, a junior medical officer who has been on rotation to Calvary Mater Newcastle, was named the 2019 Newcastle Young Citizen of the Year.

Our volunteers and Auxiliary members bring motivational energy, enthusiasm and dedication to assist the hospital in providing our patients with the very best possible care. This hard work is appreciated by staff, patients and the community who encounter their compassionate care, fundraising efforts and smiling faces. We extend to them a huge thank you. Congratulations also to the Auxiliary, which received awards for 'most money raised per

member' and 'most hours worked per member' at the United Hospital Auxiliaries NSW State Conference in October.

I would also like to thank our generous and loyal community for its support of the hospital, and the Community Advisory Council in its advisory role. The hospital continues to receive valuable support and advice from Little Company of Mary Health Care Board, Calvary National Office and the Hunter New England Local Health District.

I hope this year's Review of Operations proves to be a valuable and informative report, and we will continue to strive to provide a quality service to the community based on our values of Hospitality, Healing, Stewardship and Respect.

Mark Jeffrey
General Manager

Report from the Community Advisory Council



Calvary Mater Newcastle is committed to building and maintaining relationships that strengthen the links between the hospital and the communities it serves. The hospital's Community Advisory Council (CAC), with membership sought from a broad cross section of the community, assists Calvary Mater Newcastle in achieving this objective.

The council assists the General Manager with, and provides advice on, consumer and community engagement to ensure Calvary Mater Newcastle continues the mission of Calvary and achieves objectives that are relevant to the community it serves. As a result Calvary Mater Newcastle can improve its community's health outcomes by providing services that are reflective of each person's individual needs and those of the wider community.

Throughout 2018-19, the council has continued to positively affect patient care outcomes and help improve the experience of patients and visitors in several ways.

Hospital committees

Members are represented on a number of hospital committees including those for patient care and quality, clinical ethics, infection prevention and control, translational research, communicating for safety, partnering with consumers, heritage, mission and values, and palliative and end of life care.

Members' wide ranging participation ensures that each committee recognises consumer concerns, hears the consumer perspective, provides information on issues affecting consumers, and protects the interests of consumers, service users and potential service users. Members also have the opportunity to review and discuss de-identified patient feedback and complaints, and review performance

data. Staff members continue to be extremely appreciative of their input and greatly value their contribution and unwavering commitment.

Calvary Mater Newcastle Consumer and Community Engagement Framework 2018-2021

The Community Advisory Council is also integral in monitoring, advising on and evaluating Calvary Mater Newcastle's Consumer and Community Engagement Framework 2018-2021.

The framework provides an overarching structure to guide and support the hospital's engagement with consumers and the community. An implementation plan to achieve the framework's strategic priorities and actions was approved by the Community Advisory Council and Executive in 2018.

Staff members provide quarterly progress updates, and informal consultation and collaboration continues in between the council's quarterly meetings. Progress reports are also provided to regular hospital management, performance, patient care, and consumer partnership meetings, and to other hospital committee meetings and forums as appropriate.

There have been significant achievements since the framework's introduction, including expanding the council's role and terms of reference to become the hospital's peak consumer body.

Other notable achievements include:

- Appointment of an Aboriginal Health Liaison Officer resulting in increased identification and cultural safety for Aboriginal patients.

- Appointment of a Multicultural Health Liaison Officer to implement a workforce training program. Cultural competency training, including education about accessing interpreters, has been completed across all clinical areas.
 - Collaboration with local organisations working with vulnerable new arrivals, including refugees, to ensure their needs are met. This includes cultural needs and factors influencing the social determinants of health. Boosting health literacy is a priority with these interactions. Partnerships have been established with Northern Settlement Services and the Catholic-Diocese of Maitland-Newcastle Development and Relief Agency (DARA), and regular hospital tours and presentations were provided for local Congolese, Indian, Chinese, Spanish and Vietnamese communities.
 - The 'Hello my name is...' campaign was launched in June to encourage staff to be identifiable and accessible to patients, their families and carers.
 - Creation of a welcoming and inclusive experience for all consumers in all hospital settings. This is being achieved through ensuring accessible services, clear signage, hospitality, and a visible and identifiable workforce. A hospital-wide audit to improve how people find their way around the hospital is nearing completion. Through communicating with a wide range of stakeholders, Calvary Mater Newcastle will be able to assess the current patient and consumer experience and identify improvements.
 - Acknowledgement and support of carers and family members in their roles, their grief and decision making. Calvary Mater Newcastle has partnered with Hunter New England Local Health District to implement its Think Patient – Think Carer initiative. The District's Carer Support Program Officer is facilitating and collaborating with services to embed local initiatives and carer-based strategies and actions by enabling staff development and training and providing strategic advice, information and analysis that meets the needs of the carers and the health service.
 - Development of visual resources that address consumer needs. The hospital's CANcierge App was launched in February. It provides relevant and reliable information to help navigate cancer treatment at Calvary Mater Newcastle. Resources for education about treatment and orientation to the hospital are also planned.
 - Calvary Mater Newcastle's publications policy has been updated to include assessment of readability scores and help educate staff about the importance of plain language and readability when developing patient information publications.
 - Implementation of a policy and protocol for issues related to recruitment, appointment, training, orientation and ongoing support of consumer representatives. A consumer register and supporting information has been established.
 - Demonstration and promotion of how consumer feedback is used and what changes/improvements were made as a result of feedback. The 'You said, we did...' initiative was introduced, with the feedback vignettes displayed in posters in main foyer and on the Calvary Mater Newcastle website.
- Implementation of actions and initiatives will continue in 2019-20. Embedding key processes and principles into routine practice, particularly regarding the information needs of patients and families and their involvement in decision making about their care, will be an important focus.







Department Reports

General Medicine

The Department of General Medicine continues to care for large numbers of inpatients, providing inpatient consultations across a range of subspecialties to other departments and the Hunter New England Local Health District Mental Health facility. The department has also seen an increase in patients being treated in ambulatory care.

The department welcomed general and stroke Physician Dr Shyam Gangadharan. Dr Elizabeth Pepper left the department to take on an appointment in the Department of Neurology at John Hunter Hospital.

The department's commitment to outreach clinics continued with regular visits to Moree and Mungindi by doctors Michael Hayes, John Burston and Tim Walker, along with one of the advanced trainee registrars. This vital service provides specialist care to rural and remote populations.

The Department of General Medicine has again been the major contributor in the formal education programs for the Junior Medical Officers and Basic Physician Trainee Registrars, both in coordination and delivery. There is consistently positive feedback about this program, which enhances the hospital's reputation as a centre of excellence in which to work and train in internal medicine.

Dr John Burston is the current Director of Physician Education for the facility. Dr Burston was integral in the successful application to the Royal Australian College of Physicians to have Calvary Mater Newcastle accredited as a Level 2 Teaching Hospital. The department supervises advanced trainees in general and acute care medicine, gastroenterology and respiratory.

The department continues to be involved with the work of the Hunter Alliance – a collaboration between Hunter New England Local Health District and Hunter New England and Central Coast Primary Health Network. Dr Michael Hayes is a clinical lead on the Chronic Obstructive Pulmonary Disease (COPD) work stream and Dr Annalise Philcox is a clinical lead on the diabetes work stream. Both of these work streams are innovating integrated models of care by bringing specialist advice and care to the primary care setting.

Cardiology

The Coronary Care Unit (CCU) is a six-bed unit caring for inpatients with a wide range of acute cardiac conditions. The Cardiology Department provides inpatient and outpatient cardiac diagnostic services including exercise stress testing, cardiac ECHOs and ECG recording. The department has welcomed Dr Akash Dhawan and Dr Arshad Khan following the retirement of both Dr Angela Worthington and Dr Kosta Nikolettatos.

Admissions to CCU have increased in 2018-19 with a total of 678 admissions, up from 614 in 2017-18. Acute Coronary Syndrome comprised 255 admissions. Other reasons for admission included decompensated heart failure, cardiac arrhythmias, pacemaker and defibrillator insertion, cardioversions, transoesophageal ECHOs and pericardiocentesis.

The hospital upgraded its cardiac monitors in all acute areas in November, including CCU. The new system enabled increased telemetry capacity for remote monitoring of patients' cardiac rhythm in other wards. This increase has resulted in larger numbers of patients able to have their cardiac rhythm monitored without the need for admission to an acute area. CCU nurses remotely monitored 129 patients from Ward 4C, 133 from Ward 5A and 483 from Medical Admissions and Assessment Zone (MAAZ) during 2018-19.

A specialised cardiooncology clinic has been running for 12 months with Professor Aaron Sverdlov, who has been assessing and treating patients with co-existing cancer and heart disease. There has been a steady increase in referrals to the clinic. Clinical trials, run in conjunction with and separate to the clinic, has increased the number of outpatients for ECHO and ECG services.

Emergency Department and Emergency Short Stay Unit

Presentations to the Calvary Mater Newcastle Emergency Department (ED) increased to 40,280 for 2018-19. Approximately 30% of presentations to the ED required admission. The ED was one of the top performing facilities in the Hunter New England Local Health District (HNE Health) during the financial year with non-admitted Emergency Treatment Performance (ETP) at 70.6%.

Pressures on emergency services continue with increasing demand on services. A quality program lead by the clinical management team continues exploring emergency models and opportunities to update and implement initiatives to improve operational efficiency by ensuring care delivery is consistent with current evidence-based practice.

An enhancement to the senior medical staffing has enabled staff specialist coverage Monday to Sunday morning and evening shifts. This provides a more secure consultant workforce, addresses the current activity and significantly improves the clinical supervision provided to the junior medical workforce and emergency medicine trainees.

The Australian College of Emergency Medicine increased training accreditation from six to 12 months, reflecting the ability of the service to provide increased supervision to trainees.

The 'Front of House Service' Model of Care was reviewed, reinvigorating processes and introducing contemporary practices. An ambulance triage nurse on afternoon shifts now supports the increased ambulance arrivals during this period. Early performance results were promising and the model is achieving improvements in safety, access and quality to support patients. There were also improvements in non-admitted Emergency Treatment Performance for Australasian Triage Score (ATS) 3 and 4.

Transfer of Care (TOC) remains a high priority for the Ministry of Health. With increased emergency activity, the whole-of-hospital team approach has worked consistently to achieve a result of 88% of patient's transferred within benchmark.

The hospital Auxiliary purchased anatomy models used for patient education and teaching. Simulation training for medical, nursing and allied health was able to be supported in the department, with thanks to the generous donation of a simulation mannequin by the Hospital Auxiliary.

The Emergency Short Stay Unit (ESSU) managed 5887 admissions, approximately 48% of the hospital's emergency admissions. The efficiency of the emergency short stay model continues to be monitored, ensuring compliance with best practice inclusion and exclusion criteria to maintain safety and contribute to significant improvement in the hospital's emergency access.

The Australian College of Emergency Medicine Quality Framework underpins the quality program in place in the Emergency Department. This provides a governing framework for clinical innovations, projects, external collaborations and innovations. The monthly multidisciplinary morbidity and mortality meetings discuss difficult cases, opportunities for learnings, audit results, and promotion of clinical standards. The meetings have a strong

focus on clinical teaching opportunities and are well attended by all members of the multidisciplinary team. Congratulations to Dr Nicholas Dafters who received the Calvary Mater Newcastle Excellence in Clinical Teaching award.

The department participates in a Local Airway Registry, an innovation of the Emergency Care Institute (ECI), and continues its involvement in the Access Block Prevalence Study and the Alcohol and Harm Study. Occupational violence is a challenge that all emergency departments face and is often exacerbated by alcohol and drug use in the community. The emergency department framework for violence prevention and management and the ongoing commitment to ensure violence prevention and management training for all emergency department staff is well recognised. The department was a finalist in the Hunter New England Health Excellence Awards

A trial site for a new model of oncology referrals saw the introduction of a nurse practitioner model of care for oncology referrals. This was implemented by the oncology service to provide improvements in continuity of care between outpatient oncology services and the Emergency Department. This has been well received by staff, patients and family alike.

Feedback from our consumers regarding the paediatric environment saw a successful collaboration involving the management team, the hospital auxiliary and some talented local artists to bring colour and vibrancy to the children's clinical area. A jungle mural painted with hidden animals to delight our younger patients has received lots of wonderful feedback and comments. The team sought advice from young patients to choose a theme for the mural. A jungle scene with animals was the most popular choice, and the end result is a fun scene that brings the room to life and puts smiles on little faces.

Other activities during the year, keeping the department busy included the rollout of MedChart, the electronic medication record, and the installation of newer cardiac monitors.

The Emergency Department continued to be a highly desirable rotation for Registered Nurses wanting valuable exposure to subspecialties such as oncology, haematology, toxicology, palliative care and mental health.

Challenges for the coming year will include increasing Emergency Department activity, and aspects of the MedChart implementation.

Intensive Care Unit

The Level 5 Intensive Care Unit (ICU) experienced a busy year with strong activity and the introduction of several significant changes over the 12 months.

Average occupancy for the ICU increased to 90%, with an average length of stay of 3.0 days. The increase in activity saw 573 admissions to ICU, of whom 44% were ventilated. The use of high flow nasal prong oxygen has largely replaced non-invasive ventilation and is far more comfortable for patients. Most admissions (46%) came directly from the Emergency Department, 21% from wards, 13% from the Operating Suite and 20% via the Retrieval Service.

The most substantial change for the unit was the introduction of a patient electronic record of intensive care (eRIC). This has replaced paper documentation with an electronic bedside recording system. It includes automatic streaming of observations from the patient monitoring system, ventilator and dialysis machine, and has replaced the patient medical record for the duration of the patient's intensive care admission. The electronic system was a part of a statewide intensive care improvement project and involved a significant investment from NSW Health for implementation, education, ongoing training and evaluation.

In addition, a new patient monitoring system, new infusion and syringe pumps and new ICU-specific electronic beds were gratefully received and have improved care for critically ill patients. In February, the ICU welcomed an introduction of some much needed pharmacy support with Melanie Harrison joining the team.

The categories of critically ill patients requiring intensive care has remained similar to previous years with most (46%) being medical, 23% toxicology, 15% surgical, 9% haematology and 7% oncology.

The ICU supports the Rapid Response Team which provides the response to clinical emergencies throughout the hospital and the adjoining Hunter New England Mater Mental Health Service. There were 1043 Rapid Response Team calls this year, a 10% increase on last year. As in previous years, most patients respond to the Rapid Response Team's intervention and remain on the ward, with 6.9% of patients required admission to the ICU.

The ICU is an active member of the Australian and New Zealand Intensive Care Society (ANZICS) Clinical Trials Group, participating in several multi-centre, international research projects. The department continues to recruit into ProMedic trial, using melatonin to prevent delirium.



Consultation-Liaison Psychiatry

Clinical activity

The department consulted on 773 individual inpatients, delivering more than 1642 occasions of service.

Most new inpatient referrals came from Clinical Toxicology (449 referrals). Others included General Medicine (177), Cardiology (8), Emergency Department (25), Medical Oncology (20), Surgery (21), Radiation Oncology (10), Haematology (22), Palliative Care (69), ICU (7) and Drug and Alcohol (9).

The Youth Cancer Service saw 37 new inpatient and outpatient referrals. The Psycho-Oncology Service accepted referrals of 321 individual outpatients, delivering 1940 occasions of service through the clinic as well as 24 telehealth sessions. Clinicians provided input to oncology multidisciplinary teams for head and neck cancer, lung cancer, lymphoma and breast cancer.

Service	New Patients Seen	Occasions of Service
Consultation-Liaison Psychiatry inpatients	773	1642
Palliative Care inpatients	69	77
Youth Cancer Service (inpatients and outpatients)	37	340
Psycho-Oncology outpatients	321	1964
Total	1200	4023

Staffing

The department provides:

- Specialist psychiatric consultation for all inpatients at Calvary Mater Newcastle
- An outpatient psycho-oncology service providing specialist psychology and psychiatric consultations
- Research staff involved in psycho-oncology projects
- A part-time clinical psychologist for the Youth Cancer Service as part of the Hunter and Northern NSW Youth Cancer Service, which provides clinical services to oncology outpatients and inpatients aged 15-25 years
- A suicide prevention program and a clinical research unit funded from the Burdekin initiative and administered through the Hunter New England Mental Health Service.

Other activity

Department staff also continued their involvement in research, teaching, professional development and community education activities throughout 2018-19.

Psycho-oncology psychologist

- Psychologists are involved in numerous hospital and external organisational committees and groups. These include the Calvary Mater Eating Disorders Service Plan Working Group and Nurse Patient Safety and Clinical Quality Committee, and the HNE LHD Cancer Network Forum and Local Protocol Committee, which also involves emergency departments, police and ambulance representatives.

Education

- Provided education on violence prevention at hospital-wide orientations, JMO training and to ward staff
- Ran an Eriksonian solution-focused hypnosis workshop.

Service development

- Developed the psychosocial quality review. This is a regular meeting of allied health staff who work in oncology across the Local Health District to encourage collaboration and consultation to help provide comprehensive psychosocial oncology services
- Provided assistance to treatment teams regarding patients' adherence to treatment and patient choices; and involvement with family meetings to help facilitate understanding and acceptance of treatment decisions
- Liaison with staff to improve data entry processes for the oncology patient management system ARIA
- Advocacy to enable the Psycho-Oncology Service to become a sponsor under the Work Development Order program, allowing patients who meet specific criteria and engage with the service the opportunity to reduce their debt to Revenue NSW.

Service to the community

- Assisted with planning for psycho-oncology professional development days in Tamworth and Taree
- Supervision for ongoing placement rotations for 5th Year medical students
- Supervision of undergraduate and Masters students and PhD candidate
- Clinical supervision to Clinical Psychology Registrars
- Presentations to a range of health and community groups, including the Hunter New England Local Health District Psychology Forum, Medical Oncology Department's Friday Forum, Hunter Breast Cancer Information and Support Group, the Prostate Cancer Support Group, and the Leukaemia Foundation.

Suicide prevention research and service

- Worked with Calvary Mater Newcastle's Emergency Department as part of LifeSpan trial to conduct a review of current practice against best practice guidelines for care of people who are suicidal.

- Supported Hunter New England Mental Health Service to redesign its care pathway for people who are suicidal.
- Secured funding from Hunter New England and Central Coast Primary Health Network (PHN) to update the clinical registry for deliberate self-poisoning.
- Worked with the PHN to develop and use a dynamic simulation modelling process to identify interventions most likely to reduce suicide deaths and attempts in the region, which will be used to inform commissioning decisions.
- Evaluated the effectiveness of the Hunter Way Back Support Service in reducing repeat deliberate self-poisonings. The Way Back is a beyondblue initiative that aims to reduce suicidal behaviour by providing non-clinical support to people for three months following a suicide attempt.
- Evaluated the Accredited Persons Program, investigating the discharge decisions for the Accredited Person compared to Medical Officers for a 10-year cohort of people admitted to Calvary Mater Newcastle for deliberate self-poisoning. Data analysis is underway. An Accredited Person has the capacity to require a person to present for an assessment at a psychiatric facility in the same way as a Medical Officer.



Clinical Toxicology and Pharmacology

The Department of Clinical Toxicology and Pharmacology provides an inpatient service for the management of poisoned and envenomed patients. For the management of deliberate self-poisoning patients, the department combines with the Department of Consultation-Liaison Psychiatry as the Hunter Area Toxicology Service. Clinicians in the department also manage patients with adverse drug reactions and complex medication issues and provide a consultative service in clinical pharmacology to the Hunter New England Local Health District.

In addition:

- Professor Ian Whyte is Deputy Chair of the Quality Use of Medicines Committee (QUMC) at the John Hunter Hospital and Chairs the Hunter New England Local Health District QUMC and the clinical trials subcommittee of the HNE Health Human Research Ethics Committee.
- Professor Geoff Isbister provides expertise to the Drug Committee of the Children's Hospital, Westmead.
- Dr Michael Downes is President of the Toxicology and Poisons Network Australasia (TAPNA).
- Felicity Prior is a member of the Calvary Mater Newcastle Drug and Therapeutics Committee, the Hunter New England Local Health District QUMC and its Clinical Council.
- The clinicians in the department also contribute to the national Poisons Information Centre (PIC) roster and support the Hunter Drug Information Service (HDIS).

The department is also involved in undergraduate and postgraduate teaching and has a very active research program. This was shown by the 23 articles published in referred journals and 14 papers presented at international or national conferences in 2018-19. Topics included drug-induced QT prolongation, treatment of paracetamol poisoning, the management of behaviourally disturbed adults, relative toxicity of drugs in overdose, and an extensive series of publications on venoms and antivenoms from Professor Isbister's group.

In 2018-19, there were 1117 admissions to the Hunter Area Toxicology Service. The median age of patients at admission was 35 years.

Of these admissions, 886 were for deliberate self-poisoning. In addition, there were 40 envenomations or stings, 100 recreational drug overdoses, two iatrogenic poisonings and 74 accidental overdoses. The majority, 646 (58%), were admitted to the Emergency Short Stay Unit (ESSU); 90 (8%) to intensive care; 351 (31%) remained in the Emergency Department; and 26 (2%) were admitted to an inpatient ward bed.

Fifty-eight per cent of patients (650) were discharged home; 402 (36%) to the psychiatric admitting unit; and 25 (2%) were transferred to another hospital. The median length of stay was 14 hours, which is substantially less than the length of stay for poisoning at other hospitals in NSW and Australia. The average number of admissions per day was 3.06.



The most common drugs taken for deliberate self-poisoning in all cases were alcohol (23%), paracetamol (22%), quetiapine (13%), diazepam (11%), oxycodone (6%), ibuprofen (6%) and mirtazapine (6%). The most common complications of overdose was a GCS less than 9, followed by hypotension, paracetamol toxicity, delirium, acute kidney injury, seizures, hypoglycaemia, arrhythmia and aspiration pneumonia.

Professor Whyte now works one day a week as Director of Prevocational Education and Training for Calvary Mater Newcastle, in addition to his 0.75 in Clinical Toxicology and Pharmacology. Dr Downes is 0.5 Clinical Toxicology and 0.5 Emergency Medicine. Professor Isbister is 0.75 in Clinical Toxicology giving 2.0 FTE of senior staffing in Clinical Toxicology. Dr Kylie McCardle is a Visiting Medical Officer (VMO) in Clinical Toxicology. Christine Cook provides secretarial and administrative assistance. Felicity Prior remains Director of the Hunter Drug Information Service and is a conjoint lecturer.

Hunter Drug Information Service

Hunter Drug Information Service (HDIS) provides current, up-to-date, clinically relevant and unbiased medicines information and therapeutic advice to health professionals within the Hunter New England Local Health District. A total of 708 enquiries were received during 2018-19, up 15% from the previous period.

- The largest category of enquiries was 'adverse drug reactions' (21%)
- Most enquiries came from hospital pharmacists
- Most enquiries were patient related (62%)
- 75% of respondents used the information provided in patient management
- 46% of responses were provided via the telephone.

Providing therapeutic information in response to enquiries continues to be the service's main priority. The aminoglycoside monitoring service is also a core service. A total of 173 dosage recommendations were provided during the period.

During the year, the HDIS also:

- Represented Calvary Mater Newcastle at a national conference and seminar
- Participated in various teaching and learning activities
- Continued regular quality assurance activities and team meetings
- Continued to support quality use of medicines initiatives across a broad continuum, locally and nationally, including leading the NSW Therapeutic Advisory Group (TAG) Quality Use of Medicine Polypharmacy Indicators field testing project at the hospital.
- Audited enquiries for the use of off-label medicines
- Co-ordinated the NSW/ACT state-based quality assurance for the myocardial infarction program
- Applied for a HETI Allied Health Workplace Training Grant
- Supervised a Pharmacy Honours student project
- Reviewed manuscripts for publication in two major journals
- Represented Society of Hospital Pharmacists of Australia at two national industry and regulatory meetings
- Reviewed 47 Community HealthPathways and 39 Hospital HealthPathways.

Alcohol and Drug Unit

The Alcohol and Drug Unit (ADU) has continued to provide a variety of services to the patients and families of Calvary Mater Newcastle and the Hunter region. These patients have dependence problems and are often vulnerable, marginalised, have complex issues, and present with an extensive range of medical and psychiatric comorbidities.

The small clinical team of medical, nursing and allied health staff provided consultation and treatment to 7244 outpatients, 1344 inpatients and an additional 440 patients through the Emergency Department. Services include counselling, relapse prevention, consultation to other teams and withdrawal treatment. Providing counselling and support to relatives and friends of patients also remains a priority of the service.

Clinical services are the main activity. However, the unit continues to be involved in education and training for Calvary Mater Newcastle and Hunter New England Local Health District staff, general

practitioners and other community staff, along with research, safety audits and development of protocols and guidelines. The unit works in an integrated way with the District's Drug and Alcohol Clinical Services and are involved with the Quality in Treatment Committee for the NSW Ministry of Health. Service expertise was sought for the Special Commission of Inquiry into Methamphetamine ('Ice'), and staff provided written submissions as well as in person testimony to the Commission.

The next year will include some staffing changes, with the aim of providing greater flexibility in the delivery of services to the hospital and community. Unit staff aim to focus on optimising clinical activity whilst continuing their educational and other services.

Oncology

Radiation Oncology and Medical Physics

Over the past year, Department of Radiation Oncology managers have been meeting regularly to discuss and review departmental activities and structure. These discussions stemmed from a genuine commitment from managers to provide staff with strong and consistent leadership, supported by a structure that fosters open communication, clear direction and transparency.

An outcome of these discussions was the development of the Radiation Oncology Management Committee. Since forming, it has focused on meeting structure, reporting and communication channels. The committee has some exciting projects on the horizon that will further enhance the patient experience and continue to support a positive staff culture within the department.

The department completed the development and deployment of the e-whiteboard application in June 2019. It will be used to improve safety and efficiency in the radiotherapy treatment planning process. The software program runs from any radiation oncology computer and displays real-time treatment planning activity based on the departmental Patient Management System. The e-whiteboard will allow radiation oncologists, radiation therapists and physicists to plan and prioritise planning activities and resources, improve workflow, improve safety and facilitate timely plan checking. Congratulations to the dedicated project team behind this initiative.

The Patient Care Group implemented some outstanding projects to engage with patients and members of the community to

ensure continued improvement in service and quality of patient care. The group completed a patient experience survey within the department. Calvary Mater Newcastle volunteers assisted in collecting feedback by sitting with the patients as they waited for treatment. More than 40 responses were collected. Although overwhelming positive, there was some good feedback for discussion and the group will put forward some recommended improvements for the department to consider.

The department continues to be grateful for the generous donations received to enhance research and development activities, conduct quality improvement initiatives, or improve patient care. In 2018-19, the department received donations of more than \$15,000 from patients, their family/carers and members of the community.

A donation organised by community member Tony Gordon stood out. Tony decided to tackle the Kokoda Trail in April. Tony approached companies large and small to support him to undertake the epic trek and pledged any raised funds to go to the Department of Radiation Oncology. The department wants to thank Tony for his outstanding effort and the organisations that supported his cause. Discussions are underway on how to best utilise the funds.

This year the department also had the pleasure of welcoming the Pearls of Port Stephens group who gave a generous donation. They attended the Patient Care Group meeting to discuss how their donation can be utilised and provided feedback on how the department can improve patient and community engagement. It



was an absolute delight to share afternoon tea with these vibrant ladies and share their experiences and ideas.

The Department of Radiation Oncology purchased a 3D printer and software to manufacture custom patient immobilisation equipment, spare parts and custom physics quality assurance devices. Staff have been able to print in-house equipment for patient treatment such as custom fitting bolus for treatment of superficial lesions on patient areas, including fingers and nose. The department has also used 3D printing to print miniature models of treatment apparatus to help explain radiotherapy to patients. The printer and software was funded by a Dry July grant.

The department continues to strive for excellence by continually looking for opportunities to improve clinical governance, comprehensive care, and patient and community engagement while ensuring a safe working environment for staff and patients.

This year the department initiated a range of quality improvement projects:

- The nursing team implemented a follow-up phone call to all patients one week after completion of treatment.

- At nursing education appointments, patients are screened for falls risk and referred as necessary to ensure patient and staff safety.
- A software development governance group was established to oversee the safe implementation of software developed in house.
- Development of Radiation Therapists Professional Development and Achievement Matrix.
- Changes in administrative procedures to ensure patients receive timely and relevant communication while moving to a paperless workflow to achieve integrated patient care from end to end.
- A review of department security. Security cameras have been installed, and departmental security procedures reviewed.

Ward 5B

Ward 5B Medical Oncology continued to provide the highest standard of care for oncology patients in the Newcastle/Hunter area.

Throughout the year, the ward is privileged to have been the recipient of a number of generous donations. The Calvary Mater Newcastle Auxiliary 'Cancer Carers' continue to tirelessly fundraise year after year, to enable the hospital to purchase vital equipment for the hospital's cancer patients to enhance their care and comfort. This past year, seven new patient recliner chairs were purchased to promote comfort and mobility. A tilt chair was purchased to assist the ward's more dependent patients. Individual mirrors and containers were obtained for tracheostomy patients, who have dramatically increased in numbers over the past year.

A donation from the Forster Tuncurry Board Riders Club is one that touched the heart of many Ward 5B staff. This donation was made on behalf of Toby Flew, a well-loved and fondly remembered patient, who sadly lost his cancer battle at the age of 28. Toby's local community have established a yearly Surfest fundraiser in his name that is attended by surfers up and down the East Coast, and continues to grow each year. With their generous donation, the ward was able to purchase two cloud chairs and a weigh chair to ensure all aspects of patient care is of the highest quality.

Ward 5B remained proactive with the Essentials of Care (EOC) Program, with a new program written for the newly graduated nurses that attend the ward during their rotations as a first-year Registered Nurse. The EOC team is made up of Amy Tipping, Rowena Bradley, Aimee O'Donnell and Wendy Oakley. The program they have developed focuses on the optimum value and benefits that the new nursing graduates can obtain during their time on

Ward 5B. Mentorship is a part of the program, with one-on-one support and regular debriefing given throughout their rotation. Any areas of concern or issues they may be experiencing can be identified early during their time on the ward.

Many staff members have focused on their professional development this past year. Staff that have completed their post graduate qualifications in oncology include Amy Tipping, Samantha Oliver, Aimee O'Donnell, Kate Edwards, Caitlynn Byrnes, Emma Heldt, Megan Kepreotis, Leeanne Graham and Janine Cooper. Wendy Oakley completed her Masters in Nursing Science—Oncology. Congratulations to all these staff members who have proven their passion and commitment to the hospital's oncology patients and to their own professional development.

Ward 5B has initiated an education board which is updated fortnightly. It allows staff to learn about issues that sometimes arise with patients and gives nursing staff the opportunity to research and present the topic that they are passionate about. Some of the topics posted have been bisphosphonates, diabetic ketoacidosis, bone metastases, partnering with consumers, line labelling, personal protective equipment, observation frequency and Sago charts, spinal cord precautions, patient rounding, food allergy, and 12 essentials of tracheostomy care.

Ward 5B continues to be a challenging and rewarding place to work. Empathy and compassion are a priority for Ward 5B staff, in dealing not only with patients, but with work colleagues. Staff work as a team to support each other and their patients during one of the most difficult times in their lives.



Haematology

Overview

The Haematology Department is the hub of an area-wide service to manage all malignant and non-malignant haematology disorders including an autologous stem cell transplant service and all haematology outpatient referral for the Lower Hunter. This is the only service existing at this level in the Hunter New England Local Health District.

This service consists of haematology staff specialists, nursing, allied health and administration staff.

Outpatient referrals

There were 1660 new patients referred to the Haematology Unit in 2018-19. All referrals are reviewed by the haematology staff specialists and are then triaged for urgency to be seen in the outpatient clinic. All patient referrals are categorised into urgency codes to meet each patient's clinical need. Only 78% of all new referrals being triaged are allocated an appointment to see a haematologist. This has reduced from 83% in 2016-17 as more complex cases continue to increase and remain the priority. Alternative models of care have been developed over time to assist the team to meet the increasing demand and ensure all patients receive care.

Outpatient services

Outpatient services continued to increase. There were more than 10,870 patient visits to the outpatient clinics for 2018-19, up from 10,300 in 2016-17.

Telehealth

With the large geographical area requiring haematology care, telehealth has been implemented with great success and continues to provide a resourceful service. A total of 357 telehealth consultations were conducted for patients in Muswellbrook, Tamworth, Taree and Gunnedah. The service allows the patients to stay at home within their communities, and provides them with timely and equitable access to care without the inconvenience of travelling. This has improved the relations between GPs, outreach hospitals and the service.

Ward 5D

The 10-chair haematology day ward ran at greater than 100% occupancy during the period, with over 9700 patient visits. Activity has increased significantly over the last decade due to early discharge programs and an increase in haematology activity overall. Projections indicate that this increase will continue.

Haemophilia services

Haemophilia and Bleeding Disorder Treatment Centre services continue to operate at Calvary Mater Newcastle (for the adult population) and John Hunter Children's Hospital (paediatric population).

The service also managed 368 patients with bleeding disorders providing 147 occasions of service including clinical reviews, clotting factor treatments, planning and coordinating surgical procedures, physiotherapy and radiological interventions, and patient family

education and support. The Haemophilia Clinical Nurse Consultant is also the Data Manager for the National Blood Authority's Australian Bleeding Disorders Registry and ensures timely and accurate entry and maintenance of clinical data for the 368 patients across both sites.

Calvary Mater Newcastle and John Hunter haemophilia treatment centres had eight adult and paediatric patients with Haemophilia A and B receiving the newly trialed extended half-life (EHL) factor 8 and 9 products via the National Blood Authority. Other new and novel treatment therapies and gene therapy trials are also on the horizon for eligible bleeding disorder patients.

The Bleeding Disorders Clinic continues to be a vital service and has improved the coordination and management of surgeries at Calvary Mater Newcastle, John Hunter Hospital and private hospitals. This clinic is held on the second Wednesday of each month with the Haemophilia Director and the Haemophilia Clinical Nurse Consultant.

As part of Haemophilia Awareness Week in October, the Haemophilia service again supported "Red Cake Day" to raise awareness of bleeding disorders and raise funds for the Haemophilia Foundation of Australia.

Inpatient admissions

The demand on inpatient beds, including those for high dose chemotherapy and stem cell transplant, remained at about 1900 inpatients in 2018-19. Ward 5C (inpatient) and Ward 5D (day ward) maximised the throughput of patients by improving efficiency through pre-admission work-up, early discharge and outpatient follow-up. The haematology patients are also becoming a more complex patient group with a range of co-morbidities that complicate and often extend the expected hospital length of stay.

Nursing staff from both Wards 5C and 5D continue to provide excellent nursing care, with new recruits well into their training for haematology nursing. There is a stable, committed workforce of nursing and allied health staff on Wards 5C and 5D, who are all committed to their role in haematology and actively seek out ways to develop professionally to enable them to continue to provide excellent levels of care.

Haem-Fit

This nurse-led pilot exercise program is based in the haematology inpatient unit with funding of \$39,944 received from the Hunter Cancer Research Alliance Implementation Science Flagship Program.

The exercise program is directed at patients with a haematological malignancy who will be in hospital for seven days or more. On admission, participants consult with a physiotherapist. Exercise targets are set and integrated into participant's prescribed plan of care. The overall exercise program includes 13 basic strength exercises. Daily routines consists of 10-30 repetitions of five exercises, with achievement recorded in an exercise diary. Well received by all participants during the trial, the program has now been incorporated into routine care.

Haematopoietic stem cell apheresis, cryopreservation and transplant services

The Apheresis Service continued to have high activity levels covering services such as therapeutic plasma exchange, peripheral blood stem cell harvesting, red cell exchange and coordination of autologous stem cell transplantation.

Haematopoietic stem cell apheresis, cryopreservation and transplant services at Calvary Mater Newcastle provided all apheresis and autologous transplant related services for Hunter New England Local Health District. The service provided cell harvesting for 50 patients during the year, and 39 patients received stem cell transplantation.

The Apheresis Department passed its full National Association of Testing Authorities assessment in March. Sam Yuen is the Director of Bone Marrow Transplant; Cathie Milton remains collection facility director; apheresis deputies are Melissa Wills and Tina Gordon.

Allogeneic haemopoetic stem cell transplant service

During 2018-19, 19 patients from the Haematology Service underwent allogeneic haemopoetic stem cell transplants, predominantly at Westmead Hospital. Calvary Mater Newcastle runs a unique service whereby visiting physicians from its main referral centre (Westmead) conduct monthly follow-up clinics for transplant patients and are assisted by an allogeneic Clinical Nurse Consultant employed by Calvary Mater Newcastle. The clinics provided 174 occasions of service.

A nurse-led late effects clinic was established and 48 patients attended this clinic for ongoing late effects management post-transplant. This clinic has been designed for all patients more than two years post-transplant who have no ongoing post-transplant complications. A respiratory clinic is run in tandem with the aim of providing a truly multidisciplinary service. It provided 30 occasions of service during the year.

The aim of the Calvary Mater Newcastle service is to provide patients with specific post-transplant, long-term and late effects care closer to home. This reduces the length of stay required at the Sydney Transplant Centre and reduces travel times for follow-up care.

Lymphoma care services

The lymphoma service continues to grow with over 163 lymphoma patients being triaged through the outpatient area. The role streamlines patient point of care on the urgency of their diagnosis. Whilst not all these require upfront treatment, it allows for prompt education and scheduling of scans, treatment, referral to allied health and other specialists as required during their journey. It allows patients to have a point of contact if they transition to other specialists, departments or health areas. It provides a point of contact for patients or relatives/cares with issues or concerns related to their treatment. The lymphoma coordinator role provides a point of contact for other specialists/health professionals in the Hunter New England Local Health District for advice or support.

District and state consultative roles

A number of Calvary Mater Newcastle Haematology staff provide their expertise to the Ministry Of Health and Hunter New England Local Health District (HNE LHD).

These include:

- HNE LHD Transfusion Committee: Dr Bryony Ross
- HNE LHD Cancer Network Leadership Committee: Professor Philip Rowlings
- HNE LHD Haematology Stream Chair: Professor Philip Rowlings
- NSW Bone Marrow Transplant Network of the Agency for Clinical Innovation (ACI) – Executive: Professor Philip Rowlings; transplant coordinator Louisa Brown is part of long-term follow-up and nurses working parties
- NSW Haemophilia Network: Dr Ritam Prasad
- HNE LHD VTE Expert advisory Group Chair: Associate Professor Anoop Enjeti
- EviQ clinical guidelines group, Cancer Institute: Associate Professor Anoop Enjeti
- Health Education and Training Institute safe use of anticoagulants education committee: Associate Professor Anoop Enjeti.

Teaching

University of Newcastle and University of New England medical students are taught in both the inpatient and outpatient setting, as well as through lectures and tutorials at the University of Newcastle Callaghan Campus.

Associate Professor Anoop Enjeti was involved in developing the new medical curriculum and the Year 4/5 research project.

Nursing and allied health undergraduate students from University of Newcastle are trained in the inpatient ward.

The staff specialists contribute to medical registrar training and preparation for the Royal Australasian College of Physicians exams.

In coordination with NSW Health Pathology North – Hunter, the unit has six specialist haematologist advanced trainee positions for the colleges Royal Australasian College of Physicians and Royal College of Pathologists Of Australasia.

Personnel

The department welcomed back Dr Asma Ashraf in June. Dr Ashraf works part time with Calvary Mater Newcastle and with HNE LHD to service Manning and Muswellbrook hospitals.

Associate Professor Anoop Enjeti is undertaking research part-time with NSW Health Pathology, Hunter Medical Research Institute and the University of Newcastle until 2020.

Recognition

The department thanks volunteers Margaret Milliken and Diane Body, who do a wonderful job in supporting the team.

Donations from the community

The Haematology Department received numerous donations totalling more than \$32,000 from individual families and the community throughout the financial year. In particular, large donations received from Zebra Equites and Mr Lyle Dalton.



Medical Oncology

The Department of Medical Oncology is one of the largest and busiest units in NSW. In 2018-19, the unit saw 1378 new patients (up 15%) and provided 30,678 occasions of service (an increase of 30%). The Day Treatment Centre provided 10,115 procedures (up 18%) and the Infusion Lounge 1172 treatments (up 15%).

There have been many staff changes. The department welcomed new Advanced Trainees Dr Avraham Travers, Dr Vishal Navani and Dr Prajwol Shrestha and said goodbye to Dr Tin Quah, Dr Sarah Zardawi and Dr Elizabeth Connolly.

Dr Fiona Day and personal assistants Amanda Whitehouse and Kaylee Baldock have returned from maternity leave while Amielia Speziale has gone on maternity leave. Personal assistant Adrian Read has left the unit to work with the University of Newcastle. Dr Nick Zdenkowski continues his research fellowship and Dr Rob Paterson is temporarily helping with clinics with the support of the Hunter New England Local Health District. Dr Fiona Abell will take 12 months leave to be the Acting Director of Cancer Services for the District, and Dr Hiren Mandaliya will cover her during her leave.

The Medical Oncology Clinical Trials group's has a new home in Edith Street and the Phase I programs have been very successful. There was a smooth transition of medical melanoma patients to the Medical Centre, with thanks due to Dr Abell and Associate Director of Medical Services Tracy Muscat.

Professor Stephen Ackland was awarded a Certificate of Outstanding Service from the Clinical Oncology Society of Australia for his outstanding service to the society and cancer care and control in Australia.



Palliative Care

The Department of Palliative Care was established more than 30 years ago. It has since evolved into a comprehensive specialist service, providing integrated multidisciplinary palliative care across inpatient and community health care settings in the local Newcastle area, as well as support to the district's wider network of palliative care teams.

The vision and purpose of the Department of Palliative Care is to provide clinical care, education and research to better enable patients with life threatening illnesses to receive optimal care in their preferred setting. Grattan Institute research suggests that home is the preferred place for 70% of Australians.

Traditionally, the department:

- Operates a 17-20 bed hospice at Calvary Mater Newcastle
- Conducts specialist ward rounding at Calvary Mater Newcastle, John Hunter Hospital and Belmont Hospital

- Operates a 24-hour multidisciplinary community palliative care service
- Provides clinical support to the wider Hunter New England Local Health District.

Over recent years the service's reach has expanded to further include:

- Outreach rounding to 40 local residential aged care facilities
- Outpatient ambulatory specialist palliative care clinic at Calvary Mater Newcastle
- Motor Neurone Disease supportive care clinic
- District-wide specialist palliative care telehealth clinic
- Integration into Calvary Mater Newcastle's procedure for accelerated transfer to die at home



- Bereavement services including community walking groups and creative therapies.

In the past year, the department has undertaken substantial evaluation of its model of care to ensure its capacity to meet the needs of patients, their carers and the community. This has resulted in service restructure, implementation of new approaches to better enable multidisciplinary collaboration and shared care, and work towards supporting the team to further their skills in delivery of care and leadership.

The department acknowledges the engagement and enthusiasm of the entire team, including clinical, administrative, volunteers and support staff as they navigated a busy year.

Highlights for 2018-19 included:

Hospice major structural works

In April, the hospice building underwent major structural and renovation works, requiring its temporary closure. The department relocated to the NewMed II building and palliative care inpatients moved to Ward 4C.

The process mandated substantial collaborative pre-planning with all sectors of the hospital as well as with the private public partnership partners. The four-week relocation proved minimally disruptive. The coordination and support efforts of Phil Hanbury and Jacquie Evans saw them receive the award for team of the month. Both Palliative Care and Ward 4C staff adapted to the changes, continuing to provide service with excellence in the spirit of hospitality and mutual learning. The staff of Ward 4C warmly welcomed the palliative care patients, clinicians and staff and, aptly, also received a Team of the Month award.

Highlighting the importance of environment in palliative care, the team and patients returned to a refreshed, more comfortable hospice with new fixtures, brighter colours and a makeover feel.

Volunteer Bereavement Team win HNE Health Excellence Award

These annual awards acknowledge staff and volunteers across the district who have demonstrated outstanding achievement, clinical excellence, high quality patient care, and innovation.

The Palliative Care Bereavement Team won the Volunteer of the Year Award (team category). This is a wonderful acknowledgement of the

skill, dedication and commitment of this group of volunteers and the important and diverse role they play in supporting bereaved families. Members of the team are John Papp, Judith Morris, Margaret Fogarty, Pat Lynch, Siobhan Farrell, and Sue Hunter.

The department would also like to acknowledge the dedication and support of Fiona Harris, Mal Fletcher and Cherilyn Firth.

Into the Dreaming

The Department of Palliative Care was fortunate to be invited to support the implementation of Into the Dreaming resources aimed to increase the uptake of culturally supportive palliative care for Aboriginal people and their communities.

Development of the resource was led by Rose Wadwell, Aboriginal Health Cancer Care and Palliative Care Officer for Hunter New England Health, as part of the Aboriginal Health Unit's cancer initiative. The process of consultation and collaboration, led by Rose and supported by Sharyn Tyter and Susan Mulyk, has resulted in the development of artwork canvases and resource booklets aimed to increase confidence and communication around palliative issues for Aboriginal people.

The resource was launched at Calvary Mater Newcastle and saw members of staff and the Aboriginal community share stories and develop connections and awareness.

Palliative care education and curriculum

Following on from previous years' successful implementation of the Ministry of Health Palliative Care Education initiative, the Department of Palliative Care again partnered with the Local Health District's Palliative and End of Life Care Stream to further develop and implement palliative care education and skills development for the district's workforce.

To ensure sustainability and quality, the education working group engaged relevant stakeholders to develop a curriculum/educational framework that provides a standardised approach to the structure, delivery, and content of palliative and end-of-life education across Hunter New England Local Health District. The curriculum will articulate learning outcomes and clinical competence requirements and be aligned to the national consensus statement, and essential elements for safe and high-quality end-of-life care.

The Department of Palliative Care was fortunate to have been joined by Catherine Rutledge, who has led this work, as well as facilitating skills in implementation through delivery of the Accelerating Implementation Methodology (AIM) training for palliative care educators in the district.

The department continued to collaborate with NSW Palliative Experience in the Palliative Approach (PEPA), running regular workshops and seminars in palliative care in the Hunter area and across the wider district. General PEPA courses were run as well as courses targeting specific audiences such as aged care, acute care, cultural issues, pharmacology, advanced care planning, and advanced symptom management. The Department of Palliative Care's Nurse Practitioner Milly Sneesby continued to substantially contribute to the department's education activities.

Triage for palliative care patients

The triage model developed to ensure timely care by the palliative care team members best able to address patient and carer needs has now been integrated into the operations of the palliative care service for 18 months, ably led by Nurse Practitioner Lynette Campbell.

By using a department-developed tool based on the standards of the Palliative Care Outcomes Collaborative, and assessing the patient's phase of illness, symptom burden and functional status, the outreach service is better able to tailor care to the specific needs of the patient and their carer, and develop care plans cognisant of the patient's preferences.

The triage process has led to a successful and sustainable ambulatory outpatient clinic model, enabling early integration of palliative care and shared care with primary treating teams.

Additionally, early evaluation has demonstrated a decrease in presentations to the Emergency Department in the first month following referral to palliative care. This trend may illustrate the benefit of timely, tailored patient care in reducing unmet need.

Lynette presented the triage model at the Oceanic Palliative Care conference in Perth. Further evaluation to inform optimisation of the process is underway.

Research unit and senior research fellow

The department's vision for establishment of a clinical palliative care research unit moved closer to realisation through the appointment of a senior research fellow. Dr Sarah Moberley is an epidemiologist with a strong track record in successful collaborative research. Sarah's role over the next two years is to build infrastructure and capabilities which will support research within the department and foster collaboration with partners to conduct research that matters to patients, with rapid translation into improved service and patient and carer reported outcomes.

Priority research areas include:

- Optimisation of referral and triage processes to enable timely patient centred care
- Models of multidisciplinary community-based palliative care to enable care in the place of preference
- Home-based enhanced models of palliative care
- Palliative care in residential aged care facilities.

Enabling end of life care in preferred place for residential aged care facilities

The department was granted research funding to undertake a project concentrating on enablement of person centred end of life care in aged care facilities. This project is being undertaken on behalf of the Palliative and End of Life Workstream of the Hunter Integrated Alliance. Jacqueline Hewitt has been engaged as the clinical lead and has a strong track record in service innovation with the ACE project. Jacqueline established a collaboration between Calvary Mater Newcastle and six residential aged care facilities, with the eventual

aim of identifying a locally effective model of palliative care support to enable end-of-life care in residential aged care facilities through exploration of current models, indicators of quality of end-of-life care and exploring enablers and barriers.

Clinical activity 2018-19

Significant changes in development and delivery of care have occurred over the past 12 months, with support and streamlining multidisciplinary collaborations through the implementation of morning meetings for both inpatient and community outreach services. Multidisciplinary teams now engage daily to establish early care planning for patients with unstable symptoms and early intervention of support for families and friends caring for loved ones with advanced and end-of-life needs.

Inpatient palliative care consultation team

The Calvary Mater Newcastle specialist medical consultation service received 999 referrals across Calvary Mater Newcastle, John Hunter Hospital and Belmont Hospital.

The introduction of palliative care clinical nurse consultant and transitional nurse practitioner at John Hunter Hospital has seen the development of a collaborative clinical relationship, enabling earlier integration of palliative approaches in John Hunter Hospital, as well as opportunities for discharge planning and seamless handover to Calvary Mater Newcastle community palliative care outreach. The model developed by these excellent nurses has avoided duplication of services, enhanced clinical partnerships and enabled in-house palliative care clinical consultation and staff support and training.

Ambulatory palliative care outpatient clinic

The new palliative care outpatient clinic continued to expand its activity. It offers specialist multidisciplinary palliative care ambulatory clinic consultations to patients and their families with life threatening illness who may be in the earlier stages of their experience, or preferencing a shared care model with their treating oncology or chronic disease team.

The weekly clinic has provided 235 occasions of service, with positive feedback and evidence of strong demand.

Palliative care community outreach service

The community specialist palliative care outreach service received 778 new referrals for specialist multidisciplinary care for patients and their carers at home. In the past year, the number of active patients has substantially increased, reflecting the service's recognition of patient and carer needs throughout their illness experience and need for holistic, patient-centred support.

Recognising the increased need for support of community-based patients, the department evaluated its current model and implemented changes aimed at better meeting needs and tailoring care to patient and carer preference. This process has informed a community restructure, with the implementation of a clinical nurse consultant position for outreach. Peter Kozaczynski is in the role and has been a highly valued senior member of the palliative care team. Since commencing in his new role he has applied his broad experience in advanced clinical practice and has already made significant contributions to patient and family care as well as staff support and safety.

To better enable continuity of care across the sectors of its operations and enhance workforce sustainability, outreach nurses have provided mentorship and support to four members of the department's inpatient nursing team. The inpatient nurses have undertaken orientation and training in outreach palliative care nursing and advanced care coordination roles, ensuring the team has ongoing capacity to care for the needs of the local community.

The Department of Palliative Care has linked closely with HNE Health's Essentials of Care to implement and sustain practice improvements. Over the past 12 months projects led by clinical nurses have had wide impact and been an opportunity for staff to develop skills in leadership. Implementation of the Caring @ Home packages has been a highly successful approach to enable families to administer subcutaneous medications, better enabling care at home.

Further new projects underway are focusing on care for patients requiring close observation; improved patient and care self-reporting of symptoms commonly experienced in palliative and end of life care; and implementation of adult Ambulance Care Plans and advanced care planning for patients in the community.

Social work

The palliative care social workers organised and facilitated a two-day workshop entitled "Responding to Needs in the Palliative Care Setting". This workshop focused on building specialised skills and knowledge to work effectively in the domain of emotional and existential needs of patients and their families. Social workers from across Hunter New England Local Health District involved with palliative care patients attended the workshop. Feedback confirmed that participants had expanded and gained new insights and skills which will be highly relevant in their workplaces.

Group work continues to be an important aspect of social work practice.

The Pathways through Grief Bereavement Support Group offers support and psychoeducation to bereaved clients across three six-week programs each year. This program is principally designed to meet the needs of bereaved clients whose dominant grieving style is described in the literature as intuitive. There were a total of 134 attendances during that time.

The bereavement walking group offers a different approach and is designed to meet the needs of instrumental grievers. There were 193 attendances recorded for this ongoing monthly program.

Assisting clients as they negotiate changes and challenges to their assumptive world, identity and sense of meaning and purpose, the therapeutic writing group and Tree of Life programs were repeated this year.

Medical Centre

The Medical Centre provided outpatient services to more than 374,681 patients over the past year. Of these, 6340 patients were treated in the Infusion Lounge and 350 of those patients received a blood transfusion.

The Hospital in The Home Service provided treatment to approximately 1900 patients in their homes.

The centre continues to provide patients with exceptional service and compassionate care ensuring all patients are included and consulted in every step of their journey. The centre surveyed patients in March and received overwhelming feedback about how caring and compassionate all of the staff were.

The feedback included some suggestions for change including providing a feedback loop to patients when clinics are running behind. Several changes were made as a result. All patients are now informed when a clinic is running behind, and for how long. Coffee cards are given to patients to compensate for any late clinics. The centre is always looking at ways to improve service and further improvements will be introduced.

During the year:

- All Medical Centre nursing and administrative staff participated in creating the “Ways of Working” program. This has assisted the team to achieve better patient outcomes by providing a



consistent and committed approach in to patient care and care for colleagues.

- The centre is surveying more than 180 head and neck cancer patients to see if there are things that can be done to make their time in the clinic easier.
- Nurses Penny McLucas and Jade Quipo initiated safety huddles in the Medical Centre. Safety huddles allow discussions between staff in the clinics, Infusion Lounge and Hospital in The Home service to ensure everyone is aware of the care required for patients in each of the services. This includes sharing the workload when one service requires assistance with patient care.
- Claire Brew completed the Link Nurse course enabling her to increase her knowledge and skills in infection control. Claire can now pass this information on to clinical staff to assist with the intensive care required when infectious patients present for an appointment.
- Penny McLucas and Kelly Crawford completed the Essentials of Care Facilitation Course, enabling them to facilitate and assist with project initiatives in the Medical Centre.
- Lana Johnston was involved in the Distress Screening Pilot Project with Hunter New England Local Health District Cancer Services. This initiative allows cancer patients undergoing chemotherapy and radiotherapy to have an opportunity to self-report pain and distress and be appropriately managed.

- Infusion Lounge staff Mark Barrie and Erin Killion are establishing an education package for new staff working in the Infusion Lounge to equip them with the knowledge and skills required to provide treatments to patients.
- Erin Killion and Claire Brew are creating a work instruction and competency assessment for venesection so that nursing staff learning venesections are provided with a sound knowledge of the policy and processes required to perform the technique.
- All Medical Centre nursing and administrative staff are reviewing the vision statement to create a statement that reflects a service that is dedicated and committed to understanding patient needs to ensure that their goals of care and treatment during their time at Calvary Mater Newcastle are met.

These initiatives would not have been achievable over the past year without the dedication of Medical Centre staff whose behaviours and interactions demonstrate they are passionate about the care they deliver to patients and their families.

The Hunter and Northern NSW Youth Cancer Service

The Hunter and Northern NSW Youth Cancer Service (YCS) continued to support young cancer patients aged 15-25 years. This is the service's eighth year and it continues to pride itself on the advocacy and support it provides to this cohort of patients and their families.

The service has been instrumental in three National Youth Cancer Service (Canteen) studies aimed at better understanding and improving the patient journey. This year the team has finalised recruitment for the distress thermometer validation study, begun recruitment for the survivorship distress thermometer validation study and continued recruitment for the experiences of care study.

All members of the team attended the 3rd Global Adolescent and Young Adult Cancer Congress in Sydney in December and had a number of poster presentations accepted. These posters highlighted the great work being done with rural and remote adolescent and young adult cancer patients and those requiring preparation for bone marrow transplants. Lyndal Moore, YCS Clinical Nurse Consultant, co-facilitated a pre-congress cancer nursing leadership workshop with Australian and international colleagues. A young Hunter cancer patient submitted a work in poster format called "My Beanie, My Identity". This was the only Australian patient submission and was proudly displayed at congress.

This year the team provided ongoing outreach support to the North West Cancer Centre in Tamworth. The team met with some newly diagnosed patients who were receiving their treatment in Tamworth, and provide bereavement support to families in the local area. Whilst there, education was provided to staff about fertility preservation and anxiety. Strategies were offered to assist staff to recognise signs of anxiety and how to best support their patients with some practical tips. The team also provided outreach to young patients in Gosford.

One aspect that has become increasingly important is the links that the Hunter team has with the other YCS teams across NSW and nationally. Many young patients have required treatment across services and exceptional coordination, communication and support between the teams helps ensure treatment for these young patients is streamlined and as seamless as possible.

The YCS team look forward to welcoming their newest member, Adolescent Oncologist Dr Paola Kabalan-Baeza, who will work across Calvary Mater Newcastle and John Hunter Children's Hospital to meet a growing need in the Hunter.

Surgical Services

The Department of Surgical Services provides elective and emergency services, and a broad range of general surgical procedures, both open and laparoscopic, as well as colonoscopy and endoscopy services. The department is involved in colorectal cancer screening through the Direct Access Program and emergency surgery for gastrointestinal bleeding.

Each day the Department of Surgical Services operates on approximately three emergency cases through the Emergency Department. However, the department's activity is mainly cancer-related surgery and this year it has continued to improve services for breast cancer, melanoma and liver cancer.

The major advances for melanoma relate to medical treatments in advanced melanoma and in the adjuvant setting in clinical trials with checkpoint inhibitors, targeted therapies and immunotherapy. As a consequence, surgery for salvage situations is becoming more complex and treatment plans for node-positive disease are commonly coordinated through multidisciplinary teams.

The department has seen a major increase in the number of reconstructive and oncoplastic procedures in breast cancer. This has

been both with prostheses and autologous reconstruction by breast surgeons and plastic surgeons. The department has had a major capital investment with the purchase of an operating microscope. This has enabled Dr Kirstin Miteff to introduce free flap microsurgical reconstruction of the breast.

The department has also introduced a program for early recovery after breast cancer surgery which is allowing more standardised care and earlier discharge for all breast cancer patients.

The department introduced major liver resections and audited the performance. It was found to be of an excellent standard and will now be considered as a routine part of surgical practice.

The department has also had an increase in minimally invasive colorectal resections, and overall surgical activity has increased by about 25%. This has been due to excellent teamwork by the whole department.

Perioperative Services

Perioperative Services, encompassing the Operating Suite and Preoperative Clinic, further increased its activity and service to the community. There were a total of 3956 procedures in 2018-19, including 832 urgent procedures through the Emergency Department.

The department has continued to provide vital access to people living with mental illness who require electroconvulsive therapy (ECT). This financial year, 1135 patients received ECT.

Perioperative Services performs a range of surgeries including thoracic surgery (including pacemaker insertion), breast surgery and breast reconstructive procedures, general surgery (such as colorectal surgery and hepatic surgery), plastic surgery, and gynaecological-oncology surgery. The department also provides access for medical procedures requiring a sterile environment including endoscopy and bone marrow biopsies, both of which are vital diagnostic services.

Several new surgeons have joined the department in the past year to meet the increasing workload. These include colorectal surgeons Dr Brian Draganic, Dr Brendan McManus and Dr Stephen Smith, and surgeon Dr Ross Mejia Thoracic.

Equipment purchases included a microscope for breast reconstruction surgeries, new operating tables, and new lights for all three operating rooms. This has also helped cater for increasing surgical activity and needs.

Some of the quality improvement projects undertaken over the past year included PVC recycling, a malignant hyperthermia project, hypothermia in postoperative patients, and safe handling of specimens, just to name a few.

Pre-Procedures Clinic

A patient's surgical or procedural journey begins with the patient at home and ends when the patient is safely returned to their place of residence. The pre-procedure process optimises the journey for every patient by collating, analysing and communicating information from multiple sources. The aim is to make each individual patient's experience safe, appropriate, effective, efficient and positive.

The Pre-Procedure Clinic functions for five sessions per week with three of these sessions dedicated to patients requiring an anaesthetic assessment. The unit is guided by the Director of Anaesthetics and staffed by a nurse unit manager, an administrative assistant, and a multidisciplinary team that attends during the clinic sessions.

The 2018-19 year was another busy year for the unit. Surgery numbers and the complexity of surgical cases increased over the year, but the

team worked diligently to ensure that patients remained optimally prepared for their surgical journey.

The team continued to evaluate processes and implement changes in keeping with the NSW Perioperative Toolkit. These changes have ensured that the patient's underlying medical health status and social circumstances are taken into consideration alongside the impact of the intended surgery/procedure and anaesthesia. Work has commenced to implement a 'prehabilitation' program within the service to ensure that patients are as physically and psychologically ready as possible as they start their surgical journey. Shared decision making with patients, families and carers is an integral aspect of perioperative care and will continue to be the focus as the service progresses with this program.



Melanoma Unit

The Melanoma Unit cares for a large number of newly diagnosed patients with melanoma requiring surgical treatment in an ambulatory care setting.

In 2018-19, a supported clinical innovation and redesign program was launched to improve the outpatient model of care, the patient journey through melanoma care and to support staff with the introduction of new unit processes.

This resulted in several recommended projects aimed at improving clinical efficiency, minimising clinical risk, and increasing both patient access to clinic appointments and their experience in the service. Oncology clinics were relocated to the Medical Centre in late 2018, supporting oncology service co-location and affording flexibility in clinic access for oncology patients. This improves ease of access to support services, such as imaging and pathology for those patients who may be unwell. Surgical melanoma clinics remain very active, with referrals numbers consistently high. With redesigned clinic management processes within the unit more patients are accessing appointments earlier.

Program results can also be seen in improvements to patients' experience with reduced waiting room times in a more pleasing environment. A considerable refurbishment to the waiting room, enabled by funding from Dry July now creates a comfortable and functional area for patients waiting for appointments and treatments.

Patients have provided positive feedback:

- "Been many times, nice surprise with new furniture like the chairs with arms easy to get out of"
- "Tea room nice and inviting, nice table and chairs"
- "Lounges very comfortable, good set up of room"

The purchase of an automated external defibrillator incorporated with a clinical emergency response system has provided a defined escalation process in the event of a deteriorating patient within the unit. All staff received training in the use of the equipment.

A special thank you to Dr Fiona Abell, who earlier this year departed from her role as Director of Melanoma to take on an active district-wide role with Hunter New England Local Health District. Dr Abell lead the introduction of many changes in the unit and supported the most recent redesign program.

The unit also welcomed Ms Cheryl Cooley, Nurse Manager Surgery. This position now includes the frontline management of the Melanoma Unit. Cheryl has been the acting Nurse Manager of the Melanoma Unit during the past 12 months and with good knowledge of the unit and redesign will continue to support the staff and patients with improvements to our care delivery.

The unit welcomed new administrative officers Susan Norris and Annette Momm to the unit along with registered nurse Kahlee Michel.

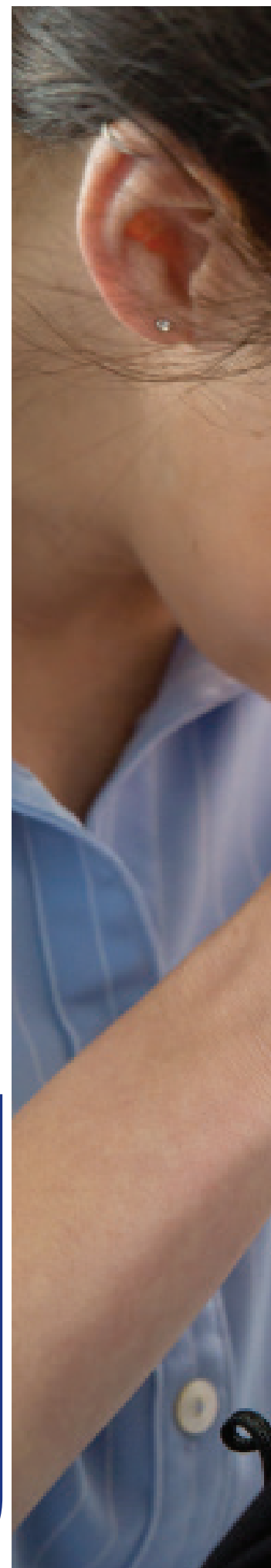
Melanoma Unit staff have reflected on a successful year with a focus on quality improvement and changes providing best practice for all patients.

Surgical Unit / Ward 4B

Ward 4B Surgical Unit continues to provide surgical services to general and oncological surgery patients. With an average of 210 separations per month, the busy surgical ward supports elective surgery admissions and those admitted via the Emergency Department.

A collaborative project was developed and commenced in 2018-19 to enhance the experience of patients undergoing breast surgery. The Early Recovery after Breast Surgery booklet aims to provide preoperative information and guidance to patients and staff to enable a comfortable, well-planned short stay on the surgical unit.

A change in management roles occurred in March 2019 with Lara Riley becoming the newly appointed Nurse Unit Manager. The Stomal Therapy/Wound Management and McGrath Breast Care Nurse services are now managed under the role of the Nurse Manager Surgery.





Allied Health



Nutrition and Dietetics

The Nutrition and Dietetics Department plans and delivers nutrition care for patients admitted to Calvary Mater Newcastle and patients receiving cancer treatment as outpatients. The department's experienced and passionate clinicians contribute significantly to the care of many patients and continue to advocate for the role of nutrition.

The department remains committed to enhancing the skills of dietitians. This year a program to transition dietitians from acute care to oncology outpatients has enabled staff to broaden their clinical skills and experiences. Dietitians have also attended training to better provide care to patients with eating disorders, as part of a new Hunter New England Local Health District model of care for patients with eating disorders.

Staff members continue to be active in clinical care, as well as in research, undergraduate teaching and community education. This year the unit began taking third year University of Newcastle dietetic students to observe hospital clinicians at work, as well as supervised placements for final-year students. In addition, a TAFE student

studying Allied Health Assistance (Dietetics) completed her practical training with the service.

The department contributed to a wide range of consumer-based support programs, which included work with cancer support groups, the drug and alcohol 'Lifestyle' program and the Calvary Mater Newcastle falls prevention program. It also participated in World Head and Neck Cancer Day and World Malnutrition Awareness Day activities.

The work of the department's dietitian assistants Suzie Collins, Dianne Kennedy, Anne Nash, Tiffani Jones and Cass Christodoulides may go unnoticed by many, but the work they do to support nutrition care is greatly valued by patients and dietitians. Cass Christodoulides retired this year and is thanked for her more than 20 years of service.

Speech Pathology

Over the past year, the Speech Pathology Department took on the responsibility of organising the regular interest group for all speech pathologists working with adults across the Hunter New England Local Health District. Several interesting speakers were organised, and presentations streamed to centres across the district thanks to technical support from HNE Health's Telehealth team.

In conjunction with Medirest, the department's work continued towards standardising diet textures for dysphagic patients in the hospital. The department has been able to provide a more appropriate soft diet option than was previously available. This work will continue over the coming year following NSW Health's introduction of the International Dysphagia Diet Standardisation Initiative.

Physiotherapy

This year has been an extremely busy year for the Physiotherapy Department with patient conditions becoming more complex, particularly in cancer services, and some long-stay clients requiring significant rehabilitation.

The department has had a big focus on partnering with consumers, providing postoperative breast cancer patients with the opportunity to attend outpatient lymphoedema education sessions four-to-eight weeks post-surgery. The department also participated in the Breast Cancer Support group education session, which give patients an opportunity to ask questions and express concerns about their recovery.

The department has also enjoyed partnering with patients on the ward throughout the year, and particularly during the hospital wide "What Matters to You?" initiative. Particular focus was placed on physiotherapy staff recording patient goals more clearly in documentation for all care providers to be aware of.

Falls management has also been a focus in the hospital, with development of a resource for staff to clearly define their role and responsibility to ensure patients at risk are clearly identified and educated appropriately. A clear guideline of expectations for staff has helped to increase staff using resources for patients to enhance their understanding of their falls risk and strategies to reduce this.

Physical recovery for cancer patients both during and after treatment continues to be a goal for the department. Many cancer patients have participated and benefited immensely from attending the twice-weekly conditioning group. A directory for exercise groups in the Greater Newcastle area is available for those who need to exercise closer to home or want to continue exercising after they have finished the conditioning group. The Lymphoedema Service continues to be highly utilised from both the oncology and medical services.

The Physiotherapy Department has worked with other departments on improving care through research. These research projects have included:

- Looking at models of care to increase patient activity levels whilst admitted to the haematology ward for chemotherapy treatment

Staff continued their input to the local evidence-based practice group looking at acquired communication disorders, and also participated in a webinar looking at updates on speech pathology management of head and neck radiation oncology patients. All staff attended a webinar on respiratory muscle training, which will be useful in managing patients with speech and swallowing disorders.

The department continues to provide a service to the Stroke Unit, improving outcomes for these patients. Staff now attend weekly multidisciplinary meetings to set goals for patients, and contribute to a common discharge report to assist with clinical handover of stroke patients to other facilities. The department has also instituted a standard communication screener to be used by all clinicians seeing new stroke patients to achieve compliance with the stroke guidelines.

- Working with patients awaiting gastrointestinal surgery to improve their physical fitness and help improve their post-operative outcomes
- Investigating whether pelvic floor exercises performed prior to reversal of stoma improves quality of life and pelvic floor function in gastrointestinal cancer patients, post-surgery.

Funds for these studies have been obtained through a Hunter Cancer Research Alliance grant and without this support this work would not have been completed.

Physiotherapists have again been actively involved in hospital-wide education and committees. These included committees focussed on work health and safety, the deteriorating patient, and comprehensive care. Staff participated in the tracheostomy care team and District Cancer Network Committee, and provided Allied Health DETECT training, patient handling competence training and falls prevention training across the hospital. Staff also participated in community events for the Cancer Council and Leukaemia Foundation, as well as helping out on World Cancer Day, April Falls Day, and the heart awareness and stroke awareness days.

Judy Holland has worked with the District's Cancer Network Committee to establish new pathways for lung cancer patients to be referred to existing pulmonary rehabilitation programs. This allows access, support and education closer to home for clients with specific lung symptoms such as shortness of breath, energy conservation and respiratory medications.

The Physiotherapy Department gratefully acknowledges the support and funding received from the Calvary Mater Newcastle Auxiliary which has provided much needed compression garments for lymphoedema patients following their treatment, as well as a new treadmill.

The department is also thankful for generous donations from patients and families that help maintain the oncology frame loan pool. This provides short-term loan of mobility aids to assist with the safety of patients whilst recovering or undergoing cancer treatment.

Social Work

The members of the Social Work Department continue to provide a comprehensive service to patients and their families and carers across all inpatient and outpatient clinical areas of the hospital.

Social workers work with the medical, nursing, allied health and support staff of Calvary Mater Newcastle to provide a multidisciplinary approach for patient care. In particular they are responsible for attending to emotional and psychosocial needs of patients, their carers or families. Social workers provide assessment, individual and group programs and services. Their work may include direct counselling for people dealing with adjustment issues, trauma, grief and loss, or domestic violence; providing specialised meditation and support group programs; discharge planning; social support services; and advocacy with government and other agencies to access services.

Social work staff continued to represent the department, allied health and the hospital on a range of committees within the hospital and with a range of community groups such as Calvary Mater Newcastle Stroke Team, Newcastle Domestic Violence Committee and the Youth Cancer Service network.

They actively network with a range of community service providers to ensure effective links and quality service for patients and families. These include the NSW Cancer Council, Canteen, Community Transport Services, local cancer support groups, women's services,

aged care service providers, and NDIS service providers. An adolescent and young adult social worker has been involved in providing outreach services to patients at Tamworth and Port Macquarie.

Staff also contributed to a range of conferences, workshops and forums, participating in organising committees and presenting papers, including at the Hunter New England Social Work Conference. A team held a planning day to consider ways to improve social work services within the hospital.

Staff continued to review, develop and update patient resources as needed. These include resources for patients living with malignant brain tumours, resources to assist in the care of patients who have suffered strokes, resources for patients who have a dementia, and bereavement resources in all clinical areas of the hospital.

Social workers were actively involved in facilitating a range of group programs within the hospital including the bereavement walking group, the "Pathways Through Grief" Support Group, Hunter Breast Cancer Information and Support Group, and the falls management program. Support was also offered to the Head and Neck Cancer Support

Occupational Therapy

The Occupational Therapy Department continued to provide a range of services across the hospital throughout 2018-19, and participated in quality activities and student supervision.

The meditation group for oncology patients and their carers has continued to meet weekly and receives positive feedback from all those who have participated. This group is facilitated jointly by occupational therapy and pastoral care teams, and has been held nearly every Friday morning. The group has been running continuously for 21 years.

The Oncology Loan Pool has provided aids of daily living to scores of patients to help them and their families manage serious illnesses in their own home environment. Enhancing this service continues to be a goal of occupational therapy staff, especially in the area of pressure care management. At any one time, up to 375 patients can be using assistive aids loaned from the program.

The department participated in Dry July and helped to raise money for valuable hospital resources. The team was grateful to have accessed some of this money for products such as portable ramps, pressure cushions, bed wedges, wheelchairs, commodes and shower chairs.

As well as continuing their professional development through conferences, inservice training and local education days, staff participated in pressure injury education and provided inservices and training to other hospital staff on equipment and management of pressure injuries. The team now works very closely with the wound nurses to optimise patient care.

Occupational Therapy Week celebrations are held each year in the last week of October. This year the department celebrated with a special breakfast in Newcastle to acknowledge and celebrate a profession that looks at the holistic picture of patient care.



Group, Newcastle Mater Prostate Cancer Support and Education Group, and Leukaemia Foundation Support Group.

Staff are also involved in research projects including the 'Distress Screening and Psychosocial Support' initiative for patients undergoing stem cell harvesting autologous transplant; 'Caring for the Professional Carers', which looks at the impact of death and dying on all staff caring for patients and families; and the 'Mood Screening' project with stroke patients.

They are also actively involved with hospital colleagues in working to create a culturally sensitive hospital environment for Aboriginal and Torres Strait Islanders and multicultural patients and their families

and carers. Social workers were active participants in the Aboriginal and Torres Strait Islander and Multicultural working groups. Margaret Whitson began in the role of Aboriginal Hospital Liaison Officer last November.

Social workers continue to be involved in Calvary Mater Newcastle's Very Important Patient (VIP) Care Program, which works with patients who have been identified as being at high risk of re-presentation and/or re-admission to hospital. The aim is to improve patients' quality of life and health care experience by addressing their medical and social needs.





Pharmacy

The Calvary Mater Newcastle Pharmacy Department demonstrates its patient focus through quality activities aimed at improving patient outcomes and contributing to the cost effective use of resources. This is achieved through the commitment and teamwork demonstrated by all members of the department.

The pharmacy provides a comprehensive Level 6 pharmacy service to the hospital, including:

- Antimicrobial stewardship
- Medication reconciliation
- Checking patient orders against approved protocols
- Checking patient orders against individual patient parameters
- Counselling patients/patient carers about medications
- Participation in quality improvement activities directed at improving medication management
- Clinical trial support
- Specialist pharmacy activities including sterile manufacturing
- Drug information
- Delivering medication-oriented talks to specialist interest groups within the community
- Hospital staff education and training.

Team members actively participate in hospital, district and national committees, specialist clinical teams and internal and external advisory groups. The department maintains its involvement in the National Medication Safety initiatives and participates in the periodic audits initiated by NSW Therapeutic Advisory Group and other groups assessing medication safety.

Calvary Mater Newcastle introduced its general electronic medication management system, MedChart, in October 2018. Implementation across the hospital was supported by Pharmacy super users (Ian Howitt and Sim Galimam) and all pharmacists, and was completed in five weeks. Pharmacy staff continue to support all MedChart users with its applications.

MedChart initiatives have enabled improved compliance with clinical indicators. A MedChart governance committee has been introduced; venous thromboembolism (VTE) risk assessments are now undertaken as a mandatory prescriber action; and MedChart medication reconciliation reports are used to target education and improve compliance.

The oncology/haematology pharmacy team plays an integral role in the care of oncology and haematology patients. All parenteral (injecting) chemotherapy orders are clinically reviewed by a Calvary Mater Newcastle specialist oncology or haematology pharmacist. The team works closely with the oncology and haematology multi-disciplinary teams to ensure the best outcomes for patients.

Pharmacists are involved in many focus groups and activities aimed at improving patient outcomes through better medication use and management, are included in reviews of all medication related

incidents, and help to develop and/or review all hospital policies relating to medications.

The Pharmacy is currently involved in 10 new quality use of medicines activities, many of them aligned with the national indicators. These in turn provide evidence that demonstrate compliance with National Safety and Quality Health Service Standards. Examples include:

- The Surgical Antibiotic Prophylaxis Project, a collaboration with the Clinical Excellence Commission to develop quality improvement methodology for a design project investigating the use of antimicrobials in surgeries performed at the hospital.
- Calvary Mater Newcastle's antimicrobial stewardship team helped revise the Local Health District's existing aminoglycoside fact sheet (adults).
- Clinical pharmacists each developed their own risk stratification tool to help them target (triage) those patients who would most benefit from a pharmacist review.
- Piloting a successful program to arrest a decline in the number of VTE risk assessments being undertaken. Completion and documentation of a risk assessment is now a mandatory step across the hospital before prescribing medications is allowed.

The pharmacy has an integral role in facilitating medication-related research and is currently actively involved in more than 100 clinical trials. These clinical trials are associated with radiation oncology, medical oncology, surgical oncology, haematology, neurology and neuropsychiatry.

Money generated from pharmacy's involvement in clinical trials has enabled the continued employment of 1.2 FTE clinical trials pharmacists, a 1.0 FTE pharmacy technician and a 0.4 FTE clinical trials finance officer.

The pharmacy continues its active role in student education by supervising undergraduate and postgraduate pharmacy students from University of Newcastle and other universities, and hosting international pharmacy students on exchange to the University of Newcastle. A number of pharmacists hold conjoint positions at the University of Newcastle.

Junior Medical Officers' Management Office

The Junior Medical Officers (JMO) Management Office is staffed by manager Victoria Wall and administration assistant Crystal Tindall who oversee the day-to-day management and welfare of JMOs, and medical and surgical trainees.

The role includes facilitating hospital and ward orientation, liaising with key hospital and network stakeholders, rostering, payroll, facilitating education and training programs, and ensuring wellbeing of staff.

Calvary Mater Newcastle is one of six hospitals across Hunter New England Local Health District (HNE Health) which manages doctors in training and typically has 31 JMOs (which include interns and residents), 17 medical trainees and 3-6 senior resident medical officers each term. JMOs and medical trainees rotate through the hospitals and are supervised within the departments of General Medicine, Surgery, Emergency, Cardiology, Haematology, Radiation Oncology, Medical Oncology, Palliative Care and Drug and Alcohol.

In 2019, the Department of Medical Oncology welcomed two JMOs back onto the ward with a newly accredited term offering the only exposure to medical oncology within the health district.

General Medicine has a new acute medicine rotation, offering rotations through the Medical Assessment and Admission Zone (MAAZ), Cardiology and Gastroenterology. In 2018-19, the Surgery Department employed additional surgical senior residents to support the surgical trainees in their training by reducing their weekday overtime and on-call responsibilities.

Calvary Mater Newcastle continues to provide an excellent and well supported education program for JMOs that includes Grand Rounds, journal clubs and regular teaching at formal morning handover. The departments of Medicine and Medical Oncology also provide weekly

formal lectures for junior doctors and should be commended on their consistent commitment to prevocational education.

In the past 12 months, prevocational, education and training funding has been introduced to support JMOs in attending courses that support their career goals and ongoing learning.

Calvary Mater Newcastle hosted the annual Royal Australasian College of Physicians clinical exam this year, taking over the Medical Centre and providing candidates and examiners an excellent range of cases and support.

The JMO Management Office is supported by a team of supervisors, educators, unit managers, medical directors and members of the hospital executive. This broader team meets regularly with JMOs during each term, both informally and through the JMO Forum and the General Clinical Training Committee. These meetings aim to provide a voice for JMOs and facilitate improvement in working conditions, education and training opportunities, and quality and safety in the hospital.

Fatigue management and wellbeing has been a priority for the JMO Management Office, which has produced a JMO toolkit as part of a joint venture with HNE Health. Manager Victoria Wall led the project for the District.

In February 2019, Calvary Mater Newcastle became one of the first hospitals in Australia to install a sleep pod in our RMO quarters. This is designed to encourage doctors in training who balance shift work and study to manage their fatigue levels and wellbeing. Evidence-based research shows short periods of rest and rejuvenation can reduce fatigue, minimise risk and improve performance.

Pastoral Care

In 2018-19 the Pastoral Care Department at Calvary Mater Newcastle had a rich year caring for the human spirit. Providing spiritual care remains a deeply rewarding privilege as staff offer compassionate presence and companionship to patients and their families. When fully staffed, the team has over 180 pastoral contacts per week in which people are supported as they explore issues of concern and meaning, celebrate and grieve, and live with the uncertainties of illness.

Pastoral Care has continued to offer bereavement support by hosting four remembrance services. During these services the names of people who have recently died on the palliative care service are read. Family and friends are invited to symbolically place a rose to honour and remember. The service concludes with light refreshments and an opportunity to be supported by staff and each other. More than 250 family and friends have attended the services.

An evaluation conducted following the March 2019 service confirmed families felt they were surrounded by a supportive community experiencing similar loss and grief and were

“understood and affirmed by staff.” One participant articulated, “It was an opportunity to reflect, to express sorrow, gratitude and love, and be in a safe environment of acceptance. It honoured our beautiful mum and it was helpful to be with others who understand how powerful grief is.”

The department continues to engage with local faith communities to ensure the specific religious needs of patients are met. The team is grateful for the enduring generosity of more than 20 local chaplains who volunteer to contribute to the spiritual care of patients and their families. In particular the department thanks Baptist Chaplain George Walter, Seventh Day Adventist Chaplain Pastor Roger Nixon, and Special Ministers of Communion, Chris Capper, Paul Rosser, Sr Margaret Blackford and Sr Therese Wilkinson.

The department is also appreciative of the Catholic Diocese of Maitland-Newcastle for its abiding commitment to the provision of ministry by ordained priests to Calvary Mater Newcastle which includes eight local priests who are rostered on-call 24 hours to meet the sacramental needs of patients. A special note of



appreciation is extended to Fr Velerian D'Souza for the care he provided in recent years as hospital chaplain prior to his transfer to a new parish.

April Macneill Pastoral Care Manager was seconded to undertake a research project for the Hunter New England Local Health District Paediatric Palliative Care Service (PPCS). The project explored how to embed spiritual care in the PPC service. It also included a literature review, benchmarked national pastoral care services and provided education and resources for paediatric palliative care staff to respond to spiritual needs.

Calvary Mater Newcastle continues to be the hub for Spiritual Care Australia (SCA) in the Hunter region. In their role as SCA champions, staff members Carolyn Nichols and Tony Hassett facilitate ongoing professional development opportunities for pastoral care practitioners and chaplains in the local area through quarterly meetings. Activities have included peer group supervision and keynote presentations from prominent spiritual care providers.

In the pursuit of excellence and service development, staff members continue to undertake peer and professional supervision, journal club and attend pertinent education days and conferences.

Pastoral Care staff continue to provide education to community palliative care organisations, university students, NSW Ambulance and the hospital multidisciplinary teams on the topics of communication and spiritual care.

This year the department has hosted students from the NSW College of Clinical Pastoral Education (CPE) under the auspice of the Sydney College of Divinity. The department has mentored three CPE students undertaking their clinical placement.

Providing a sacred space for personal and community reflection, the Mary Potter Chapel lies at the centre of Calvary Mater Newcastle. The team wishes to acknowledge the generosity of the Calvary Mater Newcastle Auxiliary for its kind donation of a weekly floral arrangement for the chapel.



Patient Safety and Quality of Care

Patient safety and the quality of the care provided to our patients is a paramount consideration underpinning the way our services are planned and staff are trained. Calvary Mater Newcastle staff constantly seek to improve on their already high standards of care by joining with others to compare their performance, and by learning from others where strategies have been shown to provide superior outcomes for patients. Detailed here are a few of the initiatives which received particular attention in 2018-19.

Accreditation

Calvary Mater Newcastle is regularly assessed against a range of independent and rigorous accreditation programs to ensure our health services are safe and of a high standard. In 2019, the

hospital became the first facility in Hunter New England Local Health District (and one of the first Calvary facilities) to undergo and achieve hospital-wide accreditation under the new National Safety and Quality Health Service Standards. The National Standards are mandated by the Australian Commission on Safety and Quality in Healthcare and apply to public and private health services nationally.

Three assessors from the Australian Council on Healthcare Standards (ACHS) assessed all services at Calvary Mater Newcastle. The assessors reported that staff demonstrate a culture of caring based on the organisation's values and mission. This culture supports the provision of patient-focused safe quality services to all patients receiving care and treatment. The focus on quality

and safety is evident from the Board and executive through all clinical and support staff. Staff understand the requirements of the standards and there is a well-developed and maintained clinical governance program with organisation-wide reporting and monitoring systems which ensure an integrated approach to improving the safety and quality of care.

Their final assessment found that Calvary Mater Newcastle met all 148 actions within the standards and achieved full accreditation status. There were just three areas where, although met, additional actions were recommended and work is already underway to improve these areas. They include:

- Reviewing the placement and visibility of hand gels and hand hygiene information in public areas including the Emergency Department
- Regular reports to the executive on the use of restraint in intensive care
- Reinforcing that all staff are to routinely and consistently use at least three patient identifiers on registration and admission, when care, medication, therapy and other services are provided, and when clinical handover, transfer or discharge documentation is generated.

Healthcare awards

A number of individuals received awards from various agencies throughout the year. Three Calvary Mater Newcastle projects won HNE Health Excellence awards.

- The CANcierge app won the Patients as Partners award category. CANcierge assists navigation of cancer services by providing easy access to relevant and reliable information, tools and resources, and supplements existing services.
- A project that enables clinicians and health professionals from primary, acute, NSW Ambulance and community services in the lower Hunter region to work effectively together to integrate care for patients won the Delivering Integrated Care Award. MyNetCare is a virtual platform that targets people with complex health needs who receive care from various public and private services in primary and acute care.
- The Volunteer Palliative Care Bereavement Team were named Volunteer Group of the Year. The team supports bereaved families at a most vulnerable and emotionally charged time. Their dedication and commitment to their work enables the Bereavement Service to reach out to support about 600 people per year. Team members strive to expand their skills and knowledge in line with new research in the area of grief and loss.

Risk management

Incident reporting is an integral component of Calvary Mater Newcastle's risk management system. Regular training and information is provided to staff on the use of the Incident Investigation and Management System (IIMS). Incidents are routinely analysed and trends reported to the Executive and the Patient Care Quality Committee. Serious incidents are formally reviewed. Open disclosure – where adverse events are acknowledged and

investigated – occurs with patients, families, carers and staff who are affected by a serious adverse event while receiving healthcare.

Issues currently being addressed, include minimising harm from violence and aggression in the workplace; compliance with the new Australian Standard for reprocessing of reusable medical devices; integrating paper and electronic health record systems; implementing systems to manage outpatient test results; and upgrading the personal duress system. The executive and staff continue to work to understand and intervene to improve patient care in these areas.

Patient safety

In the last 12 months, staff reported 2586 clinical incidents. That means that about 15% of inpatients experienced some kind of incident during their stay. Of these incidents, the vast majority of patients (about 97%) sustained minimal or no harm and 3% required additional medical care. One event resulted in significant harm or death.

Patient-centred care

Calvary Mater Newcastle continues to participate in the NSW Health Bureau of Information patient surveys including the Adult Admitted Patient, the Emergency Department, and the Outpatient Cancer Clinic surveys. The hospital continues to perform better than peer hospitals and the NSW average in the majority of the measures.

Overall:

- 95% of the 308 admitted patients who responded reported their care was very good or good, compared to NSW average of 94%
- 86% of inpatients and 71% of Emergency Department patients said they would speak highly of Calvary Mater Newcastle care
- 100% of the 573 patients that responded to the cancer clinic survey rated the care they received as very good or good, and 97% said they would speak highly of their clinical experience.

Calvary Mater Newcastle continues to use patient experience trackers to provide real-time feedback of patient experiences of their care. Regular rounding with patients and communication and care boards in inpatient units are also used to support patient/carer communication with clinicians.

In 2018-19, staff made a total of 5946 follow-up phone calls to admitted patients within 48 hours of their discharge. Feedback from patients was positive and a third of the patients wished to acknowledge a staff member who provided care during their stay.

Human Resources and Payroll Services

In line with the Hospital's Values of Stewardship, Respect and Hospitality, the Human Resources (HR) and Payroll Departments have continued to provide their customary, high quality, person-centred service to all Calvary Mater Newcastle employees.

Significant activities this year have included:

- The HR Department now facilitates the issuing of NSW Ministry of Health State Wide Identity Numbers (StaffLink Numbers) to all hospital staff so they can access a range of web-based NSW Ministry of Health clinical, quality and staff systems. Use of these systems is essential to ensure that patient records can be accessed and updated and that staff have access to the full range of training and development resources.
- HR staff have participated in the testing and implementation of Working@Calvary "Phase One" which includes a system upgrade, a new position management module and new 'on-boarding' processes that integrate information between Calvary Careers and the Chris21 HR/Payroll system. Preparatory work for Working@Calvary "Phase Two" has also commenced. This project will see the implementation of a further two modules, 'Variations' and 'Separations', within the Calvary Careers system.
- A proposed new enterprise agreement was drafted for Health Services Employees and has been made available to relevant staff during a nominated access period. After a voting period, it is hoped that staff will accept the proposed agreement and that it will then be ratified by the Fair Work Commission. Bargaining is also continuing in relation to new agreements for hospital scientists, allied health staff and medical officers.
- Historically, Hunter New England Local Health District (HNE LHD) has managed some of the recruitment process for new graduate nurses on behalf of Calvary Mater Newcastle as part of the State-wide centralised graduate recruitment process. However, with the development of a new bulk recruitment system in HNE LHD's recruitment and on-boarding system (ROB) – referred to as 'ROB Campaigns' – HNE LHD is no longer able to undertake any recruitment tasks or administration on behalf of Calvary Mater Newcastle. The HR Department's Learning and Development Coordinator will now be coordinating GradStart recruitment, utilising ROB Campaigns. Other members of the HR team have also been receiving training in GradStart/ROB Campaigns. Calvary Mater Newcastle will continue to liaise and work closely with the District in relation to this important annual recruitment activity.
- This year also saw the implementation of electronic medication charts within Calvary Mater Newcastle. Following intensive online training, the hospital's Clinical Nurse Educators (CNEs) became super trainers and, with the support of MedChart CNEs, facilitated the MedChart role out in last October.
- The incidence of Lost Time Injuries (LTIs) and the severity of those injuries remain a focus of the Work Health and Safety (WHS) Coordinator, the WHS Committee, the HR team, and the entire Calvary Mater Newcastle workforce. There were increases in the number and severity of work-related injuries over the 2018-19 financial year, but that trend has been curtailed in recent months. Calvary Mater Newcastle continues to thoroughly investigate all incidents and injuries and implements control measures to minimise the risk of future injuries. The WHS Coordinator also continues to focus on early intervention strategies for the management of workplace incidents and injuries.
- HR staff also strive to keep workers safe by monitoring their mandatory training to ensure it is up to date. This especially applies to training related to hazardous manual tasks, fire and evacuation procedures and O'Shea patient handling.

Staff Health

The role of the Staff Health Nurse at Calvary Mater Newcastle is to provide occupational health care to all health workers at the hospital and other functions under NSW Health policy and other relevant national, state and local guidelines and codes of practice.

Staff Health Clinical Nurse Consultant Suzanna Belavic is on site every Monday and Thursday providing advice and clinical care regarding immunisation, recruitment and occupational screening, health promotion, and education.

Her role at the hospital is part of the wider Hunter New England Local Health District Staff Health Network, which celebrated its 20th year of service in 2018. The network hosted the first NSW Health State Conference of its kind in Newcastle in October 2018. The theme was 'Embracing Health and Wellbeing' and Suzanna designed the symbolic logo that represents the many facets of work that the staff health nurse does.

Suzanna is also part of the ongoing HNE Staff Health research group of clinical nurse consultants. It is affiliated with the University of Newcastle, and is conducting a staged translational research project involving staff health and wellbeing within the Local Health District.



Health Information Services and Information Communications Technology

Accreditation-related work, new systems implementation, and constantly changing information technology (IT) relationships across the various networks has been a major focus for the department in the past year.

Cybersecurity is a key area of focus with new themes continuing to emerge. The department is currently working with a multi-organisational approach to managing this with the support of Calvary Healthcare, external consultants, Hunter New England Local Health District and NSW eHealth colleagues. Working across four separate IT domains is complex, and the Information Communications Technology Department manage this exceptionally on a daily basis.

The Health Information Services and Information Communications Technology departments have worked closely with clinical staff and the Hunter New England Clinical Systems team to implement new clinical information systems and Hunter New England Local Health District's electronic medical record (eMR) strategy.

The eMR strategy requires many local and constantly changing controls to be in place, central coordination of policy, and participation in revised business processes development across the hospital. New clinical information systems are continually being planned and implemented.

Calvary Mater Newcastle formally partnered with State eHealth to plan and implement Statewide Identification numbers for Calvary Mater Newcastle staff. This ensures the hospital would be able to continue to access existing systems such as the IIMS State Wide Incident Monitoring System and the My Health Learning system for staff education. The project was an enormous and complex project for Calvary Mater Newcastle. Although it meant increased workload in some aspects for the IT and Human Resource Department staff, it had very successful outcomes.

The eRIC electronic record for Intensive Care system and the MedChart electronic medication management system were both implemented in late 2018 after much hard work and planning across Calvary Mater Newcastle departments and with support from the District.

Other achievements across department services have included upgrading of audio visual equipment in meeting rooms; education for staff to support the My Health Record rollout; development of hospital policies for scanning health care records and the hybrid medical record; development of a standard suite of reports in the District's SMaRTA performance reporting system; implementation of the Performance Indicator Coding Quality program; exemplar performance in achieving routine compliance with internal and external inpatient coding deadlines; establishing a trainee coder position; and integrating several new staff into the service.

In August 2018, Brad Rochester commenced in one of the department's most senior roles as Patient Services Manager for the hospital. Brad has come to Calvary Mater Newcastle from the Central Coast Local Health District and his contribution has been invaluable.

All staff members in the frontline support areas and across all areas of the Patient Services Department, Medical Centre front office, and Clinical Information Department have continued to provide excellent administrative support to the hospital, its staff and patients. They have supported high patient activity levels, incorporated changes as needed, and continue to work across multiple systems to complete work.

The department's internal and external interactions are many and all staff continue to work hard to provide excellent daily support services to clinical and corporate services staff and management in all aspects of their work.

Public Affairs and Communications

The Public Affairs and Communications Unit comprises Public Affairs and Communication Manager Helen Ellis and Public Relations Officer Deb Astawa. Maggie Sulman OAM continues to generously donate her time to the hospital as a volunteer for the unit, including organising the annual 'Carols at the Mater' evening.

Consumer and community engagement

A large part of the unit's work over the past year has been working with the Director of Mission regarding the governance of the hospital's consumer and community engagement activity. Together, the Public Affairs and Communications Manager and Director of Mission continue to oversee the hospital's National Safety and Quality Health Service Standards (NSQHSS) relating to Partnering with Consumers. The hospital's Partnering with Consumers working party meets regularly allowing discussions and improvements to be made to consumer engagement across the hospital.

The Calvary Mater Newcastle Consumer and Community Engagement Framework (2018-2021) and Implementation Plan continues to be implemented. Achievements for 2018-19 are highlighted in the report from the Community Advisory Council at the beginning of the Review of Operations.

Consumer feedback is collated for all consumer information publications developed inhouse. Through this feedback, staff are able to take on suggestions from consumers, and subsequently amend publications to ensure they meet consumers' health literacy and information needs.

Supporters

The generosity of Calvary Mater Newcastle supporters who selflessly contribute throughout the year never ceases to amaze. Calvary Mater Newcastle receives wonderful support from fundraisers and donors, including individuals, community groups, and local organisations.

Neil Toovey was one such supporter and benefactor. Mr Toovey, 87, formerly of Hamilton South passed away in 2018, leaving a generous bequest to Calvary Mater Newcastle. The hospital was one of several local organisations to benefit from Mr Toovey's generosity and desire to give money back to the Hunter region for charitable purposes.

Donations large and small enable the hospital to purchase special equipment and furniture, pursue vital translational research, and enhance the care provided to patients.

For many years Calvary Mater Newcastle has been fortunate to be a beneficiary of the Dry July fundraising campaign, with this financial year being no exception. Through the generosity of Dry Julyers and their supporters, the hospital was once again able to purchase equipment and fund projects that make a real difference to patients undergoing cancer treatment at Calvary Mater Newcastle. Amongst many things, Dry July fundraising has enabled Calvary Mater Newcastle to update and enhance equipment in its Occupational Therapy Oncology Loan Pool, purchase two new treatment chairs and a blanket warmer for the Day Treatment Centre, scarves and turbans for oncology patients, a blanket warmer for the Medical Centre and Infusion Lounge, appropriate stands so patients can have enteral feeding at home, and refurbish the waiting room in the Melanoma Unit.

Management

The exceptionally talented and committed Wig Service team continues to provide an essential free service to Calvary Mater Newcastle patients who lose their hair through cancer treatment. This service, managed by the Public Affairs and Communications Manager, could not take place if it was not for the commitment of the Wig Service volunteers – hairdresser Ken Tarrant and volunteers Margaret Bottrill and Lyn Leach.

This financial year the Wig Service bid a sad farewell to volunteer hairdresser Kim Rossi, who hung-up her scissors after 13 years. Kim never faulted in her dedication and very rarely missed a clinic – a huge commitment! That's not to mention all the other work that goes alongside running the Wig Service. Over the many years Kim contributed enormously to the care and healing of patients. Her skill, compassion, joy and beauty has given much to so many – thank you Kim.

The Public Affairs and Communications Unit continues to enjoy a wonderful relationship with the hospital's ever dedicated fundraisers, the Calvary Mater Newcastle Auxiliary 'Cancer Carers'. Assisting this group of wonderful individuals brings much pride to the unit. Posters, leaflets, community grant applications and assistance with events, are just some of the tasks undertaken to assist the auxiliary in its work.

Recognising the achievements of hospital volunteers and the Auxiliary is also an important part of the unit's work, with National Volunteer Week in May and the Volunteer Christmas Party being a high priority.

Another cause for celebration throughout 2018-19 year was dedicated Auxiliary member Glad Dent's 100th birthday.

Media

The hospital's news, research success, campaigns and events continue to be supported and publicised through the local media. Some highlights of the coverage from the past year include:

- Calvary Mater Newcastle Auxiliary member celebrated her 100th birthday surrounded by Auxiliary and Mater friends at a morning tea held at the hospital.
- Greg Flint, Chief Executive Officer at Calvary Mater Newcastle, retired from his position at the end of August 2018.
- The University of Newcastle and Calvary Mater Newcastle welcomed nine delegates from the prestigious Princess Chulabhorn Royal Academy, Thailand, in celebration of a medical physics research memorandum of understanding being signed by the Princess Chulabhorn Royal Academy and the University of Newcastle.
- The Hunter and Newcastle community was invited to attend a Calvary Mater Newcastle Research Information Session aiming





to bring further awareness regarding the types of research carried out at the Mater.

- Calvary Mater Newcastle Radiation Oncology leading the way in treatment planning practice. The Department of Radiation Oncology at Calvary Mater Newcastle completed the installation of a dedicated clinical magnetic resonance imaging (MRI) scanner for radiotherapy treatment planning, referred to as an MRI-simulator.
- The appointment of Margaret Whitson as the Aboriginal Hospital Liaison Officer at Calvary Mater Newcastle.
- The launch of the hospital's new Cancer App, CANcierge, on World Cancer Day in February.
- Local charity Hope4Cure Foundation and Calvary Mater Newcastle joined forces to support women and their families experiencing ovarian and gynaecological cancer in the Hunter region. Following a \$40,000 donation from Hope4Cure Foundation, Calvary Mater Newcastle launched a special research grant for its researchers to help bolster research in ovarian and gynaecological cancer. Dr Jennette Sakoff, Chief Hospital Scientist Medical Oncology and her collaborator Professor Janice Aldrich-Wright from Western Sydney University, were the recipients of the inaugural Hope4Cure Grant Fund.

Other activities

The unit continued to assist departments and become immersed in hospital-wide projects.

Marketing collateral including leaflets, posters, plans, frameworks, newsletters and promotional displays are produced inhouse by Deb Astawa.

The unit was part of the CANcierge development team and continues assisting with the App's updates and marketing collateral. CANcierge provides easily accessible, relevant and reliable information to help navigate cancer care at Calvary Mater Newcastle. The App allows users to access a wealth of information in one convenient place. Users can record vital information, make note of members of their treating team, find helpful support information, access information about chemotherapy and other treatments and tests, access information about the range of services, amenities and support services available at Calvary Mater Newcastle, access a range of community groups and services, and find links to services and resources to assist Aboriginal and Torres Strait Islander peoples affected by cancer-related illnesses.

Staff and volunteers continue to lend a hand and support those less fortunate in the community through hospital-wide community benefit initiatives. Throughout 2018-19 the hospital supported the Newy Farmers Aid Group Appeal, the Christmas Giving Tree Appeal on behalf of St Vincent de Paul and the 2019 Louisiades Aid Project.

Through the unit, the hospital supports a University of Newcastle initiative for consumers helping to train the future medical workforce. Manager Helen Ellis was once again a supervisor for the University of Newcastle Joint Medical Program Community Placement. The students are placed with volunteers and auxiliary members to practice their communication skills in the context of a non-clinical interview, discussing elements of social history and individuals' experiences of and perspectives on health and wellbeing. The placements continue to prove popular with the students and the volunteers involved.



Calvary Mater Newcastle Auxiliary 'Cancer Carers'

Members of the Calvary Mater Newcastle Auxiliary 'Cancer Carers' once again proved their ongoing commitment and loyalty to fundraising for Calvary Mater Newcastle by presenting a cheque to the hospital totalling \$326,276.13 for the 2018-19 financial year.

With 29 members ranging in age from 57 to 100, this dedicated group of men and women worked approximately 46,285 hours in total throughout the year, equating to 1596 hours per member and more than \$11,000 being raised per member.

Over the past year the Auxiliary has purchased hospital equipment and made donations to the hospital to the value of \$225,315 with further equipment to the value of \$87,000 on order. Equipment and items purchased included:

- Wigs for the Wig Service = \$1000
- A weekly bunch of fresh flowers for the Mary Potter Chapel (Pastoral Care) = \$1000
- Nine integrated work stations for the Day Treatment Centre = \$65,470
- One full anatomy model for the Emergency Department = \$15,134
- Two electric trolleys for transporting haematology nitrogen cylinders = \$10,160
- One chair scale for Ward 4B (Surgical) = \$1795
- A contribution towards head and neck cancer patient's prosthetics = \$5000
- An assortment of occupational therapy equipment for Ward 4C (Medical) = \$13,516
- A contribution towards a microscope for plastic and breast reconstructive surgical services (Operating Theatres) = \$75,000
- A research contribution towards the hospital's Medical Oncology Experimental Therapeutics Group = \$7150
- Four observation machines for Ward 5A/MAAZ = \$15,600
- A contribution towards compression garments for lymphoedema patients (Physiotherapy) = \$5000

- A treadmill for the Physiotherapy Department = \$9290
- A contribution towards volunteer Kaye Woods' patient care toiletry packs for Ward 4C (Medical) patients = \$200.

The team and celebrations

The Auxiliary continues to be led by a team of exceptionally committed and dedicated individuals who have joined together with a common purpose in mind – to fundraise on behalf of Calvary Mater Newcastle for the comfort and care of patients. The Auxiliary Executive team comprises President, Elaine Wellard; Treasurer, Kay Fordham; Secretary, Margaret Dougherty; Vice Presidents, Robyne Pitt and Jan McDonald; Assistant Secretary, Margaret Sneddon; Assistant Treasurer, Gloria Graham; and Publicity Officer, Evelyn Duggan.

In October 2018, the Auxiliary attended the United Hospital Auxiliaries of NSW State Conference and received two trophies – 'most money raised per member' and 'most hours worker per member'.

Another cause for celebration throughout 2018-19 was dedicated Auxiliary member, Glad Dent's 100th birthday. Glad was surrounded by her Auxiliary friends, staff members and family at a special morning tea hosted at the hospital.

Born on 14 August 1918, the Elmore Vale resident is a proud mother of five, grandmother to 20 and great-grandmother to 11. Glad joined the Auxiliary at the tender age of 80, and in 2009, at age 91, became president, successfully leading the team for three years. She was then voted Vice President, a role she held until August 2015. Glad remains an active and respected Auxiliary member showing no signs of retiring from her Auxiliary duties any time soon.

Fundraising

The Auxiliary is well known for bowling days, coach trips, fashion parades, celebration luncheons, raffles throughout the community, craft goods, baking and its lolly tables at the hospital. Members are also widely supported by the community, who continue to donate to the Auxiliary for the benefit of the hospital and its patients.

Below is a breakdown of how the funds were raised for the 2018-19 financial year.

The Auxiliary would like to give special thanks to the following people for their ongoing assistance:

- Public Affairs and Communications Department- Helen Ellis and Deb Astawa
- Mark Jeffrey, General Manager
- Mary Ringstad, Director of Mission
- Finance Department- Lynda Evans and Maylinda Wells
- Support Services Team- David Millington and the three Peters
- Kaye Woods
- Beresfield Bowling Club and other District Bowling Clubs
- Muree Golf Club
- The Wests Group (ClubGRANTS NSW)
- The families, friends, hospital staff and members of the community
- The Auxiliary lolly packing support team

Activity	Funds Raised	Activity	Funds Raised
Bank Interest	\$1,577.03	Functions	\$45,441.40
Bowls Days	\$41,379.40	Golf Day	\$7,660.60
Knitted Chicks and Rabbits	\$1,808.55	Grants	\$35,000.00
Cookbooks	\$1,394.00	Housie	\$33,248.55
Cooking Craft Days	\$7,426.81	Lollies	\$63,901.55
Craft	\$49,054.50	Raffles	\$17,352.65
Donations	\$18,288.09	Sundry	\$2,743.00

Mission

"The most important test of our authenticity and integrity is the experience of the people we serve. If the mission is real, people will experience it". Calvary Mission Accountability Framework 2016-2021

Mission continues to work to ensure Calvary Mater Newcastle is a source of healing, hope and nurturing to the people and communities it serves.

The following initiatives, derived from areas of the Calvary Mater Newcastle Consumer and Community Engagement Framework 2018-21, have been a feature this year:

All Voices Matter – Together we are building a service that reflects, responds to and values our diverse communities.

The two hospital liaison officers, Aboriginal and Multicultural, have contributed enormously to creating a culturally safe and welcoming environment of care for our diverse communities.

A highlight of this year was the appointment of Margaret Whitson, our first Aboriginal Hospital Liaison Officer. A program to promote her role within the hospital and amongst the local community was undertaken to raise awareness of this new position. In a real gesture of support, Hunter New England Health's Aboriginal Health Unit invited Calvary Mater Newcastle to host two major functions – the launch of *Into the Dreaming*, a new palliative care resource for Aboriginal people; and an education day for Aboriginal Health Workers, where a 'cancer toolkit' was launched.

The hospital celebrated NAIDOC Week with the theme 'Because of Her, We Can'. Calvary Mater Newcastle staff joined the local community at the Foreshore, painting seed boxes and planting native violets. An enjoyable afternoon tea was held at Calvary Mater Newcastle, where Aboriginal staff members were invited to share stories reflective of the theme.

Calvary Mater Newcastle staff, Aboriginal patients and families participated in a research project looking at cultural safety and security in public hospitals. The findings will inform a NSW Health policy for public hospitals.

The Multicultural Liaison Officer (MLO) has worked tirelessly in clinical areas to increase our responsiveness to the communication needs of culturally and linguistically diverse (CALD) patients through timely and effective use of interpreters - in person, via telehealth and on the phone.

In collaboration with the Northern Settlements Services in Hamilton, the Calvary Mater Newcastle Manager of Public Affairs and Communication Manager, the Director of Mission and the Multicultural Liaison Officer worked to develop a program aimed at improving health literacy within communities of new arrivals in Newcastle. Presentations were given to individual community groups, including Chinese, Vietnamese, Spanish speaking and Tongan communities. The sessions were followed by a site visit to Calvary Mater Newcastle.

The hospital is grateful for the support of the Hunter New England Local Health District's Aboriginal Health Unit and Multicultural Health Service in establishing two standing committees to continue

the important work of improving equity of access and health outcomes for our Aboriginal and CALD communities.

The Cultural Safety Project won the Calvary STAR National Award at the 2018 Calvary Executive conference in recognition of Calvary Mater Newcastle's work in this area.

Listening Matters – To respect the consumers' voice as the starting point that informs all conversations.

The work of Partnering with Consumers, which is the second of the National Safety and Quality Health Service Standards, continued during this year. In their role as leads for Partnering with Consumers, the Director of Mission and Public Affairs and Communication Manager, along with Community Advisory Council member Kay Fordham, attended the annual Patient Experience Symposium in Sydney. It was a stimulating and challenging event which ensures the hospital's direction and priorities align with best practice in this area.

A review of the general staff orientation program was completed. A significant change was to incorporate Mission and Public Affairs and Communications into a longer segment focusing on the patient experience. This is followed by a focus on cultural safety presented by the Aboriginal Hospital Liaison and Multicultural Health Liaison officers. A segment on Mission has also now been incorporated into the JMO and Registrar Orientation program.

Calvary Mater Newcastle received encouraging feedback on a number of consumer and community engagement projects at the Local Health District's mid-year Community Partnerships Forum. This included the Consumer and Community Engagement Framework; the CANcierge App, designed to assist cancer patients access information and services easily; a wayfinding audit; the ongoing work on cultural safety; and the 'You Said, We Did' project.

The Catholic Diocese of Maitland-Newcastle holds an annual Bishop's Staff Day. This year, 25 members of the Diocesan staff visited Calvary Mater Newcastle for a brief tour and to learn about the hospital's role in providing health services to this community and its relationship with the wider Church. The visit aligned with Calvary Mater Newcastle's work on improving health literacy in the community.

The key role of the Community Advisory Council as the peak body for consumers has been reinforced in a review of their Terms of Reference. As a result, staff and consumer initiatives are now a standing agenda item for committee meetings.

Calvary Mater Newcastle Palliative Care is an active member of Compassionate Communities Newcastle. This is an initiative of the Groundswell Project aimed at 'creating a cultural shift in the way Australians respond to death and grief'. A community forum was held in November to 'help Newcastle become a more Compassionate Community'. People were invited to come along and talk about their needs when they are sick, dying, as carers, or when they are bereaved.

Mission and values

The Mission and Values Committee appointed seven new members this year. Committee member and perioperative surgery nurse Jenny



Sutton was selected along with others from throughout Calvary to participate in the pilgrimage to England in honour of Mary Potter. She has presented her reflections on her pilgrim experience and the Mary Potter story at various functions and events throughout the year.

Director of Mission Mary Ringstad was invited to join the Diocesan Council for Mission. The council's key work is to set the strategic priorities for the Catholic Diocese of Maitland-Newcastle for the next three years.

The Heritage Committee

The Heritage Committee's role is to ensure the legacy of the Mater Misericordiae Hospital is preserved and celebrated. This year, the committee has continued to develop their plan in preparation for the hospital centenary in 2022. Priority actions include preparing the photos and scripts for a permanent corridor display and archiving significant documents, photos and heritage items such as the convent bell.

Celebrations

There were a number of formal and smaller gatherings to farewell outgoing Chief Executive Officer Greg Flint. These opportunities for staff and community to acknowledge his leadership and contribution to the life of the organisation were embraced and celebrated.

The annual Mary Potter Day celebrations were well supported. During the chapel service, Sr Monica Whelan from Little Company of Mary and pilgrim Jenny Sutton shared their thoughts and insights on the Spirit of Calvary. The ever popular staff barbecue was followed with the formal Celebration of Service in the evening, where the Mary Potter Award was presented to Pay Office Manager Kerrie Chapman.

Christmas provides a great opportunity for staff to celebrate together. Many staff gatherings were enjoyed as well as the annual executive walk around distributing good cheer and handfuls of lollies and sweets. On Christmas Day each clinical area was given a special Christmas fruit hamper to supplement the banquets happening throughout the hospital.



A wonderful evening of Christmas Carols for patients, visitors and staff was provided by a band of hearty staff, friends, family and Celtic musicians who this year were joined by the Newcastle City Choir.

The pastoral care team hosted the very beautiful and reflective Christmas service with a focus on the invitation of the Christmas star to be trusting, courageous, hopeful, and to wonder and marvel.

Volunteers

The Friendly Faces volunteer training program was held during September and October. Fifteen new volunteers completed the program, including a volunteer from Calvary Cessnock and another from Friends of Palliative Care Maitland.

The Palliative Care Bereavement Team won the Hunter New England Health Excellence Award for the Volunteer (Group) of the Year. The small group of eight volunteers work in partnership with social work, pastoral care and nursing staff to allow grieving families and friends to share the pain of their loss confidentially, and provide them with an opportunity to ask for assistance or support.

New roles this year include various support roles in palliative care, theatres, and in a concierge service in the two main entrances, Platt and Edith streets.

About 40 volunteers and Auxiliary members attended the annual thank you morning tea during National Volunteer Week. Guest speakers were from the Diocesan Development and Relief Agency (DARA). This was followed by a visit from women from the Congolese community who hope to begin their training as nurses.

The Annual Volunteer and Auxiliary Christmas Party was held at Wests Bowling Club New Lambton. Once again it was well supported with 80 guests attending, all of whom enjoyed the opportunity to celebrate their year together.

The Clinical Ethics Committee

All clinical practice at Calvary Mater Newcastle is underpinned by the Code of Ethical Standards for Catholic Health and Aged Care Services in Australia. Calvary Mater Newcastle's Clinical Ethics Committee has a role in supporting clinicians and researchers to deliver care consistent with these ethical standards.

In 2019, the development and strengthening of research governance at Calvary Mater Newcastle commenced with the transition of the review of research proposals from the Clinical Ethics Committee to the Translational Research Advisory Committee (TRAC). Clinical Ethics Committee representation on TRAC continued with both the Director of Mission and another member reviewing the protocols to ensure that they are conducted in Calvary Mater Newcastle in a way consistent with the Code of Ethical Standards for Catholic Health and Aged Care Services in Australia. This is seen as an interim arrangement. All Research at Calvary Mater Newcastle is now tabled at the monthly TRAC meeting.

The role of the members of the Clinical Ethics Committee continues to support education of hospital staff on ethical issues and assist with sourcing advice for hospital staff on decisions that have ethical

considerations. Discussions have continued throughout the year on ways to revitalise the Clinical Ethics Committee, its role and its membership.

Of particular significance was the Research Ethics Forum held during Research Week in November 2018, and the attendance of three senior staff at the national seminar in Melbourne on Our Enduring Commitment to End of Life Care, sponsored by Catholic Health Australia and Australian Catholic University. The committee had hoped to hold a forum in August 2019 on the voluntary assisted dying legislation enacted in Victoria. This was postponed until November 2019.

Of note, Dennis Carroll was appointed as the representative for Bishop William Wright of the Catholic Diocese of Maitland-Newcastle with effect from July 2018.

The Clinical Ethics Committee meets on the third Wednesday of each month with the exception of December.

Ethics Forums for 2018-19

Date	Forum Topic	Presenter/s
November 2018	Research Month – Ethics Forum Discussion of three scenarios: "Hooked: Ethics, Medicine and Big Pharma; Balancing Scientific Usefulness with Privacy; Commercialisation of Research	Panel including: Mark Green, National Director of Mission, Dr John Burston, Staff Specialist Medicine; Catherine Johnson, Cancer Care Coordinator/ Clinical Research Nurse; Sue Brew, Clinical Trials Coordinator; Rosemary James, Director of Pharmacy. Facilitator: Mary Ringstad Director of Mission

The Public Private Partnership

The Newcastle Mater Hospital Public Private partnership (PPP) is a partnership between NSW Health Administration Corporation and Novacare Project Partnership. The partnership is managed by Plenary Group, under the guidance of Novacare General Manager Stuart Robson, and continues until November 2033.

Under the PPP, Novacare provides financing, design, construction and commissioning of new buildings and refurbishment of existing buildings. It also provides facilities management and delivery of ancillary non-clinical services on the site.



Soft Services

Medirest provides specialist food, retail, hospitality and support services to patients across the entire Calvary Mater Newcastle campus.

Amongst the many highlights for 2018-19:

- Patient Catering obtained NSW Food Authority Level 'A' Vulnerable Persons Scheme Licence
- Unannounced audit for Patient Catering
- BSI food safety certification
- Continued investment in upgrading equipment across the services.

In October, the Agency for Clinical Innovation – BMT group conducted an unannounced audit of Ward 5C (Haematology). An audit score of 92% audit score was achieved, exceeding the 90% benchmark. This result continued high external audit results recognising the best-in-class cleaning at Calvary Mater Newcastle. These results are achieved through refinement of microfibre cleaning technology as well as a state-of-the-art tablet-based environmental auditing system and black light technology.

During the year:

- Medirest staff served 363,522 patient meals
- Security attended 901 incidents
- The reactive cleaning team made 13,954 hospital beds
- The hospital campus generated 67.4 tonnes of clinical waste
- 22,674 events were logged through the Help Desk
- 40,740 deliveries were received via the loading dock.

Catering services

The Catering Department prepared and provided a monthly average of 29,594 high-quality, hot and cold meals. Working closely with nutrition and dietetics staff, Medirest ensured extra care was taken to provide special meals to patients requiring specific diets and supplements.

There was ongoing collaboration with the hospital through the Food Services Working Group, and ongoing investment to upgrade and replace catering equipment.

Retail

Medirest-operated retail outlets continued to prove popular across the hospital, providing an average of 5645 customers per week with high-quality meals and beverages. These outlets include the DeliMarche café, Amigo-to-Go express/convenience store, as well as conveniently located coffee carts and vending outlets.

During the past 12 months, Medirest has focused on providing additional 'grab and go' meal products to increase the speed of service for customers, and particularly hospital staff.

Help desk

The Help Desk provides a primary, round-the-clock point of communication for all requests regarding the delivery of all Novacare services on site. Sophisticated facilities management software provides a system for reporting and responding to requests, incidents, and suggestions for improvements.

Customer satisfaction surveys are regularly carried out, inviting all hospital users to participate and offer their feedback on Medirest service. These surveys have allowed Medirest to respond to customer suggestions for improvement, and it continues to strive for greater efficiency and open communication with customers. Medirest's overall satisfaction rating has increased over the past three years.

Cleaning and environmental services

Medirest's Cleaning and Environmental Services comprises scheduled cleaning, reactive cleaning, periodic and project cleaning as well as a complete waste management program. The success of the Cleaning and Environmental Services is based on a deep understanding of the critical importance of delivering cleaning, domestic and waste management (environmental) services to Calvary Mater Newcastle in a collaborative approach working closely with clinical and infection control units.

The service's reactive cleaners made an average of 1162 beds per month, and a monthly average of 5.6 tonnes of clinical waste was removed from the site.

The team exceeded benchmarks and received continued recognition as 'best-in-class' for cleaning services within state-wide bone marrow transplant audits. Investment in positive recycling initiatives such as organics, printer cartridges and batteries was another highlight for the year.

Security

The Medirest Security team provides efficient and quality security escort and response services around the clock across Calvary Mater Newcastle. The team is responsible for safe response to internal incidents and the security of people and property.

Security responded to an average of 51 'Code Black' incidents per month within Calvary Mater Newcastle.

The Security Supervisor continues to deliver high-level fire and evacuation training regularly throughout the year via mandatory in-services and refresher courses.

Materials management

The Materials Management Department provides an efficient, high-quality service for receipt and distribution of materials throughout the hospital, including clinical supplies, general consumables and hospital mail.

On behalf of Calvary Mater Newcastle, the Materials Management Department maintains supply of a wide range of items required in clinical areas. During 2018-19, the department issued a monthly average of 829,682 combined stock units to hospital wards and achieved a unit accuracy rating of 99.6% in the annual stock take.

Hard Services

The Honeywell Facility Management team has had a busy year. Projects completed in 2018-19 include:

- Hospice refurbishment, including painting, ceiling tile replacement, upgrade of the nurse call system and replacement of 17 fan coil units for the air conditioning system
- Refurbishment of five bathrooms in South Block, including replacement of vinyl flooring, painting, tiling, and replacing vanities, toilets and sinks
- TMV system upgraded to latest software to improve site wide monitoring of TMV system
- Proactive hygienist inspection and ongoing remediation
- Installation of a new dishwasher to the New Med Level 3
- Refurbishment to Lift no. 6.

During 2018-19, Honeywell received 6601 requests for service/assistance, up from 6306 the previous year. About 70% of all events raised through the Help Desk were completed within 24 hours compared to 90% in 2017-18.

Building and maintenance services

Of the 6601 requests, Honeywell generated 1467 programmed maintenance events so that the building services are maintained to ensure reliability, safety and longevity of the facility assets.



Activity and Statistical Information

ADMITTED PATIENTS	2018/2019	2017/2018
Total admissions (includes same day)	17,862	17,428
Same day admissions	6266	5787
Average length of stay of admitted patients	4.56	4.31
Bed occupancy rate	95%	92%
Number of operations	3670	3560

EMERGENCY DEPARTMENT

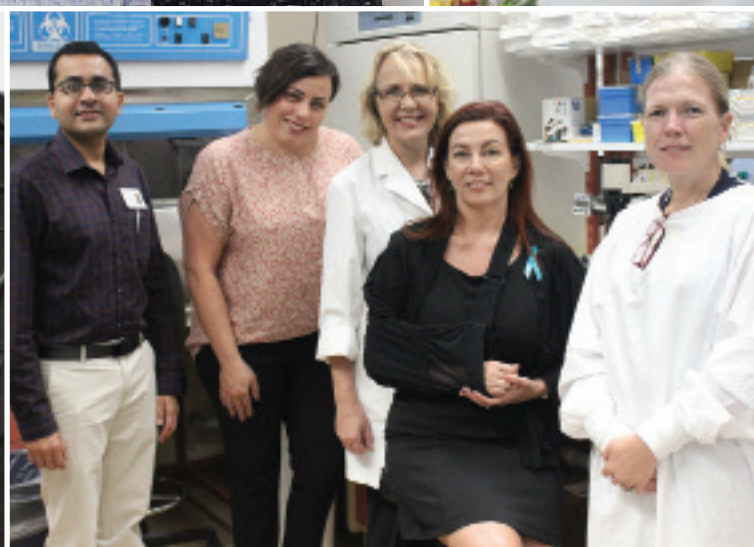
Number of attendances (includes admitted patients)	40,272	37,725
Number of admissions via Emergency Department (ED)	12,378	12,267

OUTPATIENT SERVICES (EXCLUDES ED)	382,584	362,777
--	----------------	----------------

Total FTE staff employed 30 June	1022	990
---	-------------	------------

Year in Review





Year in Review



Snapshot of our Year

363,522

Meals served to patients



Coronary Care Unit treated

678 patients



1043



Rapid Response Team calls



17,862

Patients admitted to hospital

5887



Patients cared for in the 12-bed Emergency Short Stay Unit

1117



Hunter Area Toxicology Service admissions

Perioperative Services, predominantly the Operating Suite and Preoperative Clinic



performed 3956 procedures

The Department of Medical Oncology provided

30,678 occasions of service

The Day Treatment Centre provided

10,115 procedures and the Infusion Lounge 1172 treatments



The Intensive Care Unit provided specialist care to

573 patients



40,280



patients were cared for by the Emergency Department, 30% went on to be admitted

382,584

occasions of outpatient services were provided to our community



\$326,276.13



was raised by our dedicated Auxiliary members



More than 10,870

patient visits occurred through the Haematology Outpatient Clinics

The Department of Consultation-Liaison Psychiatry delivered over



1642

occasions of service

The Alcohol and Drug Unit provided assessment, counselling, treatment and support to more than

7200 outpatients and 1344

consultations to inpatients





Research and Teaching Reports

A message from the Research Committee

The new Research Development and Engagement Committee (known as the ReDE Committee) was established in 2018 and includes Dr Jennette Sakoff (Chair), Dr Lisa Lincz, Dr Anoop Enjeti, Catherine Johnson, April Macneill, Dr Aoife McGarvey, Dr Tim Walker, Dr Peter Greer and Helen Ellis.

The committee thanks Dr Walker who stepped down in 2019 to focus on his commitments on the Calvary Mater Newcastle Translational Research Advisory Council. The ReDE Committee has since welcomed Dr Shyam Gangadharan to the membership.

In keeping with the purpose of the committee, a number of events were held throughout the year to foster and support research at Calvary Mater Newcastle. Of note was the showcase of research held during November. This included:

- A public lecture covering a variety of research areas including clinical trials in medical oncology (Dr Hiren Mandaliya), radiation oncology (Sarah Gallagher), the hospital's connection to research into Acute Myeloid Leukemia (Dr Anoop Enjeti), and a rapid fire session involving Dr Jennette Sakoff, Assoc Prof Lisa Lincz, Dr Peter Greer, Casey Hutchinson, and Dr Aoife McGarvey
- A forum to discuss the current ethical challenges in clinical research (Dr MaryAnn Ferreux)
- A workshop to upskill nurses on how to get involved in research (Aoife McGarvey, April Macneill, Casey Hutchinson and Gillian Blanchard)
- Upskills workshops on legal issues in research and on translational research
- An inaugural research speed networking event to encourage discussion between researchers across Calvary Mater Newcastle and researchers throughout the wider Hunter and Newcastle community.



Research Grants awarded

Managing Calvary Mater Newcastle research grants is an important function of the ReDE Committee.

We are delighted to announce that the Hope4Cure Foundation has established the Hope4cure research grant at Calvary Mater Newcastle. This fund was established in 2018 to support research into ovarian and gynaecological cancer. The Hope4Cure Foundation was established by Sarah and Andrew Frith to support women and their families experiencing ovarian and gynaecological cancer in the Hunter Region.

Applications were also called for funding from the Margaret Mitchell Grant Scheme, Jane Reid Harle Grant, Coalfields Cancer Support Groups Equipment grant, and Hunter Cancer Research Alliance (HCRA) Clinical Cancer Research Infrastructure Grant. For the first time, the recipients of the Margaret Mitchell and Jane Reid Harle schemes funded three projects through the NSW Regional Health Partners RICH Outcomes Workshop held in May. An additional project was funded directly by Hunter New England Health. The RICH Outcomes workshop is designed to research important clinical questions to improve health outcomes.

The funding recipients in 2018 were:

Margaret Mitchell Grant

- Julia Drake, Noelle Gallant, Melissa Walker and Emma Sturgess – Social Work. Caring for the Caring Professionals within a Cancer Hospital: Research into Compassion Fatigue, Burnout and Distress in the Workplace. RICH Outcomes Workshop, \$10,000.
- Sim Galimam – Pharmacy. Evidence Based Pharmacotherapy – What evidence is being used to support clinical oncology practices at Calvary Mater Newcastle and is it of sufficient quality? RICH Outcomes Workshop, \$10,000

Jane Reid Harle Grant

- Cheryl Cooley, Chris Aartsen, Lara Riley – Surgical Services. Reducing Clinical Variation in Post-operative Breast Cancer Surgery. Rich Outcomes Workshop, \$10,000.

Coalfields Cancer Support Group Equipment Funding

- Kim Adler – Medical Oncology. Medical Oncology Clinical Trials Heraeus Megafuge 16R Refrigerated Centrifuge, \$12,500.
- Dr Jayne Gilbert and Madhu Garg – Medical Oncology. Essential equipment including biohazard safety hood for cancer research in medical oncology, \$17,416.

RICH Program Hunter New England Health

- Rebecca Robertson and Jo Berry – Clinical Nurse Unit Manager. Domestic violence screening for high risk toxicology patients. \$10,000. Hunter New England Health RICH Outcomes Program.

HCRA Clinical Cancer Research Infrastructure

- Dr Lisa Lincz. Preventative maintenance contract for BD FACSCanto II and replacement part. Service contract for Calvary Mater Newcastle Flow Cytometer BD FACS Canto, \$2853.
- Dr Anoop Enjeti. Translational genomics in haematological malignancies. Laptop and associated statistical software and GPS temperature monitors, \$10,600.

Hope4cure Grant

- Dr Jennette Sakoff, Prof Janice Aldrich-Wright, Dr Jayne Gilbert, and Dr Hiren Mandaliya. New platinum agents for the treatment of ovarian cancer, \$39,252.

The Research Committee would like to acknowledge and thank the assessors for their time and commitment to providing expert scientific reviews and invaluable advice for funding distribution.

Department Research

DEPARTMENT OF CONSULTATION-LIAISON PSYCHIATRY

Members of the department were active in a number of research areas with a healthy record of publications in peer-reviewed journals, conference presentations and grant successes.

The topic areas reflect the clinical areas of interest for the department with an emphasis on various aspects of suicide prevention, psychological distress and psycho-oncology.

DEPARTMENT MEMBERS INVOLVED IN RESEARCH

- Associate Professor Kerrie Clover (Research Manager Psycho-Oncology, Psycho-oncology Service CMN; Conjoint Associate Professor, Faculty of Health and Medicine, University of Newcastle)
- Dr Katherine McGill (Research Manager Suicide Prevention, Burdekin Suicide Prevention HNE Mental Health Service)
- Jennifer Bryant (Clinical Nurse Consultant, CMN)
- Elisa Gabrysiak (RN and Database Manager)
- Sophia Wooldridge (Clinical Psychologist, Psycho-oncology Service CMN)
- Karen Matthews (Clinical Psychologist, Youth Cancer Service, HNE LHD)
- Erin Forbes (Research Assistant)
- Professor Gregory Carter (Psychiatrist, CMN, Conjoint Professor, Faculty of Health and Medicine, University of Newcastle)

PSYCHO-ONCOLOGY RESEARCH

- The Psycho-Oncology Service continued to be highly active in research. PhD student Erin Forbes successfully completed her PhD confirmation this year. The baseline study into the prevalence of procedure-related anxiety among head and neck cancer patients during radiation therapy was completed, with 101 patients recruited. Interim results indicate a sizeable subset (up to 9%) of patients experience intense mask-related procedural anxiety during radiotherapy for these cancers. A qualitative study interviewing patients to help design effective interventions is underway. The research was presented in a symposium at an international conference in Hong Kong.
- The Haem-Fit trial of a hospital exercise and wellness program for haematology in-patients was completed. This pilot study demonstrated that an exercise program that could be performed by patients in the ward could be successfully implemented, and was well received by patients.
- We have extended our work in the area of validating psychological measures in the oncology setting by using a gold-standard clinical interview to validate anxiety measures. Anxiety disorders are

more common and equally debilitating as depressive disorders within oncology but receive far less research attention. The department's work with the hospital's specialist cancer nurse consultants has been updated and an analysis of a new screening dataset for 765 patients is underway.

- Kerrie Clover has continued as the Convenor of the Australian Psychological Society's Psychologists in Oncology Interest Group.

SUICIDE PREVENTION RESEARCH

The primary focus of this year's suicide prevention research has been on extending the suicide prevention evidence base and leading translation activities.

- Calvary Mater Newcastle is leading the evaluation of the Hunter Way Back Support Service, a non-clinical care coordination aftercare service for people who have attempted suicide. The Commonwealth Government committed \$37.6 million to spread the service, developed by Beyond Blue, across the country. It was established in 2016 and has been tested in Newcastle in partnership with Hunter Primary Care and with support from Calvary Mater Newcastle, Hunter New England Local Health District, Everymind and Relationships Australia.

The Hunter trial of this service was designed to investigate the feasibility of the scaling and integration of the service with the existing health service system and to investigate the effectiveness of the service in reducing repetition of self-harm (specifically, readmissions for deliberate self-poisoning) and psychiatric inpatient admissions. The trial findings will inform the national dissemination of the service and the final report is being prepared.

- The department has also led other translation activities focused on promoting best practice for those who have engaged in deliberate self-harm or for people who are suicidal. The psychiatric component of the HATS database of self-poisoning is being updated by the department's new Clinical Register Manager Elisa Gabrysiak. This work has been funded by a series of grants from the Hunter Primary Care Network.
- For the 2018 National Suicide Prevention Conference, Dr Katherine McGill convened a symposium on "Support after a suicide attempt: Aftercare evidence, models and learning to date". In April, 2019, Dr McGill contributed to a rapid review for the NSW Ministry of Health, brokered by Sax Institute, regarding the effectiveness of aftercare services for people admitted to hospital after self-harm in reducing suicidal behaviours. Dr McGill also recently had a study published in Patient Education and Counselling regarding the information needs of people who have attempted suicide and their family members and friends. Both Professor Greg Carter and Dr McGill have

presented in local GP education forums about assessing and supporting people who are suicidal.

OTHER RESEARCH AND SERVICE EVALUATION STUDIES UNDERWAY INCLUDE:

- Evaluation of the Accredited Persons Program, for which data analysis and manuscript preparation is being finalised. In 2003, the Clinical Nurse Consultant with Department of Consultation-Liaison Psychiatry was among the first group of people in NSW to become an 'Accredited Person' with the capacity to require a person to present for an assessment at a psychiatric facility in the same way Medical Officers can. Using a 10-year cohort extracted from the HATS database, investigators are looking at the predictors of discharge to the psychiatric hospital for an involuntary assessment and whether the Accredited Person's disposition decisions differ in any way to those of the Medical Officers.
- Data analysis has been completed and consultation with Aboriginal stakeholders is underway for a study investigating the risk profile for repetition for Aboriginal people presenting to hospital after self-poisoning. This project represents a collaboration with the local Aboriginal people, with statistical support being provided by Professor Andrew Page from Western Sydney University.

The unit also continues to support a number of university and/or college-required research projects and theses.

- Dr Ingrid Berling was awarded her PhD – investigating whether psychotropic medication use may be contributing to some cardiac deaths
- Amir Salem and Karren Robertson were awarded their Clinical Masters of Psychology degree, including successful completion and passing of the research thesis component overseen by the unit. Their topics, respectively, were: predictors of discharge to psychiatric hospital for Aboriginal and non-Aboriginal patients; and effectiveness of the dissemination of YAM, a school-based suicide prevention program.

Current research project supervision includes: Dr Lindsay Gale (Scholarly Project – investigating delirium in self-poisoning patients; Mr Todd Heard (Clinical Psychology Masters thesis – a qualitative investigation on the perceptions and needs of the Aboriginal communities in relation to discussing suicide; and Dr Lisa Sawyer (Clinical Psychology Masters thesis – evaluating a non-clinical assertive aftercare suicide prevention service).

Calvary Mater Newcastle has also continued to be an active partner in the LifeSpan Newcastle pilot. LifeSpan is an integrated approach to suicide prevention that is based on ensuring evidence informs practice. Professor Carter is a member of the Leadership, Research and Advisory Committee for Black Dog Institute, which is rolling out the trial in four sites across NSW. Newcastle was the

first of the four sites to trial the model and the formal trial period has finished at the end of July 2019. It is anticipated that Calvary Mater Newcastle will continue to be an active partner in the dynamic simulation modelling activities and development of an integrated regional suicide prevention plan, being led by the Primary Health Network, which aim to consolidate and progress local collaborative suicide prevention aims and objectives.

Other key achievements for the past 12 months include:

- Deliberate self-poisoning clinical registry: Database updated and data entry completed for 2018. Snapshot of presentations for 2018 to be presented to the Primary Health Network (the funder) in October 2019.
- 3 minute thesis competition at the 2018 National Suicide Prevention Conference: Dr McGill was the runner up in the competition and presented immediately prior to one of the key note speakers for the conference (Mr David Covington, Zero Suicides in Health Care)
- PhD scholarship: Dr McGill was awarded one of the inaugural Suicide Prevention Scholarships to demonstrate how sentinel unit and self-harm surveillance data can be used to inform local suicide prevention planning, policy and practice. Dr McGill is the recipient of the scholarship being supported by Suicide Prevention Australia and Regional Australia Bank.

SOMATIC SYMPTOM DISORDER RESEARCH

Dr Melissa Stieler is a Hunter New England Local Health District surgical registrar undertaking a Master of Philosophy (Surgical Science) postgraduate Research Higher Degree (RHD) at the University of Newcastle. Her project title is Somatic Symptom Disorder and Undifferentiated Abdominal Pain; Prevalence, Diagnostic Accuracy and Comorbidity. She is supervised by Dr Peter Pockney (University of Newcastle) and Professor Gregory Carter. This project will initially be undertaken at the John Hunter Hospital with potential expansion to surgical departments in other general hospitals in the district in the future.

PEER REVIEWED JOURNAL PUBLICATIONS

1. Katie McGill, Suzanne Hackney, & Jaelea Skehan (2019). Information needs of people after a suicide attempt: A thematic analysis. *Patient Education and Counselling*. 102 (6). 1119-1124. <https://doi.org/10.1016/j.pec.2019.01.003>
2. Katrina Witt; Allison Milner; Matthew J Spittal; Sarah Hetrick; Jo Robinson; Jane Pirkis; Gregory L Carter
Population attributable risk of factors associated with the repetition of suicidal behaviour in young people presenting to clinical services following self-harm: A systematic review and meta-analysis. (*European Child & Adolescent Psychiatry*. Eur Child Adolesc Psychiatry (2019) 28: 5. DOI: 10.1007/s00787-018-1111-6).
3. Carter G, Spittal MJ.
Suicide Risk Assessment: Risk Stratification Is Not Accurate Enough to Be Clinically Useful and Alternative Approaches Are Needed (*Crisis* 2018, 39(4), 229–234 <https://doi.org/10.1027/0227-5910/a000558>)
4. Miyabi Ishihara, Daphna Harel, Brooke Levis, Alexander W. Levis, Kira E. Riehm, Nazanin Saadat, Marleine Azar, Danielle B. Rice, Tatiana A. Sanchez, Matthew J. Chiovitti, Pim Cuijpers, Simon Gilbody, John P.A. Ioannidis, Lorie A. Kloda, Dean McMillan, Scott B. Patten, Ian Shrier, Bruce Arroll, Charles H. Bombardier, Peter Butterworth, Gregory Carter, Kerrie Clover, Yeates Conwell, Felicity Goodyear-Smith, Catherine G. Greeno, John Hambridge, Patricia A. Harrison, Marie Hudson, Nathalie Jetté, Kim M. Kiely, Anthony McGuire, Brian W. Pence, Alasdair G. Rooney, Abbey Sidebottom, Adam Simning, Alyna Turner, Jennifer White, Mary A. Whooley, , Kirsty Winkley, Andrea Benedetti, Brett D. Thombs.



- Shortening Self-report Mental Health Symptom Measures through Optimal Test Assembly Methods: Development and Validation of the Patient Health Questionnaire-Depression-4. (accepted Depression and Anxiety, September 2018)
5. Ben Britton, Amanda L. Baker, Luke Wolfenden, Chris Wratten, Judith Bauer, Alison K. Beck, Kristen McCarter, Jane Harrowfield, Elizabeth Isenring, Colin Tang, Chris Oldmeadow, Gregory Carter.
Eating As Treatment (EAT): a stepped-wedge, randomised controlled trial of a health behaviour change intervention provided by dietitians to improve nutrition in patients with head and neck cancer undergoing radiotherapy. (accepted Journal of Clinical Oncology, September 2018).
 6. Katie McGill, Sarah Hiles, Tonelle Handley, Andrew Page, Terry Lewin, Ian Whyte & Greg Carter (2018). Is the reported increase in young female hospital-treated intentional self-harm real or artefactual? Australian and New Zealand Journal of Psychiatry. 53 (7). 663-372. <https://doi.org/10.1177/0004867418815977>
 7. Brooke Levis, Andrea Benedetti, Brett D. Thombs and the DEPREssion Screening Data (DEPRESSD) Collaboration
The Accuracy of the Patient Health Questionnaire-9 (PHQ-9) for Screening to Detect Major Depression: an Individual Participant Data Meta-analysis. (accepted BMJ March 2019).
 8. Yin Wu, Brooke Levis, Kira E Riehm, Nazanin Saadat, Alexander W Levis, Marleine Azar, Danielle B Rice, Jill Boruff, Pim Cuijpers, Simon Gilbody, John P.A. Ioannidis, Lorie A Kloda, Dean McMillan, Scott B Patten, Ian Shrier, Roy C Ziegelstein, Dickens H Akena, Bruce Arroll, Liat Ayalon, Hamid R Baradaran, Murray Baron, Charles H Bombardier, Peter Butterworth, Gregory Carter, Marcos H Chagas, Juliana C. N. Chan, Rushina Cholera, Yeates Conwell, Janneke M de Man-van Ginkel, Jesse R Fann, Felix H Fischer, Daniel Fung, Bizu Gelaye, Felicity Goodyear-Smith, Catherine G Greeno, Brian J Hall, Patricia A Harrison, Martin Harter, Ulrich Hegerl, Leanne Hides, Stevan E Hobfoll, Marie Hudson, Thomas Hyphantis, MD, Masatoshi Inagaki, Nathalie Jetté, Mohammad E Khamseh, Kim M Kiely, Yunxin Kwan, Femke Lamers, Shen-Ing Liu, Manote Lotrakul, Sonia R Loureiro, Bernd Löwe, Anthony McGuire, Sherina Mohd-Sidik, Tiago N Munhoz, Kumiko Muramatsu, Flávia L Osório, Vikram Patel, Brian W Pence, Philippe Persoons, Angelo Picardi, Katrin Reuter, Alasdair G Rooney, Juwita Shaaban, Abbey Sidebottom, Lesley Stafford, Sharon C Sung, Pei Lin Lynnette Tan, Alyna Turner, Henk C van Weert, Jennifer White, Mary A Whooley, Kirsty Winkley, Mitsuhiko Yamada, Andrea Benedetti, Brett Thombs.
Evaluation of the Equivalency of the PHQ-8 and PHQ-9: A systematic review and individual participant data meta-analysis. (accepted The Lancet Psychiatry March 2019).
 9. Garry J. Stevens, Trent E. Hammond, Suzanne Brownhill, Manish Anand, Anabel de la Riva, Jean Hawkins, Tristan Chapman, Richard Baldacchino, Jo-Anne Micallef, Jagadeesh Andepalli, Anita Kotak, Naren Gunja, Andrew Page, Grahame Gould, Christopher J. Ryan, Ian M. Whyte, Gregory L. Carter, Alison Jones.
SMS SOS: a randomized controlled trial to reduce self-harm and suicide attempts using SMS text messaging (Protocol) (BMC Psychiatry accepted April 2019, 19:117. <https://doi.org/10.1186/s12888-019-2104-9>)
 10. Elizabeth A. Fradgley, Emma Byrnes, Kristen McCarter, Nicole Rankin, Ben Britton, Kerrie Clover, Gregory Carter, Douglas Bellamy, Chris L. Paul.
A cross-sectional audit of current practices and areas for improvement of distress screening and management in Australian cancer services: is there a will and a way to improve?
(Supportive Care in Cancer accepted April 2019. <https://doi.org/10.1007/s00520-019-04801-5>)
 11. Wu Y, Levis B, Riehm KE, Saadat N, Levis AW, Azar M, Rice DB, Boruff J, Cuijpers P, Gilbody S, Ioannidis JPA, Kloda LA, McMillan D, Patten SB, Shrier I, Ziegelstein RC, Akena DH, Arroll B, Ayalon L, Baradaran HR, Baron M, Bombardier CH, Butterworth P, Carter G, Chagas MH, Chan JCN, Cholera R, Conwell Y, de Man-van Ginkel JM, Fann JR, Fischer FH, Fung D, Gelaye B, Goodyear-Smith F, Greeno CG, Hall BJ, Harrison PA, Härter M, Hegerl U, Hides L, Hobfoll SE, Hudson M, Hyphantis T, Inagaki M, Jetté N, Khamseh ME, Kiely KM, Kwan Y, Lamers F, Liu S-I, Lotrakul M, Loureiro SR, Löwe B, McGuire A, Mohd-Sidik S, Munhoz TN, Muramatsu K, Osório FL, Patel V, Pence BW, Persoons P, Picardi A, Reuter K, Rooney AG, Santos IS, Shaaban J, Sidebottom A, Simning A, Stafford L, Sung S, Tan PLL, Turner A, van Weert HC, White J, Whooley MA, Winkley K, Yamada M, Benedetti A, Thombs BD. Equivalency of the diagnostic accuracy of the PHQ-8 and PHQ-9: a systematic review and individual participant data meta-analysis. (Psychological Medicine accepted May 2019)
 12. Rebecca McKetin, Olivia M. Dean, Alyna Turner, Peter J. Kelly, Brendan Quinn, Dan I. Lubman, Paul Dietze, Gregory Carter, Peter Higgs, Amanda L. Baker, Barbara Sinclair, David Reid, Victoria Manning Nina te Pas, Wenbin Liang, Tamsin Thomas, Ramez Bathish, Margaret Kent, Dayle Raftery, Shalini Arunogiri, Frank Cordaro, Harry Hill, Michael Berk.
A study protocol for the N-ICE trial: A randomised double-blind placebo-controlled study of the safety and efficacy of N-acetylcysteine (NAC) as a pharmacotherapy for methamphetamine ("ice") dependence. (Trials June 2019, 20:325 <https://doi.org/10.1186/s13063-019-3450-0>)
 13. Ben Britton, Amanda L. Baker, Luke Wolfenden, Chris Wratten, Judith Bauer, Alison K. Beck, Kristen McCarter, Jane Harrowfield, Elizabeth Isenring, Colin Tang, Christopher Oldmeadow, Gregory Carter.
Comment In Reply to Lee and Douthit, and Champ and Klement.
(International Journal of Radiation Oncology Volume 103, Issue 5, 1 April 2019, Pages 1283-1284 <https://doi.org/10.1016/j.ijrobp.2018.12.017>)
 14. Alison Kate Beck, Erin Forbes, Amanda L. Baker, Ben Britton, Chris Oldmeadow, Gregory Carter
Treatment Fidelity in Real World Evaluations of Behaviour Change Counselling: Protocol for a Systematic Review and Meta-Analysis (Accepted BMJ Open July 2019)
- ## CONFERENCE PRESENTATIONS
- ### Published abstracts
1. Forbes, E., Clover, K., Carter, G., Wratten, C., Britton, B., Tieu, M., . . . McCarter, K. (2018). Rates of Procedural Anxiety During Radiotherapy Using A Mask in Patients with Head and Neck Cancer: Interim Data. Psycho-oncology Vol. 27 (pp. 132).
 2. Clover, K., Forbes, E., Carter, G., Wratten, C., Britton, B., Tieu, M., . . . McCarter, K. (2018). Procedural anxiety during radiotherapy using a mask in patients with head and neck cancer: Interim data. Psycho-oncology Vol. 27 (pp. 17-18).
 3. Fradgley, E., Byrnes, E., Rankin, N., McCarter, K., Britton, B., Carter, G., . . . Paul, C. (2018). Exploring the evidence-practice gap in distress management: Are Australian cancer services aware of and benefiting from evidence-based guidelines? Psycho-oncology Vol. 27 (pp. 32).
 4. Fradgley, E. A., Byrnes, E., Mccarter, K., Britton, B., Rankin, N., Carter, G., . . . Paul, C. (2018). A report card on Australian cancer services' distress screening and management practices: A pass mark or time to go back to school? Psycho-oncology Vol. 27 (pp. 16).
- ## PRESENTATIONS
1. McCarter, K., Britton, B., Baker, A., Beck, A., Wolfenden, L., Wratten, C., Bauer, J., Carter, G.
Eating As Treatment (EAT): A health behaviour change intervention for head and neck cancer patients.
32nd Annual Conference of the European

Health Psychology Society, Galway, Ireland. 21-25 August 2018.

2. Fradgley, E., Byrnes, E., Rankin, N., McCarter, K., Britton, B., Carter, G., . . . Paul, C. (2018).

Exploring the evidence-practice gap in distress management: Are Australian cancer services aware of and benefiting from evidence-based guidelines? *Psycho-oncology* Vol. 27 (pp. 32).

3. Fradgley, E. A., Byrnes, E., McCarter, K., Britton, B., Rankin, N., Carter, G., . . . Paul, C. (2018).

A report card on Australian cancer services' distress screening and management practices: A pass mark or time to go back to school? *Psycho-oncology* Vol. 27 (pp. 16).

4. International Psycho-Oncology Society (IPOS) Congress 2018, Hong Kong. Symposium presentation – Clover, K., Forbes, E., Carter, G., Wratten, C., Britton, B., Tieu, M., Kumar, M., Oultram, S., Baker, A. L., McCarter, K. Procedural anxiety during radiotherapy using a mask in patients with head and neck cancer: interim data

5. Erin Forbes, Kerrie Clover, Greg Carter, Chris Wratten, Ben Britton, Mimi Tieu, Mahesh Kumar, Sharon Oultram, Amanda Baker, Kristen McCarter

Rates Of Procedural Anxiety During Radiotherapy Using A Mask In Patients With Head And Neck Cancer: Interim Data

20th World Congress IPOS Poster Hong Kong, China, 29 October – 02 November 2018

6. Casey Hutchinson, Louisa Brown, Lisa Lincz, Alix Hall, Jackie Wykes, Judy Holland, Kerrie Clover, Benjamin Britton, Philip Rowlings . 'Designing Haem-Fit – an exercise and wellness program in the CMN Haematology Department'. HEaPS Evening Seminar 'Embedding research into routine cancer care' Newcastle. April 4, 2018.

7. Casey Hutchinson, Louisa Brown, Lisa Lincz, Alix Hall, Jackie Wykes, Judy Holland, Kerrie Clover, Benjamin Britton, Philip Rowlings 'Haem-Fit: A pilot implementation trial of a hospital exercise and wellness program for haematology in-patients'. *Blood* 2018, Brisbane Convention & Exhibition Centre, 21–24 October – Awarded BEST Oral abstract Nurses stream HSANZ.

8. McGill, K., Hazell, T., Schniering, C., KayLambkin, F. National dissemination of a program for people who care for a person with depression-predictors of program delivery. Society for Mental Health Research Conference. Noosa. 28-30 November 2018.

9. McGill, K. 3 minute thesis competition. Runner up award. National Suicide Prevention Conference. Adelaide. 23-27 July 2018.

10. McGill K, Shand F, Burns B, McRae A, Traynor M, Larsen M, Darwin L. Support After A Suicide Attempt: Aftercare evidence,

models & learnings to date. National Suicide Prevention Conference. Adelaide. 23-27 July 2018.

POSTERS

1. Casey Hutchinson, Louisa Brown, Jackie Wykes, Judy Holland, Kerrie Clover, Alix Hall, Benjamin Britton, Philip Rowlings, Lisa F Lincz.. 'Wellness and Exercise of Haematology Cancer In-patients. Baseline measurements to guide future interventions'. Cancer Nurses Society of Australia, 21st Annual Congress. Brisbane Convention and Exhibition Centre, Brisbane, 21- 23 June 2018- Awarded BEST poster
2. Casey Hutchinson, Louisa Brown, Jackie Wykes, Judy Holland, Kerrie Clover, Alix Hall, Benjamin Britton, Philip Rowlings, Lisa F Lincz. 'Haem-Fit: A pilot implementation trial of a hospital exercise and wellness program for haematology in-patients'. 2018 Hunter Cancer Research Symposium & Panel Discussion Networking Event. Nov 1st, 2018, HMRI. Awarded BEST implementation study poster

RESEARCH GRANTS

1. 2018 University of Sydney and UNSW. Seed Funding Scheme: Mental Health, Drug and Alcohol Comorbidity.
Using big data to understand the predictors of repeated self-harm in people with mental health and drug and alcohol comorbidity
Kate Chitty, Rachel Cvejic, Julian Trollor, Kirsten Morley, Preeyaporn Srasuebku, Andrew Dawson, Gregory Carter. \$19,794.87 over one year
2. 2018 NHMRC APP1152952
Centre Of Research Excellence In Suicide Prevention: CRESP II
CIs: Christensen H, Venkatesh S, Boydell K, Shand F, Harvey S, Batterham P, Calear A, Carter G, Larsen M, Robinson J. 2,499,557.28 over three years
3. 2018 National Health and Medical Research Council- APP1157757
Prescribed medicine use and healthcare contacts before suicide: Detecting opportunities for prevention using population-based linkage of routinely collected data
CIs: Kate Chitty, Jennifer Pilgrim, Andrea Schaffer, Rose Cairns
Als: Nicholas Buckley, Sallie-Anne Pearson, Gregory Carter, Andrew Page, Jacques Raubenheimer, Claire Wylie. \$354,526 over three years
4. 2018 Australian Rotary Health
Optimising caring contact: Using text messages to support people after a suicide attempt
CIs: Mark Larsen, Fiona Shand, Kirsten Morley, Philip Batterham, Sofian Berrouguet, Paul Haber, Greg Carter, Helen Christensen (Als Justin Chia, Richard Henshaw, Dean Martin)

\$133,793 over 2 years (1 Jan 2019- 31 Dec 2020)

5. 2018 Suicide Prevention Australia (NHMRC Gap Funding)
Preventing repeated self-poisoning: A brief therapy text message intervention
Investigators: Larsen, Shand, Morley, Carter, Kapur
Amount: \$523,614 Duration: 3 years (Jan 2019 – Dec 2020)

PHD STUDENT GRANTS

Katie McGill: 2018 PhD Scholarship- Suicide Prevention Australia & Regional Australia Bank. \$105 000 over three years (2019-2021).

Erin Forbes: 2018 \$10,000 Hunter Cancer Research Alliance Radiation Oncology and Cancer Imaging Technology (ROCIT) Flagship Research Higher Degree (HDR) Student Top-Up Award; 2018 \$500 Hunter Cancer Research Alliance Radiation Travel Grant

RHD STUDENT GRANTS

Dr Melissa Stieler: 2019 Master of Philosophy (Surgical Science), University of Newcastle. \$12,040 and \$16,080 per annum (2 years) Research Training Program (RTP) Scholarship

HAEMATOLOGY

OVERVIEW

The Haematology Unit engages in both clinical and laboratory based research. Clinicians and nurses are actively involved in research directed at improving patient care, while the department also supports dedicated laboratory and clinical trials teams. The Staff Specialists are committed to providing quality training to haematology registrars. Many of the staff hold conjoint appointments with the University of Newcastle and engage in teaching undergraduate medical students and supervising biomedical student projects. There are also numerous research higher degree students associated with the lab, one successful PhD completion in 2018-19 and another PhD thesis submitted. The unit is fortunate to have strong community support and is grateful for all the generous donations received in 2018-19.

HAEMATOLOGY CLINICAL TRIALS

Clinical Trial Coordinators: Michele Gambrell, Tara Novak, Marguerite Hughes, Nick Stankovich, Cheryl Cairney, Klara Jakimovski and Leanne DeGroot.

Data Managers: Katie Oleksyn and Samantha Johnson

Administrative/Finance Officers: Patricia Rozanski and Karen Kincaid

Laboratory Technical Officer: Carolina Mariga Green

Over the past year the Haematology Clinical Trials Office has:

- Activated 8 new clinical trials across a range of haematology malignancies along with 1 new disease registry

- Pre-screened 112 new potential participants for those newly activated and ongoing clinical trials,
- Formally screened 60 of those potential participants and
- Enrolled 52 of those screened participants onto a clinical trial.
- Currently 154 patients are being cared for by trials staff (either on treatment or in active follow up).
- Opened a new disease registry for Multiple Myeloma (Myeloma & Related Disease Registry)

The Trials Office Manager has also developed and fully implemented electronic site files for studies which have now been accepted by all sponsors. The filing system has been presented at National Cooperative group meetings with other sites showing interest in the system. The new electronic filing system has reduced the storage required for bulky hard copy folders and greatly reduces the paper used and archived by the trials office.

Of all the open trials/registries (including those open to recruitment and those closed to recruitment but with participants either on treatment or in follow up) being managed, all are either administered by the Australasian Leukaemia and Lymphoma Group (ALLG), the Australasian Myeloma Research Consortium (AMaRC), sponsored by pharmaceutical companies/industry partners and/or investigator initiated.

The increasing complexity of investigator initiated and pharmaceutical sponsored trials

and the administration required to successfully manage them has warranted additional staff to the Haematology Trials Office this year. The office welcomed Katie Oleksyn, Leanne DeGroot, Carolina Mariga Green and Samantha Johnson to the Haematology team. With additional trials in the pipeline for activation this year, planning for recruitment of a new Clinical Trial Coordinator is underway.

BONE MARROW STEM CELL TRANSPLANT RESEARCH

Philip Rowlings, Louisa Brown, Hong Zhang, Linda Welschinger, Geordie Zauanders

Patient transplant data are reported to the Australian Bone Marrow Transplant Recipients Registry (ABMTRR) as part of Australian BMT research and development. These data are also part of the Asia Pacific Bone Marrow Transplant (APBMT) research group. The CMN Unit is the lead site on the ethics application for data collection of the NSW BMT Network, a subgroup of the Agency for Clinical Innovation (ACI) of the Ministry of Health. Professor Rowlings is a member of the Scientific Advisory Committee of Asia Pacific BMT Group (APBMT), and is a member of the board of Worldwide Blood and Marrow Transplant network (WBMT).

VENOUS THROMBOEMBOLISM AND TRANSFUSION RESEARCH

Dr Bryony Ross, Dr Ritam Prasad, Dr Kate Melville and Dr Anoop Enjeti

Practise changing audits and interventions have been important contributions in these areas with Dr Bryony Ross as chair of area transfusion (PBM)

committee and Dr Enjeti as chair of the area venous thromboembolism (VTE) committee. Dr Ross and Dr deMalmarche are also involved in the Haematology in Women Group.

LABORATORY RESEARCH - THE HUNTER HAEMATOLOGY RESEARCH GROUP

Lisa Lincz, Fiona Scorgie, Elizabeth Pearsall, Nadine Berry, Anoop Enjeti, Ritam Prasad and Philip Rowlings

The Haematology Research Laboratory conducts studies into haematological cancers and disorders of coagulation, with a primary interest in circulating microvesicles. The laboratory is linked to the University of Newcastle and offers tuition and scholarships to encourage students to enter this area of research.

The group maintains strong collaborations with researchers internationally through the International Society on Thrombosis and Haemostasis; BFM Paediatric ALL group; Kingston University and OICR Ontario, Canada (Dr A Enjeti, travelling fellowship); nationally with researchers at the Universities of Tasmania and Melbourne, as well as the Royal Hobart Hospital and Austin Health; CCI, Children's Hospital, Randwick; and locally with the departments of Neurology (JHH), Molecular Medicine (NSW Health Pathology–North), Clinical Toxicology and Pharmacology (CMN), Medical Oncology (CMN), Radiation Oncology (CMN), Hunter Medical Research Institute, and the School of Biomedical Sciences and Pharmacy (University of Newcastle).

A strong translational research group is emerging in the area of Myelodysplasia Acute Lymphoblastic and Acute Myeloid Leukemia with



Dr Enjeti (clinical translational/Genomics/ drug development), Dr Jon Sillar (Trainee and PhD student), Dr Asma Asharf (Clinical Epidemiology), Dr Nikki Verrills (Molecular Biology), Dr Kathryn Skelding (Molecular Biology), Dr Matt Dun (Proteomics), Dr Lisa Lincz (Molecular Biology), Dr Heather Lee (Epigenetics) and Prof R Scott (Genomics). Dr A Enjeti has led the development of a Next Generation Sequencing (NGS) panel-based testing for Acute Myeloid Leukaemia/ Myelodysplastic Syndrome (AML/MDS) with the Hunter as a lead site for testing in NSW.

ACHIEVEMENTS/AWARDS

- Successful implementation of myeloid MPS panel for a state-wide service
- Anoop Enjeti nominated Lead for MDS clinical trials (ALLG) 2019
- Best paper award HCRA 2018 for industry engagement, Anoop Enjeti
- HNE Health Excellence award 2019 for 'Patient safety first' for leading HNE LHD VTE prevention program, Anoop Enjeti, Mary Bond, Melissa O'Brien.
- 'Open' day lectures for community 2018 and 2019 HMRI, Anoop Enjeti
- Anoop Enjeti edited the patient information booklet on Acute Leukemia (Cancer Council NSW)
- Community science and research showcase both on ABC Newcastle and ABC national- more than 7000 hits for this radio interview, Anoop Enjeti

RESEARCH FUNDING

1. 2017-20. Pathology North/HNELHD/CMN Clinical Research Fellowship. Locoregional differences, biomarkers and novel therapy in Acute Myeloid Leukaemia. Anoop Enjeti. \$360,000
2. 2015-19 NHMRC project grant APP1085550. Helping stroke physicians choose who to thrombolys - the "Targeting Optimal Thrombolysis Outcomes" (TOTO) study. CIA: Elizabeth Holliday, ClG: L Lincz \$1,031,671
3. 2019 HMRI Myeloma Project Grant. Predicting tOxicity for Myeloma Therapy (PrOMT) W Janowski, Anoop Enjeti \$50,000
4. HCRA seminar series in Haematology (Leukemia/MDS). Anoop Enjeti \$1500
5. HCRA Clinical Cancer research funds. Anoop Enjeti \$10,000
6. Faculty of Health Visiting fellow funds. Anoop Enjeti \$6000
7. Faculty of Health and Medicine research funds. Anoop Enjeti \$10,000
8. HMRI Array of Hope for ALL research grant. Anoop Enjeti \$25000

CONFERENCE AND MEETING PROCEEDINGS

Australasian Leukaemia & Lymphoma Group Scientific Meeting, May 2019, Anoop Enjeti (Invited Speaker). 'Update on MDS and AML' & 'MYDAAS-T Trial concept for MDS'

American Society of Haematology 60th meeting, San Diego, CA, 1-4 Dec, 2018

Yeung, D.T., A.P. Grigg, N. Shanmuganathan, I. Cunningham, J. Shortt, **P. Rowling**, J. Reynolds, R. Cushion, R.A. Harrup, D.M. Ross, D. Kipp, A.K. Mills, C.K. Arthur, A.P. Schwarer, K. Jackson, N. Viiala, R. Weinkove, A.S.M. Yong, D.L. White, S. Branford, T.P. Hughes, and O.B.o.t. ALLG, Combination of Nilotinib and Pegylated Interferon Alfa-2b Results in High Molecular Response Rates in Chronic Phase CML: Interim Results of the ALLG CML 11 Pinnacle Study. Blood, 2018. 132(Suppl 1): p. 459.

24th Congress of the European Haematology Association, Amsterdam, The Netherlands June 13-16, 2019

Schjesvold, F.; Goldschmidt, H.; Maisnar, V.; Spicka, I.; Abildgaard, N.; **Rowlings, P.**; Odum, D.; Gnanasakthy, A.; Suryanarayan, K.; Cain, L.; Romanus, D.; Rajkumar, S. V.; Dimopoulos, M. A. Less. Health-Related Quality Of Life (Hrql) Outcomes of Oral Ixazomib Maintenance Therapy Post Autologous Stem Cell Transplant (ASCT) in Newly Diagnosed Multiple Myeloma (NDMM) from Tourmaline-MM3 (PF626), HemaSphere. 3:266-267, June 2019.

Cancer Genomic Consortium 9th Annual Meeting August 6-8, 2018, Nashville, TN, Berry N, Scott R, Sutton R, Trahair T, Rowlings P, Enjeti A. Australian AIEOP-BFM 2009 acute lymphoblastic leukaemia high-risk findings – Enrichment of IKZF1 deletions and other curious findings. Cancer Genetics October 2018; vol 226-227, p42.

Blood 2018, Brisbane Convention & Exhibition Centre, 21–24 October.

POSTER PRESENTATIONS:

- Fiona E Scorgie, Jayne Gilbert, Madhu Garg, Jennette Sakoff, Lisa F Lincz. What is the Best Way to Measure Blood Cell Mean Telomere Length?
- Debbie Carr, A Enjeti. J De Malmanche, Jock Simpson. Nurse led discharge of patients post blood transfusion in an outpatient setting.
- Linda Welschinger, Jan Virtue, Geordie Zaunders, Philip Rowlings: Snapshot of CMN autologous haematopoietic cell transplant unit 2011-2018.
- Cathie Milton, Melissa Walker & Philip Rowlings. Successful Identification of Patients Requiring Psychosocial Intervention when Undergoing HPC & ASCT.
- Bryony Ross, Cindy J Flores, Anil Lakkundi, Jo McIntosh, Peter Freeman, Mark Amey, Justine Parsons, Sarah Milton, Tracey Spigiel, Ben Saxon, Amanda Thomson. Transfusion For The Tiny: Neonatal Transfusion – A Focus On Partnering With Parents And Ensuring Excellence In Practice.
- Katherine Rankin, Dr Ritam Prasad, Dr Janis Chamberlain, Dr Aisling Carville, Mr Kent Chapman. First presentation of congenital factor V deficiency in a young adult. Awarded BEST poster award THANZ

workshop

- Ritam Prasad, Greg Irwin, Mary-Anne Hardy, Dr Anoop Enjeti. Evaluation of a Cloud-Based Differential and Abnormal White Cell Morphology Tool.
- Tiong IS, Bajel A, Johnston A, **Walsh M**, D'Rozario J, Yeung D, Marlton P, Fong CY, Cull G, Larsen SO, Kennedy G, Kipp D, Schwarer A, Verner E, Ramanathan S, Tiley C, Taper J, Moore J, Morris E, Murphy N, Hahn U, Purtill D, Warburton P, Stevenson W, Shortt J, Kalro A, Filshie R, Beligaswatte A, Lenton D, Musando H, Hertzberg M, Crowther H, Wall M, Fleming S, Ritchie D, Roberts A, Wei A, on behalf of Australasian Leukaemia & Lymphoma Group. The Australasian Leukaemia and Lymphoma Group (ALLG) National Blood Cancer Registry (NBCR): report of the first 1,000 patients with acute myeloid leukaemia (AML).

ORAL PRESENTATIONS:

Cathie Milton: Is There Balance? CD34 Cell Prediction vs Actual CD34 Cell yield.

Kate Melville: The use of an electronic tablet to enhance and improve the consent process for a blood transfusion.

Casey Hutchinson: Haem-Fit: A pilot implementation trial of a hospital exercise and wellness program for haematology in-patients – awarded BEST Oral abstract Nurses stream HSANZ.

2018 Hunter Cancer Research Symposium & Panel Discussion Networking Event. Nov 1st, 2018, HMRI

POSTER PRESENTATIONS:

Casey Hutchinson, Louisa Brown, Jackie Wykes, Judy Holland, Kerrie Clover, Alix Hall, Benjamin Britton, **Philip Rowlings, Lisa F Lincz.** Haem-Fit: A pilot implementation trial of a hospital exercise and wellness program for haematology in-patients. Awarded BEST implementation study poster

Fiona E Scorgie, Jayne Gilbert, Madhu Garg, Jennette Sakoff, **Lisa F Lincz.** What is the Best Way to Measure Blood Cell Mean Telomere Length?

Cottrell Tamessar, Madhu Garg, Jennette Sakoff, **Lisa Lincz,** Alexandre Xavier, Bente A. Talseth-Palmer, Stephen Ackland. Using genomics and pharmacokinetics to predict 5FU toxicity.

Elizabeth A Pearsall, Lisa F Lincz, Kathryn A Skelding. Heterogeneous nuclear nucleoprotein A3 (hnRNPA3) is a novel binding partner for Brain and acute leukemia, cytoplasmic (BAALC).

Hunter Cancer Research Symposium, HMRI, November 1, 2018

Anoop K Enjeti, Tears, Sweat and blood (invited speaker)

Fiona E Scorgie, Jayne Gilbert, Madhu Garg, Jennette Sakoff, **Lisa F Lincz** What is the Best Way to Measure Blood Cell Mean Telomere Length? (poster presentation)

CMN Nursing Grand Rounds (International Nurses Day, May 10, 2019) Casey Hutchinson, Louisa Brown, Jackie Wykes, Judy Holland, Kerrie Clover, Alix Hall, Benjamin Britton, **Philip Rowlings, Lisa F Lincz.** Haem-Fit: A pilot implementation trial of a hospital exercise and wellness program for haematology in-patients.

ADVISORY/BOARD MEMBERSHIP

Philip Rowlings

- Editorial Board of the Journal Blood Cell Therapy
- Board of Directors, Australia Leukaemia and Lymphoma Group
- Scientific Advisory Board of the Asia Pacific Bone Marrow Transplant Group
- Member, Hunter Cancer Research Alliance, Implementation Science Committee.

Sam Yuen

- Executive Committee, NSW BMT Network of the Agency for Clinical Innovation, NSW Health

Lisa Lincz

- Organising Committee, Australasian Extracellular Vesicles Conference, 14-16 Nov, 2018, UTS, Sydney
- Member of Council, Thrombosis and Haemostasis Society of Australia and New Zealand (THANZ) Scientific and Education Trust
- Member, CMN Translational Research Advisory Committee
- Member, CMN Research Development and Engagement Committee

Anoop Enjeti

- Chair VTE committee HNEAH
- Chair Future Leaders Group (HCRA)
- Chair, Genomics post Fellowship diploma working party RCPA
- Vice-President and Executive council member Thrombosis and Haemostasis Society of Australia and New Zealand (THANZ)
- Associate Chief Examiner Haematology Royal College of Pathologists of Australasia (RCPA)
- Member, Laboratory Science and MDS/AML subcommittee Australian Lymphoma and Leukaemia Group (ALLG)
- Member, CMN Research Development and Engagement committee
- Member, Biomarkers and Targeted Therapy Committee of HCRA
- Member, Vascular Biology subcommittee, International society of Thrombosis and Haemostasis (ISTH)
- Member, Evidence based Guidelines (EviQ) committee, NSW Cancer Institute (NSW CI)
- Member, NSW Haematology Teaching committee

- Member, NSW CEC VTE risk assessment committee
- Reviewer for Thrombosis Research, Medical Journal of Australia and Pathology Journal
- Member, Community Engagement Committee, HCRA 2017-18

Ritam Prasad

- Member, Australian Haemophilia Centre Directors organisation Executive Committee
- Member, RCPA QAP Haematology-Coagulation sub-committee

Wojt Janowski

- Member, ALLG myeloma subcommittee
- Deputy Chair, CCRN Steering Committee
- Member, HCRA Clinical Trials Strategic Planning Committee
- Member, Australasian Myeloma Research Consortium Steering Committee
- Member, eVIQ Haematology Reference Group

Bryony Ross

- Member, Hunter Cancer Research Alliance, Implementation Science Committee.

Cathie Milton

- Cancer Council, reviewer for patient information booklet
- BMT network, review for scholarship program.

Louisa Brown

- Member, ACI BMT network long term follow up working group

Fiona Scorgie

- Member, CMN OH&S Committee
- Member, CMN Mission and Values Committee

PUBLICATIONS

1. 1Ahmed, A.F., C.E. de Bock, E. Sontag, H. Hondermarck, **L.F. Lincz**, and R.F. Thorne, FAT1 cadherin controls neuritogenesis during Ntera2 cell differentiation. *Biochem Biophys Res Commun*, 2019. 514(3): p. 625-31.
2. 2Baqar, S., D. Liu, **L.F. Lincz**, Y.W. Kong, G. Jerums, and E.I. Ekinci, The relationship between habitual dietary sodium intake and RAAS blockade on circulating microparticle levels in type two diabetes. *Clin Sci (Lond)*, 2018. 132(20): p. 2207-20.
3. **Chapman, K., F.E. Scorgie, A. Ariyaratna, E. Stephens, A.K. Enjeti, and L.F. Lincz**, The effects of tetrahydrocurcumin compared to curcuminoids on human platelet aggregation and blood coagulation in vitro. *Thromb Res*, 2019. 179: p. 28-30.
4. Dimopoulos, M.A., F. Gay, F. Schjesvold, M. Beksac, R. Hajek, K.C. Weisel, H. Goldschmidt, V. Maisnar, P. Moreau, C.K. Min, A. Pluta, W.J. Chng, M. Kaiser, S. Zweegman, M.V. Mateos, A. Spencer, S.

Iida, G. Morgan, K. Suryanarayan, Z. Teng, T. Skacel, A. Palumbo, A.B. Dash, N. Gupta, R. Labotka, and S.V. Rajkumar, (**P Rowlings** one of 167 collaborators). Oral ixazomib maintenance following autologous stem cell transplantation (TOURMALINE-MM3): a double-blind, randomised, placebo-controlled phase 3 trial. *Lancet*, 2019. 393(10168): p. 253-64.

5. **Enjeti, A.K., A. Ariyaratna, A. D'Crus, C. Riveros, M. Seldon, and L.F. Lincz**, Circulating microvesicles are less procoagulant and carry different miRNA cargo in myelodysplasia. *Blood Cells Mol Dis*, 2019. 74: p. 37-43.
6. **Enjeti, A.K., L.F. Lincz, M. Seldon**, and G.K. Isbister, Microangiopathy in snake bites -bubble trouble: Response to commentary. *Res Pract Thromb Haemost*, 2019. 3(2): p. 298-9.
7. **Enjeti, A.K., L.F. Lincz, M. Seldon**, and G.K. Isbister, Circulating microvesicles in snakebite patients with microangiopathy. *Res Pract Thromb Haemost*, 2019. 3(1): p. 121-5.
8. Ahmed, A.F., M.S. Fayed, and **L.F. Lincz**, Retrospective study among primary care type 2 diabetes mellitus patients within the city of Zliten, Libya, represented high incidence of early onset of disease diagnosis. *Libyan Journal of Medical Sciences*, 2019.
9. Facon, T., S. Kumar, T. Plesner, R.Z. Orlowski, P. Moreau, N. Bahlis, S. Basu, H. Nahi, C. Hulin, H. Quach, H. Goldschmidt, M. O'Dwyer, A. Perrot, C.P. Venner, K. Weisel, J.R. Mace, N. Raje, M. Attal, M. Tiab, M. Macro, L. Frenzel, X. Leleu, T. Ahmadi, C. Chiu, J. Wang, R. Van Rampelbergh, C.M. Uhlar, R. Kobos, M. Qi, and S.Z. Usmani, (**W Janowski** one of 184 collaborators) Daratumumab plus Lenalidomide and Dexamethasone for Untreated Myeloma. *N Engl J Med*, 2019. 380(22): p. 2104-15.
10. Joseph, J., D. Rabbolini, **A.K. Enjeti**, E. Favaloro, M.C. Kopp, S. McRae, L. Pasalic, C.W. Tan, C.M. Ward, and B.H. Chong, Diagnosis and management of heparin-induced thrombocytopenia: a consensus statement from the Thrombosis and Haemostasis Society of Australia and New Zealand HIT Writing Group. *Med J Aust*, 2019. 210(11): p. 509-16.
11. Liu, D., S. Baqar, **L.L. Lincz**, and E.I. Ekinci, Sodium intake, circulating microvesicles and cardiovascular outcomes in type 2 diabetes. *Curr Diabetes Rev*, 2019.
12. **Simpson, J.D., A. Hopkins, A. Amil, B. Ross, and A.K. Enjeti**, Transfusion-associated circulatory overload in ambulatory patients. *Vox Sang*, 2019. 114(3): p. 216-22.
13. Staudt, D., H.C. Murray, T. McLachlan, F. Alvaro, **A.K. Enjeti**, N.M. Verrills, and M.D. Dun, Targeting Oncogenic Signaling in Mutant FLT3 Acute Myeloid Leukemia: The

Path to Least Resistance. *Int J Mol Sci*, 2018. 19(10).

14. Wei, A.H., S.A. Strickland, Jr., J.Z. Hou, W. Fiedler, T.L. Lin, R.B. Walter, **A. Enjeti**, I.S. Tiong, M. Savona, S. Lee, B. Chyla, R. Popovic, A.H. Salem, S. Agarwal, T. Xu, K.M. Fakouhi, R. Humerickhouse, W.J. Hong, J. Hayslip, and G.J. Roboz, Venetoclax Combined With Low-Dose Cytarabine for Previously Untreated Patients With Acute Myeloid Leukemia: Results From a Phase Ib/II Study. *J Clin Oncol*, 2019. 37(15): p. 1277-84.

DEPARTMENT OF RADIATION ONCOLOGY

It has been another exciting year in Radiation Oncology research, with ongoing strong growth. Some key achievements:

- The RADAR trial investigating different durations of androgen deprivation in conjunction with radiotherapy was led by Prof Jim Denham, and was published in early 2019 in one of the world's most prestigious Oncology journals, the *Lancet Oncology*.
- The PROMETHEUS clinical trial, co-developed in Newcastle, and exploring non-invasive prostate cancer radiotherapy, was recognized by winning the best proffered paper prize at two Regional meetings in 2018 (Royal Australia and New Zealand College of Radiologist ASM and Australia New Zealand Urogenital Program ASM).
- The NINJA clinical trial was awarded Cancer Australia funding in late 2018 including Co-investigators Prof Peter Greer and Prof Jarad Martin. This trial is been run with the Trans-Tasman Radiation Oncology Group (TROG) as primary sponsor, and centrally coordinated by Ms Jo Smart, one of our Senior Radiation Oncology Clinical Trial Coordinators.
- A memorandum of understanding was signed between Calvary Mater Newcastle, Newcastle University and The Princess Chulabhorn Royal Academy, Thailand to further medical physics research ties between the institutions. The agreement will foster research collaborations and student exchanges in the field of medical physics. Acknowledgement is due to Professor Peter Greer who played a central role in this process and for the continuing development of the relationship.
- In a collaboration with Medical Oncology, outcomes from a phase 1 palliative oesophageal clinical trial were presented by Dr Swetha Sridharan at the Australasian Gastrointestinal Trials Group ASM 2019, where it won the best paper prize.
- The clinical trials unit has expanded to include four full-time trial coordinators and a data manager to oversee more than 30 active clinical trials with 340 participants receiving trial related treatment or continuing in follow up

- The department was selected as one of two sites in Australia and worldwide to conduct a clinical trial for head and neck cancer patients with xerostomia following radiation treatment. This study is ongoing with Dr Chris Wratten as Principal Investigator.

MEDICAL PHYSICS

This report represents the research output and achievements of the Medical Physics Department within the Department of Radiation Oncology and the Medical Physics Research Group combining Calvary Mater Newcastle clinical medical physicists and engineers and Newcastle University postgraduate and post-doctoral medical physics researchers based at Calvary Mater Newcastle.

JOURNAL ARTICLES

A significant 12 months of achievement included 22 peer review publications of which 13 were first authored by Medical Physics Group members comprising eight different members. Multiple first authors were Narges Miri, Michael Barnes and Neda Gholizadeh. Of special note were papers published in three prestigious journals; *Radiotherapy and Oncology* (Josh Wolf), the *Journal of Magnetic Resonance Imaging* (Neda Gholizadeh) and *Medical Physics* (Joerg Lehmann). A review of MRI-only treatment planning co-authored by Peter Greer was recognised as a 2018 highlight by another prestigious journal, *Physics in Medicine and Biology*.

CONFERENCE PRESENTATIONS/POSTERS

Over the course of the year there were a total of 37 conference presentations (oral and posters) at nine conferences, including the annual scientific meetings of the European Society for Radiotherapy and Oncology (6), the International Society of Magnetic Resonance in Medicine (2) and the American Association of Physicists in Medicine (4); acknowledged as internationally pre-eminent meetings for their respective specialisations. Nineteen different members of the Medical Physics group were represented across these works.

RESEARCH FUNDING/GRANTS

Three grants were awarded to members of the Medical Physics group:

- Danny Lee was awarded a Cancer Institute NSW Early Career Fellowship grant for \$548,377 to investigate 4D MRI in radiation therapy for achieving tumour localisation and effective treatment.
- Jonathan Goodwin received a Mark Hughes Foundation Innovation Grant of \$145,000 to advance MRI glucose fingerprinting for the better identification of brain cancer tumours.
- Joerg Lehmann received a Research Alliance ROCIT Flagship Program of \$50,000 to investigate a sensitivity assessment system to improve quality in Radiation Oncology treatments. In addition to his contributions to two of the above grants, Peter Greer was also included in a Cancer Australia grant awarded to radiation oncologist Associate

Professor Jarad Martin to investigate the integration of new prostate radiation schedules.

GRADUATIONS

Narges Miri received her PhD from the University of Newcastle in the field of medical physics.

PUBLICATIONS

1. Arabi H, Dowling J, Burgos N, Han X, **Greer P**, Koutsouvelis N, Zaidi H. Comparative study of algorithms for synthetic CT generation from MRI: Consequences for MRI-guided radiation planning in the pelvic region. *Med Phys*. 2018 Nov;45(11):5218-5233
2. Arabi, H., Dowling, J. A., Burgos, N., Han, X., **Greer, P. B.**, Koutsouvelis, N., & Zaidi, H. (2018). Comparative study of algorithms for synthetic CT generation from MRI: Consequences for MRI-guided radiation planning in the pelvic region. *Medical Physics*, 45(11), 5218-5233.
3. **Barnes M, Pomare D**, Menk F, Moraro B, **Greer P**. Evaluation of the truebeam machine performance check (MPC): OBI X-ray tube alignment procedure. *J Appl Clin Med Phys*. 2018 Nov;19(6):68-78
4. **Barnes M**, Menk F, Lamichhane B, **Greer P**. A proposed method for linear accelerator photon beam steering using EPID. *J Appl Clin Med Phys*. 2018 Sep;19(5):591-597
5. Butler D, Beveridge T, **Lehmann J**, Oliver C, Bailey T, Stevenson A, Livingstone J, "Empirical study of the spatial variation of recombination, polarity and polarization effects in ionization chambers" *Nuclear Inst. and Methods in Physics Research, A* 914:15-24, 2019
6. **Beeksm B & Lehmann J**. Excessive applicator radiation leakage for a common therapeutic kilovoltage system. *Br J Radiol*. 2019 Feb;92
7. **Gholizadeh N, Greer P, Simpson J**, Denham J, Lau P, Dowling J, Hondermarck H, Ramadan S. Characterization of prostate cancer using diffusion tensor imaging: A new perspective. *Eur J Radiol*. 2019 Jan;110:112-120
8. **Gholizadeh N, Greer P, Simpson J**, Fu C, Al-ledani O, Lau P, Heerschap A, Ramadan S. Supervised risk predictor of central gland lesions in prostate cancer using 1 H MR spectroscopic imaging with gradient offset-independent adiabaticity pulses. *J Magn Reson Imaging*. 2019 May 27
9. **Gholizadeh N**, Fuangrod T, **Greer P**, Lau P, Ramadan S, **Simpson, J**. An inter-centre statistical scale standardisation for quantitatively evaluating prostate tissue on T2-weighted MRI. *Australas Phys Eng Sci Med*. 2019 Mar;42(1):137-147
10. **Greer, P. B.**, . . . Ebert, M. A. (2019). Multi-observer contouring of male pelvic anatomy: Highly variable agreement across conventional and emerging structures of interest. *Journal of Medical Imaging*

- and Radiation Oncology, 63(2), 264-271. doi:10.1111/1754-9485.12844
11. Hiatt J, Mukwada G, **Barnes M**, Riis H, Huynh D, Rowshanfarzad P. MLC positioning verification for small fields: a new investigation into automatic EPID-based verification methods. *Australas Phys Eng Sci Med*. 2018 Dec;41(4):945-955
 12. **Kaur G, Lehmann J, Greer P, Simpson J**. Assessment of the accuracy of truebeam intrafraction motion review (IMR) system for prostate treatment guidance. *Australas Phys Eng Sci Med* 2019 Jun 13;42(2):585-598
 13. Kennedy, A., Dowling, J., **Greer, P. B.**, Holloway, L., Jameson, M. G., Roach, D., . . . Ebert, M. A. (2019). Similarity clustering-based atlas selection for pelvic CT image segmentation. *Medical Physics*, 46(5), 2243-2250. doi:10.1002/mp.13494Roach,
 14. Kennedy A, Dowling J, **Greer P**, Ebert M. Estimation of Hounsfield unit conversion parameters for pelvic CT images. *Australas Phys Eng Sci Med*. 2018 Sep;41(3):739-745
 15. Largent, A., Barateau, A., Nunes, J. C., Lafond, C., **Greer, P. B.**, Dowling, J. A., . . . de Crevoisier, R. (2019). Pseudo-CT Generation for MRI-Only Radiation Therapy Treatment Planning: Comparison Among Patch-Based, Atlas-Based, and Bulk Density Methods. *International Journal of Radiation Oncology Biology Physics*, 103(2), 479-490.
 16. **Lehmann, J.**, Beveridge, T., Oliver, C., Bailey, T.E., Lye, J.E., Livingstone, J., Stevenson, A.W., Butler, D.J. Impact of magnetic fields on dose measurement with small ion chambers illustrated in high-resolution response maps (2019) *Medical Physics*, 46 (7), pp. 3298-3305.
 17. **Miri N**, Vial P, **Greer P**. Remote dosimetric auditing of clinical trials: The need for vendor specific models to convert images to dose. *J Appl Clin Med Phys*. 2019 Jan;20(1):175-183.
 18. **Miri N**, Legge K, Colyvas K, **Lehmann J**, Vial P, Moore A, Harris M, **Greer P**. A remote EPID-based dosimetric TPS-planned audit of centers for clinical trials: outcomes and analysis of contributing factors. *Radiat Oncol*. 2018 Sep 17;13(1):178.
 19. **Miri, N., Legge, K.**, Colyvas, K., **Lehmann, J.**, Vial, P., Moore, A., . . . **Greer, P. B.** (2018). A remote EPID-based dosimetric TPS-planned audit of centers for clinical trials: Outcomes and analysis of contributing factors. *Radiation Oncology*, 13(1). doi:10.1186/s13014-018-1125-8
 20. Ritter, T.A., Schultz, B., **Barnes, M.**, Popple, R., Perez, M., Farrey, K., Kim, G., Moran, J.M. Automated EPID-based measurement of MLC leaf offset as a quality control tool (2018) *Biomedical Physics and Engineering Express*, 4 (2), art. no. 027008,
 21. Slama L, Riis H, Sabet M, **Barnes M**, Ebert M, Chan S, Rowshanfarzad P. Beam focal spot intrafraction motion and gantry angle dependence: A study of Varian linac focal spot alignment. *Physica Medica* 63 (2019) 41–47.
 22. **Wolf J**, Nicholls J, Hunter P, Nguyen D, Keall P, Martin J. Dosimetric impact of intrafraction rotations in stereotactic prostate radiotherapy: A subset analysis of the TROG 15.01 SPARK trial. *Radiother Oncol*. 136; 143-47. 2019
- ## PRESENTATIONS
1. **B Beeksmma, J Lehmann** 'Investigation of applicator leakage radiation for a Womed T-200kV kilovoltage unit' EPSM 2018
 2. Field M, Holloway L, **Lehmann J**, Sykes J, Thwaites D. A non-small lung cancer decision support system model trained using distributed learning over a multicenter cohort. AAPM 2018
 3. Field M, Holloway L, Carolan M, Miller A, Sykes J, Hau E, Vinod S, Dekker A, Bailey M, **Lehmann J**, Thwaites D. Radiomics model of overall survival from non-small lung cancer using a distributed learning platform, 19th ICCR
 4. Fuangrod T, **Greer P, Kong N, Doebrich M, Lehmann J**. Advances in Electronic Portal Imaging Device based real time assessment of internal anatomy to guide breast cancer radiation treatment under deep inspiration breath hold. 2018 HCRA Research Symposium
 5. Fuangrod T, **Greer P, Lehmann J**. Real-Time Patient Breath Hold Assessment for Deep Inspiration Breath Hold (DIBH) Treatments of Breast Cancer Using Portal Imaging Based Monitoring. AAPM 2018
 6. Fuangrod, T., Puyati, W., Khawne, A., **Barnes, M., & Greer, P.** (2019). Development of predictive daily machine quality assurance system to predict forthcoming failures. In *Radiotherapy and Oncology Vol. 133* (pp. S574-S575). Milan, ITALY
 7. Fuangrod, T., **Greer, P., Kong, N., Doebrich, M., & Lehmann, J.** (2018). Advances in Electronic Portal Imaging Device-Based Real Time Assessment of Internal Anatomy to Guide Breast Cancer Radiation Treatment Under Deep Inspiration Breath Hold. In *Asia-Pacific journal of clinical oncology Vol. 14* (pp. 15-16).
 8. **Gholizadeh N, Simpson J**, Ramadan S, **Lee D**, Lau P, **Greer P**. Supervised machine learning of prostate cancer in the peripheral zone using multiparametric MR. EPSM 2018
 9. **Gholizadeh N, Simpson J**, Ramadan S, Lee D, Lau P, **Greer P**. Comparison of the diagnostic performances of diffusion parameters in diffusion weighted imaging and diffusion tensor imaging of prostate cancer. EPSM 2018
 10. **Gholizadeh N, Greer P, Simpson J**, Lau P, Heerschap A, Ramadan S. Computer aided diagnosis of prostate cancer in central gland using GOIA-sLASER 1H MRS. ISMRM 2019
 11. **Gholizadeh N, Simpson J**, Ramadan S, Lau P, **Greer P**. Detection of prostate cancer in the peripheral zone using machine learning and multiparametric MRI. ISMRM 2019
 12. **Gholizadeh, N., Simpson, J.**, Ramadan, S., Lau, P., & **Greer, P.** (2018). Assessment of Prostate Tumor Heterogeneity Using Machine Learning: An Emerging Imaging Tool for Clinical Practice. In *Asia-Pacific Journal of Clinical Oncology Vol. 14* (pp. 13)
 13. **Gholizadeh N, Greer P, Simpson J**, Al-iedani O, Lau P, Heerschap A, Ramadan S, "Supervised machine learning of prostate cancer in the peripheral zone using multiparametric MRI", Annual Meeting ISMRM-ESMRMB, Montreal, Canada, (2019)
 14. **Gholizadeh N, Greer P, Simpson J, Lee D**, Lau P, Ramadan S, "Comparison of the diagnostic performances of diffusion parameters in diffusion weighted imaging and diffusion tensor imaging of prostate cancer", Engineering & Physical Sciences in Medicine Conference (EPSM) , Australia, (2018).
 15. **Gholizadeh N, Greer P, Simpson J**, Lau P, Ramadan S, "Multiparametric magnetic resonance imaging for the detection and localisation of prostate cancer", 6th MR in RT, Utrecht, Netherlands, (2018)
 16. **Gholizadeh N, Greer P, Simpson J**, Lau P, Ramadan S, "Multi parametric magnetic resonance imaging for the detection of prostate cancer: combination of T2-weighted, diffusion tensor imaging and magnetic resonance spectroscopic imaging", Annual Meeting ISMRM-ESMRMB, Paris, France, (2018)
 17. **Greer, P.**, Pichler, P., Young, T., Martin, J., Hunter, P., Wratten, C., . . . Dowling, J. (2019). A multi-centre study for implementation of MRI-only prostate planning. In *Radiotherapy and Oncology Vol. 133* (pp. S224-S225). Milan, ITALY
 18. Hewson, E. A., Nguyen, D. T., O'Brien, R., Poulsen, P. R., Booth, J., Bromley, R., **Greer P** . . . Keall, P. (2018). Kilovoltage Intrafraction Monitoring (KIM) Real-Time Tracking Improves Patient Dose Distributions: Interim Primary Hypothesis Results from the First 20 Patients on the TROG 15.01 Stereotactic Prostate Ablative Radiation Therapy SPARK Trial. *International journal of radiation oncology biology physics Vol. 102* (pp. S128).
 19. Largent, A., Barateau, A., Nunes, J., Lafond, C., **Greer, P. B.**, Dowling, J. A., . . . De Crevoisier, R. (2019). Patient-specific stopping power calibration for proton therapy based on proton radiographic images. In *Radiotherapy and Oncology Vol. 133* (pp. S555-S556). Milan, ITALY

20. **Lee, D., Gholizadeh, N., Wolf, J., Nguyen, D., & Greer, P.** (2018). WatchDog: A Feasibility Study to Monitor Respiratory Motion for Liver/lung Cancer Patients. In *Medical Physics* Vol. 45 (pp. E275). Nashville, TN:
21. **Lee, D., Kim, S., Simpson, J., & Greer, P.** (2018). SMART (Statistical Measures and Analysis of Quality Assurance Measurements for Optimal Radiation Treatment) for Each Treatment Plan. In *MEDICAL PHYSICS* Vol. 45 (pp. E374). Nashville, TN:
22. **Lehmann J and Ostwald T.** Simplified input and reduced errors with mask factors for the WOMed T-200 kV treatment system. *EPSM* 2018
23. **Lehmann J and Doebrich M.** User interface design for EPID based breath-hold monitoring system. *AAPM* 2018
24. **Lehmann J, Fuangrod T, Doebrich M, Kong N, Greer P.** Live EPID based Inspiration Level Assessment (LEILA) for breast cancer treatments under deep inspiration breath hold (DIBH). *TROG ASM* 2019
25. **Lehmann J, Wilfert A, Blackmore R, Doebrich M, Ostwald T.** Lessons from the commissioning of a WOMed T-200 kV treatment system. *EPSM* 2018
26. **Lim, S. B., Tsai, C. J., Yu, Y., Greer, P., Fuangrod, T., Hwang, K., . . . Lovelock, D. M.** (2018). The Investigation of a Decision Support Metric for Head and Neck Adaptive Radiation Therapy using a Real-Time In Vivo Portal Dosimetry System. In *International Journal of Radiation Oncology Biology Physics* Vol. 102 (pp. E538). San Antonio
27. **Lye J, Shaw M, Lehmann J, Alves A, Brown R, Davey C, Kadeer F, Kenny J, Supple J.** The ACDS approach to measuring dose to bone and comparing to TPS reported dose to water and medium. *ESTRO* 38
28. **McNeilly, A., Greer, P.,** Fuangrod, T., Van Beek, T., Van Uytven, E., Chytky-Praznik, K., & Zwan, B. (2018). Investigations of an EPID Based 3D Dose Reconstruction Method for Applications in MRI-Linac Radiotherapy. In *Asia-Pacific journal of clinical oncology* Vol. 14 (pp. 30-31).
29. **Shaw M, Alves A, Davey C, Keehan S, Kadeer F, Kenny J, Supple J, Lehmann J, Geso M, Lye J.** End-to-end dosimetry audits of Stereotactic Body Radiotherapy. *EPSM* 2018
30. **Shaw M, Alves A, Davey C, Geso M, Kadeer F, Lehmann J, Supple J, Lye J.** End-to-end dosimetry audits of Stereotactic Ablative Radiotherapy, *ESTRO* 38
31. **Kate Skehan, Jonathan Goodwin, Matthew Richardson, Vicky Sherwood, Peter Greer, John Simpson.** Evaluation of synthetic CT of the pelvis: Dosimetric comparison with conventional CT. *MR in RT* 2019
32. **Ostwald T, Wolf J, Baddock S, Simpson P.** Clinical Assessment of 3DBolus Software including Electron Modulated Bolus. *EPSM* 2018
33. **Pedersen T, Miri N, R David, Lehmann J, Greer P.** Remote dosimetric auditing for clinical trials using EPID and DVH patient dose analysis, *EPSM* 2018
34. **Simpson J.** Considerations for a dedicated MRI-simulator in a clinical radiation oncology setting. *EPSM* 2018.
35. **Steiner, E., Makhija, K., O'Brien, R., Wolf, J., Ludbrook, J., Greer, P., & Keall, P.** (2019). Randomised trial investigating breathing regularity: Audiovisual biofeedback vs free breathing. In *RADIOTHERAPY AND ONCOLOGY* Vol. 133 (pp. S1081). Milan, ITALY
36. **Wolf J, Baddock S, Ostwald T.** 3D Printing for Rapid Prototyping in the Radiation Oncology Environment. *EPSM* 2018
37. **Wolf J, Nicholls J, Hunter P, Trang D, Keall.** Dosimetric impact of intrafraction rotations in stereotactic prostate radiotherapy. *ESTRO Asia* 2018.

MEDICAL ONCOLOGY RESEARCH (MOR) - CLINICAL TRIAL UNIT

The Medical Oncology Department has a very active research unit (MOR) in which they conduct both laboratory and clinical research. MOR is made up of clinicians, scientists, nurses, clinical trial coordinators and data managers dedicated to the improved management of patients with cancer and the advancement of cancer treatment.

With the aim to promote cancer research and the public's understanding of, and access to, clinical trials, MOR research has been actively involved in the development of a Clinical Trials phone and web-based application as well as publicity drives on Clinical Trials Day and Medical Research Week.



MOR TRIALS

- Clinical Trial Manager: Kim Adler
- Clinical Trial Coordinators: Sue Brew, Kirrilee Askew, Kelly Barker, Kerrie Cornall, Kelly Healey, Naomi Knoblauch, Jennifer McFarlane, Louise Plowman, Amber Poulter, Gail Walker
- Finance: Alison Leonard–England
- Ethics Specialists: Catherine Johnson and Allison Kautto
- Data Management: Jessica Aldcroft, Emily Munn and Anthony Morrison
- Laboratory Technician: Alison Pickup
- Clinical Trial Fellow: Dr Hiren Mandaliya

This has been yet another exciting year for MOR Trials.

Trial Fellow Dr Hiren Mandaliya won the 2019 Conquer Cancer Foundation of ASCO Annual Meeting Merit Award. These distinguished awards support oncology trainees who are first authors on abstracts selected for presentation at the ASCO Annual Meeting.

Recognising the importance of community engagement in maintaining public trust in research, MOR Trials celebrated International Clinical Trials Day with an interactive display in the main thoroughfare of the hospital. This gave visitors, patients and staff a small lesson in randomisation which allowed us to answer the question “Is chocolate alone or chocolate with caramel a more tasty treat?” The display also included posters developed by members of the trials team showing how research over the past 10 years has directly impacted the treatments we see in the clinic today.

Over the past year MOR opened 16 new clinical trials to recruitment across Hunter New England Local Health District, covering melanoma, breast, prostate, colorectal, pancreas, brain, ovarian renal and bladder cancers. As of 1 July 2019, 29 trials were actively recruiting participants and another 17 trials were pending approval to commence. These trials were a mixture of phase 1b, II & III cooperative group, pharmaceutical-sponsored studies and investigator-initiated studies.

Overall, 195 patients were offered the opportunity to participate in a clinical trial. Of these, 103 have been enrolled into a clinical trial.

MOR EXPERIMENTS

- Director of MOR Laboratory and Chief Hospital Scientist: Dr Jennette Sakoff.
- Hospital Scientists: Dr Jayne Gilbert and Madhu Garg
- Technical Officer: Ms Alesia Ogrodnik

The MOR Laboratory encompasses the Experimental Therapeutics Group which focuses on improving outcomes for cancer patients undergoing chemotherapy. The main areas of research include (i) the development of new small molecules for the treatment of cancer, (ii) identifying ways to reducing clinical toxicity to chemotherapy and (iii) implementing

therapeutic drug monitoring in order to optimize chemotherapy dosing. Our drug development program primarily targets brain, ovarian and breast cancers, while our studies of clinical toxicity and drug monitoring span all tumour types.

PUBLICATIONS

1. Moore HCF, Unger JM, Phillips KA, Boyle F, Hitre E, Moseley A, Porter DJ, Francis PA, Goldstein LJ, Gomez HL, Vallejos CS, Partridge AH, Dakhil SR, Garcia AA, Gralow JR, **Lombard JM**, Forbes JF, Martino S, Barlow WE, Fabian CJ, Minasian LM, Meyskens FL, Gelber RD, Hortobagyi GN, Albain KS. Final Analysis of the Prevention of Early Menopause Study (POEMS)/SWOG Intergroup S0230. *J Natl Cancer Inst.* 2019 Feb 1;111(2):210-213. doi: 10.1093/jnci/djy185. PMID:30371800
2. Scurry J, van Zyl B, Gulliver D, Otton G, Jaaback K, **Lombard J**, Vilain RE, Bowden NA Nucleotide excision repair protein ERCC1 and tumour-infiltrating lymphocytes are potential biomarkers of neoadjuvant platinum resistance in high grade serous ovarian cancer. *Gynecol Oncol.* 2018 Nov;151(2):306-310. doi: 10.1016/j.ygyno.2018.08.030. Epub 2018 Sep 5. PMID:30194007
3. Clingan,P, **Ackland,S**, Daniel Brungs,D., De Souza,P., Aghmesheh,M., **Garg,M B.**, Ranson,D., Parker,S., Jokela,R., Ranson,M. (2019), First-in-human phase I study of infusional and bolus schedules of Deflexifol, a novel 5-fluorouracil and leucovorin formulation, after failure of standard treatment. *Asia-Pac J Clin Oncol.*15(3), 151-157. <https://doi.org/10.1111/ajco.13144>
4. Graves M, CelliMarchett G, van Zyl B, Tang D, Vilain RE, **van der Westhuizen A**, Bowden NA. (2019) Monitoring Patient Response to Pembrolizumab With Peripheral Blood Exhaustion Marker Profiles. *Frontiers in Medicine.* 6:113.
5. Budden T, **van der Westhuizen A**, Bowden NA (2018) Sequential decitabine and carboplatin treatment increases the DNA repair protein XPC, increases apoptosis and decreases proliferation in melanoma. *BMC Cancer* 18(1):100
6. Chin-Lenn, **Lombard,J** et al. The impact and indications for Oncotype DX on adjuvant treatment recommendations when third-party funding is unavailable. *Asia Pac J Clin Oncol.*2018 Dec;14(6):410-416. doi: 10.1111/ajco.13075. Epub 2018 Sep 30.
7. **Zdenkowski N**, Wilcken N, Francis P. Breast cancer trials in Australia: 40 years of progress. *MJA InSight* 2018;37.
8. Herrmann A, Hall A, **Zdenkowski N**, Sanson-Fisher R. Heading in a new direction? Recommendations for future research on patient decision aids. *Patient Educ Couns.* 2019 May;102(5):1029-1034. doi: 10.1016/j.pec.2018.12.006. Epub 2018 Dec 4. PMID: 30528874
9. Herrmann A, Sanson-Fisher R, Hall A, Wall L, **Zdenkowski N**, Waller A. Support persons' preferences for the type of consultation and the format of information provided when making a cancer treatment decision. *BMC Res Notes.* 2018 Jul 11;11(1):456. doi: 10.1186/s13104-018-3552-x. PMID:29996909
10. Herrmann A, Hall A, Sanson-Fisher R, **Zdenkowski N**, Watson R, Turon H. Not asking cancer patients about their preferences does make a difference. A cross-sectional study examining cancer patients' preferred and perceived role in decision-making regarding their last important cancer treatment. *Eur J Cancer Care (Engl).* 2018 Sep;27(5):e12871. doi: 10.1111/ecc.12871. Epub 2018 Jun 14. PMID: 29900611
11. Ager B, Jansen J, Porter D, Phillips KA, Glassey R; CPM DA Advisory Group, Butow P Development and pilot testing of a Decision Aid (DA) for women with early-stage breast cancer considering contralateral prophylactic mastectomy. *Breast.* 2018 Aug;40:156-164. doi: 10.1016/j.breast.2018.05.009. Epub 2018 May 22. PMID:29857282
12. Tang M, O'Connell RL, Amant F, Beale P, McNally O, Sjoquist KM, Grant P, Davis A, Sykes P, Mileshekin L, Moujaber T, Kennedy CJ, deFazio A, Tan K, Antill Y, Goh J, **Bonaventura T**, Scurry J, Friedlander M. PARAGON: A Phase II study of anastrozole in patients with estrogen receptor-positive recurrent/metastatic low-grade ovarian cancers and serous borderline ovarian tumors. PMID: 31227223 DOI: 10.1016/j.ygyno.2019.06.011
13. Kok PS, Beale P, O'Connell RL, Grant P, **Bonaventura T**, Scurry J, Antill Y, Goh J, Sjoquist K, DeFazio A, Mapagu C, Amant F, Friedlander M; PARAGON Investigators. PARAGON (ANZGOG-0903): a phase 2 study of anastrozole in asymptomatic patients with estrogen and progesterone receptor-positive recurrent ovarian cancer and CA125 progression. PMID: 31328463 DOI: 10.3802/jgo.2019.30.e86
14. Vasista A, Stockler M, Martin A, Pavlakis N, Sjoquist K, Goldstein D, Gill S, Jain V, Liu G, Kannourakis G, Kim YH, Nott L, Snow S, Burge M, Harris D, Jonker D, Chua YJ, Epstein R, **Bonaventura A**, Kiely B. Accuracy and Prognostic Significance of Oncologists' Estimates and Scenarios for Survival Time in Advanced Gastric Cancer PMID: 30936377 DOI: 10.1634/theoncologist.2018-0613
15. Vasista A, Stockler M, Martin A, Pavlakis N, Sjoquist K, Goldstein D, Gill S, Jain V, Liu G,

- Kannourakis G, Kim YH, Nott L, Snow S, Burge M, Harris D, Jonker D, Chua YJ, Epstein R, **Bonaventura A**, Kiely B. Accuracy and Prognostic Significance of Oncologists' Estimates and Scenarios for Survival Time in Advanced Gastric Cancer. PMID: 30936377 DOI: 10.1634/theoncologist.2018-0613
16. Scorgie F, **Gilbert J**, **Garg MB**, **Sakoff JA**, Lincz L What is the best way to measure blood cell mean telomere length, Asia-Pacific Journal of Clinical Oncology, Volume: 14 SI Supplement: 6: 21-22: PP10 Published: Nov 2018.
 17. **Gilbert J**, De Iulius GN, Tarleton M, McCluskey A, and **Sakoff JA**. (Z)-2-(3,4-Dichlorophenyl)-3-(1H-pyrrol-2-yl)acrylonitrile exhibits selective anti-tumour activity in breast cancer cell lines via the aryl hydrocarbon receptor pathway. Mol Pharmacol. 2018 Feb;93(2):168-177. doi: 10.1124/mol.117.109827.
 18. Azadeh G, **Sakoff J**, Russell C, **Gilbert J**, Baker J, McCluskey A. A focused library synthesis and cytotoxicity of quinones derived from the natural product, bolinaquinone. R.Soc.Open Sci. Volume: 5 Issue: 4 Article Number:171189 Published: APR 2018
 19. Pages BJ, **Sakoff J**, **Gilbert J**, Zhang Y, Kelly S, Hoechele J, Aldrich-Wright JR. Combining the platinum(II) drug candidate kiteplatin with 1,10-phenanthroline analogues. Dalton transactions (Cambridge, England : 2003) Volume: 47 Issue: 7 Pages: 2156-2163 Published: 2018-Feb-13
 20. Baker JR, **Gilbert J**, Paula S, Zhu X, **Sakoff JA**, McCluskey A. Dichlorophenylacrylonitriles as AhR Ligands That Display Selective Breast Cancer Cytotoxicity in vitro. ChemMedChem 2018, 13(14), 1447-1458. DOI:10.1002/cmdc.201800256.
 21. Hong Ngoc TP, **Sakoff JA**, Vuong Q, Bowyer MC, Scarlett C. Screening phytochemical content, antioxidant, antimicrobial and cytotoxic activities of Catharanthus roseus (L.) G. Don stem extract and its fractions. Biocatalysis and Agricultural Biotechnology. 2018. 16:405-411.
 22. Hong Ngoc TP, **Sakoff JA**, Bond D, Vuong Q, Bowyer MC, Scarlett C. In Vitro Antibacterial and Anticancer Properties of Helicteres hirsuta Lour. Leaf and Stem Extracts and Their Fractions. 2018. 45(6): 2125-2133 Molecular Biology Reports.
 23. Hong Ngoc TP; **Sakoff JA**; Vuong, Q; Bowyer MC; Scarlett CJ. Comparative cytotoxic activity between kaempferol and gallic acid against various cancer cell lines. Data in Brief. 2018. 21: 1033-1036.
 24. Yusof ENM, Latif MAM, Tahir MIM, **Sakoff JA**, Simone MI, Page AJ, Veerakumarasivam A, Tiekink ERT, Ravoof TB. o-vanillin derived Schiff bases and their organotin(IV) compounds: Synthesis, structural and in-silico studies and cytotoxicity. International Journal of Molecular Sciences. Volume: 20 Issue: 4 Article Number: 854 Published: FEB 2 2019
 25. Al Otaibi A, Deane FM, Russell CC, Hizartidis L, McCluskey SN, **Sakoff JA**, McCluskey A. A methanol and protic ionic liquid Ugi multicomponent reaction path to cytotoxic α -phenylacetamido amides. RSC Advances Volume: 9 Issue: 14 Pages: 7652-7663 Published: 2019.
 26. Hizartidis L, **Gilbert J**, Gordon C, **Sakoff JA** and McCluskey A. Synthesis and cytotoxicity of octahydroepoxyisoindole-7-carboxylic acids and norcantharidin-amide hybrids as norcantharidin analogues. ChemMedChem 2019-Apr-01 (Epub 2019 Apr 01).
 27. Hong Ngoc TP, **Sakoff JA**, Vuong Q, Bowyer MC, Scarlett C. Phytochemical, antioxidant, antiproliferative and antimicrobial properties of Catharanthus roseus root extract, saponin-enriched and aqueous fractions'. Accepted Journal of Molecular Biology Reports, March 2019. 2019-Apr-03 (Epub 2019 Apr 03)
 28. McGhie BS, **Sakoff JA**, **Gilbert J**, Aldrich-Wright J. Synthesis and Characterisation of Platinum(IV) Polypyridyl Complexes with Halide Axial Ligands. Inorganica Chimica Acta. Accepted June 2019.



29. **Day F**, Sherwood E, Chen TY, Barbouttis M, Varlow M, Martin J, Weber M, Sitas F, Paul C. Oncologist provision of smoking cessation support: A national survey of Australian medical and radiation oncologists. *AJCO* 14: 431-8, 2018.
30. Shapiro JD, Thavaneswaran S, Underhill CR, Robledo KP, Karapetis CS, **Day FL** et al. Cetuximab alone or with irinotecan for resistant KRAS, NRAS, BRAF and PIK3CA wild type metastatic colorectal cancer: The AGITG randomized Phase II ICECREAM study. *Clinical Colorectal Cancer* 17: 313-9, 2018.
31. Sternberg CN, Loriot Y, James N, Choy E, Castellano D, Lopez-Rios F, Banna GL, De Giorgi U, Masini C, Bamias A, Garcia Del Muro X, Duran I, Powles T, Gamulin M, Zengerling F, Geczi L, **Gedye C**, de Ducla S, Fear S, Merseburger AS. Primary Results from SAUL, a Multinational Single-arm Safety Study of Atezolizumab Therapy for Locally Advanced or Metastatic Urothelial or Nonurothelial Carcinoma of the Urinary Tract.. *Eur Urol.* 2019 Jul;76(1):73-81. doi: 10.1016/j.eururo.2019.03.015. Epub 2019 Mar 23.
32. Peters S, Clézardin P, Márquez-Rodas I, Niepel D, **Gedye C**. The RANK-RANKL axis: an opportunity for drug repurposing in cancer? *Clin Transl Oncol.* 2019 Jan 17. doi: 10.1007/s12094-018-02023-5.
33. Rush A, Matzke L, Cooper S, **Gedye C**, Byrne JA, Watson PH. Research Perspective on Utilizing and Valuing Tumor Biobanks. *Biopreserv Biobank.* 2018 Dec 21. doi: 10.1089/bio.2018.0099.
34. Emmett L, Crumbaker M, Ho B, Willowson K, Eu P, Ratnayake L, Epstein R, Blanksby A, Horvath L, Guminski A, Mahon K, **Gedye C**, Yin C, Stricker P, Joshua AM. Results of a Prospective Phase 2 Pilot Trial of 177Lu-PSMA-617 Therapy for Metastatic Castration-Resistant Prostate Cancer Including Imaging Predictors of Treatment Response and Patterns of Progression. *Clin Genitourin Cancer.* 2018 Sep 27. pii: S1558-7673(18)30663-3. doi: 10.1016/j.clgc.2018.09.014.
35. Mersiades AJ, Tognola A, Haber PS, Stockler M, Lintzeris N, Simes J, McGregor I, Oliver I, Allsop DJ, **Gedye C**, Kirby AC, Morton RL, Fox P, Clarke S, Briscoe K, Aghmesheh M, Wong N, Walsh A, Hahn C, Grimison P. Oral cannabinoid-rich THC/CBD cannabis extract for secondary prevention of chemotherapy-induced nausea and vomiting: a study protocol for a pilot and definitive randomised double-blind placebo-controlled trial (CannabisCINV). *BMJ Open.* 2018 Sep 12;8(9):e020745. doi: 10.1136/bmjopen-2017-020745.

CONFERENCE POSTERS

1. **Hiren Mandaliya, Sang Kim, Tin Gaik Quah, Sandy Tun Min, James Carlton**, Jack Faulkner, Christopher Oldmeadow, **Craig**

- Gedye, Andre Van Der Westhuizen, Girish Mallesara**. Mortality within 30 days of immunotherapy (checkpoint inhibitors) in cancer patients treated at Australian tertiary cancer centre ASCO 2019 – Chicago – Poster presentation and received 2019 Conquer Cancer Foundation of ASCO Annual Meeting Merit Awards
2. Moth E, **Mandaliya H** et al, ‘Older adults’ preferred and perceived roles in decision-making about palliative chemotherapy - Their decision priorities and information preferences. ASCO 2019 – Chicago
 3. S Kang, **H Mandaliya** et al, Rectal cancer treatment and outcomes in elderly patients treated with curative intent- ASCO GI 2019
 4. K Wilkinson, **H Mandaliya** et al, Patterns of adjuvant therapy use and survival outcomes in patients with rectal cancer not receiving neoadjuvant therapy in an Australian cohort - ASCO GI 2019
 5. **Gillian Blanchard, Janine Lombard** et al . MSCC8-0642: A study comparing nails in patients receiving taxane chemotherapy - a study of nail polish versus no nail polish to reduce nail changes. MASCC 2018, Vienna.
 6. Seock-Ah Im, **Janine Lombard** et al. Efficacy and safety of Palbociclib plus endocrine therapy for ER +/HER2neg advanced breast cancer in the Asia-Pacific Region. MOGA 2018, Adelaide
 7. Ciara Conduit **Janine Lombard** et al. Cardiotoxicity in advanced HER2 positive breast cancer in real world Australian patients receiving HER2-targeted therapy in the first-line setting. COSA 2018, Perth.
 8. Michelle Wong-Brown, Joshua Crowe, **Janine Lombard , Andre van der Westhuizen**, Nikola A. Bowden. Investigation of DNA repair and the epigenome in chemoresistant high grade serous ovarian cancer. ANZGOG 2019, Sydney.
 9. Sally Chan, **Catherine Johnson, Gillian Blanchard, Yolande Cox**, Tony Wang. The Prevention and Control of Non-Communicable Disease: An Australian Survey of Student Nurses and Midwives (StuNPac Study). CNSA Annual Congress 2018, Brisbane.
 10. Graves M, CelliMarchett G, van Zyl B, Tang D, Vilain RE, **van der Westhuizen A**, Bowden NA. The presence of CXCR6 on CD8+ T cells a biomarker for poor treatment outcomes in metastatic melanoma patients on Pembrolizumab? Australian Melanoma Conference 2018, Melbourne,
 11. Graves M, CelliMarchett G, van Zyl B, Tang D, Vilain RE, **van der Westhuizen A**, Bowden NA. The presence of CXCR6 on CD8+ T cells in metastatic melanoma patients on pembrolizumab correlated with poor treatment outcomes. Proceedings of the Society for Melanoma Congress (2018), Manchester, UK.

CONFERENCE ORAL PRESENTATIONS

1. **Hiren Mandaliya, Sang Kim, Tin Gaik Quah, Sandy Tun Min, James Carlton**, Jack Faulkner, Christopher Oldmeadow, **Craig Gedye, Andre Van Der Westhuizen, Girish Mallesara**. Mortality within 30 days of immunotherapy (checkpoint inhibitors) in cancer patients treated at Australian tertiary cancer centre. MASCC 2019, San Francisco
2. **Garg MB**, Sakoff JA, Yoo JW, Martin J, **Ackland SP**. Optimising Dose via TDM: Mitotane as a Model for Implementation of Personalised Therapy, Sydney Cancer Conference 2018.
3. Budden T, **van der Westhuizen A**, Graves M, Levy R, Vilain, R, Bowden NA. Repurposing epigenetic and DNA-damaging drugs to prime for immunotherapy. Australian Melanoma Conference, Melbourne, Australia, 2018.
4. **Gilbert J**; Baker J; Paula S; McCluskey A; **Sakoff J**. Targeting the aryl-hydrocarbon receptor (AhR) pathway to selectively kill breast cancer cells. Sydney Cancer Conference 2018.
5. **Garg MB, Sakoff JA**, Yoo JW, Martin J, **Ackland SP**. Optimising Dose via TDM: Mitotane as a Model for Implementation of Personalised Therapy. Sydney Cancer conference Oct 2018.
6. Scorgie F, **Gilbert J, Garg MB, Sakoff JA**, Lincz L. What is the best way to measure blood cell mean telomere length, Hunter Cancer Research Alliance Annual Meeting 2018.
7. Luz Esperanza Ayala de Calvo, Rosario Caballero Tinoco, Marise Dutra Souto, **Catherine L. Johnson**, Myrna E. McLaughlin de Anderson. Challenges and Opportunities: Lessons learned from the ISNCC Cervical and Breast cancer prevention and screening Train the Trainer Program. International Conference on Cancer Nursing (ICCN) 2018
8. **Catherine Johnson**. Nurses as leaders in building non-traditional workforce contributions
Project lead, International Society of Nurses in Cancer Care (ISNCC) Collaborative program on Breast health and Cervical Cancer Prevention and Screening Train the Trainer Program. World Cancer Congress 2018, Kuala Lumpur
9. **Yolande Cox, Catherine Johnson, Debra Cook**. Development of a Cancer Screening quick reference Guide for Supportive Care. CNSA Annual Congress 2018, Brisbane
10. **Gillian Blanchard, Yolande Cox, Craig Gedye, Catherine Johnson**. CANcierge- An Application (App) for patients to navigate cancer services, improve treatment experiences and enhance capacity for self care. CNSA Annual Congress 2018, Brisbane

GRANT FUNDING

1. **Mandaliya, H.** HCRA Statistical support grants x 2 (\$4000.00)
2. **Lombard, J & Mandaliya, H.** 2018 HMRI Ovarian Cancer Grant (HMRI- G1801351) \$20,000: Hormonal control of ovarian cancer.
3. **Gilbert J, Garg MB** (2019) Essential equipment including biohazard safety Hood for cancer research in Medical oncology. CMN Coalfields Cancer Support Group Equipment Grant Scheme: \$17,416.00
4. **Ackland SP and Garg MB (2019).** Hospital Scientist Salary in Medical Oncology Research Laboratory at Calvary Mater Newcastle. Hunter Cancer Research Alliance \$20,000.
5. **van der Westhuizen A** and Bowden NA. Avelumab Investigator-Sponsored Study PRIME002. 2019-2022 \$266,000 and drug supply from Merck Serono.
6. Bowden NA, **van der Westhuizen A.** HMRI Specified Melanoma Project Grant for PRIME002 2017-2019 \$49,000
7. Bowden NA, Graves M, **van der Westhuizen A**, Vilain R, Galettis P. HMRI Melanoma Project Grant. Standard doses of anti-PD-1 immunotherapy for metastatic melanoma may not be sufficient for all patients and may influence patient response to therapy. \$20,000
8. **Sakoff JA**, Aldrich-Wright J, **Gilbert J.** (2018). Development of DNA intercalating platinum complexes for the treatment of cancer. CMN Granting Scheme. \$20,000
9. Lincz L, **Sakoff JA.** (2018). Coalfields Cancer Support Group. CMN Granting Scheme. Real time quantitative PCR thermocycler. \$30,000.
10. **Garg M, Ackland S, Sakoff JA** (2018). Essential statistics and pharmacokinetic software with required hardware for oncology clinical research projects data analysis. CMN Granting Scheme. \$8200.
11. **Sakoff JA, Gilbert J**, and Scarlett C. (2019) Priority Research Centre for Chemical Biology and Clinical Pharmacology. Project seed grant. A new class of small molecules targeting pancreatic and other GI tumours. \$10,000.
12. **Sakoff JA**, Aldrich-Wright J, **Gilbert J. and Mandaliya H** (2019). New platinum agents for the treatment of ovarian cancer. Hope4cure Foundation. \$39,252.
13. Paul, C, **Day, F** et al. Improving outcomes for cancer patients who smoke: The Care to Quit stepped wedge randomized trial. NHMRC Grant \$1,408,506
14. **Gedye C**, Chye A, Valkenburghs S, Ramadan S, Lau P, Healey K, James E. 2019 Precision Exercise to Increase Prostate Cancer Tumour Perfusion: A pilot study; in-kind support.

15. **Gedye, Mandaliya, Lynam, Mallesara, Bonaventura;** Livshin, CelliMarchett, 2019 ANZUP Below The Belt Pedalton Fund Clinical Trial Seed Grant; AdapTax: feasibility, acceptability and safety of adaptive dosing of docetaxel in men with metastatic castrate-resistant prostate cancer, \$50,000
16. **Gedye C**, Nowak A, Hovey E, Koh E-S, Harrup R, Parkinson J, Barnes E, Jeffree R, 2019 MRFF Clinical Trials Rare Cancers, Rare Diseases and Unmet Need. MAGMA Multi-Arm GlioblastoMa Australasia; COGNO Trials, \$2,421,993.
17. Pook D, **Gedye C**, Harris C, Davis I, Krieger L, McJannett M. 2018 UNICAB: A phase II trial of single agent cabozantinib in patients with locally advanced or metastatic non-clear cell renal cell carcinoma post immunotherapy or who are unsuitable for immunotherapy (ANZUP 1802), \$1,173,201. sponsor Ipsen Australia.
18. **Gedye, Mandaliya, Lynam, Mallesara, Bonaventura, Abell;** Livshin, CelliMarchett, 2018 ANZUP Below The Belt Pedalton Fund Clinical Trial Seed Grant; EnzAdapt: feasibility, acceptability and safety of adaptive dosing of enzalutamide in men with metastatic castrate-resistant prostate cancer, \$50,000
19. Harris C, De Abreu Lorenzo R, **Gedye C** 2019 ANZUP Below The Belt Pedalton Fund Clinical Trial Seed Grant, What, where, when and how long? Using PBS data to understand patterns of care and survival in Australia patients treated for metastatic clear cell kidney cancer., \$50,000
20. **Gedye, C** 2019 Perpetual IMPACT Philanthropy, Virtual Biobank, University of Newcastle, CIA \$50,000.
21. Dhillon H, Roberts N, Harris C, **Gedye C**, 2018 ANZUP Below The Belt Pedalton Fund Clinical Trial Seed Grant, Connecting Patients to Healthcare Providers through Electronic Patient Reported Outcomes in people living with GU cancers, \$50,000.
22. EL James, **C Gedye**, J Martin, **N Zdenkowski**, A McGarvey, R Plotnikoff, B Britton, S Nixon, M Duncan, F Stacey, 2018 USE-IT (Universal Screening of Exercise needs for cancer patients In Treatment): Establishing the feasibility of implementing standardised screening and referral to physical activity support for cancer patients. \$39,874. Funded by Hunter Cancer Research Alliance (HCRA) Implementation Science Flagship Program pilot project

OTHER

Dr Nicholas Zdenkowski - PhD awarded: "Supporting decision-making about neoadjuvant therapy for women with breast cancer" U Syd, Faculty of Medicine

DEPARTMENT OF GENERAL MEDICINE

PUBLICATIONS

- Kabakambira JD, Hategeka C, Page C, Ntirenganya C, Dusabejamba V, Ndoli J, Ngabonziza F, Hale D, Bayingana C, **Walker T.** Efficacy of Helicobacter pylori eradication regimens in Rwanda: a randomized controlled trial. BMC Gastroenterology. 2018 Dec;18(1):134.
- Robertson F, Mutabazi Z, Kyamanywa P, Ntakiyiruta G, Musafiri S, **Walker T**, Kayibanda E, Mukabatsinda C, Scott J, Costas-Chavarri A. Laparoscopy in Rwanda: a national assessment of utilization, demands, and perceived challenges. World Journal of Surgery. 2019 Feb 15;43(2):339-45.
- Valtis YK, Rosenberg JD, Wachter K, Kisenge R, Mashili F, Mallya RC, **Walker T**, Kabakambira JD, Egide A, Ntacyabukura B, Weintraub R. Better evidence: prospective cohort study assessing the utility of an evidence-based clinical resource at the University of Rwanda. BMJ Open. 2019 Aug 1;9(8):e026947.
- Sophia E. Schröder, Alisa Pedrana, Nick Scott, David Wilson, Christian Kuschel, Lisa Aufegger, Rifat Atun, Ricardo Baptista-Leite, Maia Butsashvili, Manal El-Sayed, Aneley Getahun, Saeed Hamid, Radi Hammad, Ellen 't Hoen, Sharon J. Hutchinson, Jeffrey V. Lazarus, Olufunmilayo Lesi, Wangsheng Li, Rosmawati Binti Mohamed, Sigurdur Olafsson, Raquel Peck, Annette H. Sohn, Mark Sonderup, Catherine W. Spearman, Tracy Swan, Mark Thurst, **Tim Walker**, Margaret Hellard, Jessica Howell, Innovative strategies for the elimination of viral hepatitis at a national level: a country case series. Liver International. 2019 Aug 21.
- Goodsall TM, **Walker T.** Iron absorption from oral iron supplements given on consecutive versus alternate days in iron-depleted women. BMJ Evidence-based Medicine. 2018 Dec 1;23(6):228-9.
- Acharya S, **Philcox AN**, Parsons M, Suther B, Luu J, Lynch M, Jones M, Attia J. Hunter and New England Diabetes Alliance: innovative and integrated diabetes care delivery in general practice. Australian Journal of Primary Health. 2019 June; 25(3) 219-243.
- **Paul A. Wilson**, BMed and Kathleen Melville, BMed- Disseminated Cryptococcal Infection in a Patient Receiving Acalabrutinib for Chronic Lymphocytic Leukemia, Infectious Diseases in Clinical Practice, Volume 27, Number 3, May 2019
- Yates D, Frankel A, **Miles S**, Johnson A, Hoy R. Complicated Silicosis Results from Occupational Exposure to Engineered Stone Products. MJA Medical Education, Insights. Issue 46, 26 November 2018
- C Garcia-Esperon, F Soderhjelm Dinkelspiel, F Miteff, **S Gangadharan**, T Wellings, B O'Brien, J Evans, T Lillicrap, J Demeestere,



A Bivard, M Parsons, C R Levi, N J Spratt. Implementation of multimodal computed tomography in a telestroke network: Five-year experience. *CNS Neuroscience & Therapeutics*, 2019. DOI:10.1111/cns.13224.

- **Shyam Gangadharan**, Carlos Garcia-Esperon, Ferdinand Miteff, Thomas Wellings, Billy O'Brien, James Evans, Thomas Lillicrap, Andrew Bivard, Pablo Garcia Bermejo, Khaled Alanati, Mark Parsons, Christopher Levi and Neil Spratt. Analysis of transfer metrics for endovascular clot retrieval in a telestroke network of regional Australia. *International Journal of Stroke* 2019, Vol. 14(2S) 3–30.

ORAL PRESENTATIONS

- **A Philcox**, ADS 2019, Sydney, abstract submission, Primary and Tertiary clinicians caring together for better outcomes for people with diabetes
- **Shyam Gangadharan**, Stroke Society of Australasia, 2019 (Canberra). Air versus Road retrievals for Endovascular Clot Retrieval? Analysis from a telestroke network in rural Australia.

CLINICAL TRIALS

- **Shyam Gangadharan**: Co-Investigator in the following international clinical trials- TASTE, TEMPO 2, MIDAS 2, EXTEND-IA TNK, REMEDY, CHARM.

CLINICAL TOXICOLOGY AND PHARMACOLOGY

JOURNAL ARTICLES AND PUBLICATIONS

1. Chiew AL, Isbister GK, Page CB, Kirby KA, Chan BSH, Buckley NA. Modified release paracetamol overdose: a prospective observational study (ATOM-3). *Clin Toxicol (Phila)*. 2018 Sep;56(9):810-819
2. Wijewickrama ES, Kurukulasooriya I, Gunatilake M, Priyani AA, Gnanathanan A, Gawarammana I, Isbister GK. Determination of the sub-lethal nephrotoxic dose of Russell's viper (*Daboia russelii*) venom in Wistar rats. *Toxicon*. 2018 Sep 15;152:43-45.
3. Enjeti, AK, Lincz L, Seldon M, Isbister GK. Circulating Microvesicles in Snakebite Patients with Microangiopathy. *Res Pract Thromb Haemost*. 2018 Nov 22;3(1):121-125.
4. Chiew AL, Wright DFB, Dobos NM, McArdle K, Mostafa AA, Newth A, Roberts MS, Isbister GK. "Massive" metformin overdose. *Br J Clin Pharmacol*. 2018 Dec;84(12):2923-2927
5. Page CB, Parker LE, Rashford SJ, Bosley E, Isoardi KZ, Williamson FE, Isbister GK. A Prospective Before and After Study of Droperidol for Prehospital Acute Behavioral disturbance, Prehosp Emerg Care. 2018 Nov-Dec;22(6):713-721.
6. Qing Xi Ooi, Duffull S, Wright D, Isbister G. A factor VII-based method for the prediction of anticoagulant response to warfarin. *Sci Rep*. 2018 Aug 13;8(1):12041
7. Silva A, Cristofori-Armstrong B, Rash LD, Hodgson WC, Isbister GK. Defining the role of post-synaptic α -neurotoxins in paralysis due to snake envenoming in humans. *Cell Mol Life Sci*. 2018 Dec;75(23):4465-4478
8. Ediriweera DS, Diggle PJ, Kasturiratne A, Pathmeswaran A, Gunawardena NK, Jayamanne SF, Isbister GK, Dawson A, Lalloo DG, de Silva HJ. Evaluating temporal patterns of snakebite in Sri Lanka: the potential for higher snakebite burdens with climate change. *Int J Epidemiol*. 2018 Dec 1;47(6):2049-2058.
9. Page CB, Parker LE, Rashford SJ, Bosley E, Isoardi KZ, Williamson FE, Isbister GK. A Prospective Study of the Safety and Effectiveness of Droperidol in Children for Prehospital Acute Behavioural Disturbance. *Prehosp Emerg Care*. 2018 Oct 31:1-26. doi: 10.1080/10903127.2018.1542473
10. Chan B, Isbister G, Page C, Isoardi K, Chiew A, Kirby KA, Buckley NA. Clinical Outcomes from early use of digoxin

specific antibodies versus observation in chronic digoxin poisoning. (ATOM-4). Clin Toxicol (Phila). 2018 Dec 26;1-6. doi: 10.1080/15563650.2018.1546010.

11. Silva A, Sedgwick EM, Siribaddana S, Isbister GK. Sub-clinical neuromuscular dysfunction after envenoming by Merrem's hump-nosed pit viper (Hypnale hypnale). Toxicology Communications. 2019 Feb; 3(1):23-28.
12. Waidyanatha S, Silva A, Siribaddana S, Isbister GK. Long-term Effects of Snake Envenoming. Toxins (Basel). 2019 Mar 31;11(4). pii: E193.
13. Kakumanu R, Kuruppu S, Rash LD, Isbister GK, Hodgson WC, Kemp-Harper BK. D. russelii Venom Mediates Vasodilatation of Resistance Like Arteries via Activation of Kv and KCa Channels. Toxins (Basel). 2019 Apr 1;11(4). pii: E197.
14. Kumara H, Seneviratne N, Jayaratne DS, Siribaddana S, Isbister GK, Silva A. Severe coagulopathy in Merrem's hump-nosed pit viper (Hypnale hypnale) envenoming unresponsive to fresh frozen plasma: A case report. Toxicon. 2019 May;163:19-22.
15. van Helden D, Dosen P, O'Leary M, Isbister GK. Two pathways for venom toxin entry consequent to injection of an Australian elapid snake venom. Sci Rep. Jun 13;9(1)
16. Stevens GJ, Hammond TE, Brownhill S, Anand M, de la Riva A, Hawkins J, Chapman T, Baldacchino R, Micallef JA, Andepalli J, Kotak A, Gunja N, Page A, Gould G, Ryan CJ, Whyte IM, Carter GL, Jones A. SMS SOS: a randomized controlled trial to reduce self-harm and suicide attempts using SMS text messaging. BMC Psychiatry. 2019 Apr 18;19(1):117.
17. McGill K, Hiles SA, Handley TE, Page A, Lewin TJ, Whyte I, Carter GL. Is the reported increase in young female hospital-treated intentional self-harm real or artefactual? Aust N Z J Psychiatry. 2019 Jul;53(7):663-672.
18. Kerridge R, Luu J, Whyte I, Prior F, Story DA. Anaesth Intensive Care. 2018 Nov;46(6):628-629
19. Downes MA, Sadler CW, Vidler S, Lovett CJ. Difficult to sedate case of acute behavioural disturbance secondary to baclofen withdrawal. Emerg Med Australas. 2019 Jun;31(3):493-494.

CONFERENCE PRESENTATIONS

1. Isbister G. International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT) Congress September 2018. Plenary presentation 'Clinical Toxicology – evidence to address the myths'
2. Isbister G. North American Congress on Clinical Toxicology (NACCT) Meeting, Chicago, 2018: APAMT symposium: "Snake venom kinetics"
3. Isbister G. PCPA Advanced Trainee Invited talk Sydney 2019 "Snake Bite: Everything a Haematologist needs to know"

4. Isbister G. International Conference of Emergency Medicine 2019, Korea. Two invited talks: Snakebite and anticoagulant overdose.

RESEARCH FUNDING AND GRANTS

1. NHMRC Centre for Research Excellence "Translational Venom and Antivenom Research" Isbister GK, Buckley NA, de Silva J, Hodgson WC, Brown SGA, de Silva A, Lalloo D, Dawson A, Garawammanna I, Graudins A (University of Newcastle). 2016-2021
2. NHMRC Senior Research Fellowship (B). "Multicentre studies of interventions in clinical toxicology and envenoming, including antivenoms, antidotes and decontamination" Isbister G. Clinical Trials. 2018-2022

PALLIATIVE CARE

The Department of Palliative Care at Calvary Mater Newcastle is working to consistently improve multidisciplinary patient-centred care for people and their loved ones facing life limiting illness. Palliative Care at CMN has strong partnerships enabling research across health settings, including primary care, residential aged care and regional and rural settings.

RESEARCH UNIT AND SENIOR RESEARCH FELLOW

The department's vision for establishment of a clinical palliative care research unit moved closer to realisation through the appointment of a senior research fellow. Dr Sarah Moberley is an epidemiologist with a strong track record in successful collaborative research. Sarah's role over the next two years is to build infrastructure and capabilities which will support research within the department and foster collaboration with partners to conduct research that matters to patients, with rapid translation into improved service and patient and carer reported outcomes.

Priority research areas include:

- Optimisation of referral and triage processes to enable timely patient centred care
- Models of multidisciplinary community-based palliative care to enable care in the place of preference
- Home-based enhanced models of palliative care
- Palliative care in residential aged care facilities

ENABLING END OF LIFE CARE IN RESIDENTIAL AGED CARE FACILITIES

Jacqui Hewitt, Rachel Hughes, Sarah Moberley, John Attia, Sharon Ryan

The department was granted research funding to undertake a project concentrating on enablement of person centred end of life care in aged care facilities. This project is being undertaken on behalf of the Palliative and End of Life workstream of the Hunter Integrated Alliance and is a collaboration between Calvary Mater Newcastle and six residential aged care facilities. It aims to

identify a locally effective model of palliative care support to enable end of life care in residential aged care facilities through exploration of current models, indicators of quality of end of life care and exploring enablers and barriers to patient centred end of life care. Results will be available June 2020.

TESTING A NEW MODEL OF COMMUNITY BASED PALLIATIVE CARE

Jessica Scaife, Rachel Hughes, John Attia, Sarah Moberley, Alisha Chand, Graeme Kershaw, Peter Kozacynski

Funded by the Medical Research Future Fund, this is a randomised trial to assess a new model of community-based palliative care. The intervention consists of care coordination, routine surveillance for changes in needs and the availability of personal care in the home during unstable periods (in addition to standard care). The trial is continuing and will be complete by June 2021.

JOURNAL ARTICLES

Nixon, J., Gray, J., Turner, J., Bernard, A., Scaife, J. & Cartmil, B. (2018). Communicating Actively Responding Empathetically (CARE): Comparison of Communication Training Workshops for Health Professionals Working in Cancer Care, Journal of Cancer Education <https://doi.org/10.1007/s13187-018-1439-0>

CONFERENCE PRESENTATIONS

Martin J, Patel J. What pharmacology and pharmacokinetics can offer palliative care. Australian and New Zealand Society of Palliative Medicine Conference, September 2018, Sydney, Australia.

Patel J. Laxative use in inpatients in oxycodone/naloxone prolonged release and oxycodone prolonged release for cancer and non-cancer pain. Australian and New Zealand Society of Palliative Medicine Conference, September 2018, Sydney, Australia.

Hughes R, Sneesby L, Culver J, Chand A. A Community of Practice for Residential Aged Care - Partnerships Across Community and Specialist Palliative Care. 16th World Congress of the European Association for Palliative Care, May 2019, Berlin, Germany.

Knight E, Schenker Y, Hughes R. Interpreters' Experience of Working with Healthcare Professionals during End of Life Discussions with Culturally and Linguistically Diverse Patients in Perth, Western Australia. 16th World Congress of the European Association for Palliative Care, May 2019, Berlin, Germany.

CURRENT PROJECTS

Testing an enhanced community team model to improve access and quality of palliative and end of life care provided at home.



Financial Report

Financial Report for the Year Ended 30 June 2019

Calvary Health Care (Newcastle) Limited | ABN 75 081 149 126



Being for Others

Annual Financial Report 30 JUNE 2019

Calvary Health Care (Newcastle) Limited
ABN 75 081 149 126



Hospitality



Healing



Stewardship



Respect

CONTENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

1	Directors' Report
5	Auditor's Independence Declaration
6	Directors' Declaration
7	Statement of Profit or Loss and Other Comprehensive Income
8	Statement of Financial Position
9	Statement of cash flows
10	Statement of changes in equity
11	Notes to the financial statements
	1 Summary of significant accounting policies
	2 Revenue and other income
	3 Expenses
	4 Cash and cash equivalents
	5 Trade and other receivables
	6 Other financial assets
	7 Property, plant and equipment
	8 Restricted assets
	9 Provisions
	10 Retirement Benefit Plans
	11 Commitments for expenditure
	12 Related parties
	13 Contingent liabilities and assets
	14 Economic dependency and going concern
	15 Events subsequent to balance date
25	Independent Auditor's Report

DIRECTORS' REPORT

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

The Board of Directors of Calvary Health Care (Newcastle) Limited submit their report for the year ended 30 June 2019.

Directors

The names of the Company's Directors in office during the financial year and until the date of this report are as follows.

Directors were in office for the entire period unless otherwise stated.

NAME	QUALIFICATIONS	AREAS OF SPECIFIC RESPONSIBILITY
Hon. John Watkins AM	LLB, MA, DipEd, Hon GLEI, MAACD MBBS	Chair All Committees, Ex Officio Director
Assoc Prof Richard Matthews AM		Chair, Clinical Governance Committee Member, Mission & Ethics Committee
Prof Katherine McGrath (resigned 22 Nov 2018)	MBBS, FRCPA, FAICD	Chair, Clinical Governance Committee Member, Performance & Remuneration Committee
Patrick O'Sullivan	CA, MAICD	Deputy Chair Chair, Audit & Risk Committee
David Caughlan	BEC, Dip FP, FAICD, FCPA (Retired)	Director Chair, Performance & Remuneration Committee Member, Audit & Risk Committee
Jennifer Stratton	BA (Economics, English & History), FAICD	Director Chair, Mission & Ethics Committee Member, Performance & Remuneration Committee
Jim Birch AM	BHA, FCHSA	Director Member, Audit & Risk Committee Member, Clinical Governance Committee
Lucille Halloran	BCom (Hons), BA (Admin), ESOP, GAICD, Member CA ANZ	Director Member, Performance & Remuneration Committee Member, Mission & Ethics Committee
Annette Carruthers	MBBS (Hons), FRACP, FAICD, Grad Dip App Fin	Director Member, Audit & Risk Committee Member, Clinical Governance Committee
Lucille Scamozzin	LLB (Hons 1), BA, GAICD	Director Member, Mission & Ethics Committee
Agnes Sheehan (appointed 22 Nov 2018)	BA Business Studies (Hons), GAICD	Director Member, Audit & Risk Committee Member, Clinical Governance Committee
Philip Mahony	BCom, LLB, GradDip CSP, ADS, MAICD	Company Secretary

DIRECTORS' REPORT

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

Directors (cont'd)

The Directors attended the following Board meetings and applicable Committees each Director was eligible to attend:

Director	Board Meetings		ABC		MSEC		PNC		COC	
	Held	Att	Held	Att	Held	Att	Held	Att	Held	Att
Hon John Watkins AM	9	9								
Patrick O'Sullivan	9	9	5	5						
Assoc Prof Richard Matthews AM	9	7			4	4			4	4
Prof Katherine McGrath	9	3					1	1	2	2
David Caughlan	9	9	5	5			3	3		
Jennifer Stratton	9	8			4	4	3	3		
Jim Birch AM	9	8	5	4					4	4
Lucille Halloran	9	7			4	4	3	3		
Annette Carruthers	9	9	5	4					4	3
Lucille Scamozzin	9	9	5	5	4	4				
Agnes Sheehan	6	6	2	2					2	2

Key:

ABC Audit & Risk Committee
MSEC Mission & Ethics Committee
COC Clinical Governance Committee

Short and long term objectives

Calvary's strategic aims are to:

- 1) Put the person and family at the centre of care in all settings, continuing to focus on palliative and end of life care;
- 2) Sustain the ability of our hospitals, aged care facilities and community services to provide quality and compassionate care in the communities we serve;
- 3) Improve the delivery system in order to promote effective, equitable, quality care and ensure patient, resident and client safety; and
- 4) Grow, integrate and innovate within our 'circle of competence' in the environment in which we operate.

It's Calvary's aim to provide a highly valued service that's greater than the sum of its parts.

Principal activities

The principal activities of the Company are the ownership and operation of the Calvary Mater Newcastle hospital.

Significant changes in the state of affairs

There were no significant changes in the state of affairs of the Company during the financial year.

Results

A deficit of \$3.3M was incurred for the financial year ended 30 June 2019 (2018: deficit \$2.2M).

DIRECTORS' REPORT

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

Indemnification of officers and auditors

Little Company of Mary Health Care Ltd paid a premium during the year in relation to a Directors & Officers Liability policy indemnifying the Directors and Officers of the Group for losses which the Director or Officer may become legally obligated to pay on account of any claim made against the Director or Officer during the policy period for a wrongful act committed during the policy period.

The Company has not otherwise, during or since the end of the financial year, except to the extent permitted by law, indemnified or agreed to indemnify an officer or auditor of the Company or of any related body corporate against a liability incurred as such an officer or auditor.

Rounding off

The Company is an entity to which ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 applies. Accordingly, amounts in the financial statements and Directors' Report have been rounded off to the nearest thousand dollars, unless otherwise stated.

Proceedings on behalf of the Company

No person has applied for leave of the Court to bring proceedings on behalf of the Company or intervene in any proceedings to which the Company is a party for the purpose of taking responsibility on behalf of the Company for all or any part of those proceedings.

The Company was not a party to any such proceedings during the year.

Member guarantees

The Company is incorporated as a company limited by guarantee. If the Company is wound up, the constitution states that each member is required to contribute a maximum of \$100 towards meeting any outstanding obligations of the Company. As the Company only has one member, a total maximum of \$100 is payable on a wind up.

Auditor's independence declaration

The auditor's independence declaration is included on page 3 of the financial statements.

The Directors' Report is signed in accordance with a resolution of Directors.

On behalf of the Directors,


Chair of the Board

Director

Dated at Sydney this 30th day of August 2019.

DIRECTORS' REPORT

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

Management is actively reviewing operational performance to further improve this result. In the event of financial assistance being required the Company may call upon financial support from the Parent Entity, Little Company of Mary Health Care Limited.

Review of operations

The Company continued to provide quality services in accordance with the mission, vision and values of the organisation.

(a) Revenue

The Company's revenue from operating activities totalled \$187.1M (2018: \$175.7M). Grants and subsidies from Government for hospital operations totalled \$151.5M (2018: \$143.9M). Grants and subsidies represent 81% (2018: 82%) of revenue from operating activities.

Revenue from operations for the year ended 30 June 2019 included \$0.8M (2018: \$0.8M) resources received free of charge - revenue relating to the recognition of the NSW government funding of superannuation contributions for employees who are members of the defined benefit contribution schemes SASIS and SSS.

(b) Expenses

The Company's expenses from operating activities totalled \$194.9M (2018: \$183.0M). Expenses on personnel costs represent 65% (2018: 65%) of total operating expense.

Staffing levels for clinical services have increased during the reporting period with total staff of 1,022 full time equivalents as at 30 June 2019 (2018: 995). The actual number of staff as at 30 June 2019 was 1,372 (2018: 1,335).

(c) Hospital activities

The overall inpatient activity for the year was 17,852 separations, an increase of 2% on the year ended 30 June 2018. Non-inpatient activity for the hospital during the year was 379,755 occasions of service, an increase of 2% on the year ended 30 June 2018.

Future developments

The Company plans to continue the integration and expansion of its current range of services in accordance with the mission, vision and values of the organisation.

Significant events after year end

There has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely, in the opinion of the Directors of the Company, to affect significantly the operations of the Company, the results of those operations, or the state of affairs of the Company, in future financial years.

Deed of access and indemnity - Directors

Little Company of Mary Health Care Ltd has executed a Deed of Access & Indemnity which provides Directors with the right of access to records for seven years after they cease office and also indemnifies Directors (to the extent permitted by law) against liability incurred in the course of their duties as a Director of companies within the Calvary group ("the Group").



Auditor's Independence Declaration under Subdivision 60-C section 60-40 of the Australian Charities and Not-for-profits Commission Act 2012

To the Directors of Calvary Health Care (Newcastle) Limited

I declare that, to the best of my knowledge and belief, in relation to the audit of Calvary Health Care (Newcastle) Limited for the financial year ended 30 June 2019 there have been:

- i. no contraventions of the auditor independence requirements as set out in the Australian Charities and Not-for-profits Commission Act 2012 in relation to the audit; and
- ii. no contraventions of any applicable code of professional conduct in relation to the audit.

KPMG

KPMG

82

Stephen Isaac
Partner
Sydney
30 August 2019

DIRECTORS' DECLARATION

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

In the opinion of the directors of the Company:

1. the Company is not publicly accountable;
2. the financial statements and notes, set out on pages 7 to 24, are in accordance with the Australian Charities and Not-for-profits Commission Act 2012, including:
 - (a) complying with Australian Accounting Standards - Reduced Disclosure Requirements and the Australian Charities and Not-for-profits Commission Regulation 2013; and
 - (b) giving a true and fair view of the Company's financial position as at 30 June 2019 and of its performance, for the financial year ended on that date;
3. there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of the directors.


Chair of the Board


Director

Dated at SYDNEY this 30th day of August 2019.

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

	Note	2019 \$ '000	2018 \$ '000
Revenue from operations		187,104	175,703
Other income		4,004	3,738
Total revenue for the year	2	191,108	179,441
Employee benefits expense		126,447	118,822
Depreciation expense		6,647	6,370
Supplies		25,407	22,474
Contracted services		26,789	25,191
Shared service contributions		3,335	3,744
Power, light & heat		6	5
Repairs and maintenance		227	176
Other expenses		5,858	6,013
Total expenses for the year		194,916	182,995
Result from operating activities		(3,808)	(3,554)
Finance income		1,496	1,350
Net deficit for the year		(2,312)	(2,204)
Other comprehensive income for the year		-	-
Total comprehensive loss for the year attributable to members of the Company		(2,312)	(2,204)

The Statement of Profit or Loss and Other Comprehensive Income is to be read in conjunction with the notes to the financial statements set out on pages 11 to 24.

7

STATEMENT OF FINANCIAL POSITION

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

	Note	2019 \$ '000	2018 \$ '000
Current assets			
Cash and cash equivalents	4	26,209	18,422
Trade and other receivables	5	4,669	3,900
Inventories		1,132	1,351
Other financial assets	6	45,000	45,000
Other current assets		453	473
Total current assets		77,463	69,146
Non-current assets			
Property, plant and equipment	7	106,921	110,806
Total non-current assets		106,921	110,806
Total assets		184,384	179,952
Current liabilities			
Trade and other payables		9,705	7,687
Provisions	9	39,684	35,196
Income received in advance		85	22
Total current liabilities		49,474	42,905
Non-current liabilities			
Provisions	9	1,506	1,193
Total non-current liabilities		1,506	1,193
Total liabilities		50,980	44,098
NET ASSETS		133,404	135,854
Equity			
Retained earnings		133,404	135,854
TOTAL EQUITY		133,404	135,854

The Statement of Financial Position is to be read in conjunction with the notes to the financial statements set out on pages 11 to 24.

8

STATEMENT OF CASH FLOWS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

	Note	2019 \$ '000	2018 \$ '000
Cash flows from operating activities			
Receipts from customers		38,745	35,258
Government grants received		147,133	135,443
Capital grants received		2,773	7,142
Payments to suppliers and employees		(183,175)	(177,291)
Interest received		1,216	545
Other income received		4,064	3,738
Net cash provided by operating activities		10,686	5,236
Cash flows from investing activities			
Proceeds on disposal of property, plant and equipment		399	388
Payment for property, plant and equipment		(3,308)	(7,691)
Net cash used in investing activities		(2,909)	(7,303)
Net increase in cash held		7,767	(2,067)
Cash at the beginning of the financial year		18,422	20,489
Cash at end of the financial year		26,209	18,422
Separate disclosure of operating and other cash at the end of the financial year:			
Operating cash		11,824	9,734
Special purpose, trust and other restricted cash	8	14,385	8,688
		26,209	18,422

The Statement of Cash Flows is to be read in conjunction with the notes to the financial statements set out on pages 11 to 24.

STATEMENT OF CHANGES IN EQUITY

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

2019	Retained earnings \$ '000	Total earnings \$ '000
Balance 1 July 2018	135,854	135,854
Net deficit for the year	(2,312)	(2,312)
Total comprehensive loss for the year	(2,312)	(2,312)
Balance 30 June 2019	133,542	133,542

2018	Retained earnings \$ '000	Total earnings \$ '000
Balance 1 July 2017	138,058	138,058
Net deficit for the year	(2,204)	(2,204)
Total comprehensive loss for the year	(2,204)	(2,204)
Balance 30 June 2018	135,854	135,854

The Statement of Changes in Equity is to be read in conjunction with the notes to the financial statements set out on pages 11 to 24.

NOTES TO THE FINANCIAL STATEMENTS

1. Summary of significant accounting policies

- Reporting Entity**
Calvary Health Care (Newcastle) Limited is a not-for-profit Public Company limited by guarantee, incorporated and domiciled in Australia.
- Statement of Compliance**
The financial statements are general purpose financial statements which have been prepared in accordance with the Australian Charities and Not-for-profits Commission Act 2012 and Australian Accounting Standards - Reduced Disclosure Requirements, and comply with other requirements of the law.
- The financial statements were authorised by the Board on 30 August 2019.
- Assets of Preparation**
The financial statements have been prepared on the basis of historical cost. All amounts are presented in Australian dollars.
- The Company is a company of the kind referred to in ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/292, and in accordance with the Class Instrument, amounts in the financial report are rounded off to the nearest thousand dollars, unless otherwise indicated.
- New and amended accounting standards and interpretations**
AASB 9 Financial Instruments replaces AASB 139 Financial Instruments: Recognition and Measurement for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting. The standard replaces AASB 139 Financial Instruments: Recognition and Measurement.
- AASB 9 contains three principal classification categories for financial assets measured at amortised cost, Fair value through OCI and Fair value through profit and loss. The classification of financial assets under AASB 9 is generally based on the business model in which a financial asset is managed and cash flow characteristics. AASB 9 eliminates the previous AASB 139 categories of held to maturity, loans and receivables and available for sale. AASB 9 largely retains the existing requirements in AASB 139 for the classification and measurement of financial liabilities.
- The Company has applied the exemption in relation to full retrospective application of AASB 9 Financial Instruments.
- Due to the transition method chosen by the Company comparative information has not been restated to reflect the requirements of the new standard. The classification and measurement requirements of AASB 9 did not have a material impact on the opening retained earnings position of the Company and therefore no adjustment to opening retained earnings at 1 July 2018 is required.
- Trade receivables and other financial assets (term deposits) are held to collect contractual cash flows representing solely payments of principal and interest. At 1 July 2018 these are classified as debt instruments at amortised cost.
- For an explanation of how the Company classifies and measures financial instruments and accounts for related gains and losses under AASB 9 refer to Note 3(a).

11

NOTES TO THE FINANCIAL STATEMENTS

The following significant accounting policies have been adopted in the preparation and presentation of the financial report:

- (a) **Taxation**
The Company is exempt from income tax under the current provisions of the Australian Income Tax Assessment Act (1997). Accordingly, there is no income tax expense or income tax payable.
- (b) **Revenue recognition**
Revenue is measured at the fair value of the consideration received or receivable.
- Rendering of services**
Patient fee revenue is recognised when the fee in respect of services provided is receivable. Accrued patient income represents an estimate of fees due from patients not billed at balance date. This estimate is calculated with reference to individual episode information and per diem rates.
- Grants received**
Reciprocal grants
Grants received on the condition that specified services be delivered, or conditions fulfilled, are considered reciprocal. Such grants are initially recognised as a liability and revenue is recognised as services are performed or conditions fulfilled.
- Non-reciprocal grants**
Revenue is recognised when the grant is received or receivable.
- Resources received free of charge**
Revenue is recognised when fair value can be reliably measured. Usage of resources is recognised as a corresponding expense.
- Interest**
Interest income is recognised using the effective interest method.
- Donations**
Donations are recognised at fair value in other income when received and any obligations in relation to the donation are extinguished.
- (c) **Finance costs**
Borrowing costs include interest and finance lease/hire purchase finance charges and are recognised using the effective interest method.
- (d) **Cash and cash equivalents**
Cash and cash equivalents in the Statement of Financial Position comprise cash at bank and in hand and term deposits with a term of less than three months. For the purposes of the statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above.

12

NOTES TO THE FINANCIAL STATEMENTS

(e) Financial Instruments

Trade receivables are recognised when they are originated. All other financial assets and liabilities are recognised when an entity becomes a party to the contractual provisions of the instrument.

Financial assets and liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. A trade receivable without a significant financing component is initially recognised at the transaction price.

Financial assets - policy applicable after 1 July 2018

The Company holds receivables with the objective to collect the contractual cash flows and therefore measures them at amortised cost using the effective interest method, less any impairment. Changes are recognised in the net result for the year when impaired, derecognised or through the amortisation process. Other financial assets are classified and subsequently measured at amortised cost as they are held for collection of contractual cash flows solely representing payments of principal and interest.

Financial assets - policy applicable before 1 July 2018

The classification of financial assets depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognised initially at fair value plus any directly attributable transactions costs on the date when they originated. Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses.

Held to maturity Investments

Term deposits with fixed maturity dates in excess of three months that the Company has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are measured at amortised cost using the effective interest method less any impairment.

Impairment of financial assets - policy applicable after 1 July 2018

Non-derivative financial assets are assessed for indicators of impairment at the end of each reporting period and are considered to be impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

Impairment of financial assets - policy applicable before 1 July 2018

The Company applies a simplified approach in calculating expected credit losses (ECLs) for trade receivables recognising a loss allowance based on lifetime ECLs at each reporting date rather than monitoring changes in credit risk. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

The Company considers a financial asset to be in default when contractual payments are 90 days past due. However, in certain cases, the Company may also consider a financial asset to be in default when internal or external information indicates that the Company is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Company. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

13

NOTES TO THE FINANCIAL STATEMENTS

Derecognition

The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership to the asset to another entity. On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of consideration received and receivable and is recognised in profit or loss.

Financial liabilities

Non-derivative financial liabilities are initially recognised at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest rate method.

Derecognition

The Company derecognises financial liabilities when, and only when, the Company's obligations are either discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in the profit or loss.

(f) Property, plant and equipment

Property, plant and equipment is stated at historical cost less any accumulated depreciation and any accumulated impairment losses.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance are charged to profit and loss during the financial period in which they are incurred.

Depreciation is recognised so as to write off the cost of assets less their residual values over their useful lives, using the straight line method. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements. Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The depreciation/amortisation rates used for each class of assets are as follows:

	2019	2018
Buildings	2.5%	2.5%
Building improvements (unless unexpired period of lease is shorter)	10.0%	10.0%
Plant and equipment, comprised of:		
Plant, equipment, fixtures and fittings	10.0%	10.0%
Medical, surgical and office equipment	15.0%	15.0%
Computer equipment	33.3%	33.3%

Motor vehicles are not depreciated as the Company's policy is to hold motor vehicles for less than one year.

14

NOTES TO THE FINANCIAL STATEMENTS

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

(a) Impairment of non-financial assets

At each reporting date, the Company assesses whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Value in use is calculated as the higher of the present value of future cash flows or the asset's depreciated replacement cost. In assessing the present value of future cash flows, future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples or other available fair value indicators.

Impairment losses are recognised in profit or loss. For non-current assets excluding goodwill, a previously recognised impairment loss is reversed only if there has been a change in assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss.

(b) Employee benefits

A liability is recognised for benefits accruing to employees in respect of salaries and wages, annual leave, long service leave, and sick leave when it is probable that settlement will be required and they are capable of being measured reliably.

Liabilities recognised in respect of short-term employee benefits are measured at their nominal values using the remuneration rate expected to apply at the time of settlement.

Liabilities recognised in respect of long-term employee benefits are measured as the present value of the estimated future cash outflows to be made by the Company in respect of services provided by employees up to the reporting date.

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

NOTES TO THE FINANCIAL STATEMENTS

(i) Critical accounting judgements and key sources of estimation uncertainty
In the application of the Company's accounting policies, the Directors are required to make estimates and judgements about the carrying amount of assets and liabilities. The estimates and associated assumptions are based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data obtained both externally and within the group. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in future periods where applicable.

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

2	Revenue and other income	Note	2019 \$ '000	2018 \$ '000
	Revenue from operating activities			
	Revenue from rendering of services		35,608	31,815
	Public Health Service recurrent grants		148,201	136,385
	Public Health Service capital grants		2,521	6,493
	Public Health Service resources received free of charge		774	810
	Total revenue from operations		187,104	175,503
	Other income			
	Donations		1,217	439
	Other income		2,787	3,299
			4,004	3,738
	Total revenue and other income		191,108	179,241
	3 Expenses			
	Superannuation - defined contribution		8,759	8,180
	Superannuation - defined benefit		774	810
	Loss on disposal of property, plant & equipment		210	607
	4 Cash and cash equivalents			
	Cash at bank and on hand		11,824	9,734
	Cash at bank - special purpose funds		14,385	8,688
			26,209	18,422
	5 Trade and other receivables			
	Current			
	Trade receivables		1,507	1,504
	Other receivables		3,081	2,359
	Other receivables due from related parties	12	21	37
			4,609	3,900
	Movement in the impairment of receivables			
	Balance at the beginning of the year		(82)	(73)
	Impairment losses recognised/reversed during the year		(72)	(69)
	Amounts written off/recovered		71	66
	Balance at the end of the year		(83)	(82)

17

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

6	Other financial assets	Note	2019 \$ '000	2018 \$ '000
	Term deposits		45,000	45,000
	7 Property, plant and equipment			
	Freehold land - at cost		7,946	7,946
	Buildings - at cost		132,317	132,276
	Less: Accumulated depreciation		(46,768)	(43,681)
			85,549	88,815
	Plant and equipment - at cost		37,264	34,434
	Less: Accumulated depreciation		(24,261)	(21,989)
			13,003	12,445
	Motor vehicles - at cost		423	394
	Assets under construction - at cost		-	1,206
			106,911	110,866
	Reconciliation of property, plant and equipment			
	Cost			
	Freehold land			
	Balance at 1 July 2018		7,946	
	Balance at 30 June 2019		7,946	
	Buildings			
	Balance at 1 July 2018		132,276	
	Additions		41	
	Balance at 30 June 2019		132,317	
	Plant and equipment			
	Balance at 1 July 2018		34,434	
	Additions		2,830	
	Disposals		(1,246)	
	Transfers from Assets under Construction		1,206	
	Balance at 30 June 2019		37,264	

18

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

	Note	2019 \$ '000
Motor Vehicles		
Balance at 1 July 2018		394
Additions		460
Disposals		(431)
Balance at 30 June 2019		423
Assets under construction		
Balance at 1 July 2018		1,206
Transfers to property, plant and equipment		(1,206)
Balance at 30 June 2019		-
Accumulated depreciation and impairment		
Buildings		
Balance at 1 July 2018		(43,461)
Depreciation expense		(3,307)
Balance at 30 June 2019		(46,768)
Plant and equipment		
Balance at 1 July 2018		(21,989)
Eliminated on disposal of assets		1,068
Depreciation expense		(3,340)
Balance at 30 June 2019		(24,261)

Land and buildings

In 2005/06 the NSW Health Administration Corporation entered into a contract with a private sector provider, Novicare Project Partnership, for financing, design, construction and commissioning of a new hospital facility, a mental health facility and refurbishment of existing buildings, and facilities management and delivery of ancillary non-clinical services on the Calvary Mater Newcastle site until November 2033 (the Public-Private Partnership ("PPP")).

Hunter New England Local Health District (HNELHD) transferred control of the newly constructed general hospital facility through a sub-lease agreement to the Company. The terms and conditions of the use of the redeveloped facility are contained in a Head Lease between the parties to the PPP arrangement. The recognition of the assets is based on the fact that the Company, being an Affiliated Health Organisation which is outside the accounting control of either HNELHD or the NSW Ministry of Health, recognises its funding (recurrent or capital) as grant income in the year of receipt.

19

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

	Note	2019 \$ '000	2018 \$ '000
8 Restricted assets			
The Company holds assets which are restricted by externally imposed conditions, for example, in line with the 'Accounts and Audit Determination' of NSW Ministry of Health in exercising its powers conferred by the Health Services Act 1997 (NSW) and grant and donor requirements.			
The assets are only available for application in accordance with the terms of these restrictions.			
Category / Conditions			
Special Purpose / Conditions imposed by granting body		20,398	17,493
No.2 Account / Conditions imposed by NSW Ministry of Health		17,016	24,942
Research grants / Conditions imposed by granting body		6,971	6,253
		<u>54,385</u>	<u>48,688</u>
Disclosed in the Statement of Financial Position as:			
Cash and cash equivalents		14,385	8,688
Other financial assets		<u>40,000</u>	<u>40,000</u>
		<u>54,385</u>	<u>48,688</u>

9 Provisions

Current	Employee benefits:		
	Annual leave	14,992	13,506
	Long service leave	24,312	21,519
	Other employee provisions	180	171
		<u>39,484</u>	<u>35,196</u>
Non Current	Employee benefits:		
	Long service leave	1,508	1,193
		<u>1,508</u>	<u>1,193</u>
Other provisions			
Other provisions comprise roster days accrued.			

20

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

10 Retirement Benefit Plans

Defined benefit plans

A small number of employees who commenced employment with the Company prior to 18 December 1992 are members of the defined benefit State Authority Superannuation Scheme (SASS). This scheme is managed by the State Super Authority and the Company has neither control nor responsibility for the scheme. The Company's only obligations are the payment of any employee salary sacrificed employer contributions and employee post-tax employee contributions. The NSW Treasury remits all other required employer contributions directly to the scheme. The Company accounts for the liability paid by NSW Treasury as having been extinguished resulting in the amount assumed being shown as part of the non-monetary revenue item described as Resources received free of charge.

The superannuation expense for the financial year is determined by using the formulae specified by the NSW Ministry of Health. The expense for certain superannuation schemes (ie Basic Benefit and First State Super) is calculated as a percentage of the employees' salary. For other superannuation schemes (ie State Superannuation Scheme and State Authorities Superannuation Scheme), the expense is calculated as a multiple of the employees' superannuation contributions.

11 Commitments for expenditure

Public private partnership (PPP)

In 2005/06, the NSW Health Administration Corporation entered into a contract with a private sector provider, Novacare Project Partnership for financing, design, construction and commissioning of a new hospital facility, a mental health facility and refurbishment of existing buildings, and facilities management and delivery of ancillary non-clinical services on the site until November 2033.

Other expenditure commitments, totalling \$8.2M (2018: \$7.9M), for the provision of facilities management and delivery of other non-clinical services on the Calvary Mater Newcastle site, were expended for the year ended 30 June 2019. This expenditure commitment over the life of the service provision is contingent upon recurrent funding continuing to be received from the NSW Health Department, via Hunter New England Local Health District. The Company has no contractual obligations to deliver these services as the agreement to provide facilities management and other non-clinical services is between NSW Health and Novacare and the Company is not a party to this agreement.

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

12 Related parties

Transactions with key management personnel

From time to time Directors and other key management personnel of the Company may be treated as patients. This service is provided on the same terms and conditions as those entered into by other employees or customers and are trivial or domestic in nature.

A payment, the details of which are confidential and not disclosed, was made by the Parent Entity, Little Company of Mary Health Care Ltd, in respect of a contract of insurance indemnifying all Officers against liability for any claims brought against a Director or Officer.

Compensation of key management personnel

Non-Executive Directors' fees and National executive salaries are paid and are reported separately by the Parent Entity, Little Company of Mary Health Care Ltd. Remuneration for the Company's Executives is detailed below.

Compensation to key management personnel of the Company	2019	2018
	\$	\$
	364,569	554,007

Transactions with other related parties

Amounts included in income received during the year from Calvary group companies:	
Supplier rebate income	4,540
Recovery of salaries and wages (incl on costs)	111,528
Recovery for goods and services	10,341
Transfer of leave provisions	-
	8,278
	96,932
	63,222

Amounts included in expenditure during the year to Calvary group companies:

National Office shared service contribution	1,695,046
National IT shared service contribution - recurrent	1,048,128
National IT shared service contribution - non-recurrent	790,572
Payments for goods and services	46,006
Insurance premiums	121,691
	1,904,952
	1,048,128
	790,572
	89,974
	60,000

Receivables due from related parties

Amounts receivable from Calvary group companies:	
Other receivables	31,318
	36,886

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

14 Economic dependency and going concern

The Company derives most of its income from the NSW Health Department, via Hunter New England Local Health District. A going concern basis for the preparation of the financial statements has been adopted as it is expected that sufficient funding from the NSW Ministry of Health will continue.

The Company has indemnification from the NSW Ministry of Health for any accrued public hospital employee leave entitlements or any other employee entitlements such as redundancies payable by Calvary Health Care (Newcastle) Ltd which the Company is liable to pay at the time of, or becomes liable to pay as a consequence of, ceasing to conduct a public hospital in whole or part, as a public hospital listed in the Third Schedule of the Health Services Act or any successor Act subject to certain conditions.

Of total revenue, 80% is derived from NSW Government funding, and 6% is derived from private patient revenue. Benefits are paid in accordance with agreements between the NSW Ministry of Health and the health funds.

The constitution of the Company has the provision required under s187 of the Corporations Act which expressly authorises the Company to act in the best interests of the Parent Entity, so that it is capable of providing economic assistance to the Parent Entity, provided the Company will not become insolvent as a result of giving such economic assistance.

The Parent Entity may, in turn, provide economic assistance to any of its subsidiaries including the Company, by withdrawing funds from any other of its subsidiaries, except for those moneys located in certain Special Purpose or Trust Fund Accounts, to provide such support as is necessary to enable the Parent Entity or subsidiary to pay its debts as and when they fall due, provided neither the Parent Entity or the Company will become insolvent as a result of the withdrawal.

The Directors currently believe that, collectively, the Parent Entity and its subsidiaries have sufficient cash resources to ensure the Company, the Parent Entity, and other subsidiaries of the Parent Entity will continue to trade as going concerns and they are unaware of any material uncertainties, events or conditions, which may cast significant doubt on this belief.

15 Events subsequent to balance date

There has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely, in the opinion of the Directors of the Company, to affect significantly the operations of the Company, the results of those operations, or the state of affairs of the Company in future financial years.

24

NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2019 | Calvary Health Care (Newcastle) Limited

13 Contingent liabilities and assets

Claims on managed fund

On 1 July 1989 the NSW Government implemented a self insurance scheme known as the Treasury Managed Fund (TMF). Since that time, the Company has been a member of the TMF. The TMF will pay to or on behalf of the Company all sums which it shall become legally liable to pay by way of compensation or legal liability except for employment related, discrimination and harassment claims that do not have state-wide implications. Therefore, since 1 July 1989, apart from the exceptions noted above no contingent liabilities exist in respect of liability claims against the Company. A Solvency Fund (now called Pre-Managed Fund) Reserve was established by the NSW Government to deal with the insurance matters incurred before 1 July 1989 that were above the limit of insurance held or for matters that were incurred prior to 1 July 1989 that would have become verdicts against the State. The Pre-Managed Fund will respond to all claims against the Company.

Workers compensation hindsight adjustment

The NSW Treasury Managed Fund normally calculates hindsight premiums each year. However, in relation to workers compensation, adjustments are delayed. The final hindsight adjustment for the 2014/15 fund year and an interim adjustment for the 2016/17 fund year were not calculated until 2019/20. The 2016/17 final and 2017/18 interim hindsight calculations will be paid in 2020/21.

It is not possible for the Company to reliably quantify the amount outstanding.

There are no other events identified and not brought to account which could be expected to have a material effect on the financial statements in the future.

23

To the members of Calvary Health Care (Newcastle) Limited

Report on the audit of the Financial Report

Opinion

We have audited the **Financial Report** of Calvary Health Care (Newcastle) Limited (the Company).

In our opinion, the accompanying **Financial Report** of the Company is in accordance with Division 60 of the Australian Charities and Not-for-profits Commission (ACNC) Act 2012, including:

- i. giving a true and fair view of the Company's financial position as at 30 June 2019, and of its financial performance and its cash flows for the year ended on that date; and
- ii. complying with Australian Accounting Standards – Reduced Disclosure Requirements and Division 60 of the Australian Charities and Not-for-profits Commission Regulation 2013.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the Financial Report section of our report.

We are independent of the Company in accordance with the auditor independence requirements of the ACNC Act 2012 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the Financial Report in Australia. We have fulfilled our other ethical responsibilities in accordance with the Code.

Other information

Other information is financial and non-financial information in Calvary Health Care (Newcastle) Limited's annual reporting which is provided in addition to the Financial Report and the Auditor's Report. The Directors are responsible for the Other Information.

Our opinion on the Financial Report does not cover the Other Information and, accordingly, we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the Financial Report, our responsibility is to read the Other Information. In doing so, we consider whether the Other Information is materially inconsistent with the Financial Report or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We are required to report if we conclude that there is a material misstatement of this Other Information, and based on the work we have performed on the Other Information that we obtained prior to the date of this Auditor's Report we have nothing to report.

Responsibilities of the Directors for the Financial Report

The Directors are responsible for:

- i. Preparing the Financial Report that gives a true and fair view in accordance with Australian Accounting Standards – Reduced Disclosures Requirements and the ACNC Act.
- ii. Implementing necessary internal control to enable the preparation of a Financial Report that gives a true and fair view and is free from material misstatement, whether due to fraud or error; and
- iii. Assessing the Company's ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the Financial Report

Our objective is:

- i. to obtain reasonable assurance about whether the Financial Report as a whole is free from material misstatement, whether due to fraud or error; and
- ii. to issue an Auditor's Report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this Financial Report.

As part of an audit in accordance with Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit.

We also:

- i. Identify and assess the risks of material misstatement of the Financial Report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ii. Obtain an understanding of internal control relevant to the Audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an



- opinion on the effectiveness of the Company's internal control.
- iii. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.
 - iv. Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our Auditor's Report to the related disclosures in the Financial Report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our Auditor's Report. However, future events or conditions may cause the Company to cease to continue as a going concern.
 - v. Evaluate the overall presentation, structure and content of the Financial Report, including the disclosures, and whether the Financial Report represents the underlying transactions and events in a manner that achieves fair presentation.

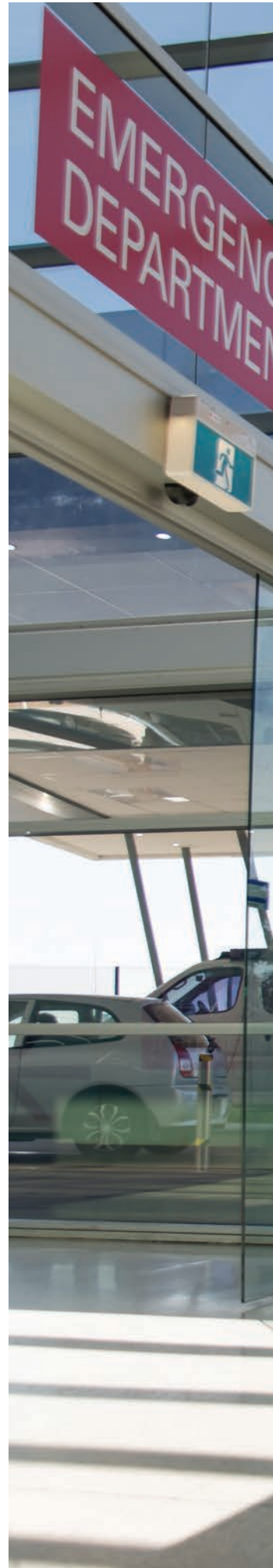
KPMG

822

KPMG

Stephen Isaac
Partner

Sydney
30 August 2019







Mater Newcastle

Locked Mail Bag 7
Hunter Region Mail Centre, NSW 2310, Australia
P: 02 4921 1211

www.calvarymater.org.au

Hospitality
Healing
Stewardship
Respect