



**Calvary**

**Mater Newcastle**

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

## Review of Operations

2017/2018







# Contents

The Spirit of Calvary	2
Management and Community Advisory Council	4
Report from the Chief Executive Officer	6
Report from the Community Advisory Council	8
Department Reports	10
Activity and Statistical Information	57
Year in Review	58
A Snapshot of our Year	61
Research and Teaching Reports	62
Financial Report 2017/2018	82



## 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
- Director of Medical Services: Dr MaryAnn Ferreux
- 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
- 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: Stacey Diana and Kate Cooper (to July 2018) / Jessica Scaife
- Desktop Services Manager: Clinton Starrett
- Director Alcohol and Drug Services: Dr Craig Sadler



- Director of Anaesthetics: Dr Bernard McClement (October 2017) / Allysan Armstrong-Brown
- Director Clinical Pharmacology and Toxicology and Director of Prevocational Education and Training: Professor Ian Whyte
- Acting 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 Gildenhuys
- 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 Melanoma Unit: Dr Fiona Abell
- Director of Pharmacy: Rosemary James
- Director of Radiation Oncology: Dr Mahesh Kumar
- Director of Social Work: Lyn Herd
- Emergency Department Nurse Manager: Jo-Anne Berry and Rebecca Robertson
- Emergency Department Clinical Nurse Unit Manager: Jacinta Carr / Maree O'Connor
- Emergency Department Nurse Unit Manager: Kim Blayden
- Financial Accounting Manager: Natasha MacNeill (to November 2017)
- 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
- Management Accounting Manager: Neville Brown
- Medical Centre Nurse Unit Manager / Hospital in the Home: Kelly Crawford
- Medical Centre Front Office Manager: Lyn Booth (to August 2017) / Rebecca Cruickshank
- Melanoma Unit Nurse Unit Manager: 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: Kerri Doyle (to March 2018) / Acting Manager Leanne Cooper
- Payroll Manager: Kerrie Chapman
- Physiotherapist in Charge: Judy Holland
- Pre-Procedures Nurse Unit Manager: Emma Brady and Jodie Casserly
- Public Affairs and Communications Manager: Helen Ellis
- Quality Manager: Lara Riley (to May 2018) / 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: Cheryl Cooley / 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: Wendy Johnson (to March 2018) / Linzi Nolan

## Community Advisory Council

- Chairperson: Cathy Tate, Consumer Representative

### Members:

- Teresa Brierley, Consumer Representative
- Kay Fordham, Consumer Representative
- Joy Reid, Consumer Representative
- Susan Russell, Consumer Representative
- Steven Tipper, Consumer Representative
- Brenda Ainsworth, Calvary National Director Public Hospitals
- Greg Flint, Chief Executive Officer
- Mary Ringstad, Director of Mission
- Wayne Wells, Director of Finance and Corporate Services
- Helen Ellis, Public Affairs and Communications Manager

# Report from the Chief Executive Officer

It is my privilege to present the 2017/18 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 whilst delivering continuous improvement and innovation.

Calvary Mater Newcastle is the major cancer care centre for Hunter New England Local Health District and 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 Hunter New England Local Health District 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 Hunter New England Local Health District networks.
- 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 continued to upgrade its facilities with a full refurbishment of Ward 4C (Medical) to improve facilities for the care and comfort of patients and staff. A new car parking management system was introduced to improve access for patients, carers, visitors and staff.

On 8 November 2017 Calvary Mater Newcastle received world-wide recognition for its VIP Program at the 41<sup>st</sup> International Hospital Federation Congress in Taipei. With 131 entries, from 90 organisations, in 42 countries competing for the awards, being selected as one of the finalists is a recognition that the entry was among the best corporate social responsibility activities in the world. Through this program, Calvary Mater Newcastle staff identify patients at risk of re-presenting to hospital, to both reduce this risk and improve their quality of life by addressing the remedial, social and clinical factors that result in them needing hospital care.

*“Every day our staff do amazing things. Their contribution 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.”*

In October 2017, three Calvary Work Health Safety Awards were awarded to Calvary Mater Newcastle staff members. Peter Martyn and David Millington

were jointly awarded the WHS Excellence Award for the Best Safety Solution. Carolyn Walker and Kelly Crawford scooped first prize in the Calvary STAR Awards for Best Clinical Safety Solution for the hospital's Infusion Lounge. The Calvary Safety Excellence Awards aim to raise awareness of workplace health and safety requirements across all Calvary sites.

Every day our staff do amazing things. Their contribution 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.

The hospital celebrated Mary Potter Day on 23 November 2017 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 Jennifer Moore, Administrative Assistant, Haematology.

In August 2017, Dr Nicholas Zdenkowski, Clinical Research Fellow and Medical Oncologist, won the Patients as Partners Award in the High Value Health Care Awards category at the Hunter New England Health Excellence Awards.

As always our Volunteers and Auxiliary members are 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 \$327,162.43 from their tireless fundraising work.

Glad Dent, Calvary Mater Newcastle Auxiliary member, was announced as the winner of the Volunteer of the Year – Individual Award at the 2017 Hunter New England Health Excellence Awards



in August 2017, and Hunter Region Senior Volunteer of the Year at the Annual NSW Volunteer of the Year Awards.

Committed Auxiliary member and Auxiliary Secretary, Margaret Dougherty, was voted a finalist in the Hunter Water Hunter Hero Awards as featured in the Newcastle Herald.

In October 2017, the Auxiliary attended the United Hospitals Auxiliaries Conference and received two prestigious awards; 'Most hours per member' and 'Runner-up most money net'.

I would like to mention two major awards for service to the community. Kay Fordham, Community Advisory Council member and Auxiliary Treasurer, was recognised with a Medal of the Order of Australia (OAM) for her service to community health on Australia Day 2018. Cathy Tate, Chairperson of the Calvary Mater Newcastle Community Advisory Council, was recognised in the Queen's Birthday 2018 Honours List. Cathy was awarded a Medal of the Order of Australia (OAM) for service to the community of Newcastle.

In August 2017 we celebrated the 90th Anniversary of the hospital's Auxiliary 'Cancer Carers'. We extend our congratulations to our hard-working Auxiliary who we highly value and they represent such an important component of our heritage and who we are as an organisation.

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 and congratulations.

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 in continuing the hospital's role as a major cancer care and research facility. 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.

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

**Greg Flint**  
**Chief Executive Officer**



# 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 community 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 CAC's objectives are to assist the Chief Executive Officer (CEO) with, and provide advice on, consumer and community engagement in order to ensure Calvary Mater Newcastle continues the mission of Calvary and achieves objectives 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 the financial year 2017/18, the CAC has continued to positively impact patient care outcomes and help improve patients and visitors experience through a number of methods.

## Hospital committees

CAC members are represented on a number of hospital committees including the Patient Care Quality Committee, Heritage Committee, Mission and Values Committee, Clinical Ethics Committee, Infection Prevention and Control Committee, Standard 2 Partnering with Consumers Working Party, and Palliative and End of Life Care Committee. By CAC members participating in the hospital's committees they are able to ensure the committee recognises consumer concerns, present how consumers may think and feel about certain issues, provide information about any relevant issues affecting consumers, and protect the interests of consumers, service users and potential service users. CAC members also have the opportunity to review/discuss patient feedback and complaints, together with reviewing performance data. Staff members are appreciative of their input and value their contribution greatly.





## Calvary Mater Newcastle Consumer and Community Engagement Framework (2018-2021)

This year the CAC was instrumental in driving the development of the first edition of the Calvary Mater Newcastle Consumer and Community Engagement Framework (2018-2021). This framework underpins and builds upon the continuing efforts of consumer engagement at Calvary Mater Newcastle. It provides a structure which embeds continuous and meaningful engagement with consumers and community partners in the work the hospital carries out. It will help expand the scope of engagement activity, provide new systems and infrastructure, and build the workforce's knowledge and capacity.

The actions and priorities developed in the framework were driven by rich and varied conversations with consumers, ensuring their direct input from the beginning. CAC members provided a strong and reliable voice of review at every stage of the process and will govern, monitor and evaluate the framework's implementation.

### Participating in the development and review of quality improvement activities

On a regular basis CAC members actively participate and provide feedback on a number of hospital initiatives. The CAC has a key role in providing feedback about consumer information publications including the hospital's Patient Information Guide, Pre-Admission Guide and car parking fact sheet. The group also participate in surveys, focus groups and ad-hoc meetings, where members provide valuable advice to the hospital from a consumer perspective.

CAC meetings also provide an opportunity for staff to present to the CAC regarding hospital initiatives and service developments, and in return receive valued input from CAC members. Past presentation topics have included: the #endPIparalysis campaign, Rapid Response Project, Translational Research Strategic Plan, Car Park Upgrades, Cultural Safety, and the Consumer Representatives Database.

### CAC documentation

CAC members worked together to update the CAC's Terms of Reference to ensure it is in line with CAC members' current roles and responsibilities. Additional CAC documentation was formalised including an application form, informal interview questions, member selection criteria and an orientation checklist.

The CAC also developed a committee evaluation form providing members with an opportunity to provide feedback and opinions on how the committee is operating on an annual basis. A CAC member evaluation questionnaire was also distributed allowing CAC members to share their experience of being on the CAC. The feedback was collated at the end of the 2017/18 financial year and will be discussed as a group allowing an action plan to be put into place.

### Training

Last financial year, 2016/17, CAC members received consumer representative training carried out by Health Consumers NSW at the Calvary Public Hospital CAC Retreat held at Calvary National Office, Sydney. In July 2017 the group advocated for Health Consumers NSW to carry out a workshop on consumer and community engagement for senior managers at the July Senior Staff Forum. This training session was very well attended and positively received.



# Department Reports



## General Medicine

The Department of General Medicine continues to care for large numbers of inpatients, providing inpatient consultation 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 Respiratory Physician Dr Ray Mariasoosai, General and Infectious Diseases Physician Dr Neil Miller, and General and Geriatrician Physician Dr Hilary Hayes.

Dr Lex Tierney retired from his position at the Mater after 35 years of exemplary service. His care and compassion for patients and families, his wonderful relationships with staff, and knowledge will be sorely missed.

The department's commitment to outreach clinics continued with regular visits to Moree and Mungindi by Dr Michael Hayes, Dr John Burston, Dr Aidan Foy, and Dr Tim Walker, 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 an excellent centre in which to work and train in internal medicine. Doctors Paul Wilson and John Burston are the current Co-Directors of Physician Education for the facility. The department continues to have advanced trainees in general and acute care medicine, gastroenterology, respiratory and geriatric medicine.

The department has maintained involvement with the work of the Hunter Alliance; a collaboration between Hunter New England Local Health District, Calvary, Hunter New England Central Coast Primary Health Network and Hunter Primary Care. Dr Michael Hayes is a Clinical Lead on the Chronic Obstructive Pulmonary Disease (COPD) Workstream and Dr Annalise Philcox is a Clinical Lead on the Diabetes Workstream. Both of these workstreams are producing innovative work in integrated models of care by bringing specialist advice and care to the primary care setting.

### Ward 5A/MAAZ/Stroke Unit

Ward 5A/MAAZ/Stroke Unit is a diverse 24-bed medical ward that includes 12 Medical Assessment and Admissions Zone (MAAZ) beds, four stroke beds and eight general medical beds. The ward provides care to patients with chronic diseases and various acute general medical conditions.



The year has seen the ward farewell some longstanding team members. After 35 years of service to Calvary Mater Newcastle the wards matriarch Fane Falemaka retired. The ward's Nurse Unit Manager Marissa Ledlin was appointed as the Nurse Unit Manager of the Day Treatment Centre and Tracey Coates was appointed the ward's new Nurse Unit Manager. Debra Carroll resigned from her part-time nursing position to work on the casual pool.

Tina Barry and Sharleen Holz, two of the wards senior registered nurses, had the opportunity to participate in the Emerging Leader program in 2017. Tina has been the team leader for MAAZ since 2016 and works closely with the MAAZ team and the Emergency Department to coordinate patient flow.

Sharleen has an interest in chronic diseases and is involved in the hospital's newly formed Chronic Disease Working Party and is a valuable resource nurse to the ward.

Sally Ormond is the hospital's Stroke Care Coordinator and supports staff with any concerns around stroke care for patients. The Stroke Unit is achieving great results as per the 2017 Acute Stroke Unit Audit results. The hospital is achieving equivalent to and some higher rates of recommended care compared to NSW overall.

There are always areas to improve upon, which is being closely looked at by the newly formed Standard 5 Stroke Committee. The committee is enhancing its engagement with the Emergency Department with education for staff being provided by Sally and the hospital's allied health team.

The unit also continues to be involved in various studies to improve patient outcomes following a stroke.

The following are the current studies participated in:

Navigate **ESUS** (embolic stroke of undetermined source); this study looked at Aspirin versus Rivaroxaban. The study results concluded that Aspirin was the preferred secondary prevention due to Rivaroxaban causing increased bleeding but not necessarily reducing recurrent strokes. This study closed out in April 2018.

**OASIS** (Optimal aftercare for stroke survivors) involves sending out surveys to stroke patients post discharge. The survey is looking at patients' access to the Stroke Foundation's Enable Me website and if provided with extra support to access the information, does this improve patient outcome.

**PAUSE** (Plan assess understand survival after stroke); we are participating in at end of life care for stroke patients.

In April 2018, Sally presented at the Agency for Clinical Innovation (ACI) Stroke Forum in Sydney with the Hunter Stroke Service. The presentation was on the Stroke Continence Assessment and Management Plan, referred to as **SCAMP** (Structured Urinary Continence Management Plans). SCAMP has been very successful amongst the Mater's stroke cohort and is now in the process of being rolled out across the whole of Ward 5A/MAAZ to improve patient continence and with the aim of reducing patient falls associated with toileting.

The ward receives lots of positive feedback from many patients complimenting the medical teams, allied health and nursing staff, on the excellent care and communication they provide. Patients and their families are also appreciative of the follow-up phone calls they receive from nursing staff following discharge with many reporting the phone call provides reassurance and support.

## Cardiology

The Coronary Care Unit (CCU) continues to provide care for patients with a wide variety of acute cardiac conditions including: acute coronary syndrome, acute decompensated congestive heart failure, cardiac arrhythmias, pericarditis, myocarditis, valvular heart disease and management of pericardial effusions.

Admissions to the CCU remained stable over the past 12 months with 614 admissions in the 2017/18 period. Of those acute coronary syndrome comprised 238 admissions (16 with ST Elevation Myocardial Infarction, 162 with Non-ST Elevation Myocardial Infarction and 60 with unstable angina).

There was a significant increase in the number of emergency permanent pacemakers and implantable cardiac defibrillators implanted, from 19 implants in 2016/17 to 32 this year. With rapid improvements in cardiac device technology these life saving devices are now available for the management of many cardiac conditions with improved short and long term patient outcomes.

Nursing and medical staff of the CCU continue to participate as members of the Rapid Response Team (RRT) attending medical emergency calls within the facility and extending to the Hunter New

England Local Health District Mater Mental Health Centre. As staff continue to embrace the concept of early recognition of patient deterioration, the RRT service is continuing to be increasingly busy for both the CCU and Intensive Care Unit staff.

The Cardiology Department has purchased a new heart ultrasound machine, a GE e95 echocardiography machine. This machine is the most up-to-date model, with excellent imaging quality for all cardiac cases. It also has a new imaging modality (speckle tracking strain) that enables earlier detection of cardiac disease in patients, especially those receiving chemotherapy or psychiatric medications.

A specialised cardio-oncology clinic will soon be run by Dr Aaron Svedlow, from the Hunter Medical Research Institute (HMRI) and John Hunter Hospital, in conjunction with the hospital's Oncology Department. Dr Svedlow will assess and treat patients with co-existent cancer and heart disease. His clinic will link in with trials, run through the HMRI, assessing the best way to detect cardiac disease in patients receiving chemotherapy.

# Emergency Department and Emergency Short Stay Unit

Presentations to the Calvary Mater Newcastle Emergency Department (ED) increased to 37,725 for the 2017/18 financial period; 32% of presentations to the ED were admitted. The ED was one of the top performing facilities in the Hunter New England Local Health District in the past year with non-admitted ED Emergency Treatment Performance (ETP) performance at 83.5%.

Pressures on emergency services are increasing and the ED faces many challenges with the high demand for inpatient beds. The emergency service continually looks to improve operational efficiency by ensuring that the models of care it is using are consistent with current best practice.

The ED was reinvigorated with some significant changes to the 'Front of House Service Model of Care'. The results reflect that

this newer model is working towards better access and support for patient care with improvements in non-admitted ETP and benchmark performance in Australasian Triage Score (ATS) 3 and 4.

The 2017/18 financial year saw the increased prioritisation of the Transfer of Care (TOC) Key Performance Indicator (KPI). Despite the increase in ED activity, the Whole of Hospital team worked consistently to help the ED achieve 92%, of which the department is extremely proud.

Some of the key 'improving access' projects achieved during this financial year by the ED management team were:

- Discussions and planning for the re-design of the ambulance bay. It is envisaged that ED will have an ambulance offload area.





- Clinical Initiative Nurse. This specialised nurse works one shift per day and is predominantly responsible for the care of patients in the waiting room. Following implementation, ATS 4 exceeded benchmark by 22%. Did Not Wait (DNW) performance continued to meet benchmark at 2%.
- Planning for ambulance triage nurse on the afternoon shift to match peak demand. Recruitment is underway.

A change in nursing leadership occurred within ED with Rebecca Robertson and Jo-Anne Berry being appointed permanently in the Nurse Manager position.

The Calvary Mater Newcastle Auxiliary kindly provided funding for the ED to purchase anatomy models that are used for teaching as well as patient education.

The 12-bed Emergency Short Stay Unit (ESSU) serviced 5,268 admissions, which equates to approximately 43% of the hospital's total emergency admissions. The efficiency of the Emergency Short Stay Unit model is monitored regularly. This ensures that best practice inclusion and exclusion criteria are adhered to and contributes to a significant improvement in the hospital's ETP.

The Emergency Department Quality Program continues to implement the Australian College of Emergency Medicine Quality Framework. This includes the continuation of the multidisciplinary Morbidity and Mortality meetings being conducted monthly, which involves discussing difficult cases, results of audits, promotion of clinical standards and review of issues. The meetings continue to be well attended by clinical staff.

The Gold Standard Procedural Sedation Practices, Procedural Sedation Policy and Process, was implemented in the ED. This aligns to the practice standards set by the Australian and New Zealand College of Anaesthetists and has been endorsed by the Australian College of Emergency Medicine. It is consistent with the National Safety and Quality Health Service Standards.

The continuation of a Local Airway Registry forms the basis of a move towards participation in the Global Airway Registry that is championed by the Emergency Care Institute.

Medication safety initiatives include stewardship improvements to antibiotic prescribing and dispensing, a paediatric medication safety

project, storage improvements of patient's own scheduled drugs and improvements to afterhours dispensing of emergency medicines, and standardisation of medications for patients with uncomplicated deep vein thrombosis.

Other achievements this past financial year included:

- Continuing the partnership with Hunter New England Local Health District Mater Mental Health Centre to improve pathways for patients to the Psychiatric Emergency Care Centre.
- Continuing and expanding the Aged Care Emergency (ACE) project including the Tomaree Peninsula.
- Continuing involvement in the Access Block Prevalence study.
- Participation in the Alcohol and Harm study.
- Capability to provide high flow humidified nasal oxygen.
- Medical staffing - the ED has been approved to implement the use of Visiting Medical Officers (VMO). Thank you to executive for the ongoing support.
- Training - Director Emergency Medicine Training (DEMT): Dr Brett Squires and Dr Nicholas Dafters are Co-DEMT for the Emergency Department.
- RN2: The ED continues to be a highly desirable rotation for the RN2 program to gain valuable exposure to subspecialties such as oncology, haematology, toxicology, palliative care and mental health.

Challenges for 2017/18:

- Continuing increase in ED activity
- Staged closure of Stockton Centre for 2019
- Australian College Emergency Medicine (ACEM) Accreditation
- MedChart implementation into Calvary Mater Newcastle due to occur September 2018

As the department enters into 2018/19 it looks forward to the many changes and challenges ahead.

## Intensive Care Unit

Activity in the Intensive Care Unit (ICU) increased again this year with 550 admissions, of whom 42% were ventilated and 17 received Continuous Renal Replacement Therapy. The use of high flow nasal prong oxygen has increased again to 164 patients, which is consistent with other Intensive Care Units across Australia. Average occupancy for the ICU increased to 87%, with an average length of stay of 3.4 days. The majority of admissions (44%) came directly from the Emergency Department, 26% came from the ward, 11% from the Operating Suite and 19% were admitted via the Retrieval Service. These figures are very similar to last year.

The Rapid Response Team provides the response to clinical emergencies throughout the hospital. There were 933 Rapid

Response Team calls this year, a decrease of 8% from last year. As in previous years, the majority of patients remain on the ward after intervention, with only 9.4% requiring admission to the ICU.

The ICU continues to be 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 recruiting into the ICU-FM (feeding patients in a bolus versus continuous manner) and ProMedic (using melatonin to prevent delirium) trials and has commenced recruiting to the randomised, controlled, double-blinded clinical trial PLUS (Plasmalyte versus Saline for resuscitation).

# Consultation-Liaison Psychiatry

The Department of Consultation-Liaison Psychiatry was active in clinical, research, teaching, professional development and community education activities.

## Clinical Activity

During 2017/18, the department consulted on 786 individual inpatients, delivering over 1,745 occasions of service.

Inpatient (new) referral departments were: Clinical Toxicology (488 referrals), General Medicine (159 referrals), Cardiology (10 referrals), Emergency Department (18 referrals), Medical Oncology (21 referrals), Surgery (21 referrals), Radiation Oncology (19 referrals), Haematology (17 referrals), Palliative Care (60 referrals), Youth Cancer Service (37 referrals) and other departments (6 referrals).

The Youth Cancer Service saw 37 new referrals, on both an inpatient and outpatient basis.

The Psycho-Oncology Service accepted referrals of 300 individual outpatients and delivered 1,478 occasions of service through the Psycho Oncology Clinic. The Psycho-Oncology Service provided input to the following oncology multidisciplinary teams (MDTs): head and neck cancer, lung cancer, lymphoma and breast cancer.

Service	New Patients Seen	Occasions of Service
Consultation-Liaison Psychiatry inpatients	689	1,527
Palliative Care inpatients	60	93
Youth Cancer Service (inpatients and outpatients)	37	340
Psycho-Oncology outpatients	300	1,478
<b>Total</b>	<b>1,086</b>	<b>3,438</b>

## 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, a clinical research unit funded from the Burdekin initiative and administered through the Hunter New England Mental Health Service (HNEMHS).

## Other Activity

### Youth Cancer Service Clinical Psychologist

Service Development:

- Move into Phase 3 funding to 2020
- Creation of Youth Cancer Service Multidisciplinary Clinic in Medical Centre 1/week
- Ongoing recruitment of patients for the Distress Thermometer Validation Study
- Commenced recruitment for the Experiences of Care Study

Services to Community:

- Outreach – one day in Port Macquarie

### Psycho-Oncology Psychologists

Service Development:

- Establishment of extra Psych-Oncology Clinics during a period of high waitlist demand.
- Sophia Wooldridge was nominated for the 2017 Hunter New England Health Excellence Awards for Staff Member of the Year: commitment to patients and improving outcomes for Aboriginal and Torres Strait Islander persons.

Services to Community:

- Provision of Break Bad News Tutorial as part of Interactional Skills Training, 5th Year Medical Students, University of Newcastle.
- Provision of Monthly Clinical Supervision to Nurse Counsellors, Hunter Breastscreen.
- Guest Speaker at Women's Space Advanced Cancer Support Group – Managing Psychological Distress.
- Education of 5th year Medical Students on rotation in oncology.
- Development of Psycho-Oncology Service to meet patients' needs who access Palliative Care Rapid Access Clinic, through consultation and availability of appointments.
- Developing a Hunter New England Local Health District Oncology Psychosocial meeting.

### Suicide Prevention Research

Research projects supporting clinical work of the department:

- The Way Back Support Service (Hunter) trial: The Way Back is a beyondblue initiative that aims to reduce suicidal behaviour by providing non-clinical support to individuals for up to three months following a suicide attempt. It is being trialled in the Hunter region using an integrated referral pathway model for people who have presented to Calvary Mater Newcastle after deliberate self-poisoning. Professor Carter is leading the efficacy evaluation of this service by comparing rates of self-poisoning repetition and hospital lengths of stay during the intervention period compared to historical controls. The 12-month follow-up phase for this study is underway and data analysis is projected for the end of this year.
- Evaluation of the Accredited Persons Program: In 2003, the Clinical Nurse Consultant with Department of Consultation-Liaison Psychiatry, Jenni Bryant, was among the first in NSW to become an 'Accredited Person'; 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.



Using a 10-year cohort extracted from the HATS database, the team is investigating 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. The findings from this study will have implications for models of care locally and across the state. Data analysis for this project is complete and preparation of a manuscript is underway.

- **Aboriginal Hospital-treated Deliberate Self-Poisoning:** Nationally, rates of suicide and self-harm are higher for Aboriginal and Torres Strait Islander people than for the general population. However, rates are known to vary by region and across communities. The team is working with the

local Aboriginal community through the LifeSpan Newcastle Aboriginal Advisory Group and the Hunter New England Mental Health Service Closing the Gap Committee to investigate hospital presentations for deliberate self-poisoning at Calvary Mater Newcastle for a 10-year cohort. Ethics approval has been received and data analysis is underway. The team will work with the local Aboriginal community to understand and interpret the findings and identify recommendations for consideration by health and community services.



# Clinical Toxicology and Pharmacology

The Department of Clinical Toxicology and Pharmacology provides an inpatient service for the management of poisoned or 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.

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 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. She also joined the Society of Hospital Pharmacists of Australia Medicines Information Leadership Committee.

As well as these activities, there is a substantial commitment to undergraduate and postgraduate teaching and an ongoing, very active research program. This was shown by the 26 articles published in refereed journals and 17 papers presented at international or national conferences in 2017/18. Topics included drug-induced QT prolongation, pesticide poisoning, treatment of paracetamol poisoning, the management of behaviourally disturbed adults, electronic medicines management and an extensive series of publications on venoms and antivenoms from Professor Isbister's group. The clinicians in the department also contribute to the national Poisons Information Centre (PIC) roster and support the Hunter Drug Information Service (HDIS).

In 2017/18 there were 1,037 admissions to the Hunter Area Toxicology Service. The median age of patients at admission was 37 years (interquartile range: 24–49 y) and the proportion of females was 67.8%. There were 905 individual patients responsible for these admissions. Eighty-six patients had more than one admission during the financial year. Of the admissions, 833 were for deliberate self-poisoning. In addition, there were 47 envenomations or stings, 74 recreational drug overdoses, four iatrogenic poisonings and 62 accidental overdoses. The majority were admitted to the Emergency Short Stay Unit (ESSU) - 666 (64%), 64 (6.2%) were admitted to intensive care, 271 (26%) remained in the Emergency Department and 29 (2.8%) were admitted to an inpatient ward bed. There were two in-hospital deaths (0.2%). The discharge destination was home in 627 (60%), the psychiatric admitting unit in 205 (19.8%) or transferred to another hospital in 169 (16.3%). The median length of stay was 16 hours (interquartile range: 6 to 24 h).

The average number of admissions per day was 2.84. This length of stay is substantially less than the length of stay for poisoning at other hospitals in NSW and Australia. The commonest drugs taken for deliberate self-poisoning in all cases were paracetamol (28.7%), alcohol (23.6%), quetiapine (19.3%), diazepam (14.8%), codeine phosphate (12.7%), ibuprofen (10.1%) and oxycodone (6.6%). The

commonest complications of overdose were a GCS less than 9 in 90 (8.7%), paracetamol toxicity in 79 (7.6%), delirium in 36 (3.4%), hypotension in 32 (3.1%), seizures in 14 (1.4%), hypoglycaemia in 10 (1%), acute kidney failure in 10 (1%) and hepatotoxicity from paracetamol poisoning in 9 (0.9%).

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 Colin Page continues as Visiting Medical Officer (VMO) in Clinical Toxicology. Dr Ingrid Berling spent a brief time in the department as Locum Staff Specialist in Clinical Toxicology before leaving to become Co-director of the Emergency Department at Maitland Hospital. Christine Cook provides secretarial and administrative assistance.

The HDIS continues to provide 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 614 enquiries were received during the 12-month period, many were from new users.

- The largest category of enquiries was 'adverse drug reactions'
- Hospital pharmacists are the largest category of health professionals enquiring
- 62% of enquiries were known to be patient related
- 75% of respondents used the information provided in patient management
- 46% of responses were provided via the telephone

While the provision of therapeutic information in response to enquiries continues to be the main priority of the service, the aminoglycoside monitoring service is also regarded as a core service.

The HDIS office relocated to the NBN Telethon Mater Institute building with the Departments of Clinical Toxicology and Pharmacology, Consultation-Liaison Psychiatry and General Medicine. Felicity Prior remains the director of the service and a Conjoint Lecturer at the University of Newcastle, and is completing a Masters of Health Management (University of New England). Piedad (Pili) Vazquez commenced in July 2016. Myfanwy Graham completed her contract and now operates the NSW Cannabis Medicines Advisory Service. Shu Ren joined the service in June 2017.







## Alcohol and Drug Unit

Calvary Mater Newcastle has provided services to many vulnerable patients over many years. The Alcohol and Drug Unit (ADU) has been an integral part of that service provision since 1991. A small and enthusiastic team (six clinical and one administrative staff - FTE) continues to assist and treat a challenging and often marginalised group of patients. Caring for these individuals and their families is an important part of the hospital mission and the Spirit of Calvary.

In the past year activity continued to increase. Services were provided to the Emergency Department, inpatients, outpatients, consultation-liaison, to other teams, and to the Mater Mental Health Centre. A total of 7,035 outpatient consultations, 1,275 inpatient consultations and 703 Emergency/ESSU consultations were attended.

The unit provides services related to alcohol and other drugs including opioids, cannabis, stimulants, benzodiazepines and nicotine. The ability to access drugs from online and other less routine sources has seen an increase in patients who report use of many different synthetic drugs from around the world and presenting with the physical and psychological complications of use.

In addition to clinical services, the unit is involved with education of staff, teaching of undergraduate students in medicine, nursing and psychology, and community health professional sessions across

a broad range of the community including general practitioners. Research involvement within the hospital and in collaboration with Hunter New England Local Health District Drug and Alcohol Clinical Services has provided opportunity for patients to participate in studies related to alcohol and opioid treatment. Representation on and involvement with NSW Ministry of Health Committees provides staff the opportunity to feedback treatment issues and also to positively influence quality related aspects of programs delivered – both locally and across NSW.

Some planned changes over the coming year are designed to provide a more comprehensive medical staffing profile and to streamline the ever increasing documentation requirements, so that patient care remains the focus of all interactions.

The staff are the most valuable component of the service and the hospital is fortunate to have an experienced, co-operative and highly skilled team, who strive to do their best every day for the patients and families who find themselves affected by addiction issues.

# Oncology

## Radiation Oncology and Medical Physics

Over the past year, the Department of Radiation Oncology has been involved in several key changes leading to improvements in the quality of care to patients. The department's staff continue to receive praise as evidenced by the feedback and continued generous donations given by patients, their families and members of the community.

The department has expanded the use of advanced treatments like stereotactic radiation to improve patient outcomes. These advanced treatment techniques have allowed a higher dose to be delivered to the tumour whilst a lower dose is delivered to the surrounding healthy tissue, leading to improved treatment outcomes and fewer side effects.

The department continues to service close to 2,000 new patients per year and has been able to maintain a quick turnaround for consultations and treatment, meeting the acceptable benchmarks set up by different governing bodies.

As part of the standard replacement cycle, the past year has seen the installation of a new superficial x-ray therapy unit and CT-simulator. The state of the art superficial x-ray unit allows better manoeuvrability improving safety for both patients and staff and has features that allow integrated communication with patient information systems for improved patient record integrity and storage. The new CT-simulator provides a number of significant improvements in the quality of images used for treatment planning.

Arguably, the most significant equipment project for the year was the replacement of the department's second CT-simulator with an MRI-simulator. The MRI-simulator significantly advances the Department of Radiation Oncology's treatment planning capabilities and places it at the forefront of advanced clinical practice.

This year the department achieved an Australasian first of MRI-only treatment planning of the prostate, with special recognition to Professor Peter Greer for his lead role in this project and in advancing the field of MRI-only treatment planning.

The department's clinical trial team currently has 44 active studies, which are in recruitment or follow-up, and other staff-led studies, which test feasibility, safety and efficacy, as well as retrospective audits. Three new studies were activated, 125 participants were enrolled and 429 participants were in follow-up.

Radiation Oncology staff were recognised as leaders in their field with 68 peer-reviewed publications including the highest profile journals in the field such as Journal of Clinical Oncology and Lancet Oncology. The department has been awarded over \$1.3 million in competitive research grants and there was an increase in research related activities in nursing and allied health.

There has been the establishment of the Radiation Oncology and Cancer Imaging and Treatment (ROCIT) program and a partnership with the Princess Chulabhorn Royal Academy, Thailand. There has been a significant increase in research related activities by other disciplines such as allied health, nursing, dietetics, and speech pathology. Professor Jim Denham, Professor Peter Greer, Associate Professors Jarad Martin and Joerg Lehman continue to build strong collaborations with local and international experts.

As the region's main public hospital for cancer care and treatment, and thanks to the generous sponsorship from the Prostate Cancer Foundation of Australia (PCFA) the department now supports two Prostate Cancer Nurse Specialists to provide specialist care and increased support to men at all stages of their diagnosis, treatment and aftercare of prostate cancer.

To improve the quality of patient care and improve the transfer of patient information the department has been working towards a paperless work environment, integrating administrative workflow such as referral management with existing patient management systems and the implementation of paperless patient treatment areas. Administrative staff have implemented a range of projects to continue to provide a high level of support to the clinical team and improve frontline service to patients and the community.

As cancer treatment can be a difficult time for patients and their families, staff wanted to positively contribute to the patient journey by forming a Patient Care Group. Some of the group's initiatives include placing a patient bell in the waiting room for patients to celebrate the end of their treatment. Additionally, the placement of wool and knitting needles in the waiting room to help patients pass the time, gained momentum with bags full of soft bandages being knitted and donated to the Leprosy Mission Hospital in India.

All the above would not be achieved without a dedicated team of staff who have been flexible, understanding and share a common goal to improve the outcomes for patients.







## Medical Oncology

The Department of Medical Oncology is one of the largest and busiest units in NSW. In the 2017/18 financial year the department saw 1,252 new patients, provided 28,443 occasions of service, the Day Treatment Centre provided 12,167 procedures and the Infusion Lounge 2,785 treatments.

As is usual, there have been many staff changes. The department welcomed new Advanced Trainees Dr Adrian Chye and Dr Sang Kim and said goodbye to Dr Seema Kumari and Dr Giovana Celli-Marchett, who has been appointed as Staff Specialist in Medical Oncology at Manning Base Hospital.

Dr Namrata Nayar has covered for Dr Fiona Day whilst on maternity leave. Similarly, there have been changes in the clerical staff with Julia Fluit leaving and both Kaylee Baldock and Amanda Whitehouse going on maternity leave to be replaced by Adrian Read, and cover by Carol Pearce and Joanne Allis.

The Medical Oncology Clinical Trials Group have relocated from level 4 NewMed to the Edith Street house. Dr Hiren Mandaliya has been appointed as a Clinical Trials Fellow for 2018. The department's trials portfolio continues to grow and has expanded to include Phase I programs.

The staff specialists workforce has remained unchanged over the last four and a half years at 7.5 FTE. However, the workload has increased in comparison to four years ago. Over the last four years, the number of new patients has increased by 26% and occasions of service by 21%, the Day Treatment Centre procedures have increased by 29% and the Infusion Lounge by a factor of 13 times. Regardless of wait times and workload this unit remains arguably the best in the state.





# Haematology

## Overview

The Hunter Haematology Department is the hub of an area-wide service to manage all malignant and non-malignant haematology disorders including autologous stem cell transplant service and all haematology outpatient referral for the Lower Hunter District. This is the only service existing at this level in the Hunter New England Local Health District (HNELHD). This service consists of haematology staff specialists, nursing, allied health and administration staff.

## Outpatient Referrals

There were 1,628 new patients referred to the Haematology Unit in 2017/18. These patient referrals are all reviewed by the haematology staff specialists and 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 70% of all new referrals being triaged are allocated an appointment to see a haematologist. This has reduced from the previous year at 83% as more complex cases continue to increase and remain the priority. Where feasible, patients are being re-referred to the private sector to be seen. The remaining are referred back to their GP with written advice. The average waiting time for outpatient appointments is still standing at seven weeks. Patients with non-life threatening illnesses are required to wait for an outpatient appointment.

## Outpatient Services

Outpatient services continue to increase from 10,300 in 2016/17 to over 10,550 patient visits occurring through the outpatient clinics for 2017/18.

## Telehealth

With the large geographical area requiring this service Telehealth has been implemented with great success and continues to provide a resourceful service, with 233 Telehealth consults conducted to Muswellbrook, Tamworth, Taree and Gunnedah. This service allows the patients to stay at home within their communities, providing patients with timely and equitable access to this service without the inconvenience of travelling. This has improved the relations between GPs, outreach hospitals and the service.

## Ward 5D

Ward 5D, a 10-chair haematology day ward, ran at greater than 100% occupancy with over 9,500 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.

A review of activity has led to the modification of the Ward 5D booking system in order to manage delays.

## Haemophilia Services

Haemophilia and Bleeding Disorder Treatment Centre services continue to operate at Calvary Mater Newcastle (adult population) and John Hunter Children's Hospital (paediatric population) with a total of 836 patients seen in 2017/18. A total of 354 patients with bleeding disorders were also managed with 678 occasions of service

including clinical reviews, clotting factor treatments, planning and coordination of clotting factor support for surgical procedures, physiotherapy and radiological interventions, and patient family education and support. The Haemophilia Clinical Nurse Consultant is also the Data Manager for the Australian Bleeding Disorders Registry – ABDR (National Blood Authority), and ensures timely and accurate entry and maintenance of clinical data for the 354 patients across both sites.

In April 2018 both adult and paediatric Haemophilia Centres successfully had six patients with Haemophilia A and B approved to receive the newly trialled extended half-life factor 8 and 9 products as part of a limited supply arrangement via the National Blood Authority (NBA).

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 2017, the Haemophilia Service took part in Red Cake Day to raise awareness of bleeding disorders and \$605 was raised for the Haemophilia Foundation of Australia.

## Inpatient Admissions

The demand on inpatient beds, including those for high dose chemotherapy and stem cell transplant, still stands at around 1,900 inpatients in 2017/18. Under Nurse Unit Manager Linzi Nolan and Debbie Carr's leadership, the staff in Ward 5C (inpatient) and Ward 5D (day ward) maximised the through-put of patients by improving efficiency. This was achieved by pre-admission work-up, early discharge and outpatient follow-up. The occupation of inpatient beds is often in excess of 100%. There are regularly haematology patients admitted on wards of the hospital (outliers) due to increasing demand on beds. 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.

## 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 (PBSCH), red cell exchange and coordination of autologous stem cell transplantation (ASCT).

Haematopoietic Stem Cell Apheresis, Cryopreservation and Transplant Services at Calvary Mater Newcastle provided all



apheresis and autologous transplant related services for the HNELHD.

The service provided PBCSH for 50 patients and 39 patients received an ASCT in 2017/18.

A National Association of Testing Authorities (NATA) accreditation requirement for 2018 was online accreditation, focusing on the quality management of the Autologous Bone Marrow Transport (BMT) Service. The BMT Network conducted two audits in 2017/18 in relation to Apheresis Services and covered document control and training assessment and competency.

For two months the service also participated in the BMT Network Patient Quality Improvement Audit for all PBSCH and ASCT patients. Using an online survey patients were asked questions regarding their satisfaction of the service provided with the focus on the patient experience, and ASCT outcomes of the Mater's participation, presented at BMT Quality Management Review Group meeting.

The service has completed a unit-specific pilot study, 'Improving Psychosocial Support for Patients Undergoing PBSCH and ASCT'. The year 2017/18 has been the timeframe for evaluating the outcomes of the pilot study with a planned poster presentation at Blood 2018. The ongoing plan is the incorporation of study findings into day-to-day practice within the Apheresis Service.

## Allogeneic Haemopoetic Stem Cell Transplant Service

During 2017/18, 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 the hospital's main referral centre (Westmead) conduct monthly follow-up clinics for transplant patients assisted by Calvary Mater Newcastle's employed Allogeneic HSCT Clinical Nurse Consultant. These clinics totalled 190 occasions of service. With the aim of providing a truly multidisciplinary service, a respiratory clinic is run in tandem to provide a point of care referral for patients with respiratory complications. Thirty-seven occasions of service were seen this year.

A nurse-led late effects clinic was established and 42 patients attended this clinic for ongoing late effects management post allogeneic-HSCT. This clinic has been designed for all patients more than two years post-transplant, with no ongoing post-transplant complications.

The aim of the Calvary Mater Newcastle Allogeneic HSCT Service is to provide patients with specific post-transplant, long-term and late effects care closer to home. This thereby reduces 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 patients point of care on the urgency of their diagnosis. Whilst not all these require up front 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 them to have a point of contact, if they transition to other specialists, departments or health districts. It provides a point of contact for patients or relatives/carers with issues or concerns

related to their treatment. The lymphoma coordinator role provides a point of contact for other specialists/health professionals in the HNELHD for advice or support.

## Consultative Roles for Hunter New England Local Health District and the NSW Ministry of Health

A number of Calvary Mater Newcastle haematology staff play an indispensable role for the Ministry of Health and HNELHD by providing their expertise.

- HNELHD Transfusion Committee: Dr Bryony Ross
- HNELHD Cancer Network Leadership Committee: Professor Philip Rowlings
- HNELHD Haematology Stream: Chaired by Professor Philip Rowlings
- NSW BMT Network of the Agency for Clinical Innovation (ACI): Louisa Brown CNC, Transplant Coordinator part of LTFU Working Party and Nurses Working Party
- NSW BMT Network of the Agency for Clinical Innovation, Executive: Professor Philip Rowlings
- NSW Haemophilia Network: Dr Ritam Prasad

## Teaching

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

Nursing and allied health undergraduate students from the 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 (RACP) exams.

The unit, in co-ordination with NSW Health Pathology North - Hunter, has six specialist haematologist advanced trainee positions for RACP and the Royal College of Pathologists of Australasia.

## Personnel

In July this year the department welcomed a new haematology staff specialist to the team. Dr Israfil Baluwala commenced in a permanent full-time capacity based between Tamworth Rural Referral Hospital and Calvary Mater Newcastle. Dr Baluwala will be providing clinical and laboratory haematology at Calvary Mater Newcastle and laboratory haematology at NSW Health Pathology North New England.

Dr Aung Thant who was previously covering the Tamworth role was the successful applicant for a permanent part-time position within the Hunter Haematology Unit at Calvary Mater Newcastle (replacing Dr Sandra Deveridge).

Dr Bryony Ross was the successful applicant for a permanent part-time position of 0.5 (replacing Dr Arno Enno).

Dr Asma Ashraf who was covering Dr Deveridge's long service leave will be moving overseas to enhance her experience and career.

Dr Anoop Enjeti is undertaking research part-time with NSW Health Pathology, HMRI and the University of Newcastle until 2020.



## Recognition

- Jennifer Moore, Haematology Administrative Assistant, won the prestigious Mary Potter Award for 2017. Jennifer was awarded for:
  - Outstanding contribution to service provision
  - Effective team member/work unit
  - Contribution to staff harmony
  - Flexible and adaptable to department and organisational change
  - Consistent demonstration of the 'Spirit of Calvary' through the values of Hospitality, Healing, Stewardship and Respect
- The Newcastle Herald featured 'a day in the life' of Dr Enjeti and his research in an article entitled: "On a mission to cure"
- Continuation of the Administration Traineeship - this has now been run for three consecutive years with great success
- Volunteers - Margaret Milliken and Diane Body who do a wonderful job in supporting the department

## Donations from the Community Haematology Department

Numerous donations totalling over \$10,000 were received from individual families and community throughout the financial year, with the single largest being in memory of Dr Kamala De Silva.



## Palliative Care

In 2018 the Department of Palliative Care celebrated 35 years since the establishment of the Newcastle Palliative Care Service. This service was established in 1983, as a community based service, by Sister Mary Brennan and Dr Pam Harrison, to enable citizens of Newcastle to receive care at home, away from hospital. The service has long provided holistic care, based on integration of medical care, spiritual care and psychosocial support. The Mercy Hospice was built in 1993 as a result of a telethon, responding to the community's strong acceptance and support of palliative care.

In the years since the development of the service, the definition of palliative care and the preferences of the community have evolved to see the service now working towards earlier integration into the care of patients with life threatening illness and provision of care in the place of the patient's choosing, which is often at home.

The department is a Level 6 Palliative Care Service operating within the Hunter New England Local Health District (HNELHD). The service cares for patients with life-limiting illness (both malignant and non-malignant disease), operates a specialist palliative care inpatient unit, a consult service to local district and tertiary hospitals, and a specialist community outreach service. The department provides specialised supportive care, symptom management for patients and their carers, as well as specialist palliative care input into the integrated services across the HNELHD.

The 24-hour outreach team consists of a dedicated team of palliative care nurses, rehabilitative and psychosocial allied health professionals (AHPs), supported by a medical team of predominantly general practitioners with significant palliative care experience (GP VMOs), a career medical officer (CMO) and palliative care staff specialists. Administrative support and oversight is provided by a team of administrative staff.

The 2017/18 financial year has been a year of substantial growth and change in the department. Team members have been proud to work together on improving accessibility to the service, contributing to education and training in palliative care and working towards a strong, well supported community of practice in palliative care.

A major service redesign project occurred in the form of the evaluation and redesign of the service's current intake processes. The resulting triage processes have resulted in a more streamlined referral process, reliable intake processes and optimal needs based assessments improving the timeliness of access to the breadth of the palliative care multidisciplinary service.

The department also in the past 12 months introduced a district wide telehealth clinic model. The project was led by Senior Staff Specialist, Dr Mark Mather, in partnership with the HNELHD telehealth unit. Connecting the palliative care services across the



district, the resulting weekly telehealth clinics enable patients in regional and rural areas, in conjunction with their local palliative care team, to access specialist palliative care consultations with the department's medical and multidisciplinary teams. The telehealth clinic model has been supported by ongoing visits for education and clinical support across the district.

The department has also benefitted from and valued its ongoing integration into the HNELHD Palliative and End of Life Stream, which has worked together to best enable an integrated and consistent framework for delivery of palliative care across the district. A major collaborative project this year was delivery of a district-wide education program which was facilitated by a Ministry of Health funding initiative. Both on the job clinical placements and scholarships were offered.

Additionally the department collaborated with colleagues in the Palliative and End of Life Care Stream to deliver a district-wide series of 'roadshows' – workshops which were held in regional sites, targeted at colleagues providing care for patients with life threatening illness in non-specialist settings. The roadtrips, whilst well received and positively evaluated, also provided the team with invaluable opportunities to connect with colleagues across the district and provided rich insights into the challenges of regional and rural palliative and end of life care.

Palliative Care Week 2018, 20-26 May, the department celebrated its theme, "What Matters Most", which invited all to contribute to increasing awareness and understanding of palliative care, encouraging discussion and planning ahead for the community and patients.

Palliative Care Week also enabled the department to celebrate the work carried out as a team and provided an opportunity to connect and reflect on the contribution and caring done across the service.

As part of Palliative Care Week, a large graffiti blackboard was installed on the walls of the Hospice posing the question "Before I die I want to ...". This concept has been used in public spaces around the world inviting people to 'contemplate mortality and share their personal aspirations'. This project was carried out by the staff of the department's Fig Tree Program which continues to utilise the Arts in Health Care, and the promotion of discussions around death, dying and important end of life conversations. The blackboard was enormously well received with poignant, funny and warm contributions by patients, families and staff.

The Department of Palliative Care's commitment to improving palliative care for the Aboriginal community continues through the work of the department's Aboriginal Health Practitioner, Kathryn Bensley. In ongoing respect to Calvary Mater Newcastle's commitment to Closing the Gap, this year the department has also been privileged to partner with colleagues across the district to develop an educational session around Palliative Care for Aboriginal People. During Palliative Care Week, a smoking ceremony was held onsite at the Hospice for staff, patients and families. An Aboriginal smoking ceremony is an ancient custom, intended for cleansing and healing; its importance to individuals and communities varies, for reasons which may be very personal. The smoking ceremony also provided the department with an opportunity to pay respect to the culture of Aboriginal patients, families and community and their connection to the land on which the Hospice stands.

The department continues to benefit from the commitment of a cohort of generous volunteers who provide support and engagement across the domains of the service. Volunteering remains one of the hallmarks of quality palliative care and the department sincerely thanks all volunteers for their contribution and looks forward to exploring the ongoing growth of volunteering within the department.

The department's Nurse Practitioners, Lyn Campbell and Milly Sneesby, continue to provide high quality clinical care to people with palliative needs across the Greater Newcastle region. The Calvary Mater Newcastle nurse practitioner role is integral to the clinical palliative care consultancy service which aims to meet the growing demand for end of life care and symptom management for patients, their families, carers and communities. In the past 12 months, the nurse practitioners roles have continued to evolve to meet areas of need and also to innovate in the palliative care field.

In 2017/18, the nurse practitioners undertook an evaluation of their current model and impact of their practice, including inreach consultations and partnerships with residential aged care facilities and clinical education initiatives. The department's nurse practitioners have also been engaged in the development and delivery of a Motor Neurone Disease Supportive Care Clinic, the initiation of advance practice nurse triage processes, as part of the triage project, and leadership around projects enabling end of life care in preferred place for patients.

Milly and Lyn have also provided leadership in palliative care education for nurses, both in the form of a district-wide Palliative Care Nurses' Education Network and the Hunter Area Palliative Aged Care Nursing Network. Both of these networks continue to grow in their scope and influence, and look forward to contributing to improved care in the future.

Tapping into the therapeutic value of developing deeper connections with others in common circumstances, the department's diverse group programs have flourished over the past 12 months. A significant innovation by the social workers has been the Therapeutic Writing Group for bereaved clients. This group uses a range of creative writing activities to explore and reflect on the experience of grief and its impact on participants' self-narrative. The group is grounded in the work of researcher and clinician, Robert A Neimeyer, and uses writing activities that enhance self-reflection, meaning making and meaning reconstruction. The social workers have also facilitated the Women's Space Advanced Cancer Support Group in Partnership with the Cancer Council. This group offers participants an opportunity to support each other as they explore common issues associated with living with advanced disease. There have been 29 attendances over the past six months.

The Bereavement Walking Group is now in its eleventh year of operation. There are 133 attendances. This group builds on recent research which acknowledges that many people connect with their grief through activity. In practice the department has found that this group offers a range of therapeutic experiences including emotional support, a safe place to re-engage and build confidence in the social domain, as well as being a forum to build community capacity. The department is noticing a trend of regular walkers taking greater ownership over the running of the group.

In addition, the ongoing Pathways Through Grief Program was offered three times this year. Each program provides a combination of

psycho-education and support across seven sessions. There were 115 attendances. The annual 'Beginning Again' group session explored loneliness and aloneness. This annual session utilises group process to explore common themes that are associated with the aspect of bereavement that has been described in the research and literature as relearning the world and relearning the self. This aspect of grieving emphasises the rebuilding of life purpose and direction and the reconstruction of meaning. There were 34 attendees at this session.

Specialist occupational therapy in palliative care works to enable people with life threatening illnesses to be meaningfully engaged in occupations of importance throughout their life.

Specialised palliative care occupational therapists (OTs) provide care across a spectrum of illness which is inclusive of restorative, preventative, supportive and palliative goals. Approaches utilised to achieve this include reframing and tailoring interventions to adapt to the patient's changing goals and in response to the changes associated with illness.

OTs operate to support the community and home based occupations important to patients and families within the geographical area. Patient identified areas of importance include independent functioning in the home environment, community access and end of life care. Enabling patients to explore; achieve and maintain participation in activities of importance and occupation at end of life.

Interventions take a combination of approaches and may include: specialised equipment prescription, patient and caregiver education, energy conservation, environmental adaptations, enablement in everyday activities and non-pharmacological management of symptoms such as pain, anxiety and fatigue.

The Fig Tree Program offers a supportive and encouraging environment, where people identify their own health and wellbeing needs, and interact and engage in constructive and therapeutic activities in a group setting. Staff create an 'enabling culture' of support where people are given choice and opportunity to do things for themselves, enhance functioning, explore personal goals for living and reflect on life experiences and illness impacts.

The program's content reflects the needs and goals of its attendees. Typical activities may include social activities, therapeutic use of art and creative therapies, pet therapy, outings, creation of legacy items and the opportunity for tailored rehabilitative interventions.

This year has seen the team awarded an Allied Health Clinical Telehealth Grant for the project: Improving functional outcomes at end of life-OT consultations in Aged Care facilities. This project will ensure that all patients transferred from the Hospice to a Residential Aged Care Facility (RACF) will have the opportunity to participate in a telehealth consultation for handover and introductions prior to the transfers occurring. It is envisaged that this will allow families and patients to raise and identify issues of concern prior to the transfers whilst also allowing for the RACF to receive face-to-face handover from therapists.

The OTs participated in delivery of palliative care education workshops across the HNELHD to upskill and educate general allied health and nursing staff on foundational palliative care knowledge. As part of the Palliative Care Training Initiative the team hosted on-the-job training placements in palliative and end of life care.

The OTs are responsible for the management and coordination of the extensive equipment loan pool across all clinical areas. This workload will be eased through the recent completion of the equipment storage area which has undergone significant capital works.

Pastoral Care continues to provide compassionate, sensitive and skilled spiritual care to patients, families and carers both in the Hospice and on outreach service.

Pastoral Care is part of the Palliative Care Bereavement Service which includes holding four Remembrance Services a year. These services are valued by the families - the names are read out of all those who have died over an allocated time and participants respond by coming forward and placing a rose in the rose bowl when their loved one is named. The service concludes with light refreshments and an opportunity to support the bereaved as they support each other. There was a total of 373 bereaved family and friends attending the services last year.

This year Carolyn Nichols, Pastoral Care Practitioner, participated in the organising committee of the Spiritual Care Australia National Conference, which was held in Newcastle City Hall for four days. The theme was 'New Horizons' and highlighted the changes in today's society as people are engaging with religion and spirituality in new and diverse ways. National and international speakers presented on the way forward for the profession of spiritual care with emphasis on new research and initiatives around meeting current contemporary spiritual needs. The Conference welcomed over 250 delegates from across Australia.

Pastoral Care has provided education on Spirituality in Palliative Care for medical students carrying out a placement at the Hospice, this occurs every two months. Also, this year the department has provided education for palliative care volunteers in Maitland and Nelson Bay, plus a days teaching in Muswellbrook for rural health care professionals.

Providing an inclusive, reflective space in the Hospice Chapel is a high priority for spiritual care as it creates a quiet space for patients, families and staff. Meditation is held in the Chapel regularly. Everyone is welcome to use this space for quiet reflection or just a place to sit and be.

The department has enjoyed the opportunity to reflect on a busy and productive year and very much looks forward to the next year as it continues to grow and evolve, working towards a model of best practice, connectedness and wellbeing for patients, the community and staff.

# Medical Centre

Improvements and initiatives made by the Medical Centre Service continue to be maintained by all the service's staff who demonstrate their ongoing commitment in delivering the best specialist outpatient care, accelerating improvements and initiatives. The excellent care delivered by all staff (medical, nursing, allied health and administrative) who work within the Medical Centre translates to excellent service provision for the hospital's outpatients including consumers, patients, carers, visitors and professionals.

The Medical Centre clinical activity is always in a constant state of growth with various departments increasing clinical activity with new sub-specialty clinics well established. The Medical Centre has seen an increase in staff specialists from several departments over the past 12 months including the Department of Medicine, Radiation Oncology, Surgical Oncology and Plastic Clinics.

The centre continues to see a steady and encouraging increase in the number of patients being treated in the Infusion Lounge. The demand on the service has been steady with well over 2,700 patients having treatment provided to them in the outpatient setting. Over 360 patients have received a blood transfusion in the

Infusion Lounge thereby enabling patients some choice and control over when they come in for a blood transfusion. This enables patients to stay at home with their family rather than having to come in for an overnight stay in the hospital.

The Calvary Mater Newcastle Hospital in the Home Service provides an opportunity for patients to be treated in their home or in the Medical Centre Infusion Lounge rather than remaining as an inpatient in hospital. Feedback from patients has been encouraging and patients are stating they are happy to be provided with an opportunity to receive valuable care and treatment in their own home close to their family and support systems.

GP Access After Hours is heading into its fifth year as a service provider of care for the local community. The service remains in its initial location in the Medical Centre after hours, weekends and public holidays. GP Access After Hours works in consultation with the hospital's Emergency Department to provide treatment for patients who would otherwise be seen by a GP for non-emergency treatments.





# Surgical Services

This year a strong focus in surgery has been on planning; evaluating Surgical Services and developing a strategic plan that will support the Hunter New England Local Health District and Calvary Mater Newcastle in providing a strong surgical program for the community.

Engaging clinicians in planning and addressing the work place environment has been pivotal to developing the vision for the future and a strong operational plan for the next 12 months.

Surgery activity has increased across all areas including an increase in the complexity of cases. Change implementation and growth within the portfolio has improved relationships between staff and other sites with notable reported improvements in job satisfaction and staff retention. Clinician feedback regarding surgical culture has been positive and the strengthened teamwork across surgery is visible. The department welcomed the appointment of Dr Martin McLeod, Dr Shanta Velaiutham and Dr Owen Morris to the general surgery program, each bringing a level of experience and expertise to the surgeon team. Their contribution with the emergency on-call roster provides a more sustainable, less fatiguing consultant roster that supports emergency patient care.

Improving breast cancer surgery and reconstruction is a priority area. The appointments of Dr Velaiutham and Dr Morris are instrumental in breast surgeon led reconstructive surgery in cancer

cases and there has been greater combined breast and plastic collaborative reconstructive cases. These cases have previously been limited in the Hunter New England Local Health District public hospital system and it is a great achievement to provide enhanced services to women in the community. An educational day was coordinated by nursing staff to share expertise regarding breast cases and reconstruction; this was well attended and received.

The department, with the kind support of the Calvary Mater Newcastle Auxiliary, was able to purchase an operating microscope which will allow the introduction of new procedures, and the ability for Dr Kirsten Miteff to undertake free flap reconstructive surgery at Calvary Mater Newcastle for the first time commencing in October 2018.

This year Surgical Services has had accreditation for surgical training, assessed by General Surgeons Australia and Royal Australasian College of Surgeons, approved for five years with further support of the training positions. Dr David Logan in the role of supervisor of surgical training provided a significant amount of support and preparation to the department for the accreditation process.

The department is looking forward to further develop and implement activities of the operational plan with increased collaboration with the Hunter New England Local Health District.

## Perioperative Services

The Perioperative Services, predominantly encompassing the Operating Suite and including the Pre-operative Clinic, has again seen the increase of the service provision to the community from previous years. Actual case numbers increased to a total of 3,805 of which 815 of these were urgent procedures where patients have sought the department's services through the Emergency Department. The department has continued to maintain and grow the vital access provided to the Hunter New England Local Health District Mental Health Service to treat the community who require ECT (Electro-convulsive therapy). This service has grown this financial year from 871 patients to 1,124.

Perioperative Services performs thoracic surgery (including pace maker insertion), breast surgery and breast reconstructive procedures, general surgery (such as colorectal surgery and hepatic surgery), plastics 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.

All of these procedures are essential services needed for the community. The continual purchase of new equipment helps the service maintain the quality of care it can provide to those requiring its services. The department's more efficient and effective service provision is highlighted in the extra patients it can deliver its services to, as demonstrated in the increased numbers.

The Transition to Perioperative Nursing Program continues to grow in popularity. This program is similar to the New Graduate Nursing Program but is targeted to registered nurses with more than two years of nursing experience. This program enables an experienced nurse to train to become a perioperative nurse, learning all aspects of scrub/scout, anaesthetic and recovery nursing.

## Pre-Procedures Clinic

The Pre-Procedure Clinic aims to provide a quality assessment of patients booked for elective surgical admissions to improve their health outcomes, therefore decreasing the number of patients cancelled after admission. The unit works to optimise the surgical journey for every patient by collating, analysing and communicating information from multiple sources to deliver safe and effective care.

The Pre-Procedure Clinic functions for five sessions per week, with three of these sessions delegated to patients requiring an anaesthetic review. The unit is staffed by two 0.5 FTE nurse unit managers, and one

part-time administrative assistant and the multi-disciplinary team who attend during the clinic sessions.

The 2017/18 year proved to be yet again another busy year for the unit. Numbers remained fairly consistent with previous years, however, the ever increasing complexity of patients' health status brought challenges as the team worked to ensure that patients were optimally prepared for their surgical journey in a timely manner.

With the release of the Perioperative Toolkit in February 2018 the unit is in the process of evaluating practices, implementing necessary



changes and improving and implementing guidelines to ensure safe, efficient and optimised patient-centred care. Improvements so far include the introduction of revised fasting guidelines for surgical patients, and subsequently the implementation of patient handouts, to ensure that surgical fasting times are appropriately explained and recorded. Work also commenced to implement a 'preoperative haemoglobin assessment and optimisation tool' and the unit has begun working with the Infusion Lounge to administer preoperative iron infusions to patients meeting the criteria.

This year the Pre-Procedure Clinic triaged 2,603 'Request for Procedure' booklets and were involved in the face-to-face care of 1,291 patients and 374 phone assessments. Due to the multidisciplinary nature of the clinic sessions, this equates to 2,863 outpatient occasions of services.



## Melanoma Unit



The Melanoma Unit provides care to patients with primary, metastatic melanoma and patients at high risk of developing melanoma.

Melanoma is a major health issue in Australia. It is the fourth most common cancer in males and the third in females in NSW. It also has a heavy impact on the lives of young Australians, because it is the most common cancer in males aged 25-54 years and in females aged 15-29.

The majority of patients with melanoma are managed primarily with surgical treatment, however, medical oncology patients are increasing with advances in therapeutic options providing response to metastatic disease and long term improvement outcomes.

The Medical Oncology Clinical Trials Group participates in international clinical trials for melanoma in the metastatic and adjuvant setting.

The Melanoma Unit continues to care for large numbers of newly diagnosed patients with melanoma in an ambulatory care setting. In 2017/18 the Melanoma Unit received 655 new surgical patient and 62 new oncology patient referrals.

During 2017/18 the Melanoma Unit has seen new additions to the team with the commencement of Dr Martin McLeod, Registered Nurse Joanne Blair, and Administrative Officers Kristy Unwin and Eve Simmons.

As part of a re-design project, Cheryl Cooley commenced as the Melanoma Unit Nurse Unit Manager in March 2018. Cheryl is working with the Director of the Melanoma Unit, Dr Fiona Abell and the unit's staff making quality improvement a priority.

The Hunter Melanoma Foundation office is situated in the Melanoma Unit. The Hunter Melanoma Foundation supports research through PhD scholarships and research equipment. The Foundation is integral to ongoing education and support for the community in raising funds and increasing public awareness about the aetiology of melanoma as well as being a valuable resource centre for the prevention, detection, education and multidisciplinary management of melanoma.



## Surgical Unit / Ward 4B

The Surgical Unit/Ward 4B continues to provide surgical services to general and oncological surgical patients.

The following services are managed from the Surgical Unit:

### The Stomal Therapy Wound Management Service

The Stomal Therapy Wound Management Service provides inpatient and outpatient services five days a week with two wound and stomal therapy nurses sharing the role. Pre and post-operative education, follow-up review and ongoing outpatient support is provided to new and existing ostomates. Wound review is provided for acute and chronic wounds on request and this care can be supported within the outpatient clinic. If needed, wounds can be managed with negative pressure wound therapy with the potential for patients to be discharged with an easy to manage machine at home.

Funds were gratefully accepted from the Calvary Mater Newcastle Auxiliary which has enabled the stomal therapy service to purchase an Otto Ostomy model that will greatly benefit the pre and post-operative education of patients who require a stoma.

### McGrath Breast Care Nurse Service

Calvary Mater Newcastle is fortunate to have two McGrath Breast Care Nurses who provide much needed support to inpatient and outpatient breast cancer patients. They also provide regular clinics to Muswellbrook Hospital for those living in the area to enable convenient follow-up. Calvary Mater Newcastle's McGrath Breast Care Nurse Clinic has increased capacity over the last year and is now offering further follow-up and support to more patients within the Newcastle and Lower Hunter area. The McGrath Breast Care Nurses are now involved with the hospital's newly commenced plastics clinic and are able to provide support and clinical care for women undergoing breast reconstructive surgery.

Both McGrath Breast Care Nurses are the co-chairs for the Hunter Nurse Education Breast Cancer Care Group which provides two full day education days a year for nurses who provide support to women with breast cancer within the Hunter New England Local Health District. This group offers scholarships for nurses with a strong interest in breast cancer nursing.



# Allied Health

## Nutrition and Dietetics

Nutrition and Dietetics staff plan and deliver nutrition care for patients admitted to the hospital and those receiving cancer treatment as outpatients. In 2017, the Dietetics Service was involved in the care of more than 2,800 inpatients and 850 oncology outpatients, with more than 4,950 and 2,900 occasions of service provided respectively.

The governance to deliver nutrition care to patients is overseen by the Nutrition Care Committee (NCC) and the Food Services Working Group (FSWG). In 2018 the NCC was reformed with a broader clinical representation. These groups are responsible for ensuring a high standard of nutrition care is in place for patients, and to undertake a number of initiatives to improve care. These initiatives include but are not limited to the evaluation and improvements made to the menu, better systems for ordering patients diets through the electronic patient

journey board (EPJB), transition to the use of safer enteral feeding devices and consumables (ENFit), improving processes to better identify and document malnutrition and promoting best practice in the delivery of parenteral nutrition.

The outpatient oncology dietetic team is committed to adopting best practice in the nutrition care given to patients with head and neck cancer. Data collected from 2000-2015 was used to evaluate whether the use of prophylactic gastrostomy feeding tubes (PEG) resulted in PEG dependency in these patients. In 2018 Allison Fraser presented this research at the Australian and New Zealand Head and Neck Cancer Society (ANZHNCS) conference in Brisbane and at the hospital's Grand Rounds.

## Physiotherapy

With some significant staffing changes and recruitment limitations, this year has been extremely busy for the Physiotherapy Department and required the team to work very closely together to achieve the best outcomes. Thanks to all of the team for the great work they do and the passion towards improving patient outcomes and services.

A big focus for the department this year has been collaborating 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.
- Working with patients awaiting gastro-intestinal surgery to improve physical fitness with the aim to improve post-operative outcomes.
- Developing pathways for lung cancer patients to access existing pulmonary rehabilitation programs with the aim of improving patient's physical fitness.
- Use-It program looking at improving referrals and support for cancer patients commencing chemotherapy around physical activity benefits and support to participate.
- The department has just started its first patients in the study looking at reversal of stoma's and pelvic floor strength.

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

The Physiotherapy Department has been an active participant in the #endPIparalysis campaign which runs hospital wide, with the aim to encourage patients to get dressed and out of bed during the day to

increase activity and decrease the deconditioning that occurs whilst in hospital. The department continues to be active on hospital committees – Work Health and Safety, Falls and Allied Health DETECT training, along with the Area Cancer Network Committee.

The training of a physiotherapist in lymphoedema management, to support patients experiencing this medical condition, occurred thanks to funding from the hospital executive. This therapist filled the gap left by a recent staff resignation. The Lymphoedema Service continues to be highly utilised from both the oncology and medical services.

The Oncology Loan Pool provides short term loan of mobility aids to assist with the safety of patients whilst recovering or undergoing treatment for cancer. Without generous donations from patients, families and Dry July, this could not be maintained.

The conditioning and falls groups have been well attended. Many cancer patients have participated and benefited from the conditioning group, in particular, from a physical and mental health perspective.

Physical recovery for cancer patients both during and after treatment continues to be a goal for the department. The service aims to push for equitable and timely access to services, in a location suitable for the patient throughout the Hunter New England Local Health District.





## Speech Pathology

Speech Pathology has taken on several new projects in the past year. The department has been pleased to establish a new clinical education relationship with the Australian Catholic University, so far hosting two high calibre students and look forward to continuing this partnership into the future.

A major improvement this year has been the ability to capture modified barium swallow images on the Hunter New England Local Health District's Picture Archiving and Communication System (PACS). Viewing and assessment of these images can now be of a much higher quality, and the department is very grateful to the Medical Imaging Department for making this innovation possible. Calvary Mater Newcastle is the first hospital in NSW able to provide this service, and the Speech Pathology team have already been contacted by other hospitals for information on the process.

Work has continued towards improving the appropriateness of referrals to Speech Pathology. A referral checklist has been developed and education sessions regarding its use have been carried out across the wards. This has resulted in more efficient use of resources in this small department.

This year the department has taken on the responsibility of co-ordinating regular education meetings for speech pathologists in the Hunter New England Local Health District. This has involved inviting speakers and training with the NBN Telehealth Centre. So far this has been a great success with favourable feedback received from participants.

A further innovation in the department is ongoing development of fiberoptic endoscopic evaluation of swallowing, particularly with radiation oncology patients. A structured protocol has been implemented, and a mentoring relationship established with Prince of Wales Hospital. Most staff have now received training through the Health Education and Training Institute in the fundamentals of the procedure. The department looks forward to integrating this important evaluation into Calvary Mater Newcastle Speech Pathology practice, with improved outcomes for patients.





## Social Work

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

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

Staff have continued to provide representation of the Social Work Department, allied health and the hospital on a range of committees both within the hospital and with a range of community groups including Calvary Mater Newcastle Stroke team, Newcastle Domestic Violence Committee, Haemophilia Social Workers and Counsellors Group, Clinical Oncology National Oncology Group, COSA Neuro Oncology Group, Cancer Council Regional Advisory Committee, NSW Cancer Institute Neuro Oncology Interest Group, a local Oncology Social Worker Interest Group, education for second year medical students at University of Newcastle and Youth Cancer Service Network.

Social Work staff 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. The Adolescent and Young Adult (AYA) Social Worker has been involved in providing outreach services to patients at Tamworth and Port Macquarie.

Staff have also contributed to a range of conferences, workshops and forums, by participating in organising committees and presenting papers including the Hunter New England Local Health District Social Work Conference. A Social Work team planning day was held this year to look at ways to improve Social Work Services within the hospital.

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

Social workers are actively involved in facilitating a range of group programs within the hospital including Bereavement Walking Group, the Pathways Through Grief Support Group, Hunter Breast Cancer Information and Support Group and the Falls Management Program. Support is also offered to the Head and Neck Cancer Support Group, Newcastle Mater Prostate Cancer Support and Education Group, Leukaemia Foundation Support Group and the Brain Tumour Support Group.

Social Work staff continue to be involved in a number of research projects including 'Distress Screening and Psychosocial Support' for patients undergoing stem cell harvesting autologous transplant, 'Caring for the Professional Carers' - looking at the impact of death and dying on all staff caring for patients and families, and participation in the 'Mood Screening' project with stroke patients.

The department continues to be actively involved in working with hospital colleagues in creating a culturally sensitive hospital environment for Aboriginal and Torres Strait Islanders and multicultural patients and their families/carers. Social Work staff are active participants in the Aboriginal and Torres Strait Islander and Multicultural Working Groups.

The department is also actively involved in the Calvary Mater Newcastle Very Important Patients (VIP) Care Program working with patients who have been identified as being at high risk of representation and/or readmission to hospital in order to improve their quality of life and health care experience, by addressing their medical and social needs.

## Occupational Therapy

The Occupational Therapy Department throughout 2017/18 has continued to provide a range of services across the hospital, as well as participate in quality activities and student supervision.

The hospital's 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, and has been held nearly every Friday morning since 1998.

During 2017/18 a weekly yoga group facilitated by Occupational Therapist and Master Yoga Instructor Tamara Coughlan, assisted with staff health, and a Mindful Movement Group has been offered to medical ward patients. Tamara has since stepped down from her role at Calvary Mater Newcastle and has passed on the facilitation of staff yoga to Ursula Aggio in the Department of Human Resources.

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. Expansion of this service continues to be a goal of occupational therapy staff, especially in the area of pressure care management. A recent review of the numbers showed that 500 patients were currently using at least one item out of the loan pool.

The Occupational Therapy team participated as a group in the Dry July campaign to assist with hospital fundraising. In early 2018, thanks to the generosity of Dry July supporters, the department was fortunate to be able to purchase a range of new equipment for its Oncology Loan Pool. This boost of equipment has really enhanced the loan pool service offered to patients.

Staff have continued their professional development throughout the year with attendance at conferences, inservices and local education days, including:

- Australasian Allied Health and Nursing Smart Strokes Conference (Gold Coast)
- Hunter Occupational Therapy Education day
- Allied Health Research forum
- Rehabilitation in Focus workshop
- Resilience workshop
- Rural Occupational Therapists forum
- Cognition webinars
- Equipment and new product reviews

Occupational Therapy students from the University of Newcastle were supervised in the department.

Occupational Therapy Week held each year in the last week of October was celebrated with a special breakfast in Newcastle, and throughout the Hunter New England Local Health District staff participated in Hunter Occupational Therapy Week celebrations.

In mid 2017 a new Occupational Therapy Assistant, Donna Waldron, commenced working alongside Kylie Murchie to assist with the administration of the Oncology Loan Pool program. In addition, several staff throughout the year have commenced maternity leave so a number of new occupational therapy staff were welcomed into the department and have participated in quality patient care.

# Pharmacy

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

Pharmacists are involved in many activities including:

- Antimicrobial Stewardship
- Medication reconciliation
- Checking patient orders against approved protocols
- Checking patient orders against individual patient parameters
- Counselling patients/patient carers about medications
- Working with clinicians to ensure the quality use of medicines within the hospital
- Clinical trial support
- Specialist pharmacy activities including sterile manufacturing
- Provision of drug information
- Delivering medication-oriented talks to specialist interest groups within the community
- Education and training of hospital staff

Pharmacy staff members actively participate in hospital, district and national committees, specialist clinical teams and internal and external advisory groups.

The Pharmacy maintains its involvement in the National Medication Safety initiatives and participates in the periodic audits associated with the National Medication Inpatient Chart.

With the introduction of an electronic medications management system (MedChart) scheduled for late 2018, Calvary Mater Newcastle pharmacists are already actively involved in the planning for this new process. It is anticipated that all pharmacists will have an important role in the ongoing support for this system following its implementation at the hospital.

The Pharmacy staff, through their commitment and team work, continue to deliver a quality pharmacy service to patients of Calvary Mater Newcastle. This is demonstrated by their involvement in a number of clinical activities which support targeted key performance indicators.

The Oncology/Haematology Pharmacy team plays an integral role in the care of hospital oncology and haematology patients. All parenteral chemotherapy orders are clinically reviewed by one of the hospital's specialist oncology or haematology pharmacists. The hospital oncology and haematology pharmacists work closely with the oncology and haematology 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. Some local initiatives include the inclusion of pharmacists in the:

- Development and/or review of all Calvary Mater Newcastle policies relating to medications
- Review of all medication related incidents

The Pharmacy is currently involved in 16 Quality Use of Medicines (QUM) activities. Many of these activities are aligned with the National QUM indicators. These in turn provide evidence that demonstrate compliance with National Safety and Quality Health Service Standards.

Examples of the QUM activities currently being undertaken or recently undertaken by Pharmacy include:

1. CEC-CMN Surgical Antibiotic Prophylaxis Project: Project Team members: Allysan Armstrong-Brown (Director of Anaesthetics), John Burston (ID Staff Specialist), Kearney Gleadhill (AMS/QUM Pharmacist), Bernadette Haines (Infection Prevention and Control), Kylie Larter (OT RN), Ryan Lacy (Intern Pharmacist), Jeanette Upton (Quality Manager), Martin McLeod (Surgeon), Richard Hanlon (Anaesthetics AT) and Sim Galimam (AMS/QUM Pharmacist). The team is collaborating with Lolita Tu from the Clinical Excellence Commission (CEC) to develop a quality improvement methodology for a design project investigating the use of antimicrobials in surgeries performed at the Mater.
2. Creation of Pharmacy webpage on Calvary Connect, Calvary Mater Newcastle intranet. Project leads: Sim Galimam and Leanne Cooper. The development of this webpage was the result of feedback received by Pharmacy regarding the difficulty experienced by clinicians when trying to access pharmacy-related forms. Several resources can be accessed from Pharmacy's webpage on Calvary Connect intranet, including but not limited to pharmacy-related forms (SAS, IPU) prescribing and clinical resources, medication management resources and private hospital/nursing home/community pharmacy details.
3. Increasing Pharmacy's hospital presence by presenting at Junior Medical Officer (JMO) teaching sessions and Calvary Mater Newcastle hospital-wide Grand Rounds. Rory Curtis, Mel Harrison and Sim Galimam conducted successful JMO teaching sessions to facilitate discussion regarding pharmacy and pharmaceutical concepts in a variety of medical disciplines. These included the 'Match that bug and drug' and 'Wheel of Pharmacy Fortune' games. The Pharmacy team presented at Grand Rounds focusing on the variety of routine activities undertaken by pharmacy staff as they go about their day-to-day roles.
4. Honours students supervision – Mel Harrison, Kearney Gleadhill and Sim Galimam are supervising Calvary Mater Newcastle based pharmacy honours student projects. One student is interrogating medication-related IIMS reports to determine patterns of reports, to identify problem areas and to devise strategies for intervention. A second student's project is centred on discharge summaries. This project aims to





determine the proportion of discrepancies between discharge summaries and medication information documented in the patient's medical records and charts of general medicine patients, and then to determine whether or not these discrepancies resulted in an adverse patient outcome. The third project is aimed at identifying the number of oncology and haematology patients prescribed oral chemotherapy over the past five years. The students are interrogating patient information contained in doctors letters within ARIA to access this information.

5. Clinical pharmacist activity profiles – collecting the day-to-day activities of hospital clinical pharmacists for the purpose of analysing what clinical interventions pharmacists are making, identifying which health professionals are involved in the pharmacist interventions and establishing clinical pharmacist activity profiles. These profiles will be used to demonstrate the value of clinical pharmacists as a resource to patient care and to ensure pharmacy resources are used efficiently. These profiles will be a valuable resource when planning future services at the hospital.

The Pharmacy continues its active role in student education by:

- Supervising both undergraduate and postgraduate pharmacy students from the University of Newcastle and other universities
- Hosting international pharmacy students on exchange to the University of Newcastle

Pharmacy has an integral role in the facilitation of medication related research and is currently actively involved in more than 67 clinical trials. These clinical trials are associated with Radiation Oncology, Medical Oncology, Surgical Oncology, Haematology, Neurology and Neuropsychiatry.

Funds generated from Pharmacy's involvement in clinical trials have enabled the continued employment of 1.2 FTE clinical trials pharmacists, a 0.5 FTE pharmacy technician and a part-time clinical trials accounts clerk.



## Pastoral Care

In 2017/18 the Pastoral Care Department at Calvary Mater Newcastle moved towards new horizons, particularly in the arena of spiritual care education, research, and professional development.

After six years of post-graduate studies, department manager, April Macneill completed her M.A Pastoral Supervision. April's studies culminated in a pastoral research project, "More Than Blood Count Recovery: Bridging the Worlds of Theology and Haematology." April's groundbreaking research provides the opportunity for theologians, spiritual care practitioners, and health care communities to consider a collaborative approach towards the spiritual care of haematology patients as together they strive for best practice in care.

Pastoral Care team members Margot McCrindle and Catherine Stace, are currently completing Clinical Pastoral Education studies with the Hunter Centre for Clinical Pastoral Education, and Maria McDonald's successful completion of the Seasons for Growth Facilitator program will enable Calvary Mater Newcastle to continue to provide twilight Seasons for Growth programs. Pastoral Care staff both contributed, and attended, "The Spiritual Dimension of Palliative Care: a two day workshop for Health Professionals" with workshop facilitator Professor Doug Bridge at the Tocal Agricultural College, and in response to the community's needs, pastoral care staff also provided education to community palliative care organisations, and cancer support groups.

This year the department has hosted students from the New South Wales College of Clinical Pastoral Education (CPE), under the auspice of the Sydney College of Divinity. The department has welcomed CPE students, Charlee Rowlings, Kristine Hodyl, Dennis Carroll, and Jenny Foley, as they undertake their clinical placement and education at Calvary Mater Newcastle. April Macneill facilitated this 400 hour unit in clinical pastoral education, providing students with the opportunity to consolidate their pastoral identity and skills, whilst working in acute health care, and palliative care settings.

In May 2018, Spiritual Care Australia (SCA) executives, President Tony Hassett and Secretary Carolyn Nichols, in conjunction with Director of Mission Mary Ringstad and Rev Peter Oliver, organised and hosted the 2018 Spiritual Care Australia Conference “Towards New Horizons” in Newcastle. Held at the Newcastle City Town Hall, the SCA Conference was attended by over 270 participants from interstate and overseas, who were provided with a broad range of outstanding workshops and seminars presented by spiritual care professionals and academics. This conference significantly contributed to the ongoing development of the pastoral care profession.

Working closely with local faith communities is an integral part of pastoral care at Calvary Mater Newcastle. The department is very grateful for the generosity of those who contribute to the spiritual care of hospital patients and their families, especially Fr Velarian D’Souza visiting Catholic Priest, George Walter appointed Baptist Chaplain, and Pastor Roger Nixon appointed Adventist Chaplain. Local Ministers of Communion: Frank and Joyce Gardiner, Chris Capper, Sr Margaret Blackford, Paul Rosser, and volunteer Sr Therese

Wilkinson provide an invaluable service each week to the patients and families here at Calvary Mater Newcastle.

In ongoing collaboration with the Adult Faith Formation team in the Maitland-Newcastle Catholic Diocese, the Pastoral Care Department hosted Rev Professor Elizabeth Mackinlay’s one-day workshop “Finding Meaning In Later Life: A Spiritual Perspective.” Future activities are already planned for the 2018/19 calendar as local faith communities continue to recognise the spiritual care education resources available at Calvary Mater Newcastle.

The Pastoral Care Department continues to provide twilight and morning Remembrance Services. Invitations to attend a Remembrance Service are extended to families and friends of those who have died in both the acute hospital and on the Palliative Care Service. The Seasons for Growth twilight programs have also enabled people who are unavailable during normal business hours to access bereavement support in a group setting.

Providing a sacred space for personal and community reflection, the Mary Potter Chapel lies at the hub 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, which contributes to a peaceful environment that is available to all.

## Junior Medical Officers’ Management Office

The Junior Medical Officers (JMO) Management Office oversees day-to-day management of JMOs, medical and surgical registrars. Junior medical officers include interns and residents who are allocated to five terms at the start of the year across the Hunter New England Local Health District network of hospitals. Calvary Mater Newcastle is one of six hospitals in the district managing JMOs and medical trainees (MT) and typically has 24 JMOs, and 21 MTs each term. Departments where JMOs and medical trainees are supervised include General Medicine, Surgery, Emergency, Cardiology, Haematology, Radiation Oncology, Medical Oncology, Palliative Care and Drug and Alcohol Services.

The JMO Management Office employs Angela Lawrence, JMO Manager and Crystal Tindall, JMO Administration Assistant. The role of the JMO Management Office includes facilitating hospital and ward orientation, liaising with key hospital and network stake holders, rostering, payroll, facilitating education and training programs and ensuring wellbeing of staff.

The work of the JMO Management Office is supported by Executive Assistant to the Director of Emergency, Term Supervisors, Nurse Unit Managers, the Director of Prevocational Education and Training (Dr Ian Whyte, Director of Toxicology and Pharmacology) and the Director of Medical Services (Dr MaryAnn Ferreux). This team meet

regularly with JMOs during each term through both informal and formal meetings including 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.

Calvary Mater Newcastle continues to provide an excellent education program for the JMOs. This program is supported by all departments and includes Grand Rounds, journal clubs and regular teaching at formal morning handover. In addition, the Departments of Medicine and Medical Oncology provide weekly formal lectures for junior doctors and should be commended on their consistent commitment to prevocational education.

Finally, Calvary Mater Newcastle continues to remain accredited by the Health Education and Training Institute (HETI) to supervise JMOs with the annual HETI report accepted without conditions.



# Quality

## Patient Safety

In the past 12 months 2,375 clinical incidents were notified by staff. That means on average, approximately 3% of inpatients experienced some kind of incident during their stay. Of these, 97% sustained minimal or no harm, 3% sustained an event that required additional medical care and one event resulted in significant harm or death.

## Patient Experience Surveys

A number of methods are used to obtain feedback from patients and their families or carers. Calvary Mater Newcastle continues to participate in the NSW Health Patient Surveys including the Adult Admitted Patient, the Emergency Department and the Outpatient Cancer Clinics. The hospital continues to perform better than peer hospitals and the NSW average in the majority of measures. Overall 96% of inpatients reported their care was very good or good compared to the NSW average of 93%. 84% of inpatients and 79% of Emergency Department patients said they would speak highly of Calvary Mater Newcastle care. Overall 99% of patients rated the care that they received in the cancer clinics as very good or good. 95% of patients reported that they would speak highly of their clinic experience.

## Post Discharge Telephone Calls

Realising that patients often encounter problems in their first few days after hospital discharge, in 2016 Calvary Mater Newcastle expanded the post discharge follow-up phone call program.

In 2017/18 staff made a total of 5,774 phone calls to inpatients within 48 hours of discharge or approximately 55% of all discharged inpatients. Two attempts are made to contact the patient during this time. Feedback from patients was positive and on average a quarter of the patients wished to acknowledge a staff member who provided care during their hospital stay.

Patient experience trackers continue to be used to capture real time feedback from patients, their families and carers about various aspects of their care. In late 2018 the improved functionality of the devices will be used to help find ways to improve the involvement of patients and their families in the planning and delivery of care.

## Person Centred Care

Quality and safety continues to be a strategic intent of Calvary services. Creating respectful, collaborative relationships with patients, families and community partners is central to the development of a person centred model of care. One of the core programs continues to be the Essential of Care (EOC) Program.

The EOC Program aims to enhance the experiences of patients, families, carers and the staff involved in the delivery of care through the ongoing evaluation and development of safe, effective and compassionate clinical care workplace cultures. This aim is achieved by engaging health care teams in collaborative processes that utilise evidence from patients and their families, workplace data and research to inform improvements that impact on patient quality and safety at the point where care is experienced.

The use of the EOC methodology has enabled many units to adopt change creating positive outcomes for the patient experience.

The EOC Annual State Showcase was held in May 2018. Three projects from Calvary Mater Newcastle were selected:

- The Emerging Leaders Program
- The Day Treatment Centre - Outpatient Specific Safety Huddles
- The Operating Theatre Suite - Noise Reduction project

## Hand Hygiene

Hand hygiene has been identified as the single most 'effective' intervention for the prevention of health care associated infection.

Throughout the past 12 months, 85.2% of all staff complied with hand hygiene audit requirements and the national benchmark is 80%.

## Infections

Staphylococcus Aureus (SABSI) is a type of micro organism that can be found on human skin. Sometimes it can get inside the body through broken skin and can cause infections that require treatment with antibiotics. Calvary Mater Newcastle monitors SABSI infections every month and

the overall rate for 2017/18 per 10,000 patient care bed days was 1.3. This is close to the national target of less than two infections per patient care day.

## Rapid Response Calls

Calvary Mater Newcastle continues to provide a two-tier robust rapid response program which quickly identifies and ensures staff appropriately respond to a patient whose health is unexpectedly deteriorating. In 2017/18, 4,772 urgent clinical reviews were requested by clinical staff and 827 rapid response calls were attended. Only 10 (0.086%) rapid response calls were due to a cardiac arrest.

## Antimicrobial Stewardship Program

Calvary Mater Newcastle's Antimicrobial Stewardship (AMS) Program was launched in June 2014. The program is supported by a multidisciplinary stewardship team. The team reviews patients prescribed restricted antimicrobials and makes recommendations to the treating team to optimise patient treatment. These may include changes to the antimicrobial drug, dose or frequency, de-escalating to a narrower spectrum drug or the oral route, or ceasing the antibiotic all together. The program has assisted medical practitioners to identify and prescribe the most appropriate antimicrobial for each patient, resulting in savings which have been reinvested in the program to improve clinical care.

Other initiatives of the AMS Program include projects such as the Antimicrobial Surgical Prophylaxis Clinical Excellence Commission (CEC) collaboration project, education to nurses and doctors regarding AMS concepts and participation in nationwide initiatives such as the National Antimicrobial Prescribing Survey (NAPS) and the National Antimicrobial Utilisation Surveillance Program (NAUSP).

# 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, and Calvary Mater Newcastle's Clinical Ethics Committee has a role in supporting clinicians and researchers to deliver care consistent at all times with these ethical standards.

While Calvary Mater Newcastle Clinical Ethics Committee is not a Human Research Ethics Committee constituted according to the requirements of the National Health and Medical Research Council, it does have a number of functions. Committee members review research which has already been approved by a Human Research Ethics Committee (HREC) to ensure that it is able to be conducted in this hospital in a way consistent with the Catholic Code of Ethical Standards. From July 2017 to June 2018, the Clinical Ethics Committee examined 28 for consideration and 29 for noting Human Research Ethics Committee-approved research proposals.

In addition, members of the Clinical Ethics Committee seek to support education of hospital staff on ethical issues and can assist with sourcing advice for hospital staff on decisions that have ethical considerations. Clinical Ethics Forums are also held throughout the year on issues of relevance to staff across the hospital.

During this year there has been a major review of research governance with a focus on translational research. The recommendations of this review have implications for the Clinical Ethics Committee, which will continue to be addressed.

## Members of the Clinical Ethics Committee

In 2017, the committee was reinvigorated with new clinician membership and a number of new members joined the committee with a commitment to providing education to clinical teams in regards to managing complex ethical issues. Members are:

- Dr MaryAnn Ferreux, Director of Medical Services
- Mary Ringstad, Director of Mission
- Dr Fiona Boyd, Visiting Medical Officer/GP, Palliative Care
- April Macneill, Pastoral Care Manager
- Bryony Cooke, Social Worker and Allied Health representative
- Dennis Carroll, Theologian and Ethicist; Member, Catholic Moral Theologians Association, Australia and New Zealand

- Steven Tipper, Community Advisory Council Member
- Mary-Claire Hanlon, Research Assistant with Special Interest – Research (resigned 1 February 2018)
- Dr Kathleen Melville, Medical Staff Member with Special Interest – Haematology
- Dr John Burston, Medical Staff Member with Specialist Interest – General Medicine
- Anna Wells, Nursing Staff Member with Special Interest – Casual Pool/final year medical students
- Dr Amanda Wisely, Medical Staff Member with Special Interest – Advanced Trainee, Palliative Care
- Andrew Scullion, Nursing Staff Member with Special Interest – Haematology (resigned 27 June 2018)
- Natasha Atkinson, Occupational Therapist Staff Member with Special Interest – Palliative Care (resigned 23 May 2018)
- Dr Kathryn Kerr, Medical Staff Member with Specialist Interest – Registrar
- Ruth Satchell, Nursing Staff Member with Special Interest – Ward 4B

Given the revitalised membership of the committee a variety of initiatives have enhanced its function. These include the discussion of challenging case studies, some of which generated enough interest for Grand Rounds presentations, and all of which were included for discussion and comment in the monthly hospital publication Mater Matters. The importance of consumer and community participation in creating a vibrant ethical environment is reflected in the consultation process undertaken to develop the hospital's Consumer and Community Engagement Framework (2018-2021).

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

## Ethics Forums for 2017/18

Date	Forum Topic	Presenter/s
30 October 2017	More than Healing? Social responsibility and stewardship	Ms April Macneill, Pastoral Care Manager
4 May 2018	The authority of personal belief	Dr Kathleen Melville, Staff Specialist, Haematology and Dr John Burston, Staff Specialist, General Medicine

# Human Resources and Payroll Services

The Human Resources (HR) Department and Payroll Services continue to provide a high quality, personalised service to all staff at Calvary Mater Newcastle. In line with the hospital's values of Respect and Stewardship, the departments endeavour to ensure that hospital staff can focus their energy on caring for patients, without having to worry about their own financial and employment issues while on duty.

## Human Resources

The HR Department has continued to provide a professional and responsive service to managers and all staff members while managing numerous significant changes to systems and processes.

- National Criminal Record Checks are now being conducted on a three-yearly basis for all staff members through the Fit2Work process, which will also soon be used to determine the work rights of non-resident job applicants and existing employees.
- Arrangements are being finalised for the issue of NSW Ministry of Health State Wide Identity Numbers (StaffLink Numbers) to all Calvary Mater Newcastle staff so they can access a range of web-based 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 so that staff have access to the full range of training and development resources.
- Pre-employment health assessments, including functional assessments for the majority of new staff members have been introduced and are being carried out in conjunction with Konekt Ltd.

- HR staff have also been involved in preparatory work for the rollout of Working@Calvary which includes new 'onboarding' processes that will integrate information between Calvary Careers and the Chris21 HR/Payroll system.
- A new Enterprise Agreement was drafted for nurses and has been ratified by the Fair Work Commission. Bargaining is continuing in relation to new agreements for health employees, hospital scientists and allied health staff.

All HR activity is carried out with a focus on Equal Employment Opportunity (EEO) to ensure that services provide equal access to employment and health services for people who might otherwise be disadvantaged or discriminated against.

## Payroll Services

The Pay Office has also managed significant change over the past 12 months.

- The most significant change for the Pay Office has been the decision for Calvary Mater Newcastle to look at assisting other Calvary public hospitals in payroll delivery. While staff are paid under the same Enterprise Agreements and use the same payroll system (Chris21), this assistance requires an enormous amount of work to assimilate records and processes prior to implementation.
- The Pay Office assist staff to access and amend their own personal HR information via MyKiosk.





- All staff members now receive their payslips and payment summaries electronically.
- Changes have also been made to the processing of superannuation payments to ensure compliance with the most recent legislative changes.

## Staff Training and Development

Staff training and development continues to be a critical part of the HR portfolio. The upgrading of the skills of staff is an ongoing requirement to ensure that they can effectively carry out their jobs. To achieve this, there is also a need to constantly change the ways in which skills are developed and training is delivered.

- This financial year, the issuing of Ministry of Health State Wide Identity Numbers to all staff has been a major focus to ensure all staff can continue to access online training through My Health Learning (formerly known as Health Education and Training Institute (HETI)) and other training and clinical skills development portals.
- The Staff Development Coordinator continues to oversee the placement and recruitment of undergraduate and post-graduate staff into medical, nursing and allied health positions as well as the coordination of training for administrative trainee positions.

## Work Health and Safety

The incidence of Lost Time Injuries (LTIs) has been an ongoing focus for the Work Health and Safety (WHS) Coordinator and has resulted in a steady improvement over recent times. This is a great result for all staff.

Due to preventative actions, and effective early management of incidents and injuries, the number and severity of workplace injuries to staff have both decreased significantly.

Date	Year to June 2017	Year to June 2018	% Improvement
Lost Time Injuries (Number of LTIs)	16	12	25%
LTI Frequency Rate	10.06	7.58	25%
LTI Severity Rate	144.03	85.30	41%

The hospital's focus on safety improvement was also rewarded with Calvary Mater Newcastle winning two awards at the 2017 Calvary Safety Excellence Awards. The awards were for:

- 'Best Safety Solution' for the development of an innovative mattress racking system; and
- 'Best Clinical Safety Solution' for the establishment of the 'Infusion Lounge'.

The mattress racking system was also a finalist at the 2017 Hunter Safety Awards.

## 'Being For Others' Staff Survey

The most recent 'Being for Others' staff survey, conducted by independent company Best Practice Australia (BPA), has reported the best results for Calvary Mater Newcastle since the surveys commenced in 2007. While there is still progress that can be made, staff satisfaction and engagement have shown continuous improvement with every survey undertaken since 2007.

Level of:	2007	2009	2011	2013	2015	2017
Engagement	25.1%	31.7%	36.9%	42.2%	49.9%	50.7%
Disengagement	28.3%	21.3%	14.2%	11.2%	9.7%	9.8%

Over the past 10 years, the level of engagement amongst staff members has more than doubled, while the level of disengagement has decreased by more than 65%. These results are both a credit to, and a reward for, all staff members and management.

# Health Information Services and Information Technology



Strategically services have continued to work towards enhanced integration with wider clinical and corporate systems infrastructures where appropriate, and Health Information Services (HIS) and Information Technology (IT) is actively participating in planning for the implementation of two new clinical applications, as well as the introduction of new patient monitors and infusion pumps which have IT support requirements.

On a daily basis the hospital and its services work across four main computer networks - the Calvary Mater Newcastle network, and more widely the Calvary, Hunter New England Local Health District and eHealth State networks. The complexities of these arrangements are many, and as IT and communications systems continue to converge in many aspects and increasingly, the department is constantly revising work methods, and working across internal and external department boundaries to progress.

The IT Department supports much of the integration work between the networks, with Information Security always high on the team's radar, and in any newly proposed system, on any device, and in any data format a major consideration. Managing for the safe use of technology is ever more important as technology reach has simplified, and staff asking why they cannot use any device, and a single device often, to access all information.

Privacy considerations are mandatory when planning to send information electronically, when interacting with patients, visitors and staff, and when working to develop new methods of communication and information transfer, as well as when considering new methods of data and information storage or sharing. Release of Information procedures must be strictly adhered to, and with so many having access to so much information now in the electronic form, education and coordination of needs in this area, as well as routine monitoring requirements have grown.

The hospital's partnership with NSW eHealth has developed significantly since the start of 2018, with the hospital currently involved in a large body of work to achieve allocation of State Wide Identification (SWID) Numbers for all staff to enable access to some existing state and externally hosted systems, and as well future systems as these are developed. This is consuming much staff time across the HIS/ICT Service and the Human Resources Department.

Two new major clinical systems will be implemented by the end of 2018. The first is the MedChart electronic prescribing system hosted by the Hunter New England Local Health District, and the second is the eRIC Electronic Record for Intensive Care system hosted by NSW eHealth. The business WiFi system will be upgraded significantly to better support these newer systems in the latter half of 2018.

Front-line and clinical support services staff in Patient Services, the Medical Centre Front Office and in the Clinical Information Department have continued to provide excellent administrative support to the hospital, its staff and patients, with very high patient presentations. This year 17,500 plus patients were admitted and discharged, 340,000 plus outpatient attendances recorded, and more than 36,000 Emergency Department attendances processed.

The Clinical Coding Unit has continued to perform well and has consistently met the end of month internal and external coding deadlines at the 100% completion rate. A current key area of focus is clinical documentation and how this can be improved to support best practice coding. The department will continue to be involved in reviewing DRG data and to assist in identifying areas for coding improvement, as well as potential hospital opportunities regarding casemix.

The department's services underpin organisational functioning with regards to IT services provision and information management. The team's external interactions are many, and they provide daily support to clinical and corporate services staff and management for the intricacies of the services they provide. Some key areas of attention in the next year will be review of legal business record management requirements - corporate and clinical in the wider systems, as well as increased controls for medical records across the various formats and systems as these continue to develop.

# Public Affairs and Communications

## The Team

The hospital's three person Public Affairs and Communications team have been kept extremely busy over the past year. Helen Ellis continues in the role of Public Affairs and Communications Manager, Deb Astawa as the Public Relations Officer, and ever dedicated volunteer, Margaret 'Maggie' Sulman OAM, continues to generously donate her time to the hospital. Maggie assists across a number of hospital areas and projects, including organising the annual 'Carols at the Mater' evening.

## Consumer and Community Engagement

Calvary Mater Newcastle is committed to improving the patient experience. The hospital and its staff are dedicated to meaningful and effective engagement with its consumers and the community. It is only by involving the people we serve, will we truly be able to provide responsive, high quality services that reflect the individual and collective needs of the diverse community who use them.

Working with the Community Advisory Council and Director of Mission, the unit helped research, write and design the hospital's first edition of its Consumer and Community Engagement Framework (2018-2021). This framework underpins and builds upon the continuing efforts of consumer engagement at Calvary Mater Newcastle. It provides a structure for continuous meaningful engagement with consumers. In writing the framework the team asked consumers amongst many things "What matters to you?", "What can we do better?" and "Whose voices are going unheard?". Improving the patient experience particularly for those who are disadvantaged or vulnerable is a key drive.

The Director of Mission and Public Affairs and Communications Manager continue to establish and build upon existing relationships with consumers and local organisations to foster future partnerships, especially reaching out to vulnerable consumers, including Culturally and Linguistically Diverse (CALD) and Aboriginal members of the community.

Health literacy education continues to take place for different cultural groups through tours and presentations, allowing members of the community to hear about the services provided, meet staff, ask questions, and familiarise themselves with the hospital. These health literacy sessions have helped attendees feel more comfortable at the hospital, allowing improved access, and are addressing community misperceptions elicited during the hospital's Cultural Safety Audit.

The Public Affairs and Communications Manager and Director of Mission oversee the hospital's National Safety and Quality Health Service Standards (NSQHSS) Standard 2: Partnering with Consumers. The hospital's Standard 2 Working Party continues to meet regularly allowing discussions and improvements to be made to consumer engagement at the hospital.

The incorporation of consumer feedback into all hospital publications is an ongoing process and we thank consumers for sparing the time to provide the hospital with their valuable comments.

## Our Supporters

Calvary Mater Newcastle is very fortunate to receive generous support from fundraisers and donors, including individuals, community groups, and local organisations.

These donations enable the hospital to purchase special equipment and furniture, pursue vital translational research, and enhance the care provided to patients. These purchases are only made possible through the generosity of hospital supporters who have contributed so richly throughout the hospital.

Calvary Mater Newcastle was once again fortunate enough to be a beneficiary of the Dry July fundraising campaign. Many members of staff and the community signed-up to go alcohol-free to help raise funds for the hospital. Through the generosity of Dry Julyers and their supporters the hospital is able to purchase equipment and fund projects that make a real difference to patients undergoing cancer treatment at Calvary Mater Newcastle.

## Management

The voluntary Wig Service team continue to be managed by the Public Affairs and Communications Manager. This exceptionally talented and committed team, volunteer hairdresser Kim Rossi and Wig Service volunteer Margaret Bottrill, provide an essential free service to patients who lose their hair through cancer treatment. The team were also fortunate to welcome new volunteer hairdresser Ken Tarrant to the Wig Service. Without this team's commitment, the service would not be able to help the many women, men and adolescents who leave with hope and empowerment after having their new wig fitted.

The hospital's ever dedicated fundraisers, the Calvary Mater Newcastle Auxiliary 'Cancer Carers', is also managed by the Public Affairs and Communications Manager. The unit has a wonderful relationship with this loyal and dedicated group and enjoys working with the members immensely. 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 wonderful work of hospital Volunteers and the Auxiliary is also an important part of the unit's work with the year 2017/18 proving there was much to celebrate.

There was a standing ovation for Glad Dent, Calvary Mater Newcastle Auxiliary member, in front of a full house at Newcastle City Hall at the 2017 Hunter New England Health Excellence Awards in August. Glad was crowned 'Volunteer of the Year' for being an inspiration to patients, staff and visitors, and to the Auxiliary. Glad was also crowned the Hunter Region Senior Volunteer of the Year at the annual NSW Volunteer of the Year Awards. Glad joined the Auxiliary at the ripe old age of 80, and in 1999, at age 91, became President. She remains an active and respected member whose wisdom, warm personality and friendship is very much admired and appreciated by all who know her. Glad also celebrated her 99th birthday in August 2017. A very special day!

Auxiliary Treasurer and Community Advisory Council member Kay Fordham OAM, was recognised with a Medal of the Order of Australia (OAM) for her service to community health on Australia Day 2018. Kay is a regular face at the hospital and her kindness and compassion is well known throughout Calvary Mater Newcastle and the local community.

Auxiliary Secretary Margaret Dougherty was voted a finalist in the Hunter Water Hunter Hero Awards as featured in the Newcastle Herald. Margaret was commended for her ongoing dedication and hard work in raising vital funds for the hospital. Margaret was presented with a medal at the Newcastle Carols Service.



Members of the Auxiliary were also voted by 2HD Newcastle listeners as the best volunteer/charity group in the region. Richard and Kim from the radio station's breakfast show visited the hospital to give the Auxiliary the good news and present them with a certificate.

The unit works very closely with Mary Ringstad, Director of Mission, to ensure Volunteers and Auxiliary members are recognised and celebrated throughout the year. Throughout National Volunteer Week, 21-25 May, the hospital's Volunteers and Auxiliary members were acknowledged and celebrated by staff members for the rich contribution they make to the hospital. Hand written, personalised thank you cards were sent to all volunteers and a special event was held in their honour. Also, a fun time was had by Volunteers and Auxiliary members at the eagerly anticipated Volunteer Christmas Party that took place on Friday 8 December 2017. The event provided an opportunity for volunteers to join together to celebrate the festive season and reflect on the year that was.

Last but certainly by no means least, Auxiliary members both past and present joined together on Tuesday 22 August 2017 at Calvary Mater Newcastle to celebrate the Mater Auxiliary's 90th Anniversary. The Auxiliary was formed on 24 August 1927. The day started with a Mass where members were presented with yellow roses as a sign of appreciation. Staff were then given the opportunity to acknowledge the Auxiliary's wonderful contribution to the hospital by forming a guard of honour, reaching from the Chapel to the Mater Lecture Theatre. Staff clapped the Auxiliary on the way to lunch, a very simple but very moving tribute. Besides past and present Auxiliary members, guests from the local community and Calvary National Office attended the celebrations.

## Media

The local media continues to support the hospital in sharing its news, research success, patient stories, community fundraisers, ongoing campaigns and events. Some highlights of the coverage from the past year include:

- The hospital's Very Important Person (VIP) Program being recognised at the 41<sup>st</sup> International Hospital Federation Congress in Taiwan.
- The Department of Radiation Oncology and Medical Physics developed an artificial intelligence system to identify more than 100 features within the magnetic resonance imaging (MRI) images that can differentiate cancer from healthy prostate tissue.
- The launch of the #endPIparalysis campaign at Calvary Mater Newcastle.
- Associate Professor Joerg Lehmann, Principal Medical Physics Specialist at Calvary Mater Newcastle, received a \$405,000 prestigious National Health and Medical Research Council funding grant from the Federal Government to improve radiation therapy treatment for breast cancer patients.
- The appointment of two Specialist Prostate Cancer Nurses, Nancy Consoli and Tracy Scott, to support men in the Hunter region.

The unit continues to uphold relationships with key local media and stakeholders. Its ongoing relationship with Hunter Lifestyle Magazine

means the unit writes and submits an article for each edition of the magazine profiling staff and celebrating their achievements.

## Key activities for 2017/18

At any one time the unit can be immersed in a whole host of activities assisting departments and hospital wide projects.

Deb's excellent graphic design and photography skills have seen the department continue to produce first-rate marketing collateral including leaflets, posters, plans, frameworks, newsletters, and promotional displays.

Three Senior Staff Forums took place throughout the year with approximately 70 senior staff attending each forum. These forums continue to provide a chance for senior members of staff to be kept abreast of hospital news, listen and learn from guest speakers, and network.

The unit was heavily involved with the preparation and launch of the hospital's #endPIparalysis campaign. This is an international campaign founded by Professor Brian Dolan. For many patients wearing pyjamas reinforces feeling unwell and can lead to unintentional harm. The campaign encourages patients who are medically able to 'get up, get dressed and get moving' while in hospital and highlights how bed rest can seriously damage the health and independence of the elderly.

The unit wrote and designed a range of marketing collateral, stickers, leaflets, posters and factsheets, to help educate patients, visitors and staff about the campaign. These tools are now being used and adapted by a whole host of hospitals throughout NSW including the Hunter New England Local Health District. The campaign was successfully launched at the hospital on Monday 30 April 2018 and continues to build momentum. By supporting patients to get up, get dressed and get moving, the hospital hopes it can promote a speedier recovery allowing patients to get back to the people and places they love as soon as possible.

The unit continues to organise and run community benefit activities that see staff and volunteers dig deep to support those less fortunate. Throughout 2017/18 the hospital supported an April Share the Dignity community benefit drive, the Hunter Homeless Connect Day and the Christmas Giving Tree Appeal run on behalf of St Vincent de Paul.

Additionally, Helen 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. A fantastic initiative for consumers helping to train the future medical workforce.





## Calvary Mater Newcastle Auxiliary ‘Cancer Carers’

Members of the Calvary Mater Newcastle Auxiliary ‘Cancer Carers’ once again showed their ongoing commitment and loyalty to fundraising for Calvary Mater Newcastle by presenting a cheque to the hospital totalling \$327,162.43 for the 2017/18 financial year.

With 26 members ranging in age from 57 to 99, this dedicated group of men and women throughout the 2017/18 financial year worked approximately 46,472 hours in total, equating to 1,786 hours per member and over \$10,000 being raised per member.

It is because of the Auxiliary’s dedication the hospital is able to purchase much needed equipment for the care and comfort of patients throughout the hospital. Calvary Mater Newcastle staff are constantly inspired by the hard work and countless hours the members put in each and every week and are incredibly grateful for the ongoing support they provide to patients and staff.

Over the past year the Auxiliary has purchased hospital equipment and made donations to the hospital to the value of \$334,045.42, with further equipment to the value of \$134,000 on order.

The following equipment was purchased by the Auxiliary in the 2017/18 financial year:

- Wigs for the Wig Service = \$1,000
- A weekly bunch of fresh flowers for the Mary Potter Chapel (Pastoral Care) = \$1,000
- A contribution towards the hospital’s Head and Neck Cancer Support Group = \$5,000
- A research contribution towards the hospital’s Medical Oncology Experimental Therapeutics Group = \$10,850
- Two dermatology lights for the Medical Centre = \$3,450
- Five digital pulse oximeters for Ward 4B (Surgical) = \$5,100
- Two navigator probes for sentinel node biopsies (Operating Theatres) = \$52,800
- Two urinalysis machines for Ward 5C/D (Haematology) and Ward 4B (Surgical) = \$2,040





- Upgrade the Department of Medical Oncology's videoconferencing equipment in the Medical Oncology Tutorial Room = \$17,882.56
- A bariatric bed and mattress for use throughout the hospital = \$54,166.45
- Three power recliner chairs for the Discharge Lounge = \$5,985
- Refurbished family rooms in both the Emergency Department and Intensive Care Unit = \$13,709.85
- New communication monitors and software for the Medical Centre = \$17,169.54
- A cardiac probe for the Department of General Medicine = \$9,237.38
- Two VAC machines for Ward 4B (Surgical) = \$21,900
- Two dialysis machines for the Intensive Care Unit = \$56,000
- Three electric shower chairs for Ward 4B (Surgical) and Ward 4C (Medical) = \$29,673
- Five patient controlled analgesia pumps for the Operating Theatres = \$15,569
- Four air purifiers and one otto ostomy model for hospital wide usage = \$11,512.64

## Fundraising

The Auxiliary continues to be expertly led by Auxiliary President, Elaine Wellard, Treasurer, Kay Fordham, and Secretary, Margaret Dougherty, together, with Vice Presidents, Wendy Cameron and Jan McDonald, Assistant Secretary, Margaret Sneddon, Assistant Treasurer, Jo Pritchard, and Publicity Officers, Evelyn Duggan and Jan McDonald. All are exceptionally committed and selflessly dedicated to their roles.

The Auxiliary is well known for bowling days, coach trips, fashion parades, celebration luncheons, raffles throughout the community, craft goods, baking and its 'famous' lolly tables at the hospital. The group also continue to be thankful for the unwavering support from the community, who donate money and goods for the benefit of the hospital and its patients.

In October 2017, the Auxiliary attended the United Hospital Auxiliaries NSW State Conference in Tweed Heads and received two prestigious awards: 'Most hours per member' and 'Runner-up most money net'.

Below is a breakdown of how the funds were raised this year:

Activity	Funds Raised
Bank Interest	\$5,064.32
Bowls Days	\$32,269.15
Knitted Chicks and Rabbits	\$2,370.10
Cookbooks	\$593.00
4 x Cooking Craft Days	\$8,067.30
Craft	\$39,513.25
Donations	\$30,357.01
Functions	\$36,347.50
Golf Day	\$4,590.00
Grants	\$20,000.00
Housie	\$35,815.15
Lollies	\$69,299.75
Pop-up Shop	\$8,267.00
Raffles	\$24,946.90
Sundry	\$9,662.00

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
- Greg Flint, Chief Executive Officer
- Mary Ringstad, Director of Mission
- Finance Department - Lynda Evans and Maylinda Wells
- Support Services Team - David Millington and the three Peters
- Assistant Treasurer, Jo Pritchard
- 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 lolly packing support team



# Volunteers

**"No Act of Kindness is Ever Wasted."** Aesop

Calvary Mater Newcastle's volunteers continue to care for patients in all hospital inpatient and outpatient areas, and indirectly through administrative support, together contributing 9,673 hours of care this year. What can't be counted so readily is the multitude of ways, each day, they show kindness and concern to patients, families, staff and visitors.

## Education and Training

The 'Friendly Faces' program is now a regular feature in Calvary Mater Newcastle's volunteer training program. It has been held in November 2017 and April 2018. Twelve volunteers completed the program along with two volunteers from Martin de Porres Residential Aged Care Facility, Waratah. The plan is to continue the hospital's collaboration with Calvary Community and Aged Care by providing places for volunteers within their services each time the course is offered. All those who had completed these two programs graduated with a celebratory ceremony and morning tea. Each also received a certificate of appreciation from Calvary Mater Newcastle for the work they so generously do to enhance life here at the hospital.

A highlight of the ceremony was a reflection from one of the hospital's senior nurses, Tina Barry, Clinical Nurse Specialist, Ward 5A/MAAZ unit. Tina spoke of the impact these volunteers make in the wards. Some of her reflection is shared below:

### **A nurse says thank you**

*"A large percentage of our patients have age related frailties and increased levels of confusion. The hospital setting can be very frightening for a confused patient and often causes further problems such as falls, functional decline, and decreased oral intake.*

*"Since the introduction of the 'Friendly Faces' program volunteers have come to Ward 5A/MAAZ to sit with patients who have been identified as being a high falls risk or wandering and absconding. Their interaction with the patients allows the nurses to continue to deliver care to the remaining patients. This small intervention from our 'Friendly Faces' volunteers has a significant follow-on effect. Nurses are able to administer medications and effectively monitor their other patients without distraction.*

*"It has been well documented that errors are less likely to occur when nurses are focused and not distracted. The nurses are able to attend and assist with the daily hygiene needs of the other patients knowing that their confused patient is currently being observed, assisted with their meal and is safe from harm.*

*"Their intervention is a God send to us nurses and has a positive impact on the patient's experience. Sitting with a patient and having a one-on-one interaction has a calming effect and can sometimes distract the patient from wanting to leave. Other helpful activities include reminiscing with the patient, talking about family, hobbies, careers, and using the activities trolley to engage them in ways which give a sense of importance and makes them feel as though they are helping and doing something useful.*

*"So yes, their precious time and dedication does have an effect on both the nursing staff and patients, probably more than they realise."* Tina Barry, Clinical Nurse Specialist, Ward 5A/MAAZ.

## Celebrations

NSW Volunteer Regional Awards are a great celebration and acknowledgement of the contribution of volunteers throughout the Hunter Region. The Hunter has the largest volunteer population of any region in NSW and when the nominees were read out this was clearly evident. This year one of Calvary Mater Newcastle's volunteers, Ross Robertson was a finalist in the Regional Adult Volunteer of the Year category. Ross has been volunteering in the hospital's Occupational Therapy Department since 2012. His generous and reliable assistance makes a huge difference to patients receiving the right equipment in a timely fashion so that they can make the transition to home more confidently.

Christmas is always a special time to celebrate with volunteers. The Carols held every year are enthusiastically organised by Calvary Mater Newcastle's volunteer, Maggie Sulman OAM. She is able to bring together volunteers, staff, Celtic musicians and of course Santa, to bring some cheer to the hospital community each Christmas. After what is a rousing session of carolling throughout the hospital, staff, patients and visitors experience a brief respite from their concerns and the emotional strain being sick at Christmas uniquely brings. Sadly, John Tucker, a much loved Santa for many years, died very unexpectedly in May. RIP John, and deepest condolences to John's wife and long-time volunteer Val Mace-Tucker.

The Christmas party is great fun; the Volunteers and Auxiliary come together for lunch, some entertainment and always look forward to the 'dad jokes' from Chief Executive Officer, Greg Flint. The entertainment this year really had the group moving and shaking as Mauritsio and Betty from Ruedisima Latin Dance Co had everyone out of their seats trying a few popular Latin dances such as the Tango. The photo booth remains a popular source of mementos of the day.

National Volunteer Week was enjoyed at Calvary Mater Newcastle during the week 21-25 May. Volunteers and Auxiliary members were thanked by staff over the week and each received a personal thank you card from the hospital. A highlight of the week was the celebratory morning tea held on Tuesday 22 May. Forty volunteers gathered with members of the Executive and David Bergman, National Chief Finance Officer, to enjoy each other's company, welcome new members, farewell those who had moved on and acknowledge the year that has been. The guest speaker was Amorelle Dempster, the 2017 Maitland Citizen of the Year and founder of the Slow Food Movement in the Hunter. Her inspirational story of contributing to her community began as a child, was fuelled by compassion and has achieved so much by asking the difficult questions, having the courage to ask for help and the pragmatism to get things done.

# Heritage Committee

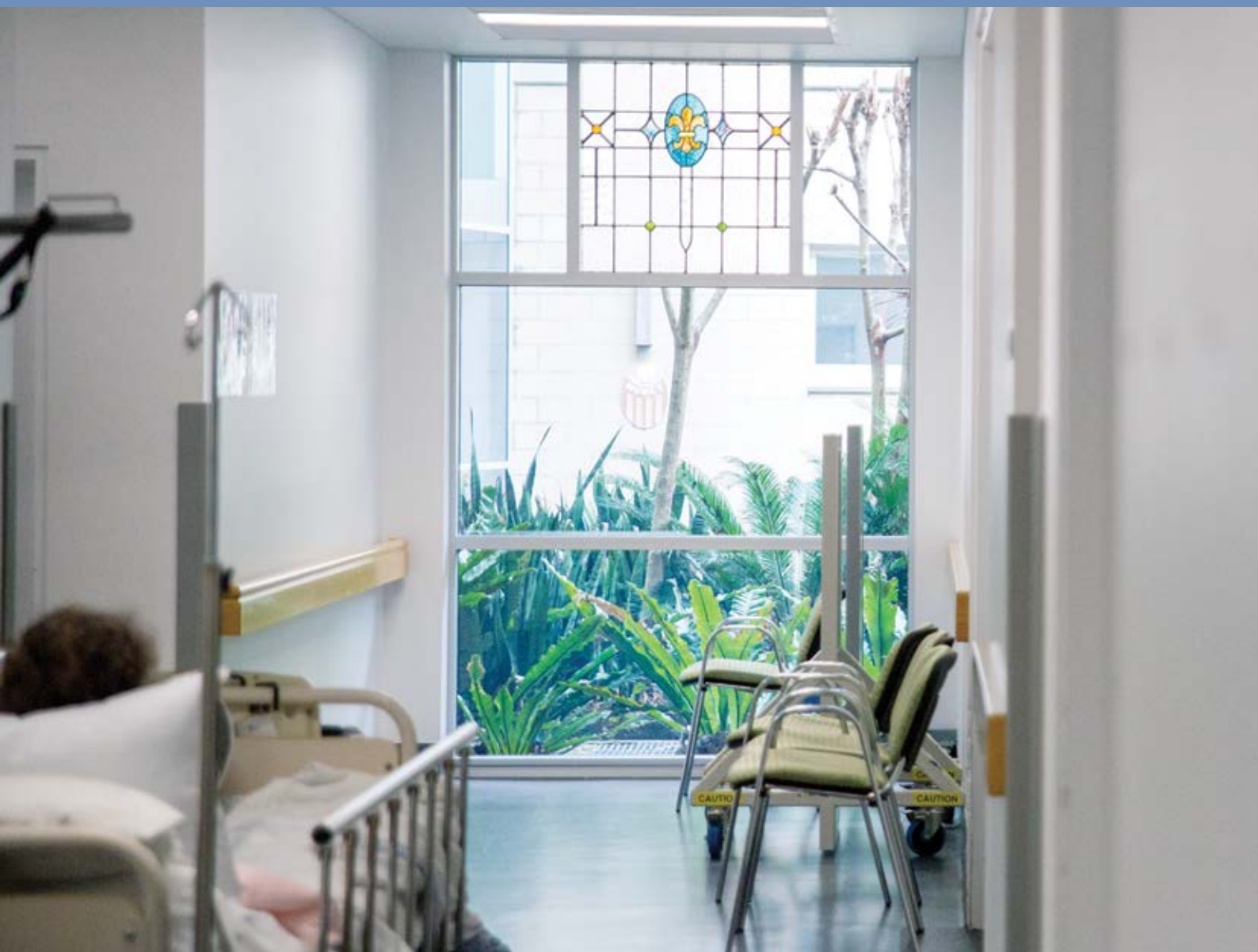
The Heritage Committee was established in 2010 to ensure the retention of the history and heritage of the Newcastle Mater Misericordiae Hospital as it became incorporated in to Calvary Mater Newcastle. The intention being to honour the heritage of the Sisters of Mercy while embracing the spirit and heritage of the Little Company of Mary.

While significant achievements have occurred during the past 10 years, at the February 2018 meeting the Heritage Committee agreed to focus its efforts on ensuring the current projects, plus those still in need of action, be completed by the Centenary of the hospital in December 2021.

These include:

- A permanent acknowledgment of the Awabakal peoples at each entrance to the hospital including an account of the significance of this site to the first peoples of this area.
- Completion of a photographic installation of significant People, Events and Places of the last 100 years. This will be a permanent display along a hospital corridor on level two near the Platt Street entrance.
- The incorporation of the chimney bricks into a landscape feature. The bricks are from the demolition of the original hospital chimney.
- The establishment of a Heritage Walk for the site.

A particular acknowledgement goes to the former staff and community members who contribute enormously to achieving much of the painstaking work required to ensure the Mater's heritage continues to inform Calvary Mater Newcastle's work and culture, particularly Dr Pam Harrison, Pat Barrett, Ron O'Neil and Kay Fordham.





# Mission

*"In the Spirit of Mary on Calvary, our vocation impels us to enter into the suffering of others, to bring about equality and dignity for all and to collaborate with others to create a world of justice, love and peace."* Constitutions of the Sisters of the Little Company of Mary

This year has been one of widespread and rich community engagement. A large majority of work has been motivated by the hospital's commitment to partner with consumers to provide culturally safe care in an environment which is welcoming. The team has learnt that the simplest of interactions can have a profound effect on a vulnerable person. These interactions reflect and are shaped by the culture the hospital creates and the systems built and sustained.

The foundation of true community engagement is listening. In NAIDOC Week staff learnt the value of language when the team joined the local Awabakal community in celebrating 'Our Languages Matter'. This year Calvary Mater Newcastle also worked together with the Mater Mental Health Centre in planning and hosting the various events onsite. The opportunities to learn from Aboriginal partners in care were plentiful:

- Attendance at the 40th Anniversary celebrations of the local Aboriginal Medical Service, Awabakal Inc.
- Attendance at Close the Gap Report Day; of particular interest was the presentation of the work of Aboriginal Collaborative Committees as a structure that is growing in support in health. Calvary Mater Newcastle plans to establish the same.
- Participation in the Newcastle and Lower Hunter Aboriginal Health Partnership Inaugural Forum which focused on five main areas of concern in Aboriginal health: Chronic Disease, Children's and Maternal Health, Mental Health, Smoking/ Lung Cancer and Drug and Alcohol. Calvary Mater Newcastle presented the work of the Cultural Safety Audit and co-facilitated the workshop on Cancer/Smoking.
- Attended the Aboriginal Health Unit Staff Forum: an opportunity to promote the work of Calvary Mater Newcastle and to network with other key providers of important services to the Aboriginal community: Cancer Council, NDIS, Telehealth, and Health Pathways.
- Participated in the Hunter New England Local Health District Aboriginal Cancer Initiative 'Yarn-Up' (community consultation) looking at early detection and screening for cancer and palliative care.
- Calvary Mater Newcastle hosted a visit from nine Aboriginal Women Elders from the Tamworth region looking at inpatient and outpatient cancer services. The Tamworth based Aboriginal Cancer and Palliative Care Project Officer, Rose Wadwell, organised the visit. She was also consulted regarding the development of the hospital's CANcierge App for cancer patients.

The involvement of the hospital's multicultural community in various initiatives this year has gathered pace with the appointment of a Multicultural Health Liaison Officer (MHLO) initially for two days a week and later increased to three. The MHLO is establishing her role at Calvary Mater Newcastle: undertaking a review of

interpreter referral systems, receiving referrals and consulting with staff regarding issues affecting Culturally and Linguistically Diverse (CALD) community members accessing services and staff education regarding the role and cultural competency in the workplace.

Staff attended the Newcastle International Women's Day breakfast in July and during Multicultural Health Week hosted a function focused on the theme: Women's Journey to Health. Local women from a range of culturally diverse communities attended sessions to learn about the Mater's services, tour the site, speak with staff from services that are confronting for the community, e.g. palliative care, cancer.

This work in community engagement was contextualised within the development of the hospital's Consumer and Community Engagement Framework (2018-2021). The process of consumer and staff consultation occurred throughout the first half of this year with the final consumer focus group being held early in February 2018. The data from widespread consumer and community consultation was collated and reviewed. The findings formed the basis of the strategic priorities and an action plan for the Consumer and Community Engagement Framework which was completed in April 2018.

Education, Pastoral Care and Spirituality was another area of endeavour for Mission. Some of the events the team were involved in or initiated are as follows:

- The Mindfulness and Awareness in End of Life Care programs which were held in Newcastle and Tamworth. This program was initiated through the Hunter Alliance and has continued beyond.
- 'Mind the Gap' 2-day workshop - 'Mental illness in the terminally ill is under-diagnosed and under-treated. This is the 'Treatment Gap' in palliative care'. This federally funded project was held at and hosted by Calvary Mater Newcastle. Bringing it to the hospital was a joint initiative of the Departments of Pastoral Care and Occupational Therapy.
- Participation in the follow-up meeting for the National Consensus Conference, Enhancing Quality and Safety: Spiritual Care in Health. The conference outcomes report was finalised, and a plan determined for addressing the primary issue of a lack of a consistent approach to the delivery of spiritual care across the health system in Australia.
- The Pastoral Care Department hosted a day-long seminar led by Professor Elizabeth MacKinley, 'Spirituality in Later Life'. Seventy people from the Hunter New England Local Health District, Aged Care and Catholic community attended.
- Reflective Practice sessions continued with the Calvary Mater Newcastle Palliative Care staff and the Paediatric Palliative Care staff at John Hunter Hospital.
- The workshop 'The Spiritual Dimension of Palliative Care', facilitated by Professor Doug Bridge took place on a weekend in March. There were 80 participants in the main workshop and 30 who remained for the Facilitators' training. Professor Bridges asked for Calvary Mater Newcastle to be the lead centre in NSW for the development of this training. In principle, agreement has occurred.



- Three Clinical Pastoral Education students enjoyed placements at Calvary Mater Newcastle, working in Medical Oncology and Coronary Care, Palliative Care and in the Medical inpatient unit.
- Pastoral Care team members, through their roles as Spiritual Care Australia Hunter office holders, successfully hosted the National Spiritual Care Australia Conference 6-9 May 2018. The conference delegates numbered 280 and included practitioners from the USA, New Zealand and Singapore. The theme 'Towards New Horizons', explored the rapidly changing religious and spiritual landscape in Australia and the ways to provide care within such diversity. Calvary National was a major sponsor of the event, enabling 10 guests to attend a day of the conference.

During the year it was decided to review the role of the Mission and Values Committee in order to align it with the Calvary Mission Accountability Framework. The working principle for the committee is: representatives should be drawn from the diverse groups across the hospital and be used for information gathering, generating ideas, and the implementation of projects. The review successfully

recruited five new staff members with a wide variety of ideas for how Calvary Mater Newcastle can live its values in every encounter, every day.

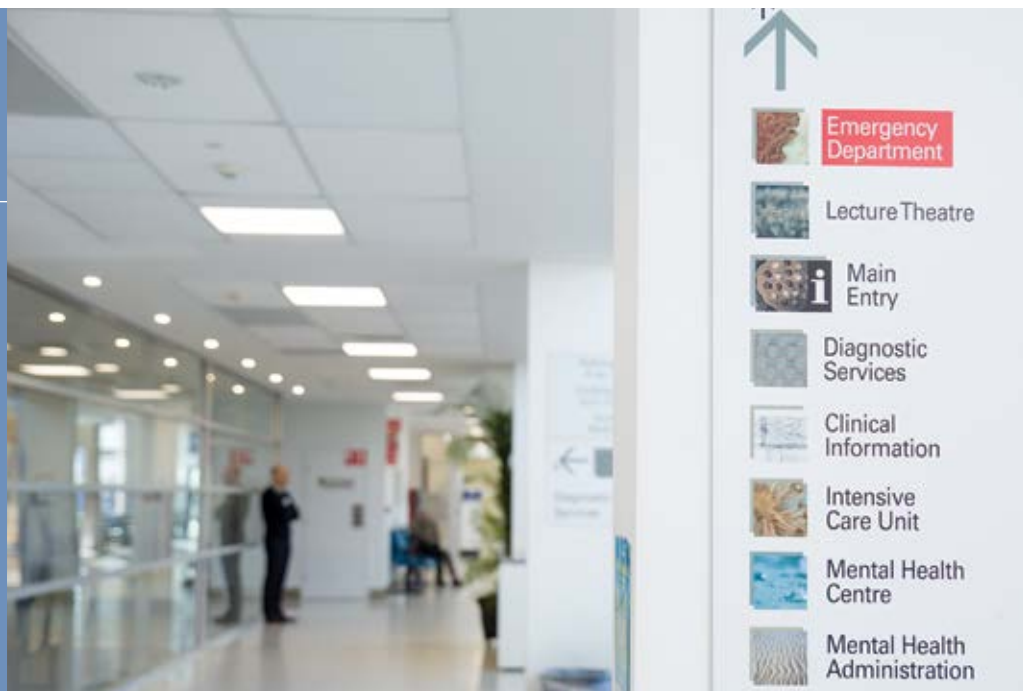
Someone who does just that is the recipient of the Mary Potter Award for 2017, Jennifer Moore, Administrative Assistant in the Department of Haematology who was nominated by her colleagues and manager for the way in which she lives the Spirit of Calvary 'Being for Others'.

Lastly, a highlight of the year was the selection of Calvary Mater Newcastle staff member, Jennifer Sutton, Clinical Nurse Specialist Perioperative Services, to take part in the 2018 Mary Potter Pilgrimage to England. For the first time staff were invited to submit an expression of interest and Jenny was selected as one of a small group from across Calvary Services. The impact of this adventure is best conveyed in Jenny's own words "It could be argued that we are all blessed, to be part of something that is bigger than us, and that we have the privilege to serve the people of our community with humanity, earnestness and graciousness. How fortunate are we?"

# The Public Private Partnership

Calvary Mater Newcastle's Public Private Partnership (PPP) includes the financing, design, construction and commissioning of new buildings and refurbishment of existing buildings, facilities management and delivery of ancillary non-clinical services on the site until November 2033. These services are provided through the PPP by Novacare.

Management of the PPP including asset management services is provided by Plenary Group under the guidance of Novacare General Manager, Stuart Robson.



## Hard Services

The Honeywell Facility Management team has had a busy year with a number of projects completed throughout 2017/18 including:

- Refurbishment of Ward 4C continued. Work included upgrade replacement of fan coil units, Honeywell BMS controls installed to increase control and efficiency, improved ceiling tile replacement throughout, painting of all areas.
- Site wide LED lighting replacement project.
- NewMed riser door hardware upgrade/paint.
- Mater Institute internal paint and flooring refurbishment.
- NewMed air compressor upgraded to oil free energy efficient unit.
- NewMed lift upgrade/refurbishment.
- Fan coil unit replacements along with the original pneumatic controls were engineered over to the BMS for increased control and efficiency in:
  - NewMed Level 2
  - NewMed Level 3
  - Medical Oncology
- Villa Units barbeque awning upgrade.
- Street tower signage and lighting upgraded to LED.
- Selected garden areas along the front entrance have been upgraded with hardy plantings that promote colour. This has made the frontage more appealing to patients and visitors.

- Installation of rodent prevention devices and bristle strips on exterior doors.
- Hospice Morgue roller shutter motor upgrade.
- Central energy cooling water pump overhaul.
- Cooling tower mechanical refurbishment.
- Several replacement ice machines and over 20 hot water boiling units were upgraded throughout the facility.

During 2017/18, Honeywell received 6,306 events compared to 7,151 in 2016/17.

The rectification times indicate that 90% of all events raised through the Help Desk were completed within 24-hours compared to 96% in 2016/17.

### Safety

Honeywell continued with the roll out of the online induction system. Significant reduction in site time carrying out face-to-face inductions allowed for more time with stakeholders and staff. The monitoring and automated notification process enabled efficiencies for the renewal of inductions and licences.

### Building and Maintenance Services

Of the 6,306 events received during 2017/18, Honeywell generated 1,255 programmed maintenance events so that the building services were maintained to

ensure reliability, safety and longevity of the facility assets.

During 2017/18, Honeywell continued the role out of 'Outcome Based Services Internet of Things Platform'. This gives Calvary Mater Newcastle a microscopic insight of the facility 24-hours a day, seven days a week, 365 days a year, thus enabling maximum efficiency of the installed mechanical and electrical equipment, early fault finding, maintaining indoor air quality for the patients and staff alike. The solution also compliments the hospital's ongoing environmental sustainability initiative to help improve the life of the installed equipment by efficient inventory management, minimising downtime, costs and improving employee productivity, thus improving the life of assets across the facility.

During 2017/18, Honeywell partnered with Hunter New England Local Health District to deliver a site wide LED lighting upgrade:

- Over 9,000 light fittings site wide were upgraded to LED
- The total energy usage for the site will be significantly reduced

LED lighting also has better light output quality and greater operating life. These new technology fittings are reducing the hospital's energy footprint which means less greenhouse gases are being generated to give the same amount of light. As well as having a green footprint these fittings are energy efficient, meaning they cost less to run.



# Soft Services

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

Highlights for the Medirest team in 2017/18 included:

- Patient catering obtaining NSW Food Authority Level 'A' Vulnerable Persons Scheme Licence
- BSI Food Safety Certification
- All retail outlets obtaining a 5-Star Food Safety Rating
- Continued recognition of best in class for cleaning services within state-wide bone marrow transplant audits, which is achieved through refinement of microfibre cleaning technology and state-of-the-art tablet-based environmental auditing system and black light technology
- Continued investment in upgrading equipment across the services

## Overall Service Statistics

- 383,215 meals were served to hospital patients
- The Security team attended 456 'Code Blacks' within Calvary Mater Newcastle
- The Reactive Cleaning team made 13,775 hospital beds
- The hospital campus generated 79.2 tonnes of clinical waste
- 20,546 events were logged through the Help Desk
- 40,740 deliveries were received via the loading dock

## Catering Services

The Catering Department provided a monthly average of 31,935 high-quality, hot and cold meals, prepared onsite for Calvary Mater Newcastle patients during 2017/18. Working closely with Nutrition and Dietetics staff, Medirest ensured extra care was taken to provide special meals to patients that require specific diets and supplements. Highlights for 2017/18 included:

- Maintaining NSW Food Authority Level 'A' licence through further strengthening of HACCP processes
- Ongoing investment in upgrading and replacement of catering equipment

## Retail

Medirest-operated retail outlets continue to prove popular across the hospital, providing an average of 5,798 customers per week with high-quality meals and beverages. These outlets include the Deli Marche 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, particularly hospital staff.

## Help Desk

The Help Desk provides a primary point of communication for all requests regarding the delivery of all Novacare Services onsite 24-hours a day, seven days a week, 365 days a year. 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 Services. 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 solution comprises scheduled cleaning, reactive cleaning, periodic and project cleaning in addition to 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 901 beds within the hospital per month over the 2017/18 period, and a monthly average of 6.6 tonnes of clinical waste was removed from the site. Highlights for this financial year included:

- Continued recognition as 'best in class' for cleaning services within state-wide bone marrow transplant audits when compared with similar facilities
- Investment in positive recycling initiatives such as organics, PVC plastics and batteries

## 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 the safe response to internal incidents and the security of people and property.

During 2017/18, Medirest Security responded to an average of 38 'Code Black' incidents per month within Calvary Mater Newcastle.

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

## Materials Management

The Materials Management Department provides an efficient, high-quality service for the 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 2017/18, the department issued a monthly average of 834,573 combined stock units to hospital wards, and achieved a unit accuracy rating of 99.9% in the 2017/18 annual stock take.



# Activity and Statistical Information

ADMITTED PATIENTS	2017/2018	2016/2017
Total admissions (includes same day)	17,428	17,599
Same day admissions	5,787	5,695
Average length of stay of admitted patients	4.31	4.74
Bed occupancy rate	92%	93%
<b>Number of operations</b>	<b>3,560</b>	<b>3,341</b>

## EMERGENCY DEPARTMENT

Number of attendances (includes admitted patients)	37,725	36,961
Number of admissions via Emergency Department (ED)	12,267	12,818

<b>OUTPATIENT SERVICES (EXCLUDES ED)</b>	<b>362,777</b>	<b>345,733</b>
--	----------------	----------------

<b>Total FTE staff employed 30 June</b>	<b>990</b>	<b>985</b>
---	------------	------------



# Year in Review









# Year in Review





# A Snapshot of our Year



The Coronary Care Unit treated a total of

**614**

patients. Acute coronary syndrome comprised

**238**

admissions



**362,777**

occasions of outpatient services were provided to our community



The Department of Consultation-Liaison Psychiatry consulted on **786** individual inpatients, delivering over

**1,745**

occasions of service

The Intensive Care Unit provided specialist care to

**550**

patients of which **42%** were ventilated



The 12-bed Emergency Short Stay Unit cared for

**5,268**

patients, equating to approximately **43%** of the hospital's total emergency admissions



More than

**10,550**

patient visits occurred through the Haematology Outpatient Clinics

Perioperative Services, predominantly the Operating Suite and Pre-operative Clinic, performed

**3,805**

procedures, of which **815** were urgent

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

**7,035**

outpatients and **1,275** consultations to inpatients



**383,215**

meals were served to patients

**17,428**

patients were admitted to hospital



There were

**1,037**

admissions to the Hunter Area Toxicology Service

**37,725**

patients were cared for by our Emergency Department, **32%** went on to be admitted



The Day Treatment Centre provided

**12,167**

procedures and the Infusion Lounge

**2,785**

treatments

The Department of Medical Oncology saw

**1,252**

new patients and provided

**28,443**

occasions of service



Our dedicated Volunteers donated

**9,673**

hours of their valuable time

There were

**933**

Rapid Response Team calls



The Melanoma Unit received

**655**

new surgical patients and

**62**

new oncology patient referrals



Our dedicated Auxiliary members raised

**\$327,162.43**

this equates to more than \$10,000 being raised per member

The Dietetics Service was involved in the care of more than **2,800 inpatients and 850 oncology outpatients**, with more than 4,950 and 2,900 occasions of service provided respectively





# Research and Teaching Reports

## A message from the Research Committee

Research at Calvary Mater Newcastle has undergone significant changes over the past 12 months. For the past 20 years the Calvary Mater Newcastle Research Committee (CMNRC) has overseen the management and provision of research grants for Calvary Mater Newcastle staff.

As a new era of research slowly develops at the hospital we sadly say goodbye to the Calvary Mater Newcastle Research Committee. A special thank you goes to long standing members both past and present: Dr Lisa Lincz, Professor Ian Whyte, Dr Jennette Sakoff (Chair), Dr Stephen Ackland, Douglas Bellamy, Mary-Clare Hanlon, Judith Thompson, Dr Kerry Clover, Susan Goode, Helen Ellis, Laraine Cross, Craig Cutler, Kylie Murchie, Cathy-Lyn Burnard and Crystal Tindall.

In 2018 a new research committee was convened, known as the Research Development and Engagement Committee, affectionately known as the ReDE Committee. Committee members include: 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 vision of the new committee is for Calvary Mater Newcastle to be recognised as a world class research facility that benefits the individuals and communities it serves.

The mission of the committee is to support a broad spectrum of high quality research, create an environment where research is an integral component of sustainable health care and propel innovative translational research into improving the health of individuals, communities and populations.

The purpose of the committee is to:

- Support and further develop the capacity for research in Calvary Mater Newcastle
- Enhance the profile of current research in Calvary Mater Newcastle
- Strengthen the performance and quality of research in Calvary Mater Newcastle
- Encourage new researchers, including junior staff, to participate in research
- Sustain an organisational commitment to support and develop research roles
- Ensure governance arrangements which promote accountability and responsibility for research conducted according to ethical principles, scientific, regulatory and professional standards, risk management and the mission and values of Calvary

The function of the committee will be to complete the actions from the strategic plan that relate to: media, events, community engagement, professional development, education and training, and donations and bequests.



# Research Grants awarded by the CMNRC

The Calvary Mater Newcastle Research Committee (CMNRC) prides itself on overseeing a rigorous peer review process of grant funding. This year was no exception.

The CMNRC received six applications for funding in 2017, requesting \$141,571 from a total of \$140,000 available funding. Three of these were solely for equipment funding from the Coalfields Cancer Support Group Equipment Scheme (requesting \$83,226.98 from \$45,000 available), one was eligible for funding from the James Lawrie Scheme (Head and Neck Cancer; requesting \$28,325 from \$30,000 available), while two were eligible for funding from the Margaret Mitchell and Jane Reid Harle Schemes (requesting \$30,020 from a total sum of \$70,000).

As per terms of reference for grant review, one peer review panel of three members plus an observer was convened to rank the Coalfields Equipment Grant, while another panel of four members, plus an observer was convened to assess all submissions for the James Lawrie Grant, Margaret Mitchell and Jane Reid Harle Grants.

Scores and comments were submitted to Crystal Tindall, Research Administration Assistant, for collation. Of the six applications, five received full or partial funding from Calvary Mater Newcastle, with one not being suitable for funding. All funding outcomes concurred with collated review scores. In addition to these, the Hunter Cancer Research Alliance (HCRA) provided funding for three pieces of infrastructure through the HCRA Clinical Research Fund.

The funding recipients acknowledged at the Celebration of Service in November 2017 were:

## **Margaret Mitchell Grant**

- Jennette Sakoff, Janice Aldrich-Wright, Jayne Gilbert. Medical Oncology Department. Development of DNA intercalating platinum complexes for the treatment of cancer.

## **Jane Reid Harle Grant**

- Catherine Johnson, Brian Draganic, Stephen Smith, Judy Holland, Belinda Allen, Jarad Martin. Medical Oncology Department. A randomised study of pelvic floor muscle exercise to improve bowel function after colostomy reversal following a diagnosis of rectal cancer.

## **James Lawrie Grant**

- Haylea Richardson, Mahesh Kumar, Chris Wratten, Clare Jeans. Radiation Oncology Department. Correlation of dosimetry to swallowing structures on functional outcomes for head and neck cancer patients at the Calvary Mater Newcastle.

## **Coalfields Cancer Support Group Equipment Funding**

- Lisa Lincz, Jennette Sakoff. Haematology upgrade of essential equipment: Real time quantitative PCR thermocycler.
- Madhu Garg, Jennette Sakoff, Stephen Ackland. Medical Oncology. Essential statistics and pharmacokinetic software with required hardware for oncology clinical research projects data analysis.

## **HCRA Clinical Cancer Research Infrastructure**

- Stephen Ackland. Hunter Cancer Biobank Sequential Blood Collection: OpenSpecimen Software upgrade.
- Nick Zdenkowski, Mike Fay. Hunter Cancer Research Centre Biobanking Freezer.
- James Lynam. Clinical Trials Management System "MAISI" (Management Application for Investigator Sites) software for Calvary Mater Newcastle Clinical Trial Units Clinical Trials Management Software.
- Lisa Lincz. Service contract for Calvary Mater Newcastle Flow Cytometer BD FACS Canto.

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

### CLINICAL TOXICOLOGY AND PHARMACOLOGY

#### JOURNAL ARTICLES/PUBLICATIONS

- Russo M, Santarelli D, Isbister G. Comment on "probable tapentadol-associated serotonin syndrome after overdose". *Hospital Pharmacy*. 2017;52(4):248
- Isoardi KZ, Armitage MC, Harris K, Page CB. Establishing a dedicated toxicology unit reduces length of stay of poisoned patients and saves hospital bed days. *Emergency Medicine Australasia*. 2017;29(3):310-314
- Kasturiratne A, Pathmeswaran A, Wickremasinghe AR, Jayamanne SF, Dawson A, Isbister GK, de Silva HJ, Lalloo DG. The socio-economic burden of snakebite in Sri Lanka. *PLoS Neglected Tropical Diseases*. 2017;11 (7) (no pagination). Article Number: e0005647
- Chitty KM, Isbister GK, Dawson AH, Buckley NA. Authors' reply. *British Journal of Psychiatry*. 2017;211(1):53-54
- Chitty KM, Kirby K, Osborne NJ, Isbister GK, Buckley NA. Co-ingested alcohol and the timing of deliberate self-poisonings. *Australian and New Zealand Journal of Psychiatry*. 2018; 52(3):271-278
- Johnston CI, Ryan NM, Page CB, Buckley NA, Brown SG, O'Leary MA, Isbister GK. The Australian Snakebite Project, 2005-2015 (ASP-20). *Medical Journal of Australia*. 2017;207(3):119-125
- Chiew AL; Isbister GK; Kirby KA; Page CB; Chan BSH; Buckley NA. Massive paracetamol overdose: an observational study of the effect of activated charcoal and increased acetylcysteine dose (ATOM-2). *Clinical Toxicology*. 2017;55(10):1055-1065
- Young S, O'Driscoll R, Antony M, Whyte I. Massive eucalyptus oil overdose. *Internal Medicine Journal*. 2017;47(9):1085-1086
- Isbister GK, Brown AL, Gill A, Scott AJ, Calver L, Dunlop AJ. QT interval prolongation in opioid agonist treatment: analysis of continuous 12-lead electrocardiogram recordings. *British Journal of Clinical Pharmacology*. 2017;83(10):2274-2282
- Shrestha BR, Pandey DP, Acharya KP, Thapa-Magar C, Mohamed F, Isbister GK. Effective, polyvalent, affordable antivenom needed to treat snakebite in Nepal. *Bulletin of the World Health Organization*. 2017;95(10):1718-719
- Isbister GK. In reply: Treatment Goal for Agitation: Sedation or Calming. *Annals of Emergency Medicine*. 2017;70(5) 752-753
- Page CB, Ryan NM, Isbister GK. The safety of high-dose insulin euglycaemia therapy in toxin-induced cardiac toxicity. *Clinical Toxicology*. 2018;56(6):389-396
- Cardon-Dunbar A, Robertson T, Roberts MS, Isbister GK. Pramipexole Overdose Associated with Visual Hallucinations, Agitation and Myoclonus. *Journal of Medical Toxicology*. 2017;13(4):343-346
- Ooi QX, Wright DFB, Tait RC, Isbister GK, Duffull SB. A Joint Model for Vitamin K-Dependent Clotting Factors and Anticoagulation Proteins. *Clinical Pharmacokinetics*. 2017;56(12):1555-1566
- Chan BSH, Chiew AL, Grainger S, Page CB, Gault A, Mostafa A, Roberts MS, Buckley NA, Isbister GK. Bromoxynil and 2-methyl-4-chlorophenoxyacetic acid (MCPA) poisoning could be a bad combination. *Clinical Toxicology*. 2018 Jan 30:1-3. doi: 10.1080/15563650.2018.1433299. [Epub ahead of print]
- Chiew AL, Isbister GK, Page CB, Kirby KA, Chan BSH, Buckley NA. Modified release paracetamol overdose: a prospective observational study (ATOM-3). *Clinical Toxicology*. 2018 Feb 16:1-10. doi: 10.1080/15563650.2018.1439950. [Epub ahead of print]
- Chiew AL, Wright DFB, Dobos NM, McArdle K, Mostafa AA, Newth A, Roberts MS, Isbister GK. 'Massive' metformin overdose. *British Journal of Clinical Pharmacology*. 2018 Mar 13. doi: 10.1111/bcp.13582. [Epub ahead of print]
- 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. *Prehospital Emergency Care*. 2018 Mar 20:1-9. doi: 10.1080/10903127.2018.1445329. [Epub ahead of print]
- Tasoulis T, Isbister GK. A review and database of snake venom proteomes. *Toxins (Basel)*. 2017 Sep 18;9(9). pii: E290. doi: 10.3390/toxins9090290.
- Berling I, Gupta R, Bjorksten C, Prior F, Whyte IM, Berry S. A review of ECG and QT interval measurement use in a public psychiatric inpatient setting. *Australasian Psychiatry*. 2018;26(1):50-55
- Sanhajariya S, Duffull SB, Isbister GK. Pharmacokinetics of Snake Venom. *Toxins (Basel)*. 2018 Feb 7;10(2). pii: E73. doi: 10.3390/toxins10020073.
- Kerridge R, Whyte I, Prior F, Luu J, Story DA. The good, the bad, and the ugly: sodium-glucose cotransporter-2 inhibitors (gliflozins) and perioperative diabetes. *Anaesthesia and Intensive Care*. 2018 Mar;46(2):155-158
- Pearce R, Whyte I. Electronic medication management: Is it a silver bullet? *Australian Prescriber*. 2018;41(2):32-33
- Ng DPI, Duffull SB, Faed JM, Isbister GK, Gulati A. An Evaluation of a Factor Xa-Based Clotting Time Test for Enoxaparin: A Proof-of-Concept Study. *Clinical and Applied Thrombosis/Hemostasis*. 2018;24(4):669-676
- Chiew AL, Page, Clancy D, Mostafa A, Roberts MS, Isbister GK. 2-Methyl-4-chlorophenoxyacetic acid (MCPA) and bromoxynil herbicide ingestion. *Clinical Toxicology*. 2018;56(5):377-380
- Page CB, Ryan NM, Isbister GK. The safety of high-dose insulin euglycaemia therapy in toxin-induced cardiac toxicity. *Clinical Toxicology*. 2018;56(6):389-396

#### CONFERENCE PRESENTATIONS

- Isbister GK. Two invited talks. Australian Association of Clinical Biochemists. Annual Conference. Melbourne. 2017
- Isbister GK. Antivenom treatment. Society of Hospital Pharmacists. Annual Scientific Meeting. Sydney. 2017
- Whyte IM. From caveman to Shipman: A history of homicidal poisoning. Society of Hospital Pharmacists. Annual Scientific Meeting. Sydney. 2017
- Isbister GK. Snakebite associated acute kidney injury and can antivenom prevent it? Congress of the Asia Pacific Association of Medical Toxicology. Sri Lanka. 2017
- Downes M, Robertson T, Roberts MS, Leatham SH, Chan B, Isbister GK. Orphenadrine ingestion: New birth of an old toxin. *EMA - Emergency Medicine Australasia*. Conference: 34th Australasian College of Emergency Medicine Annual Scientific Meeting. Australia. 30 (Supplement 1) (pp 54), 2018
- Chiew A, Isbister GK, Page CB, Chan BSH, Buckley NA. Modified release paracetamol overdose: A prospective observational study. *EMA - Emergency Medicine Australasia*. Conference: 34th Australasian College of Emergency Medicine Annual Scientific Meeting. Australia. 30 (Supplement 1) (pp 13-14), 2018
- Isbister GK. Snake envenoming. *EMA - Emergency Medicine Australasia*. Conference: 34th Australasian College of Emergency Medicine Annual Scientific Meeting. Australia. 30 (Supplement 1), 2018
- Chan B, Chiew A, Grainger S, Page C, Mostafa A, Roberts M, Buckley N, Isbister G. Bromoxynil poisoning series: A toxic herbicide. *EMA - Emergency Medicine Australasia*. Conference: 34th Australasian College of Emergency Medicine Annual Scientific Meeting. Australia. 30 (Supplement 1) (pp 63-64), 2018
- McArdle K. Overdose related lactic acidosis. *EMA - Emergency Medicine Australasia*. Conference: 34th Australasian College of Emergency Medicine Annual Scientific Meeting. Australia. 30 (Supplement 1), 2018
- Johnston C, Buckley N, Brown S, Ryan NM, Page C, Isbister GK. Acute kidney injury in Australian snake envenoming:

Common, multifactorial and somewhat avoidable (ASP-26). *Clinical Toxicology*. Conference: 38th International Congress of the European Association of Poisons Centres and Clinical Toxicologists, EAPCCT 2018. Romania. 2018;56(6) 545-546

11. Berling I, Whyte IM, Semmens A. Thirty years of inpatient toxicology deaths. *Clinical Toxicology*. Conference: 38th International Congress of the European Association of Poisons Centres and Clinical Toxicologists, EAPCCT 2018. Romania. 2018;56(6) 516-517
12. Keegan M, Cooper JM, Isbister GK. Duloxetine overdose. *Clinical Toxicology*. Conference: 38th International Congress of the European Association of Poisons Centres and Clinical Toxicologists, EAPCCT 2018. Romania. 2018;56(6) 536
13. Silva A, Premawardene N, Bandaranayake A, Siribaddana S, Isbister GK. Large inter-batch variation in acute adverse reactions to Indian polyvalent antivenom. *Clinical Toxicology*. Conference: 38th International Congress of the European Association of Poisons Centres and Clinical Toxicologists, EAPCCT 2018. Romania. 2018;56(6) 548
14. Cooper JM, Duffull SB, Isbister GK. Serotonin toxicity: A regression analysis of frequency and outcomes. *Clinical Toxicology*. Conference: 38th International Congress of the European Association of Poisons Centres and Clinical Toxicologists, EAPCCT 2018. Romania. 2018;56(6) 547-548

#### CONFERENCE POSTERS

1. Ryan N, Isoardi K, Page C, Isbister G. Frequency and burden of delirium in drug overdose patients. Toxicology and Poisons Network Australasia (TAPNA). Scientific Meeting. Brisbane. 2018
2. Prior F, Ng YC. Doing more for medicines information services-expanding the peer review process. Society of Hospital Pharmacists. Annual Scientific Meeting. Sydney. 2017
3. Vasquez P, Prior F. Continuing uncertainties related to non-vitamin K antagonist oral anticoagulants (NOACs). Society of Hospital Pharmacists. Annual Scientific Meeting. Sydney. 2017

#### RESEARCH FUNDING/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, Laloo D, Dawson A, Garawammana 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. End 2018
3. NHMRC Program Grant: "An integrated research program in human toxicology to ensure rapid translation of results into practice and regulation." Buckley NA, Isbister GK, Dawson A, Roberts M. 2014-2018
4. HETI Allied Health Workplace Training Grant. "Scientific Writing and Editing workshop for HNE pharmacists". Prior F. 2018

#### CLINICAL TRIALS

1. Stevens GJ, Hammond TE, Brownhill S, Anand M, de la Riva A, Hawkins J, Chapman T, Baldacchino R, Micallef J-A, Andepalli J, Kotak A, Gunja N, Page A, Gould G, Ryan CJ, Whyte IM, Carter GL, Jones A. SMS SOS: a randomised, controlled trial to reduce self-harm and suicide attempts using SMS text messaging.

#### OTHER RESEARCH

1. Dr Kylie McArdle has enrolled in a PhD with the University of Newcastle. "Drug overdose-related lactic acidosis and hyperammonaemia".



## CONSULTATION-LIAISON PSYCHIATRY

### INTRODUCTION

The 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 HNEMHS)
- Jennifer Bryant (Clinical Nurse Consultant, CMN)
- Dr Marianne Jackson (Advanced Trainee in Old Age Psychiatry)
- Dr Benjamin Britton (Clinical and Health Psychologist, Psycho-Oncology Service, CMN)
- Sophia Wooldridge (Clinical Psychologist, Psycho-oncology Service, CMN)
- Karen Matthews (Clinical Psychologist, Youth Cancer Service, HNELHD)
- Professor Gregory Carter (Psychiatrist, CMN, Conjoint Professor, Faculty of Health and Medicine, University of Newcastle)

### PSYCHO-ONCOLOGY RESEARCH

- In an exciting development, the department has welcomed PhD student Erin Forbes who will be co-supervised by Kerrie Clover and Ben Britton. Erin's PhD research will expand on existing work into anxiety experienced by head and neck cancer patients during radiation therapy procedures. With co-investigators from the Department of Radiation Oncology the department is currently recruiting into a baseline study and 78 patients have completed the study to date. The department has also obtained Ethics Committee approval for a qualitative study to better understand the procedures from the patient perspective. The next phase of the research will test innovative interventions to reduce patient anxiety. In developing these interventions the department will focus on ease of translation into clinical practice.
- Another new project was Haem-Fit, a pilot implementation trial of a hospital exercise and wellness program for haematology inpatients. The Haem-Fit team was led by the Haematology Department with co-investigators from Physiotherapy and Psycho-Oncology. People admitted for management of haematological malignancy often have long hospital stays and

experience therapies that can reduce their ability and motivation to exercise. Lack of exercise can lead to skeletal muscle atrophy and influence patient outcomes. The team completed a baseline survey and developed a structured exercise program. The baseline study showed that the majority of patients experienced significant loss of muscle mass during their hospital stay. The next stage of this pilot study will implement and evaluate the exercise program.

- The department has continued its work in the area of validating measures of depression and anxiety in the oncology setting. The team were the first to use a gold-standard clinical interview to validate depression measures from the "PROMIS" initiative (a major project originating in the United States using item-response theory to develop Patient Reported Outcome Measures). This research confirmed that the new measures are valid but concluded that they offer no particular advance on existing measures. The team continue to work with hospital specialist cancer nurse consultants to examine the impact of distress screening practices.
- The department has also worked with local, national and international collaborators in a range of areas including: a national survey into the evidence-practice gap in distress management; the experience of general psychological distress and anxiety before and after head and neck cancer treatment; and the validity of the Patient Health Questionnaire as a measure of depression.
- Kerrie Clover has continued as the Convenor of the Australian Psychological Society's Psychologists in Oncology Interest Group and participated in consultations for the Cancer Institute NSW.

### SUICIDE PREVENTION RESEARCH

This year's suicide prevention research has had a focus on self-harm within priority populations, has built on existing work including dissemination of findings and strengthening knowledge translation, and has been able to secure funding to update the data held in the deliberate self-poisoning register to include the psychiatric information.

Based on the findings from the systematic reviews led by Calvary Mater Newcastle researchers and published last year, Professor Carter has recently published an editorial in the journal 'Crisis' discussing how risk stratification is not accurate enough to be clinically useful; and both Professor Carter and Dr McGill have presented to different groups of local mental health clinicians on the findings of the systematic reviews and their implications for clinical practice.

A manuscript has recently been submitted that considers whether the reported increase in young females' self-harm in national and state data is real or artefactual, through a comparison of Australian Institute of health and Welfare (AIHW) and Ministry of Health self-harm rates with those

calculated using the Hunter Area Toxicology Service dataset.

Ethics approval has been received and data analysis 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.

Work for two service evaluation projects continues.

*The Way Back Support Service (Hunter) trial* - This is a *beyondblue* initiative that aims to reduce suicidal behaviour by providing non-clinical support to individuals for up to three months following a suicide attempt. It is being trialled in the Hunter region using an integrated referral pathway model for people who have presented to Calvary Mater Newcastle after deliberate self-poisoning. The aim of this study will be to identify whether rates of repetition of self-poisoning and lengths of stay in either the general or psychiatric hospitals differ for the period the intervention was available compared to historical controls. This study will be part of a multi-layered evaluation framework that has been developed for the project. The 12 month follow-up phase for this study is underway and data analysis is project for the end of 2018.

*Evaluation of the Accredited Persons Program* - 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'. An Accredited Person has 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, the unit is investigating 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 for this project is complete and preparation of a manuscript is underway.

The unit also continues to support a number of university and/or college required research projects and theses; including Dr Lindsay Gale (Scholarly Project- investigating delirium in self-poisoning patients), Dr Ingrid Berling (PhD- investigating whether psychotropic medication use may be contributing to some cardiac deaths), Mr Amir Salem (Psychology Clinical Masters thesis- predictors of discharge to psychiatric hospital for Aboriginal and non-Aboriginal patients), Ms Karen Robertson (Psychology Clinical Masters thesis- Effectiveness of the dissemination of YAM, a school based suicide prevention program).

Finally, Calvary Mater Newcastle is a LifeSpan Newcastle pilot. LifeSpan is an integrated approach to suicide prevention that is fundamentally based on ensuring evidence informs practice. Professor Carter is a member of the Leadership, Research and Advisory Committee



for Black Dog Institute who is rolling out the trial in four sites in New South Wales. Newcastle is the first of the four sites to trial the model and Calvary Mater Newcastle is an active partner in the hospital-based activities.

#### PEER REVIEWED JOURNAL PUBLICATIONS

1. Hossein Hassanian-Moghaddam, Fatemeh Ghorbani, Afsaneh Rahimi, Tayyebbeh Farmahini Farahani, Parvane Sadat Vafaei Sani, Terry J. Lewin, Gregory L. Carter  
Federation Internationale de Football Association (FIFA) 2014 World Cup impact on hospital-treated suicide attempt (overdose) in Tehran (Suicide and Life-Threatening Behavior 2018 48:3 367-375 |<https://doi.org/10.1111/sltb.12359>)
2. Woodford R, Spittal MJ, Milner A, McGill K, Kapur N, Pirkis J, Mitchell A, Carter G.  
Accuracy of clinician predictions of future self-harm: a systematic review and meta-analysis of predictive studies (Suicide and Life-Threatening Behavior, 03 October 2017 |<https://doi.org/10.1111/sltb.12395>)
3. Witt K, Spittal MJ, Carter G, Pirkis J, Hetrick S, Currier D, Robinson J, Milner A.  
Effectiveness of online and mobile telephone applications ('apps') for the self-management of suicidal ideation and self-harm: a systematic review and meta-analysis (BMC Psychiatry 2017, 17:297 DOI 10.1186/s12888-017-1458-0)
4. Large M, Ryan C, Carter G, Kapur N.  
Can we usefully stratify patients according to suicide risk? (BMJ 2017;359:j4627 October 2017 doi: 10.1136/bmj.j4627)
5. Borruso LD, Buckley NA, Kirby KA, Carter G, Pilgrim JL, Chitty KM  
Acute alcohol co-ingestion and hospital-treated deliberate self-poisoning; is there an effect on subsequent self-harm? (Suicide and Life-Threatening Behavior 02 March 2018 <https://doi.org/10.1111/sltb.12443>)
6. Mark Erik Larsen, Fiona Shand, Kirsten Morley, Philip Batterham, Katherine Petrie, Bill Reda, Sofian Berrouguet Paul Haber, Gregory Carter, Helen Christensen  
Development of the RAFT (Reconnecting after a suicide attempt) SMS brief contact intervention (JMIR Mental Health JMIR Ment Health 2017;4(4):e56 DOI: 10.2196/mental.7500 PMID: 29237584 PMCID: 5745353)
7. Kristen McCarter; Amanda Baker; Ben Britton; Alison Kate Beck; Gregory Carter; Judith Bauer; Chris Wratten; Sean A Halpin; Elizabeth Holliday; Christopher Oldmeadow; Luke Wolfenden  
Effectiveness of clinical practice change strategies in improving dietitian care for head and neck cancer patients according

to evidence based clinical guidelines: A stepped wedge randomised controlled trial. (Accepted Translational Behavioral Medicine, October 2017)

8. Kerrie Clover, Sylvie D. Lambert, Christopher Oldmeadow, Benjamin Britton, Madeleine T. King, Alex J Mitchell, Gregory Carter  
PROMIS depression measures perform similarly to legacy measures relative to a structured diagnostic interview for depression in cancer patients. (Quality of Life Research, (2018) 27: 1357. <https://doi.org/10.1007/s11136-018-1803-x>)
9. Kristen McCarter, Amanda L. Baker, Ben Britton, Sean A. Halpin, Alison Beck, Gregory Carter, Chris Wratten, Judith Bauer, Luke Wolfenden, Katrina Burchell, Erin Forbes  
Head and neck cancer patient experience of a new dietitian-delivered health behaviour intervention: "You know you have to eat to survive" (Supportive Care in Cancer, (2018) 26: 2167. <https://doi.org/10.1007/s00520-017-4029-5>)
10. Kristen McCarter, Ben Britton, Amanda Baker, Sean A Halpin, Alison K Beck, Gregory Carter, Chris Wratten, Judy Bauer, Erin Forbes, Debbie Booth, Luke Wolfenden  
Interventions To Improve Screening And Appropriate Referral Of Cancer Patients For Distress: Systematic Review (BMJ Open January 2018; 8:e017959. doi: 10.1136/bmjopen-2017-017959)
11. 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 and Adolescent Psychiatry. 2018 DOI: 10.1007/s00787-018-1111-6).
12. Levis, B., Benedetti, A., Riehm, K., Saadat, N., Levis, A., Azar, M., . . . Thombs, B. (2018). Probability of major depression diagnostic classification using semi-structured versus fully structured diagnostic interviews. The British Journal of Psychiatry, 212(6), 377-385. doi:10.1192/bjp.2018.54
13. McCarter K, Wolfenden L, Beck A, Wratten C, Carter G, Britton B, Baker A, Bauer J, Halpin S.  
Smoking, drinking and depression: comorbidity in head and neck cancer patients undergoing radiotherapy (Cancer Medicine, Cancer Medicine 2018; 7(6):2382–2390 doi: 10.1002/cam4.1497)
14. 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>)

15. Bourke, J, Plant C, Wooldridge, S  
Interpersonal Psychotherapy (IPT) with Expressive Art for Major Depression in a Psycho-Oncology Context (Manuscript accepted, Clinical Case Studies, 2018)

#### RANZCP SCHOLARLY PROJECT DISSERTATION

1. Jackson M  
Hospital-treated Deliberate Self-Poisoning in the older adult: identifying the specific clinical assessment needs (passed May 2018)

#### CONFERENCE PRESENTATIONS

1. Eating As Treatment (EAT): A Health Behaviour Change Intervention to Improve Treatment Outcomes for Head and Neck Cancer Patients Undergoing Radiotherapy. Baker, A., Britton, B., McCarter, K., Wolfenden, L., Wratten, C., Bauer, J., Carter, G.  
British Association for Behavioural and Cognitive Psychotherapies, Manchester. 25-28 July 2017.
2. Eating As Treatment (EAT): Improving Treatment Outcomes for Head and Neck Cancer Patients Undergoing Radiotherapy. Britton, B., Baker, A., Beck, A., McCarter, K., Wolfenden, L., Wratten, C., Bauer, J., Halpin, S., Carter, G.  
Cancer Institute 2017 Innovations in Cancer Treatment and Care Conference. 14 September 2017.
3. Procedural Anxiety During Radiotherapy Using A Mask In Patients With Head And Neck Cancer: Interim Data as part of symposium: Patient Experiences Of Anxiety During Radiation Therapy For Head And Neck Cancer.  
Clover, K., Forbes, E., Carter, G., Wratten, C., Britton, B., Tieu, M., Kumar, M., Oultram, S., Baker, A. L., McCarter, K.  
20th World Congress of Psycho-Oncology and Psychosocial Academy (IPOS 2018)
4. Suicide Risk Assessment: Should We Do It? Why Should We Do It? What Should We Do? Kate Comtois, Dave Jobes, Greg Carter, Pete Gutierrez, Jeff Sung  
Symposium Presentation. 2018 AAS Annual Conference, Washington, DC, April 19-21, 2018.
5. Support after a suicide attempt: Aftercare evidence, models and learnings to date. McGill, K., Shand, F., Burns, B., McRae, A., Traynor, M. and Larsen, M. 25-28 July 2018.
6. Eating As Treatment (EAT): A health behaviour change intervention for head and neck cancer patients.  
McCarter, K., Britton, B., Baker, A., Beck, A., Wolfenden, L., Wratten, C., Bauer, J., Carter, G.  
32nd Annual Conference of the European Health Psychology Society, Galway, Ireland. 21-25 August 2018.
7. Preliminary results of psychiatric morbidity for oncology patients.  
Plant, C., McGill, K., Ang, P.  
20th International Conference on

- Psychology, Philosophy and Cognitive Science, Bali. 22-23 October 2018.
8. PROMIS depression measures versus legacy PROMs and structured diagnostic interview for depression in cancer patients.  
 Kerrie Clover, Sylvie D. Lambert, Christopher Oldmeadow, Benjamin Britton, Madeleine T. King\*, Alex J Mitchell, Gregory Carter  
 PROMIS Health Organisation annual conference. Philadelphia, USA. 17 October 2017.  
*\*Presenting author*
  9. Wellness and Exercise Survey of Haematology Cancer In-Patients. Baseline measurements to guide future interventions.  
 Casey Hutchinson\*, Louisa Brown, Lisa Lincz, Alix Hall, Jackie Wykes, Judy Holland, Kerrie Clover, Benjamin Britton, Jenny Martin, Philip Rowlings  
 Cancer Nurses Society of Australia, 21-23 Jun Brisbane  
*\*Presenting author*
- RESEARCH GRANTS**
1. Hunter New England Central Coast Primary Health Network.  
 Hunter Deliberate Self-Poisoning Clinical Registry.  
 Carter, G, Whyte, I, McGill, K.  
 \$145,000 for one year (commenced June 2018).
  2. 2017 Faculty of Health and Medicine Strategic Pilot Grant (University of Newcastle)
  3. 2017 Priority Research Centre for Health Behaviour Funding, University of Newcastle  
 Mediation analysis of an effective health behaviour change intervention for head and neck cancer patients: the importance of best practice guidelines  
 McCarter K, Britton B, Baker A, Wolfenden L, Carter G, Bauer J, Wratten C, Beck A, Forbes E, Oldmeadow C, Lee H. \$2,200 over one year
  4. 2017 Priority Research Centre for Health Behaviour Funding, University of Newcastle  
 Two year survival of participants of the Eating As Treatment trial. (AIHW data linkage)  
 Britton B, Baker A, McCarter K, Wolfenden L, Bauer J, Wratten C, Beck A, Forbes E, Oldmeadow C, Carter G. \$3,000 over one year
  5. 2017 HCRA Implementation Science Program  
 Translating Eating as Treatment for Head and Neck Cancer (TREAT)  
 Ben Britton, Amanda Baker, Alison Beck, Greg Carter, Chris Wratten, Judith Bauer, Luke Wolfenden, Kristen McCarter. \$30,000 over one year
  6. 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
  7. 2017 Hunter Cancer Research Alliance, targeted funding round.  
 Design and implementation of an exercise and wellness program for haematology cancer patients before, during and after treatment.  
 Philip Rowlings, Casey Hutchinson, Louisa Brown, Lisa Lincz, Alix Hall, Jackie Wykes, Judy Holland, Kerrie Clover, Benjamin Britton, Jenny Martin, \$39,944 over one year.

## 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. The unit is fortunate to have strong



community support and is grateful for all the generous donations received in 2017/18.

## HAEMATOLOGY CLINICAL TRIALS

**Clinical Trial Coordinators:** Michele Gambrell, Tara Novak, Marguerite Hughes, William Whitbread-Brown, Nick Stankovich, Cheryl Cairney and Klara Jakimovski.

**Administrative Officers:** Patricia Rozanski and Karen Kincaid

**Laboratory Technical Officer:** Michelle Barnett

Over the past year the Haematology Clinical Trials Office has:

- Activated 13 new clinical trials across a range of haematology malignancies
- Pre-screened 171 new potential participants for those newly activated and ongoing clinical trials,
- Formally screened 51 of those potential participants, and
- Enrolled 39 of those screened participants onto a clinical trial
- Opened a Phase study in Acute Promyelocytic Leukaemia with another Phase 1 study in development

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 in 2017/18, 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 department has also successfully contributed to several Phase II studies in Lymphoma and Acute Myeloid Leukaemia (AML), with one of the latter leading to US Food and Drug Administration accelerated access to the drug that was tested.

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 department welcomed Karen Kincaid, Klara Jakimovski (replacing retiring William Whitbread-Brown) and Michelle Barnett to the Haematology Clinical Trials Office team.

The department is currently also in the process of recruiting a Data Manager to a newly created position.

## BONE MARROW STEM CELL TRANSPLANT RESEARCH

**Philip Rowlings, Louisa Brown, Hong Zhang, Linda Welschinger, Geordie Zaunders**

Patient transplant data is reported to the Australian Bone Marrow Transplant Recipients Registry (ABMTRR) as part of Australian Bone Marrow Transplant research and development. This data is also part of the Asia Pacific Bone Marrow Transplant (APBMT) group 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 A 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. The publication from this group (Ayyalil et al 2017) is a ground breaking intervention for reducing transfusion wastage published in a leading international transfusion journal. Dr Ross and Dr deMalmanche 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 microparticles. The laboratory is linked to the University of Newcastle and offers tuition and scholarships to encourage students to enter this area of research. There are presently four PhD and one Master's students associated with the lab.

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 Leukaemia with Dr Enjeti (clinical translational/Genomics/drug development), Dr Jon Sillar (Trainee and PhD student), Dr Asma Asharf (Clinical Epid), Dr Nikki Verrills (Molecular Biology), Dr Kathryn Skelding (Molecular Biology), Dr Matt Dun (Proteomics), Dr Lisa Lincz (Molecular Biology), Dr Heather Lee (Epigenetics) and Professor R Scott (Genomics). Dr A Enjeti has led the development of a NGS panel based testing for 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.

## IMPLEMENTATION SCIENCE COMMITTEE OF HUNTER CANCER RESEARCH ALLIANCE

**Professor Rowlings and Dr Bryony Ross were members of the Hunter Cancer Research Alliance, Implementation Science Committee.**

## BIOMARKERS AND TARGETED THERAPY COMMITTEE OF HCRA

**Dr Anoop Enjeti and Dr Lisa Lincz are members of this committee. Dr A Enjeti is also the chair of 'future leaders group' (FLG) of the HCRA.**

## RESEARCH FUNDING

1. 2018. HCRA Children's Cancer Research Project Grant. Re-purposing PARP inhibitors to treat childhood leukaemias K Skelding, N Bowden, L Lincz, A Enjeti, F Alvaro \$25,000
2. 2018. CMN Coalfields Cancer Support Group. Upgrade of essential equipment: real time quantitative PCR thermocycler. Lincz and Sakoff \$30,000
3. 2017-20. Pathology North/HNELHD/CMN Clinical Research Fellowship. Locoregional differences, biomarkers and novel therapy in Acute Myeloid Leukaemia. Anoop Enjeti. \$360,000
4. 2015-19 NHMRC project grant APP1085550. Helping stroke physicians choose who to thrombolys- the "Targeting Optimal Thrombolysis Outcomes" (TOTO) study. CIA:Elizabeth Holliday, CIG: L Lincz \$1,031,671
5. 2017-18 Genome wide approach to risk assess Multiple Myeloma and precursor plasma cell disorders A Enjeti, N Berry, W Janowski, R Scott and P Rowlings \$50,000
6. 2017-18 Research Equipment Grant (UON/ HMRI ) for a Tape station. R Thorne and R Scott as lead CIs. A Enjeti listed as a CI. \$50,000
7. 2017-18 Beyond the Next generation of DNA Sequencing: Long read Sequencing using Sequel CI R Scott, A Enjeti listed as CI. \$570,000
8. 2017-18 Determining the mechanisms underpinning leukemic transformation for children suffering from Shwachman-Diamond Syndrome (SDS). CI M Dunn, A Enjeti listed as CI. \$25,000
9. 2017 RCPA Rural supplementation for teaching, education and training. A Enjeti \$49,850

## CONFERENCE AND MEETING PROCEEDINGS

1. **Australasian Leukaemia and Lymphoma Group Scientific Meeting, 15-18 May, Melbourne, VIC**  
**Wojt Janowski** (Invited Speaker). *"Myeloma Research Update"*
2. **HaemX Symposium Haematology Update Melbourne Aug 2017**  
A Enjeti (Invited Speaker). *"Update on Bcl2 inhibitors in AML"*



3. **NSW HSNZ March 2018**  
A Enjeti (Invited Speaker). "NGS based testing for Myeloid disorders in NSW"
  4. **American Society of Haematology 59th meeting, Atlanta, Georgia, 9-12 Dec, 2017**
    - Andrew Wei, Stephen A. Strickland, Gail J. Roboz, Jing-Zhou Hou, Walter Fiedler, Tara L.Lin, RolandB. Walter, **Anoop Enjeti**, Brenda Chyla, Relja Popovic, Kaffa Fakouhi, Pooja Shah, Martin Dunbar, Tu Xu, Mack Mabry and John Hayslip Phase 1/2 Study of Venetoclax with Low-Dose Cytarabine in Treatment-Naive, Elderly Patients with Acute Myeloid Leukemia Unfit for Intensive Chemotherapy: 1-Year Outcomes. Blood 2017 130:890 (oral abstract)
    - Jock Simpson, Adam Hopkins and Anoop Enjeti *Transfusion Associated Circulatory Overload in Ambulatory Transfusions* Blood 2017 130:1124 (poster)
  5. **Cancer Cytogenomics Consortium Denver USA July 2017**  
HD-SNP Microarray Analysis of the Study 9 High Risk ALL Patients- Increased Yield of Important Prognostic Information **Nadine K Berry**, Rodney Scott, Rosemary Sutton, Philip Rowlings, Anoop K Enjeti Denver USA (oral abstract)
  6. **HAA-ASTH 2017, Oct 29 – Nov 1, Sydney, NSW**
    - **Lisa Lincz** (Invited speaker), Thrombosis and Haemostasis society of Australia and New Zealand, Scientific Workshop 'Curcumin and Fish oil effects on platelet aggregation and coagulation'
    - **Fiona E Scorgie**, Ritam Prasad, John Attia, Elizabeth Holliday, Rodney Scott, Lisa F Lincz. *Australian Frequency of Polymorphisms Clinically Relevant for Diagnosis of Type 1 von Willebrand's Disease* (poster)
    - **Linda Welschinger**, Lisa Lincz, Richard Makin, Philip Rowlings, Jan Virtue, Patricia Palladinetti, Geordie Zaunders. *Effect of over-night storage, plasma reduction and nucleated cell number on viable CD34+ cell recovery* (poster)
    - Alison Chandler, Lauren Shephard, **Philip Rowlings**. *Development of a Matrix for Appropriate Pathology Ordering in Haematology Inpatients* (poster)
    - **A Enjeti** (Session Chair), *HSANZ VTE Clinical Session*
  7. **Cancer Nurses Society of Australia 21st Annual Congress, Brisbane 21-23 June 2018**  
**Casey Hutchinson**, Louisa Brown, Lisa Lincz, Alix Hall, Jackie Wykes, Judy Holland, Kerrie Clover, Benjamin Britton, Jenny Martin, Philip Rowlings. *Wellness and Exercise Survey of Haematology Cancer In-Patients. Baseline measurements to guide future interventions.*
  8. **HCRA Implementation Science Flagship Program HEaPS Evening Seminar: 'Embedding research into routine cancer care'. April 4, 2018, Newcastle.**  
**Casey Hutchinson** (Invited speaker), 'Designing HAEM-Fit - an exercise and wellness program in the CMN Haematology Department'
  9. **Hunter Cancer Research Symposium of HCRA HMRI November 2017**  
**Elizabeth Pearsall**, Mengna Chi, Lisa Lincz, Kathryn Skelding. *Identification of a new mechanism for controlling Acute Myeloid Leukaemia cell survival.* (Awarded best translational science poster by an ECR/ student)
  10. **New Directions in Leukemia Research, Brisbane March 2018**  
Three translational projects in AML/MDS were presented in this symposium. A key note presentation by a collaborating researcher working with Dr A Enjeti was also presented at this meeting.
- ADVISORY/BOARD MEMBERSHIP**
- Philip Rowlings**
- Editorial Board of the Journal *Blood Cell Therapy*
  - Board of Directors, Australia Leukaemia and Lymphoma Group
  - Executive Committee, NSW BMT Network of the Agency for Clinical Innovation, NSW Health
  - Scientific Advisory Board of the Asia Pacific Bone Marrow Transplant Group (APBMT)
- Lisa Lincz**
- Member of Council, Thrombosis and Haemostasis Society of Australia and New Zealand (THANZ) Scientific and Education Trust
  - Member, CMN Translational Research and Governance 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 Translational Research and Governance Committee
- Member, CMN Research Development and Engagement Committee
  - Member, Vascular Biology Sub-Committee, 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, Symposium Committee HCRA for 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
- 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 OHandS Committee
  - Member, CMN Mission and Values Committee
- PUBLICATIONS [1-12]**
1. Alkhatatbeh, M.J., **A.K. Enjeti**, S. Baqar, E.I. Ekinci, D. Liu, R.F. Thorne, and **L.F. Lincz**, *Strategies for enumeration of circulating microvesicles on a conventional flow cytometer: Counting beads and scatter parameters.* Journal of Circulating Biomarkers, 2018. 7: p. 1849454418766966.
  2. Ayyalil, F., G. Irwin, B. Ross, M. Manolis, and **A.K. Enjeti**, *Zeroing in on red blood cell unit expiry.* Transfusion, 2017. 57(12): p. 2870-7.
  3. **Berry, N.K.**, A. Dixon-Mclver, R.J. Scott, P. Rowlings, and **A.K. Enjeti**, *Detection of complex genomic signatures associated with risk in plasma cell disorders.* Cancer Genet, 2017. 218-219: p. 1-9.
  4. Dyer, G., L. Brice, N. Gilroy, M. Kabir, M. Hertzberg, M. Greenwood, S.R. Larsen, J. Moore, D. Gottlieb, G. Huang, M. Hogg, **L. Brown**, J. Tan, C. Ward, and I. Kerridge, *Changes to work status and household income of long-term allogeneic blood and marrow*

transplant survivors in New South Wales, Australia. Bone Marrow Transplant, 2018.

5. Dyer, G., L. Brice, M. Schifter, N. Gilroy, M. Kabir, M. Hertzberg, M. Greenwood, S.R. Larsen, J. Moore, D. Gottlieb, G. Huang, M. Hogg, **L. Brown**, J. Tan, C. Ward, and I. Kerridge, *Oral health and dental morbidity in long-term allogeneic blood and marrow transplant survivors in Australia*. Aust Dent J, 2018.
6. Pearsal, EA., **Lincz, LF.**, and Skelding, KA. *The Role of DNA Repair Pathways in AML Chemosensitivity*. Current Drug Targets, 2018. 19: p. 1-15.
7. **Enjeti, A.K., A. Ariyaratjah, E. Warwick, M. Seldon, and L.F. Lincz**, *Challenges in Analysis of Circulating Extracellular Vesicles in Human Plasma Using Nanotracking and Tunable Resistive Pulse Sensing*. J Nanomed Nanotechnol 2017. 8(5).
8. Lim, M.S., **A. Ariyaratjah**, C. Oldmeadow, A. Hall, and **A.K. Enjeti**, *A Systematic Review and Meta-analysis Comparing Anticoagulation versus No Anticoagulation and Shorter versus Longer duration of Anticoagulation for Treatment of Isolated Distal Deep Vein Thrombosis*. Semin Thromb Hemost, 2017. 43(8): p. 836-48.
9. Malik, R., T. Dau, M. Gonik, A. Sivakumar, D.J. Deredge, E.V. Edeleva, J. Gotzfried, S.W. van der Laan, G. Pasterkamp, N. Beaufort, S. Seixas, S. Bevan, **L.F. Lincz**, E.G. Holliday, A.I. Burgess, K. Rannikmae, J. Minnerup, J. Kriebel, M. Waldenberger, M. Muller-Nurasyid, P. Lichtner, D. Saleheen, P.M. Rothwell, C. Levi, J. Attia, C.L. Sudlow, D. Braun, H.S. Markus, P.L. Wintrobe, K. Berger, D.E. Jenne, and M. Dichgans, *Common coding variant in SERPINA1 increases the risk for large artery stroke*. Proc Natl Acad Sci U S A, 2017. 114(14): p. 3613-8.
10. Saglio, G., P. le Coutre, J. Cortes, J. Mayer, **P. Rowlings**, F.X. Mahon, G. Kroog, K. Gooden, M. Subar, and N.P. Shah, *Evaluation of cardiovascular ischemic event rates in dasatinib-treated patients using standardized incidence ratios*. Ann Hematol, 2017. 96(8): p. 1303-13.
11. Scott, A., N. Weber, C. Tiley, K. Taylor, J. Taper, S. Harrison, K.L. Chan, R. Stark, C. Lee, K. Morris, P.J. Ho, A. Dodds, S. Ramanathan, R. Ramakrishna, A.M. Watson, B. Auguston, F. Kwok, H. Quach, P. Warburton, **P. Rowlings**, and P. Mollee, *'Real-world' Australian experience of pomalidomide for relapsed and refractory myeloma*. Leuk Lymphoma, 2018. 59(6): p. 1514-6.
12. van der Pol, E., A. Sturk, T. van Leeuwen, R. Nieuwland, and F. Coumans, **(AK Enjeti; contributor)** *Standardization of extracellular vesicle measurements by flow cytometry through vesicle diameter approximation*. J Thromb Haemost, 2018. 16(6): p. 1236-45.

## RADIATION ONCOLOGY AND MEDICAL PHYSICS

### GOAL

Improving clinical training, service delivery in cancer care and long-term survival due to research advances in radiation oncology, cancer imaging and technology.

### HIGHLIGHTS DURING THE REPORTING PERIOD

- 68 peer-reviewed publications including the highest profile journals in the field such as Journal of Clinical Oncology and Lancet Oncology
- 125 new participants enrolled into clinical trials
- Invited speakers at high profile national and international meetings
- Involvement in >\$1,300,000 of competitive research grant funding
- Establishment of Radiation Oncology and Cancer Imaging Technology (ROCI) Flagship Program

### OUR RESEARCH PRIORITY AREAS:

- Both initiation and collaboration on clinical trials
- Radiotherapy with particular focus on image-guided radiation therapy (IGRT) and treatment verification
- Imaging using technologies such as magnetic resonance imaging (MRI), and positron emission tomography (PET)
- Radiation Therapist and Nuclear Medicine research projects

### CLINICAL TRIAL ACTIVITY

From July 2017 to June 2018, the department had 44 currently active studies, which were in recruitment or follow-up, and other staff-led studies, which tested feasibility, safety and efficacy, as well as retrospective audits. Three new studies were activated, 125 participants were enrolled and 429 participants were in follow-up. Participation in these trials provides valuable research income for the hospital as well as improved care and outcome opportunities for patients in our community.

The trials the department participates in encompass basic sciences, technical projects and quality assurance activities, as well as qualitative research and multicentre clinical trials with the potential to direct future best practice.

An example of Calvary Mater Newcastle research success in this area is highlighted by Associate Professor Jarad Martin's work in a prostate cancer trial. Jarad was the Australasian principal investigator within the Trans-Tasman Oncology Group for the international prostate cancer radiotherapy randomised trial, which helped establish a four-week course of treatment as a standard option. This trial accrued >200 men ahead of schedule and integrated newer technologies such as Image Guided Radiotherapy (IGRT) and Intensity Modulated Radiotherapy (IMRT) in the clinical setting, and these techniques now represent the widespread standard of care in the profession.

## FLAGSHIP PROGRAM

Building from the success of previous years – the establishment of the Radiation Oncology and Cancer Imaging (ROCI) Research Executive, and the Radiation Therapy Research Interest Group (RTRIG), the department has continued to increase the research capacity of the unit.

A Flagship Program, Radiation Oncology and Cancer Imaging Technology (ROCIT), has been established in partnership with the Hunter Cancer Research Alliance. ROCIT incorporates the research portfolios of the Nuclear Medicine and Radiation Therapy teams, along with Radiation Oncology, Cancer Imaging and Medical Physics. This flagship will broaden the breadth and complexity of the research conducted by now involving multiple disciplines and more field leaders. The ROCIT Steering Committee, Chaired by Professor Peter Greer, is working to increase collaboration, attract funding opportunities and encourage novel research initiatives. The Flagship will offer monetary assistance for up to five pilot projects as well as support the travel and publication requirements of members aligned with the program in 2018.

Scope of activities:

- Fostering collaboration and identifying new opportunities
- Testing ideas with cross-disciplinary debate
- Developing a ground-up set of priority research questions which are amenable to implementation and build on the Hunter New England Local Health District's research and clinical strengths
- Developing a project implementation and management strategy for the agreed research questions and projects

## GOVERNANCE AND OVERSIGHT

The department holds regular education meetings to disseminate the latest improvements in patient care and for senior leaders to participate in the Hunter New England Local Health District multidisciplinary team meetings. Staff are involved in many oversight and governance roles including:

- CMN Governance Committee
- National and International Conference Organising Committees
- Editorial boards
- Funding body peer-review panels
- Collaborative research groups (e.g. the Trans-Tasman Radiation Oncology Group)
- CMN Research Committee
- Hunter Cancer Research Alliance Executive Committee
- Advisory board members for Pharma including Janssen-Cilag, Ferring Pharmaceuticals and MSAC Expert Panel

## RESEARCH OUTCOMES

Several staff are recognised as leaders in their fields and have built strong collaborations with other national and international experts. This is supported by the 68 peer reviewed journal articles published

by members of the department during the reporting period. In addition, 27 staff were invited to conferences and meetings, both nationally and internationally, to present their research either orally or by poster. This research dissemination is a vital part of making findings available and builds further collaborations. Participation at these events also highlights Calvary Mater Newcastle as a world-class research environment. The department has 24 conjoint appointments with the University of Newcastle. It was awarded \$1.37 million in competitive funding and supervised 17 Higher Degree Research students.

## JOURNAL ARTICLES

1. **Barnes, M., and Greer, P.** (2017). Evaluation of the truebeam machine performance check (MPC): mechanical and collimation checks. *Journal of Applied Clinical Medical Physics*, 18(3), 56-66. doi:doi:10.1002/acm2.12072
2. Bhandarkar, N., Kumar, S., **Martin, J.**, Brown, L., and Panchal, S. (2018). Attenuation of Metabolic Syndrome by EPA/DHA Ethyl Esters in Testosterone-Deficient Obese Rats *Marine Drugs*, 16(6), 182.
3. Butler, D., Beveridge, T., **Lehmann, J.**, Oliver, C., Stevenson, A., and Livingstone, J. (2018). Spatial response of synthetic microDiamond and diode detectors measured with kilovoltage synchrotron radiation. *Medical Physics*, 45(2), 943-952. doi:doi:10.1002/mp.12733
4. Catton, C., Lukka, H., Gu, C., **Martin, J.**, Supiot, S., Chung, P. . . Levine, M. (2017). Randomized Trial of a Hypofractionated Radiation Regimen for the Treatment of Localized Prostate Cancer. *Journal of Clinical Oncology*, 35(17), 1884-1890. doi:10.1200/jco.2016.71.7397
5. Chojnowski, J., **Barnes, M.**, Sykes, J., and Thwaites, D. (2017). Beam focal spot position: The forgotten linac QA parameter. An EPID-based phantomless method for routine Stereotactic linac QA. *Journal of Applied Clinical Medical Physics*, 18(5), 178-183. doi:doi:10.1002/acm2.12147
6. Corry, J., Bressel, M., Fua, T., Herschtal, A., Solomon, B., Porceddu, S., **Wratten, C.** . . . Rischin, D. (2017). Prospective Study of Cetuximab, Carboplatin, and Radiation Therapy for Patients With Locally Advanced Head and Neck Squamous Cell Cancer Unfit for Cisplatin. *International Journal of Radiation Oncology\*Biophysics*, 98(4), 948-954. doi:https://doi.org/10.1016/j.ijrobp.2017.02.088
7. Day, F., Sherwood, E., Chen, T., Barbouttis, M., Varlow, M., **Martin, J.** . . . Paul, C. (2018). Oncologist provision of smoking cessation support: A national survey of Australian medical and radiation oncologists. *Asia-Pacific Journal of Clinical Oncology*, 0(0). doi:10.1111/ajco.12876
8. Day, F., Sherwood, E., Sitas, F., Weber, M., Varlow, M., **Martin, J.** . . . Paul, C. Current Oncologist practices and preferences in patient smoking cessation support. *Asia Pacific J Clin Onc*.
9. Doebrich, M., Downie, J., and **Lehmann, J.** (2018). Continuous breath-hold assessment during breast radiotherapy using portal imaging. *Physics and Imaging in Radiation Oncology*, 5, 64-68. doi:https://doi.org/10.1016/j.phro.2018.02.006
10. **Fuangrod, T., Greer, P., Zwan, B., Barnes, M., and Lehmann, J.** (2017). A novel and independent method for time-resolved gantry angle quality assurance for VMAT. *Journal of Applied Clinical Medical Physics*, 18(5), 134-142. doi:doi:10.1002/acm2.12129
11. Ghose, S., **Greer, P.**, Sun, J., Pichler, P., Rivest-Henault, D., Mitra, J. . . Dowling, J. (2017). Regression and statistical shape model based substitute CT generation for MRI alone external beam radiation therapy from standard clinical MRI sequences. *Physics in Medicine and Biology*, 62(22), 8566.
12. Gupta, S., Watson, T., **Denham, J.**, Shakespeare, T., **Rutherford, N.**, McLeod, N., **Martin, J.** (2017). Prostate-Specific Membrane Antigen Positron Emission Tomography-Computed Tomography for Prostate Cancer: Distribution of Disease and Implications for Radiation Therapy Planning. *International Journal of Radiation Oncology\*Biophysics*, 99(3), 701-709. doi:https://doi.org/10.1016/j.ijrobp.2017.06.2448
13. **Hanlon, M., Ludbrook, J., Jovanovic, K., Greer, P., and Martin, J.** (2018). Fostering a culture of research within a clinical radiation oncology department. *Journal of Medical Imaging and Radiation Oncology*, 62(1), 102-108. doi:doi:10.1111/1754-9485.12662
14. Hussein, M., Clementel, E., Eaton, D., **Greer, P.**, Haworth, A., Ishikura, S. . . Clark, C. (2017). A virtual dosimetry audit – Towards transferability of gamma index analysis between clinical trial QA groups. *Radiotherapy and Oncology*, 125(3), 398-404. doi:https://doi.org/10.1016/j.radonc.2017.10.012
15. Jones, M., Carroll, S., **Martin, J.**, Hillman, R., Grulich, A., O'Connell, D. . . Poynten, I. (2017). Management of early anal cancer: need for guidelines and standardisation. *International Journal of Colorectal Disease*, 32(12), 1719-1724. doi:10.1007/s00384-017-2913-6
16. Jones, M., **Martin, J.**, Foo, K., Estoesta, P., Holloway, L., and Jameson, M. (2018). The impact of contour variation on tumour control probability in anal cancer. *Radiation Oncology*, 13(1), 97. doi:10.1186/s13014-018-1033-y
17. Keall, P., Colvill, E., O'Brien, R., Caillet, V., Eade, T., Kneebone, A., **Greer, P.** . . Booth, J. (2018). Electromagnetic-Guided MLC Tracking Radiation Therapy for Prostate Cancer Patients: Prospective Clinical Trial Results. *International Journal of Radiation Oncology\*Biophysics*, 101(2), 387-395. doi:https://doi.org/10.1016/j.ijrobp.2018.01.098
18. Keall, P., Nguyen, D., O'Brien, R., Caillet, V., Hewson, E., Poulsen, P., **Martin, J.** . . Booth, J. (2018). The first clinical implementation of real-time image-guided adaptive radiotherapy using a standard linear accelerator. *Radiotherapy and Oncology*, 127(1), 6-11. doi:https://doi.org/10.1016/j.radonc.2018.01.001
19. Kennedy, A., Dowling, J., **Greer, P.**, and Ebert, M. (2018). Estimation of Hounsfield unit conversion parameters for pelvic CT images. *Australasian Physical and Engineering Sciences in Medicine*. doi:10.1007/s13246-018-0651-x
20. Kim, J., Nguyen, D., Booth, J., Huang, C., **Fuangrod, T.**, Poulsen, P. . . Keall, P. (2018). The accuracy and precision of Kilovoltage Intrafraction Monitoring (KIM) six degree-of-freedom prostate motion measurements during patient treatments. *Radiotherapy and Oncology*, 126(2), 236-243. doi:https://doi.org/10.1016/j.radonc.2017.10.030
21. Koivula, L., Kapanen, M., Seppälä, T., Collan, J., Dowling, J., **Greer, P.** . . Korhonen, J. (2017). Intensity-based dual model method for generation of synthetic CT images from standard T2-weighted MR images – Generalized technique for four different MR scanners. *Radiotherapy and Oncology*, 125(3), 411-419. doi:https://doi.org/10.1016/j.radonc.2017.10.011
22. Kupfer, T., **Lehmann, J.**, Butler, D., Ramanathan, G., Bailey, T., and Franich, R. (2017). Commissioning of a PTW 34070 large-area plane-parallel ionization chamber for small field megavoltage photon dosimetry. *Journal of Applied Clinical Medical Physics*, 18(6), 206-217. doi:doi:10.1002/acm2.12185
23. Lee, D., **Greer, P.**, Lapuz, C., Ludbrook, J., Hunter, P., Arm, J. . . Keall, P. (2017). Audio-visual biofeedback guided breath-hold improves lung tumour position reproducibility and volume consistency. *Advances in Radiation Oncology*, 2(3), 354-362. doi:10.1016/j.adro.2017.03.002
24. Lee, D., **Greer, P.**, Paganelli, C., Ludbrook, J., Kim, T., and Keall, P. (2018). Audio-visual biofeedback improves the correlation between internal/external surrogate motion and lung tumour motion. *Medical Physics*, 45(3), 1009-1017. doi:doi:10.1002/mp.12758
25. Legge, K., **Greer, P.**, Keall, P., Booth, J., Arumugam, S., Moodie, T. . . **Lehmann, J.** (2017). Technical note: TROG 15.01 SPARK trial multi-institutional imaging dose measurement. *Journal of Applied Clinical Medical Physics*, 18(5), 358-363. doi:doi:10.1002/acm2.12151
26. Legge, K., **Greer, P.**, O'Connor, D., Wilton, L., Richardson, M., Hunter, P. . . Cutajar,



- D. (2017). Real-time in vivo rectal wall dosimetry using MOSkin detectors during linac based stereotactic radiotherapy with rectal displacement. *Radiation Oncology*, 12(1), 41. doi:10.1186/s13014-017-0781-4
27. Legge, K., Nguyen, D., Ng, J., Wilton, L., Richardson, M., Booth, J. . . . **Martin, J.** (2017). Real-time intrafraction prostate motion during linac based stereotactic radiotherapy with rectal displacement. *Journal of Applied Clinical Medical Physics*, 18(6), 130-136. doi:10.1002/acm2.12195
  28. **Lehmann, J.**, Alves, A., Dunn, L., Shaw, M., Kenny, J., Keehan, S. . . . Lye, J. (2018). Dosimetric end-to-end tests in a national audit of 3D conformal radiotherapy. *Physics and Imaging in Radiation Oncology*, 6, 5-11. doi:https://doi.org/10.1016/j.phro.2018.03.006
  29. Loh, J., Davis, I., **Martin, J.**, and Siva, S. (2014). Extracranial oligometastatic renal cell carcinoma: current management and future directions. *Future Oncology*, 10(5), 761-774. doi:10.2217/fon.14.40
  30. Macann, A., Fauzi, F., **Simpson, J.**, Sasso, G., Krawitz, H., Fraser-Browne, C. . . . Raith, A. (2017). Humidification mitigates acute mucosal toxicity during radiotherapy when factoring volumetric parameters. *Trans Tasman Radiation Oncology Group (TROG) RadioHUM 07.03 substudy*. *Oral Oncology*, 75, 75-80. doi:https://doi.org/10.1016/j.oraloncology.2017.10.021
  31. **Martin, J.**, Supiot, S., Keall, P., and Catton, C. (2018). Moderately hypofractionated prostate external-beam radiotherapy: an emerging standard. *The British Journal of Radiology*, 91(1086), 20170807. doi:10.1259/bjr.20170807
  32. McCarter, K., Baker, A., Britton, B., Beck, A., Carter, G., Bauer, J., **Wratten, C.** . . . Wolfenden, L. (2018). Effectiveness of clinical practice change strategies in improving dietitian care for head and neck cancer patients according to evidence-based clinical guidelines: a stepped-wedge randomized controlled trial. *Translational Behavioral Medicine*, 8(2), 166-174. doi:10.1093/tbm/ibx016
  33. McCarter, K., Baker, A., Britton, B., Halpin, S., Beck, A., Carter, G., **Wratten, C.** . . . Forbes, E. (2018). Head and neck cancer patient experience of a new dietitian-delivered health behaviour intervention: 'you know you have to eat to survive'. *Supportive Care in Cancer*, 26(7), 2167-2175. doi:10.1007/s00520-017-4029-5
  34. McCarter, K., Baker, A., Britton, B., Wolfenden, L., **Wratten, C.**, Bauer, J. . . . Oldmeadow, C. (2018). Smoking, drinking, and depression: comorbidity in head and neck cancer patients undergoing radiotherapy. *Cancer Medicine*, 7(6), 2382-2390. doi:doi:10.1002/cam4.1497
  35. McCarter, K., Britton, B., Baker, A., Halpin, S., Beck, A., Carter, G., **Wratten, C.** . . . Wolfenden, L. (2018). Interventions to improve screening and appropriate referral of patients with cancer for psychosocial distress: systematic review. *BMJ Open*, 8(1).
  36. McCartney, C., MacLeod, J., **Greer, P.**, and Davies, P. (2018). An easy-to-use FRET protein substrate to detect calpain cleavage in vitro and in vivo. *Biochimica et Biophysica Acta (BBA)- Molecular Cell Research*, 1865(2), 221-230. doi:https://doi.org/10.1016/j.bbamcr.2017.10.013
  37. Miri, N., **Lehmann, J.**, Legge, K., Zwan, B., Vial, P., and **Greer, P.** (2017). Remote dosimetric auditing for intensity modulated radiotherapy: A pilot study. *Physics and Imaging in Radiation Oncology*, 4, 26-31. doi:https://doi.org/10.1016/j.phro.2017.11.004
  38. Nagaria, T., Shi, C., Leduc, C., Hoskin, V., Sikdar, S., Sangrar, W., and **Greer, P.** (2017). Combined targeting of Raf and Mek synergistically inhibits tumorigenesis in triple negative breast cancer model systems. *Oncotarget*, 8(46), 80804-80819. doi:10.18632/oncotarget.20534
  39. Owringi, A., **Greer, P.**, and Glide-Hurst, C. (2018). MRI-only treatment planning: benefits and challenges. *Physics in Medicine and Biology*, 63(5), 05TR01.
  40. Paganelli, C., Lee, D., Kipritidis, J., Whelan, B., **Greer, P.**, Baroni, G. . . . Keall, P. (2018). Feasibility study on 3D image reconstruction from 2D orthogonal cine-MRI for MRI-guided radiotherapy. *Journal of Medical Imaging and Radiation Oncology*, 62(3), 389-400. doi:doi:10.1111/1754-9485.12713
  41. Porceddu, S., Bressel, M., Poulsen, M., Stoneley, A., Veness, M., Kenny, L., **Wratten, C.** . . . Rischin, D. (2018). Postoperative



- Concurrent Chemoradiotherapy versus Postoperative Radiotherapy in High-Risk Cutaneous Squamous Cell Carcinoma of the Head and Neck: The Randomized Phase III TROG 05.01 Trial. *Journal of Clinical Oncology*, 36(13), 1275-1283. doi:10.1200/jco.2017.77.0941
42. Pryor, D., Sidhom, M., Arumugam, S., Bucci, J., **Gallagher, S., Smart, J. . . . Martin, J.** (2018). Invited Presentations and Oral Abstracts- Preliminary Results of a Phase 2 Multi-Centre Study of Linac-Based Stereotactic Radiotherapy Boost for Intermediate- and High-Risk Prostate Cancer (PROMETHEUS) Asia-Pacific. *Journal of Clinical Oncology*, 14(S2), 26-31. doi:10.1111/ajco.12989
43. Pryor, D., Turner, S., Keen, H. T., Tang, C., Sasso, G., Dreosti, M. . . . **Martin, J.** (2018). Moderate hypofractionation for prostate cancer: A user's guide. *Journal of Medical Imaging and Radiation Oncology*, 62(2), 232-239. doi:10.1111/1754-9485.12703
44. Richardson, M., Sidhom, M., **Gallagher, S.**, Grand, M., Pryor, D., Bucci, J. . . . **Martin, J.** (2018). PROstate Multicentre External beam radioTherapy using a Stereotactic boost: the PROMETHEUS study protocol. *BMC Cancer*, 18(1), 588. doi:10.1186/s12885-018-4511-6
45. Roach, D., Jameson, M., Dowling, J., Ebert, M., **Greer, P.**, Kennedy, A. . . . Holloway, L. (2018). Correlations between contouring similarity metrics and simulated treatment outcome for prostate radiotherapy. *Physics in Medicine and Biology*, 63(3), 035001.
46. Rutledge, A., Jobling, P., Walker, M., **Denham, J.**, and Hondermarck, H. (2017). Spinal Cord Injuries and Nerve Dependence in Prostate Cancer. *Trends in Cancer*, 3(12), 812-815. doi:https://doi.org/10.1016/j.trecan.2017.10.001
47. Rutledge, A., McLeod, N., Mehan, N., Regan, T., Ainsworth, P., Chong, P. . . . **Martin, J.** (2018). A clinician-centred programme for behaviour change in the optimal use of staging investigations for newly diagnosed prostate cancer. *BJU International*, 121(S3), 22-27. doi:10.1111/bju.14144
48. **Simpson, J.**, Raith, A., Rouse, P., and Ehr Gott, M. (2017). Considerations for using data envelopment analysis for the assessment of radiotherapy treatment plan quality. *International Journal of Health Care Quality Assurance*, 30(8), 703-716. doi:doi:10.1108/IJHCQA-08-2016-0121
49. Song, L., Xiang, F., Ye, H., Huang, H., Yang, J., Yu, F., **Greer, P.** . . . Ma, W. (2018). Inhibition of angiotensin II and calpain attenuates pleural fibrosis. *Pulmonary Pharmacology and Therapeutics*, 48, 46-52. doi:https://doi.org/10.1016/j.pupt.2017.10.012
50. Supiot, S., Créhange, G., Latorzeff, I., Pommier, P., Paumier, A., Rio, E., **Martin, J.** . . . Lisbona, A. (2013). Hypofractionated radiotherapy in prostate cancer. *Cancer radiotherapie: journal de la Societe francaise de radiotherapie oncologique*, 17(5-6), 349-354. doi:10.1016/j.canrad.2013.05.005
51. Tsiamis, E., Millar, J., Baxi, S., Borg, M., Ileso, P. D., Elsaleh, H., **Martin, J.** . . . Evans, S. (2018). Development of quality indicators to monitor radiotherapy care for men with prostate cancer: A modified Delphi method. *Radiotherapy and Oncology*. Doi:https://doi.org/10.1016/j.radonc.2018.04.017
52. **Wilfert, L.** (2018). Drivers of change. *Australasian Physical and Engineering Sciences in Medicine*, 41(2), 357-360. doi:10.1007/s13246-018-0648-5
53. Wilton, L., Richardson, M., Keats, S., Legge, K., **Hanlon, M.**, Arumugam, S. . . . **Martin, J.** (2017). Rectal protection in prostate stereotactic radiotherapy: a retrospective exploratory analysis of two rectal displacement devices. *Journal of Medical Radiation Sciences*, 64(4), 266-273. doi:10.1002/jmrs.238
54. Wyatt, J., Dowling, J., Kelly, C., McKenna, J., Johnstone, E., Speight, R., **Greer, P.** . . . McCallum, H. (2017). Investigating the generalisation of an atlas-based synthetic-CT algorithm to another centre and MR scanner for prostate MR-only radiotherapy. *Physics in Medicine and Biology*, 62(24), N548.
55. Zwan, B., **Barnes, M.**, Hindmarsh, J., Lim, S., Lovelock, D., **Fuangrod, T.** . . . **Greer, P.** (2017). Commissioning and quality assurance for VMAT delivery systems: An efficient time-resolved system using real-time EPID imaging. *Medical Physics*, 44(8), 3909-3922. doi:doi:10.1002/mp.12387
56. Bitsika, V., Sharpley, C. F., Christie, D. R. H., Bradford, R., Steigler, A., and **Denham, J. W.** (2017). Measuring personal and functional changes in prostate cancer survivors: development and validation of the FADE: data from the TROG 03.04 RADAR trial. *Psycho-Oncology*, 26(4), 553-555. doi: 10.1002/pon.4182
57. Galvão, D. A., Taaffe, D. R., Spry, N., Cormie, P., Joseph, D., Chambers, S. K., **Denham, J.** . . . Newton, R. U. (2018). Exercise Preserves Physical Function in Prostate Cancer Patients with Bone Metastases. *Medicine and Science in Sports and Exercise*, 50(3), 393-399. doi: 10.1249/MSS.0000000000001454
58. Lacas, B., Bourhis, J., Overgaard, J., Zhang, Q., Grégoire, V., Nankivell, M., **Denham, J.** . . . Zhang, Q. (2017). Role of radiotherapy fractionation in head and neck cancers (MARCH): an updated meta-analysis. *The Lancet Oncology*, 18(9), 1221-1237. doi: 10.1016/S1470-2045(17)30458-8
59. Lamb, D. S., Sondhaus, S., Dunne, J. C., Woods, L., Delahunt, B., Ferguson, P., **Denham, J.** . . . Jordan, T. W. (2017). Proteins Annexin A2 and PSA in Prostate Cancer Biopsies Do Not Predict Biochemical Failure. *Anticancer research*, 37(12), 6943-6946.
60. Marcello, M., Ebert, M. A., Haworth, A., Steigler, A., Kennedy, A., Bulsara, M., . . . **Denham, J. W.** (2018). Association between measures of treatment quality and disease progression in prostate cancer radiotherapy: An exploratory analysis from the TROG 03.04 RADAR trial. *Journal of Medical Imaging and Radiation Oncology*, 62(2), 248-255. doi: 10.1111/1754-9485.12695
61. Marcello, M., Ebert, M., Haworth, A., Steigler, A., Kennedy, A., Joseph, D., and **Denham, J.** (2018). Association between treatment planning and delivery factors and disease progression in prostate cancer radiotherapy: Results from the TROG 03.04 RADAR trial. *Radiotherapy and Oncology*, 126(2), 249-256. doi: 10.1016/j.radonc.2017.10.021
62. Moulton, C. R., House, M. J., Lye, V., Tang, C. I., Krawiec, M., Joseph, D. J., **Denham, J.** . . . Ebert, M. A. (2017a). Accumulation of rectum dose-volume metrics for prostate external beam radiotherapy combined with brachytherapy: Evaluating deformably registered dose distribution addition using parameter-based addition. *Journal of Medical Imaging and Radiation Oncology*, 61(4), 534-542. doi: 10.1111/1754-9485.12593
63. Moulton, C. R., House, M. J., Lye, V., Tang, C. I., Krawiec, M., Joseph, D. J., **Denham, J.** . . . Ebert, M. A. (2017b). Spatial features of dose-surface maps from deformably-registered plans correlate with late gastrointestinal complications. *Physics in Medicine and Biology*, 62(10), 4118-4139. doi: 10.1088/1361-6560/aa663d
64. Sharpley, C. F., Bitsika, V., Christie, D. R. H., Bradford, R., Steigler, A., and **Denham, J. W.** (2017a). Psychological resilience aspects that mediate the depressive effects of urinary incontinence in prostate cancer survivors 10 years after treatment with radiation and hormone ablation. *Journal of Psychosocial Oncology*, 35(4), 438-450. doi: 10.1080/07347332.2017.1306733
65. Sharpley, C. F., Bitsika, V., Christie, D. R. H., Bradford, R., Steigler, A., and **Denham, J. W.** (2017b). Total depression and subtypes in prostate cancer survivors 10 years after treatment. *European Journal of Cancer Care*, 26(6). doi: 10.1111/ecc.12630
66. Taaffe, D. R., Buffart, L. M., Newton, R. U., Spry, N., **Denham, J.**, Joseph, D., . . . Galvão, D. A. (2018). Time on androgen deprivation therapy and adaptations to exercise: secondary analysis from a 12-month randomized controlled trial in men with prostate cancer. *BJU International*, 121(2), 194-202. doi: 10.1111/bju.14008
67. Xie, W., Regan, M. M., Buyse, M., Halabi, S., Kantoff, P. W., Sartor, O., **Denham, J.** . . . Zapatero, A. (2017). Metastasis-free survival is a strong Surrogate of overall survival in localized prostate cancer. *Journal of Clinical Oncology*, 35(27), 3097-3104. doi: 10.1200/JCO.2017.73.9987

68. Yahya, N., Ebert, M. A., House, M. J., Kennedy, A., Matthews, J., Joseph, D. J., and **Denham, J. W.** (2017). Modeling Urinary Dysfunction After External Beam Radiation Therapy of the Prostate Using Bladder Dose-Surface Maps: Evidence of Spatially Variable Response of the Bladder Surface. *International Journal of Radiation Oncology Biology Physics*, 97(2), 420-426. doi: 10.1016/j.ijrobp.2016.10.024

#### BOOK CHAPTERS

1. **Greer, P.** (2017). Pre-treatment EPID based patient specific QA. In R. Berbeco (Ed.), *Beams eye view imaging in radiation therapy*: CRC Press.
2. Kairn, T., **Lehmann, J.**, Crowe, S., Lye, J., Alvarez, P., Followill, D., and Kron, T. (2017). Postal and clinical trial dosimetry. In I. J. Das (Ed.), *Radiochromic Film: Role and Applications in Radiation Dosimetry*: CRC Press.
3. McCurdy, B., **Greer, P.**, and Bedford, J. (2017). EPID Dosimetry. In D. T. a. B. Mijneheer (Ed.), *Clinical 3D Dosimetry in Modern Radiation Therapy*: CRC Press.
4. Zwan, B., and **Greer, P.** (2018). Time resolved dosimetry and quality assurance using real-time EPID imaging. In M. F. Chan (Ed.), *Recent Advances and Applications in Dosimetry* NOVA Publishing.

#### CONFERENCE PRESENTATIONS AND POSTERS

1. Butler, D., **Lehmann, J.**, Beveridge, T., Bailey, T., Oliver, C., Crosbie, J. . . . Stevenson, A. (2017). Sub-millimeter spatial response maps of ionization chambers in a magnetic field. Paper presented at the Engineering and Physical Sciences in Medicine Conference (EPSM).
2. Caillet, V., Zwan, B., Hardcastle, N., Brien, R., Poulsen, P., **Greer, P.**, and Keall, P. (2017). Best in Physics (Therapy): MLC tracking for lung SABR reduces the dose to organs at risk and improves geometric targeting of the tumor. Paper presented at the Medical Physics.
3. Field, M., Holloway, L., Stirling, D., Ghose, A., Bailey, M., Carolan, M. . . . Thwaites, D. (2018). Investigation into non-linear radiomic signatures characterizing overall survival from non-small cell lung cancer. Paper presented at the ESTRO, Barcelona, Spain.
4. Field, M., Holloway, L., Stirling, D., Ghose, A., Bailey, M., Carolan, M. . . . Thwaites, D. (2018). Non-small cell lung cancer decision support based on distributed learning over multi-center data. Paper presented at the ESTRO, Barcelona, Spain.
5. **Fuangrod, T., Barnes, M.**, Simpson, J., Zwan, B., and **Greer, P.** (2017). Investigation of long-term linear accelerator performance from comprehensive EPID-based quality assurance tests. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.

6. **Fuangrod, T., Greer, P., Zwan, B., Barnes, M.**, and **Lehmann, J.** (2017). Video based gantry angle assessment for VESPA using Double Dot and dose rate meter. Paper presented at the Engineering and Physical Sciences in Medicine Conference (EPSM)
7. **Fuangrod, T.**, McNeilly, A., Pichler, P., Dowling, J., and **Greer, P.** (2017). Verification of accuracy of substitute CT for MRI-only prostate IMRT using transit dosimetry. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.
8. **Gholizadeh N, G. P., Simpson J, Lau P, Ramadan S.** (2018). Multiparametric magnetic resonance imaging for the detection and localisation of prostate cancer. Paper presented at the 6th MR in RT, Utrecht, Netherlands.
9. **Gholizadeh, N., Greer, P., Simpson, J., Lau, P., and Ramadaan, S.** (2017). Quantitative features of diffusion tensor imaging (DTI) of prostate cancer patients for Computer Aided Diagnosis (CADx). Paper presented at the Engineering and Physical Sciences in Medicine Hobart, Australia.
10. **Gholizadeh, N., Greer, P., Simpson, J., Lau, P., and Ramadan, S.** (2018). Multi parametric magnetic resonance imaging for the detection of prostate cancer: combination of T2-weighted, diffusion tensor imaging and magnetic resonance spectroscopic imaging. Paper presented at the Annual Meeting ISMRM-ESMRMB, Paris, France.
11. **Greer, P.**, and David, R. (2017). Remote dosimetric IMRT auditing using EPID derived doses in patient CT model and DVH analysis. Paper presented at the Medical Physics.
12. **Greer, P.**, Pichler, P., Richardson, H., Hunter, P., **Wratten, C.**, and Dowling, J. (2017). MRI-only prostate cancer treatment – a prospective clinical study. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.
13. Kaur, G., **Lehmann, J., Greer, P.**, and **Simpson, J.** (2017). Accuracy and clinical utility of TrueBeam Intra-fraction Motion Review (IMR). Paper presented at the Engineering and Physical Sciences in Medicine Conference (EPSM).
14. Largen, A., Nunes, J., Saint-Jalmes, H., Simon, A., Perichon, N., Barateau, A. . . . Acosta, O. (2017). Pseudo-CT generation by conditional inference random forest for MRI-based radiotherapy treatment planning. Paper presented at the 25th European Signal Processing Conference (EUSIPCO).
15. **Lehmann, J.** (2018a). Dose to water / dose to medium. Paper presented at the Transtasman Radiation Oncology Group (TROG) Annual Scientific Meeting, Technical Workshop, Hobart, Australia.
16. **Lehmann, J.** (2018b). MOSkin detectors for in vivo measurement of rectal wall dose in

prostate SBRT boosts. Paper presented at the ESTRO, Barcelona, Spain.

17. **Lehmann, J.**, Butler, D., Beveridge, T., Bailey, T., Oliver, C., Lye, J. . . . Stevenson, A. (2018). High-resolution response maps illustrating the impact of magnetic fields on dose measurement with small ion chambers. Paper presented at the 2018 MRinRT conference Sydney, Australia.
18. Lye, J., Shaw, M., Manktelow, S., Keehan, S., Alves, A., **Lehmann, J.** . . . Patel, R. (2017). International benchmarking of the ACDS IMRT audit. Paper presented at the Engineering and Physical Sciences in Medicine Conference (EPSM)
19. Miri, N., Vial, P., Begg, J., and **Greer, P.** (2017). A virtual method for remote auditing of Elekta systems. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.
20. Ostwald, T., Artschan, R., Jones, R., and **Greer, P.** (2017). Efficient EPID-based QA for SBRT and SRS treatments. Paper presented at the Medical Physics.
21. Roach, D., Jameson, M., Dowling, J., Ebert, M., **Greer, P.**, and Holloway, L. (2017a). Development and validation of a CT-MR pelvic atlas for clinical trial quality assurance. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.
22. Roach, D., Jameson, M., Dowling, J., Ebert, M., **Greer, P.**, and Holloway, L. (2017b). Development of a CT-MR pelvic atlas: clinical target and neighbouring organ painting. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.
23. Shaw, M., Lye, J., **Lehmann, J.**, Alves, A., and Geso, M. (2018). Small field and SABR dosimetry audits by the ACDS. Paper presented at the Transtasman Radiation Oncology Group 2018 Annual Scientific Meeting.
24. Shaw, M., Manktelow, S., Keehan, S., Alves, A., Supple, J., **Lehmann, J.**, and Geso, M. (2017). Small field and stereotactic audit development. Paper presented at the Engineering and Physical Sciences in Medicine Conference (EPSM).
25. Silvestre, I., Lye, J., Lee, J., Patel, R., **Lehmann, J., Greer, P.** . . . Clark, C. (2018). A multi-national inter-comparison clinical trial IMRT QA exercise. Paper presented at the ESTRO Barcelona, Spain.
26. Thwaites, D., Holloway, L., Field, M., Barakat, S., Vinod, S., Delaney, G. . . . Dekker, A. (2017). Datamining and Distributed Learning in Radiation Oncology to Help Clinical Decision Support: The Australian Computer Aided Theragnostics Network for Oncology. Paper presented at the AAPM.



27. Young, T., Thwaites, D., Dowling, J., Liney, G., Rai, R., **Greer, P.**, and Holloway, L. (2017). The Effect of MRI Sequence Variations on Substitute CT Generation for MR-Only Planning. Paper presented at the Engineering and Physical Sciences in Medicine, Hobart, Australia.

## GRANTS

1. **J. Martin.** (2017). Stereotactic Ablative Radiotherapy (SABR) as a New Precision Treatment Option in Kidney Cancer. In: Cancer Australia
2. Barton, M., Vial, P., Liney, G., Kuncic, Z., Keall, P., Peng, G., **Greer, P.** ... Blake, S. X-ray detectors for tomorrows radiotherapy. In: Cancer Institute NSW Equipment grant.
3. **Lehmann, J., Greer, P.**, Hegi-Johnson, F., Graham, P., and Thwaites, D. (March 2018). First ever system to continuously and directly measure the internal anatomy to guide breast cancer radiation treatment under deep inspiration breath hold. In: NHMRC.
4. **Martin, J.** (2017a). A randomized study of pre-operative pelvic floor muscle exercises (PFME) compared to standard care to improve bowel function following ileostomy/colostomy reversal after diagnosis of colorectal cancer. In: HCRA Implementation Flagship.
5. **Martin, J.** (2017b). 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 of cancer patients In: HCRA Implementation Flagship
6. **Martin, J.** (2018). Novel Integration of New Prostate Radiation Schedules with Adjuvant Androgen Deprivation (NINJA) in: multipharma.

## GENERAL MEDICINE

### DEPARTMENT MEMBERS INVOLVED IN RESEARCH:

#### JOHN BURSTON

- A role for antimicrobial stewardship in sepsis pathways: a prospective interventional study'. **Burston J**, Adhikari S, Hayen A, Doolan H, Kelly M, Fu K, Jensen T, Konecny P. Infection Control and Hospital Epidemiology. 2017; 38(9):1032-1038
- 'Inclusions or bystanders? CMV PCR sensitivity and specificity in tissue samples'. **Burston J**, van Hal S, Dubedat S, Lee A. Journal of Clinical Virology. 2017; 90: 38-9. DOI: 10.1016/j.jcv.2017.03.008
- 'Intra-abdominal sepsis following a Papanicolaou test'. **Burston J**. Internal Medicine Journal. 2018; 48: 100-101. DOI: 10.1111/imj.13663

#### TIM WALKER

- Corrado Cancedda, Phil Cotton, Joseph Shema et al. "Health Professional Training and Capacity Strengthening Through International Academic Partnerships: The First Five Years of the Human Resources for Health Program in Rwanda" Int J Health Policy Manag 2018, doi 10.15171/ijhpm.2018.61
- Theogene Twagirumugabe, Gatere Swaibu, Tomas Bergstrom, **Timothy David Walker**, Jean Bosco Gahutu, and Helene Norder. "Low prevalence of hepatitis C virus RNA in blood donors with anti-hepatitis C virus reactivity in Rwanda." Transfusion, July 2017. doi:10.1111/trf.14204
- Aloys Tuyizere, Alphonse Ndayambaje, **Timothy D. Walker**, Claude Bayingana, Cyprien Ntirenganya, Vincent Dusabejambo and DeVon C. Hale. "Prevalence of Strongyloides stercoralis infection and other soil-transmitted helminths by cross-sectional survey in a rural community in Gisagara District, Southern Province, Rwanda" Transactions of the Royal Society of Tropical Medicine and Hygiene 2018; 00: 1–6. doi:10.1093/trstmh/try036
- **Tim Walker**, Vincent Dusabejambo, Janet J. Ho, Claudine Karigire, Bradley Richards, Andre N. Sofair. "An international collaboration for the training of medical chief residents in Rwanda." Annals of Global Health, March 2017; 83 (2): 339-46. doi: 10.1016/j.aogh.2016.12.006
- Etienne Amendezo, **Timothy David Walker**, Vincent Karamuka and Charlotte Bavuma "Effects of a lifestyle education program on glycemic control among patients with diabetes at Kigali University Hospital, Rwanda: A randomized controlled trial." Diabetes Research and Clinical Practice, April 2017. 126 (1): 129-137. doi: 10.1016/j.diabres.2017.02.001
- Gupta N, Kabahizi J, Mukabatsinda C, **Walker TD**, Musabeyezu E, Kiromera A, et al. "Waiting for DAAs: A retrospective chart review of patients with untreated hepatitis C in Rwanda." PLoS ONE, March 2017. 12(3):e0174148. doi:10.1371/journal.pone.0174148
- Theogene Twagirumugabe, Gatere Swaibu, **Timothy David Walker**, Magnus Lindh, Jean Bosco Gahutu, Tomas Bergström, Hélène Norder. "Hepatitis B virus strains from Rwandan blood donors are genetically similar and form one clade within subgenotype A1." BMC Infectious Diseases, January 2017. 17 (1): 32. doi: 10.1186/s12879-016-2149-z

#### SUSAN MILES

Susan is the clinician on the Dust Diseases Board (DDB) and has been invited to join a National Taskforce into Silicosis in the Engineered Stone Industry which is linked to Safework Australia. Susan made a presentation in State Parliament

in 2017 for the first review of the DDB arm of icare for the Thoracic Society of Australia and New Zealand (TSANZ). There is a case report in the pipeline of three cases of scleroderma linked to silicosis which will probably be ready in 2019. Susan has been on the working party to draw up a position paper for occupational asthma for the TSANZ which is nearing completion.

Susan is a coinvestigator in a trial which assesses the use of the antifibrotic Nintedanib in occupational pneumoconioses which is due to begin recruitment in mid 2019. She is a Conjoint Senior Lecturer with the School of Medicine, University of Newcastle.

## MEDICAL ONCOLOGY RESEARCH (MOR) - CLINICAL TRIAL UNIT

The Medical Oncology Department has a very active Medical Oncology Research (MOR) unit which conducts 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 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, Melissa Lloyd, Louise Plowman
- Finance and Administration: Alison Leonard–England
- Ethics Specialists: Catherine Johnson and Allison Kautto
- Data Management: Jessica Aldcroft/Emily Munn and Anthony Morrison
- Laboratory Technician: Jennifer McFarlane/Jessica Aldcroft

This has been yet another exciting and busy year for MOR Trials with new people, new trials, a new home for the unit and an international award for recruitment processes. In February, Dr Hiren Mandaliya started a two year Clinical Trial fellowship to help with an increasing number of clinical trials and trial participants. While in March, the unit relocated from the hospital to more spacious lodgings in Edith Cottage. To top the year off, the MOR team won the inaugural ASIA-Pac Site Recruitment Innovation Award in recognition of the innovative, patient-directed enrolment strategies designed and used by the unit during a recent prostate trial.

Over the past year MOR opened 14 new clinical trials to recruitment across the Hunter New England Local Health District - covering melanoma, breast, colorectal, lung and

genitourinary cancers – and as of July 2018, 27 trials were actively recruiting participants and another eight trials were pending approval to commence. These trials were a mixture of phase 1b, II and III cooperative group, pharmaceutical sponsored studies and investigator initiated studies.

Overall 245 patients were offered the opportunity to participate in a clinical trial. Of these, 114 patients elected to participate and 95 have been enrolled into a clinical trial.

To help the team manage the increasing number of trials and trial participants, MOR Trials, in collaboration with the Haematology and Radiation Oncology trial teams, has spent the last year phasing in a new clinical trial management system known as MAISI. It is hoped that MAISI, by replacing many of our outdated systems and processes, will allow us to better manage our patient and trial workloads, as well as improve other trial related processes.

#### 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 optimise chemotherapy dosing. Its drug development program primarily targets brain and breast cancers, while its studies of clinical toxicity and drug monitoring span all tumour types.

#### PUBLICATIONS

1. Fradgley EA, Chong SE, Cox ME, **Gedye C**, Paul CL. Patients' experiences and preferences for opt-in models and health professional involvement in biobanking consent: A cross-sectional survey of Australian cancer outpatients. *Asia Pac J Clin Oncol*. 2018 Mar 23. DOI: 10.1111/ajco.12866.
2. Almazi JG, Pockney P, **Gedye C**, Smith ND, Hondermarck H, Verrills NM, Dun MD. Cell-Free DNA Blood Collection Tubes Are Appropriate for Clinical Proteomics: A Demonstration in Colorectal Cancer. Almazi JG, Pockney P, Gedye C, Smith ND, Hondermarck H, Verrills NM, Dun MD. *Proteomics Clin Appl*. 2018 May;12(3):e1700121. doi: 10.1002/prca.201700121. Epub 2018 Mar 30.
3. Fradgley EA, Chong SE, Cox ME, Paul CL, **Gedye C**. Enlisting the willing: A study of healthcare professional-initiated and opt-in biobanking consent reveals improvement opportunities throughout the registration process.. *Eur J Cancer*. 2017 Dec 7;89:36-41. doi: 10.1016/j.ejca.2017.10.025
4. **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.
5. 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-May-17 (Epub 2018 May 17) DOI:10.1002/cmdc.201800256
6. Hizartidis L, **Gilbert J**, **Sakoff JA** and McCluskey A. Synthesis and cytotoxicity of octahydroepoxyisoindole-7-carboxylic acids and norcantharidin-phenylacrylonitrile hybrids as norcantharidin analogues. Accepted May 2018. *ChemMedChem* DOI: 10.1002/cmdc.201800236
7. Spare L, Pasquale Falsetta P, **Gilbert J**, Harman D, Baker M, Li F, McCluskey A, Clegg J, **Sakoff J**, Aldrich-Wright J, Gordon C. Cytotoxicity of a series of norcantharidin inspired



- tetrahydroepoxyisoindole carboxamides. ChemMedChem. Volume: 12 Issue: 2 Pages: 130-145 Published: 2017-Jan-20
8. Sahoo SS, **Lombard JM**, Ius Y, O'Sullivan R, Wood LG, Nahar P, Jaaback K, Tanwar PS. Adipose-Derived VEGF-mTOR Signaling Promotes Endometrial Hyperplasia and Cancer: Implications for Obese Women. Mol Cancer Res. 2018 Feb;16(2):309-321. DOI: 10.1158/1541-7786.MCR-17-0466. Epub 2017 Nov 13. PMID:29133593
9. von Minckwitz G, Procter M, de Azambuja E, Zardavas D, Benyunes M, Viale G, Suter T, Arahmani A, Rouchet N, Clark E, Knott A, Lang I, Levy C, Yardley DA, Bines J, Gelber RD, Piccart M, Baselga J; APHINITY Steering Committee and Investigators. Adjuvant Pertuzumab and Trastuzumab in Early HER2-Positive Breast Cancer. N Engl J Med. 2017 Jul 13;377(2):122-131. DOI: 10.1056/NEJMoa1703643. Epub 2017 Jun 5. Erratum in: N Engl J Med. 2017 Aug 17;377(7):702.
10. Surein Arulananda, **James Lynam**, Mun Sem Liew, Mori Wada, Lawrence Cher, Hui K. Gan (2018) Clinical correlates of severe thrombocytopenia from temozolomide in glioblastoma patients. Intern Med J,[Epub ahead of print] DOI:10.1111/imj.14000.
11. Chris Roberts, Priya Khanna, Louise Rigby, Emma Bartle, Anthony Llewellyn, Julie Gustavs, Libby Newton, James P. Newcombe, Mark Davies, Jill Thistlethwaite and **James Lynam** (2017) Utility of selection methods for specialist medical training: A BEME (best evidence medical education) systematic review: BEME guide no. 45, Medical Teacher, 40:1, 3-19, DOI: 10.1080/0142159X.2017.1367375
12. Nguyen VT, **Sakoff JA** and Scarlett CJ. Physicochemical, Antioxidant, and Cytotoxic Properties of Xao Tam Phan (Paramignya trimera) Root Extract and Its Fractions. Chemistry & Biodiversity 2017. 14(4) Article Number: e1600396.
13. Nguyen VT, **Sakoff JA**, Bowyer MC, van Altena IA, Scarlett CJ. Physicochemical properties, antioxidant and anti-proliferative capacities of dried leaf and its extract from Xao tam phan (Paramignya trimera). Chemistry & Biodiversity 2017. 14 (6) Article Number: e1600498.
14. Nguyen VT, **Sakoff JA**, Scarlett CJ. Physicochemical properties, antioxidant and cytotoxic activities of extracts and fractions from Phyllanthus amarus. Special Issue Herbal Medicines and Functional Foods. Medicines 2017, 4(2), 42; DOI:10.3390/medicines4020042
15. Odell L, Abdel-Hamid M, Hill T, Chau N, Young K, Deane F, **Sakoff J**, Andersson S, Daniel J, Robinson P, McCluskey A. Pyrimidine-Based Inhibitors of Dynamin I GTPase Activity: Competitive Inhibition at the PH Domain. J Med Chem. Volume: 60 Issue: 1 Pages: 349-361 Published: JAN 12 2017
16. Cossar P, Abdel-Hamid M K, Ma C, **Sakoff J**, Trinh T, Gordon C, Lewis P, McCluskey A. Small molecule inhibitors of the NusB-NusE protein-protein interaction with antibiotic activity. ACS Omega. 2017. 2(7) 3839-3857. DOI: 10.1021/acsomega.7b00273.
17. Bhuyan D, **Sakoff J**, Bond DR, Predebon M, Vuong QV, Chalmers AC, van Altena IA, Bowyer MC, Scarlett CJ. In vitro anticancer properties of selected Eucalyptus species. In Vitro Cellular and Developmental Biology-Animal. 53 (7): 604-615, 2017.
18. Ghods A, **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. 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. In Press September, 2018
21. 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. Accepted September 2018 Molecular Biology Reports.
22. 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
23. 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 Research Notes 2018 (Accepted).
24. Waller A, Douglas C, Sanson-Fisher R, **Zdenkowski N**, Pearce A, Evans T, Walsh J. Dances With Denial: Have Medical Oncology Outpatients Conveyed Their End-of-Life Wishes and Do They Want To? Journal of the National Comprehensive Cancer Network 2018; 16(5):498-505. DOI:10.6004/jnccn.2017.7054.
25. 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. European Journal of Cancer Care 2018:e12871. DOI: 10.1111/ecc.12871
26. **Zdenkowski N**, Butow P, Spillane A, Douglas C, Snook K, Jones, M, Oldmeadow C, Fewster S, Beckmore C, Boyle FM. A single-arm longitudinal study to evaluate a decision aid for women who have been offered neoadjuvant systemic therapy for operable breast cancer (ANZ1301 DOMINO). Journal of the National Comprehensive Cancer Network 2018;16(4):378-385. DOI 10.6004/jnccn.2017.7063
27. Waller A, Hall A, Sanson-Fisher R, **Zdenkowski N**, Douglas C, Walsh J. Do medical oncology patients and their support persons agree about end of life issues? Internal Medicine Journal 2017;48(1):60-66. DOI: 10.1111/imj.13626
28. Herrmann A, Waller A, Sanson-Fisher R, Wall L, Hall A, **Zdenkowski N**. A discrete choice experiment to assess cancer patients' preferences for when and how to make treatment decisions. Journal of Supportive Care in Cancer 2018;26(4):1215-1220. DOI: 10.1007/s00520-017-3944-9
29. Herrmann A, Hall A, **Zdenkowski N**. Women's experiences with deciding on neoadjuvant systemic therapy for operable breast cancer: A qualitative study. Asia-Pacific Journal of Oncology Nursing 2018;5(1):68-76. DOI: 10.4103/apjon.apjon\_60\_17
30. Herrmann A, Boyle FM, Butow P, Hall A, **Zdenkowski N**. Exploring women's experiences with a decision aid for neoadjuvant systemic therapy for operable breast cancer. Health Science Reports 2017. DOI: 10.1002/hsr2.13
31. Waller A, Hall A, **Zdenkowski N**, Douglas C, Walsh J, Sanson-Fisher R. The right place at the right time: Medical oncology outpatients' perceptions of location of end of life care. Journal of the National Comprehensive Cancer Network 2018;16(1):35-41. DOI: 10.6004/jnccn.2017.7025

## CONFERENCE ABSTRACTS

1. Clingan,P. **Ackland,S**, Daniel Brungs,D., De Souza,P., Aghmesheh,M., **Garg,MB**, Ranson,D., Parker,S., Jokela,R., Ranson,M., A phase I trial of infusional and bolus schedules of Deflexifol, a novel 5-fluorouracil and leucovorin formulation, after failure of standard treatment. Submitted to Asia-Pacific J Clin Oncol 05/06/2018
2. **Blanchard G**, **Lombard JM** et al. A Study Comparing Nails In Patients Receiving Taxane Chemotherapy- A Study Of Nail Polish Versus No Nail Polish To Reduce Nail Damage (Conpart). MASCC 2018
3. 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 Winter Congress 2018

4. Evandro de Azambuja, Cristina Saura, Paolo Nuciforo, Sophie Frantal, Mafalda Oliveira, Dimitrios Zardavas, Anita Jallitsch-Halper, Lorena de la Peña, Peter Dubsy, **Janine M Lombard**, Peter Vuylsteke, Carlos Castañeda, Cesar Sanchez, Alberto Ballestrero, Marco Colleoni, Giuliano Santos Borges, Eva Ciruelos, Aditya Bardia, Monica Fornier, Katalin Boér, Timothy R. Wilson, Thomas J. Stout, Jerry Y. Hsu, Yi Shi, Martine Piccart, José Baselga, Michael Gnant. Secondary endpoints including Ki67 changes in the LORELEI trial: a phase II randomized, double-blind study of neoadjuvant letrozole plus taselisib versus letrozole plus placebo in postmenopausal women with ER-positive/HER2-negative early-stage breast cancer. San Antonio Breast Cancer Symposium Dec 2017 Abstract # 417
5. Halle CF Moore, Joseph M Unger, Kelly-Anne Phillips, Frances Boyle, Erika Hitre, Anna Moseley, David Porter, Prudence Francis, Lori J Goldstein, Henry L Gomez, Carlos S Vallejos, Ann H Partridge, Shaker R Dakhil, Agustin A Garcia, Julie Gralow, **Janine M Lombard**, John F Forbes, Silvana Martino, William E Barlow, Carol J Fabian, Lori Minasian, Frank L Meyskens, Richard D Gelber, Gabriel N Hortobagyi, Kathy S Alban. The final analysis of SWOG S230/Prevention of early menopause study (POEMS). SABCs 2017
6. Seock-Ah Im, Norikazu Masuda, Young-Hyuck Im, Kenichi Inoue, Sung-Bae Kim, Andrew Redfern, **Janine Lombard**, Dongrui Lu, Kathy Puyana Theall, Eric Gauthier, Hirofumi Mukai, Jungsil Ro. Efficacy and Safety of Palbociclib (P) Plus Endocrine Therapy (ET) in Women With Hormone Receptor-Positive (HR+)/Human Epidermal Growth Factor Receptor 2-Negative (HER2-) Advanced Breast Cancer (ABC) in the Asia-Pacific (AP) Region: Data From PALOMA-2 and -3. ESMO ASIA 2017
7. Sheau Wen Lok, Desmond Yip, Sally Greenberg, Laura Pellegrini, Ian M Collins, Karen White, Bianca Devitt, Gary Richardson, **Janine Lombard**, Peter Gibbs and Richard De Boer. Tumour characteristics and treatment patterns in patients with relapsed metastatic HER2 positive breast cancer. COSA 2017
8. **Sakoff J, Gilbert J**, Tarleton M, et al. Phenylacrylonitrile-Based Small Molecules Utilize the Aryl-Hydrocarbon Receptor Pathway (AhR) to Selectively Kill Breast Cancer Cells. ASIA-PACIFIC JOURNAL OF CLINICAL ONCOLOGY Volume: 13 Special Issue: SI Supplement: 5 Pages: 20-20 Meeting Abstract: P3 Published: NOV 2017
9. **Zdenkowski N**, Butow P, Boyle FM. Patient reported outcomes according to receipt of neoadjuvant or adjuvant systemic therapy for breast cancer: results of a prospective longitudinal study. Controversies in Breast

Cancer Conference, Tokyo, Japan, October 2017.

10. **Zdenkowski N**, Butow P, Spillane AJ, Douglas C, Beckmore C, Jones M, Boyle FM. Primary results of a study to evaluate a decision aid for women offered neoadjuvant systemic therapy for breast cancer. Annals of Oncology 2017;28(Suppl 5). European Society of Medical Oncology Annual Meeting 2017, Madrid, Spain.
11. Waller A, Sanson-Fisher R, **Zdenkowski N**, Douglas C, Walsh J, Hall A. Are older and seriously ill Australians planning for their future medical care? Psycho-Oncology 2017;26(S3, Abstr 872):19. World Congress of Psycho-Oncology, Berlin, Germany, August 2017.
12. **Zdenkowski N**, Lynam J, Wall L, Brown S, Wells K, Sproule V. Breast cancer patients' willingness to travel to participate in a clinical trial. American Society of Clinical Oncology Annual Meeting 2017, Chicago IL, USA. Journal of Clinical Oncology 2017;35(suppl; abstr e14031).
13. **Zdenkowski N**, Butow P, Boyle F. Patient reported outcome results from the ANZ1301 DOMINO neoadjuvant breast cancer decision aid study. Medical Oncology Group of Australia Annual Scientific Meeting 2017, Melbourne. Oral presentation 'Best of the Best Research 2017'. Asia-Pacific Journal of Clinical Oncology 2017;13(S2)50-52.

#### CONFERENCE ORAL PRESENTATIONS

1. **Ackland SP, Garg MB**, Ranson M, Jokela R, Brungs D, Aghmesheh M, Tafreshi A, Ranson RD, Parker S, De Souza PL, et al. Deflexifol (a novel formulation of 5FU): Pharmacokinetics in a phase 1 trial in comparison to 5FU. JCO 2017, 35(15):2530-2530.
2. Clingan PR, **Ackland SP**, Ranson M, Brungs D, Aghmesheh M, Tafreshi A, **Garg MB**, Parker S, Henderson A, Jokela R, et al. Deflexifol (a novel formulation of 5FU): Phase 1 dose escalation study of infusional and bolus schedules after failure of standard treatment. JCO 2017, 35 (15):2529-2529.
3. Clingan PR, **Ackland SP**, Ranson M, De Souza P, Tafreshi A, Aghmesheh M, Brungs D, **Garg M.B.**, Parker S, Jokela R. Phase 1 study of infusional or bolus deflexifol (a novel formulation of 5FU, folic acid, and cyclodextrin) after failure of standard treatment. JCO 2017 35(4): TPS812-TPS812.
4. **Adler KA**. Thinking Outside the Recruitment Box. 2018 Asia Pac Site Solutions Summit. Melbourne 2018
5. **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 Winter Congress 2018:
6. **Garg MB**, Schneider J., **Ackland,SP**, Martin, J., Galettis, P.A simple, sensitive

and rapid LC-MS/MS method for the simultaneous measurement of anthracyclines, cyclophosphamide and taxanes in breast cancer patients samples. Asia-Pacific Journal of Clinical Oncology, Volume: 13 SI Supplement: 5: 20-20: PP4 Published: Nov 2017.

7. **Gedye C**. Building on success: predictive biomarkers in ANZUP kidney cancer trials. ANZUP 2018 ASM,
8. **Gedye C**. Convening Committee and MDT MasterClass Convenor. ANZUP 2018 ASM
9. **Gedye C**. New Indications in GU cancers, 14 Nov 2017. COSA ASM 2017
10. **Gedye C**. Convening Committee and Panel Chair, Diagnostic vs. clinical utility – same-same or different. 2017 4th Thomas Ashworth Symposium
11. **Gedye C**. Catching Up: Opportunities and challenges for kidney cancer biomarkers, 16 July 2017. ANZUP ASM 2017
12. **Gedye C**. Invited Plenary; How Cancer is Evolving: Challenges and Opportunities of Cancer Heterogeneity, 16 June 2017, Adelaide. 2017 Cancer Nurses Society of Australia Annual Meeting,
13. **Lynam, J** Pancreatic Solid and Cystic Lesions – Australasian Symposium of Pancreatic Disease 2018, Brisbane QLD 2018
14. **Lynam, J** Medical Oncology Management of Brain Tumours- Annual Hunter Brain Cancer Forum 2018, Mark Hughes Foundation and Cancer Council NSW, Newcastle NSW
15. Anneke C. Blackburn, A.C., Theodoratos, A., Hardy, K., **Garg, M.B.**, **Ackland, S.P.**, Board, P. Dichloroacetate (DCA) decreases Dihydropyrimidine Dehydrogenase (DPD) activity in cancer patients: Potential for adverse drug interactions between Dichloroacetate and 5-Fluorouracil. ISSX 2017
16. T. Budden, M. Graves, R. Vilain **A. van der Westhuizen**, N. Bowden. 'Repurposing chemotherapy to target methylation and induce DNA repair to overcome treatment resistance in melanoma'. World Melanoma Congress/Society for Melanoma Research 2017, Pigment Cell and Melanoma Research, 2018 31 (1): 125-230
17. M. Graves; G. CelliMarchetti; B. Van Zyl; D. Tang; R. Vilain; **A. van der Westhuizen**; N. Bowden. 'Monitoring patient response to Pembrolizumab with peripheral blood immune profiles' World Melanoma Congress/Society for Melanoma Research 2017, Pigment Cell and Melanoma Research, 2018 31 (1): 125-230
18. **van der Westhuizen A**, Graves M, Levi R, Vilain R, Bowden N, 'Early Phase II Study of Azacitidine and Carboplatin Priming for Avelumab in Patients with Advanced Melanoma Who are Resistant to Immunotherapy', Asia-Pacific Journal of Clinical Oncology (2017)



19. Graves M, CelliMarchett G, van Zyl B, Tang D, Vilain R, **van der Westhuizen A**, Bowden N, 'Using Peripheral Blood Immune Profiles to Monitor Patient's Response to Pembrolizumab', Asia-Pacific Journal of Clinical Oncology (2017)
20. **Zdenkowski N** Neoadjuvant systemic therapy for breast cancer: Patient, practice and research considerations. Bangladesh Breast Cancer Conference, Dhaka, December 2017

#### GRANT FUNDING

1. **Ackland SP** and **Garg M.B.** (2017). Hospital Scientist Salary in Medical Oncology Research Laboratory at the Calvary Mater Newcastle Hospital. Hunter Cancer Research Alliance \$40,000
2. **Ackland SP** and **Garg M.B.** (2018). Hospital Scientist Salary in Medical Oncology Research Laboratory at the Calvary Mater Newcastle Hospital. Hunter Cancer Research Alliance \$20,000
3. **Garg MB**, **Sakoff JA** and **Ackland SP.** (2018) Essential statistics and pharmacokinetic software with required hardware for Oncology clinical research projects data analysis. CMN Coalfields Cancer Support Group Equipment Grant Scheme: \$8,227
4. James E, **Gedye C**, **Lynam J**, **Zdenkowski N**, McGarvey E, Plotnikoff R, Britton B, Nixon S, Rees M, Duncan M, Stacey F. 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. Hunter Cancer Research Alliance pilot grant: \$40,000.
5. **Gedye C** (2018) EnzAdapt: feasibility, acceptability and safety of adaptive dosing of enzalutamide in men with metastatic castrate-resistant prostate cancer, Calvary Mater Newcastle: Gedye, Mandaliya, Lynam, Mallesara, Bonaventura, Abell; Manning Base Hospital, Livshin, CelliMarchett, ANZUP Below The Belt Fund, \$50,000
6. Siva S, Kron T, Martin J, Christie D, Lawrentschuk N, De Abreu Lourenco R, Carmichael A, Vanneste B, **Gedye C**, Mathias B, Hofman M, Brook N, Lo S (2018) Cancer Australia Project Grant (Associate Investigator), Stereotactic Ablative Radiotherapy (SABR) as a New Precision Treatment Option in Kidney Cancer. TROG 15.03 FASTRACK II clinical trial, \$589,000.
7. **Gedye C** (2017) ANZUP Cancer Trials Group/BaCT cooperative group study, Chief Principal Investigator; Phase II Sequential Treatment Trial of Single Agent Nivolumab, Then Combination Ipilimumab + Nivolumab In Metastatic or Unresectable Non-Clear Cell Renal Cell Carcinoma (ANZUP1602; CA209-718); UNISO: anzUp Nivolpi+nivo Sequential Non-clear cell; \$1,681,800, sponsor Bristol-Myers Squibb Australia.
8. **Gedye C** (2017) ANZUP Cancer Trials Group/NHMRC CTC cooperative group study, Study Chair; Denosumab and Pembrolizumab in clear cell renal carcinoma: a phase II trial (ANZUP1601); Kidney cancer Pembrolizumab And Denosumab: KeyPAD, \$2,413,500; sponsors Merck Sharpe Dohme and Amgen Australia.
9. Khasraw M, Rosenthal M, McDonald K, Ashley D (2017) NHMRC Project Grant (Associate Investigator) 2:1 Randomised Phase II Study of Nivolumab and Temozolomide vs Temozolomide in Methylated newly diagnosed Elderly Glioblastoma (NUTMEG); \$1,608,845
10. **Gilbert J**, **Garg M**, **Sakoff JA**, (2017). Coalfields Cancer Support Group, CMN Granting Scheme; Luminescence reader. \$23,000
11. **Gilbert J**, **Garg M**, **Sakoff JA.** (2017). Prostate Cancer Support Group- Luminescence reader. \$5,000
12. **Gilbert J**, **Sakoff JA**, McCluskey A. (2017). CMN Granting Scheme. Tumour reducing efficacy of novel breast cancer targeting small molecules. \$20,000

13. **Catherine Johnson**, Dr Stephen Smith, Dr Brian Draganic, Professor Jarad Martin, Judy Holland. A randomised study of pelvic floor muscle exercises compared to standard care to improve bowel function following ileostomy/colostomy reversal following a diagnosis of rectal cancer (PFME in RC). Jane Reid Harle Memorial Research Grant Scheme: \$10,000
14. **Lynam J**, Britton B, Fradgley L, Martin J, Watts G. A cross-sectional study to explore patterns of use and perceptions towards cannabis in the NSW Cancer population. Hunter Cancer Research Alliance Implementation Science Flagship Program: 2018 Demonstration Project (2018): \$30,000.
15. **Lynam J**. Clinical Cancer Research Network Data Manager. Hunter Cancer Research Alliance Infrastructure Funding (2018): \$26,152
16. **Sakoff JA**, Aldrich-Wright J, **Gilbert J**. (2018). Development of DNA intercalating platinum complexes for the treatment of cancer. CMN Granting Scheme. \$20,000
17. **Sakoff JA**, Fay M and Lynam L (2017). EphA2 as a circulating biomarker for GBM progression – a pilot study. Mark Hughes Foundation \$27,000.
18. **Sakoff JA**, **Gilbert J**, Fay M. (2017). James Lawrie Grant, CMN Granting Scheme, A novel radiation and chemotherapy combination strategy for the treatment of head and neck cancer involving the aryl hydrocarbon receptor pathway. \$25,000
19. **Sakoff JA**, **Gilbert J**, and Scarlett C. (2018). 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.
20. Lincz L, **Sakoff JA**. (2018). Coalfields Cancer Support Group. CMN Granting Scheme. Real time quantitative PCR thermocycler. \$30,000.
21. Simone M and **Sakoff JA** (2017). Priority Research Centre for Chemical Biology and Clinical Pharmacology. Project grant. Investigations of the first generation of borylated drugs in Boron Neutron Capture Therapy and synthetic modifications to a second more potent generation of broad-spectrum anticancer agents. \$10,000.
22. Bowden NA, **van der Westhuizen A**. Ramaciotti Foundation Health Investment Grant. 2016-2018 \$110,000
23. Bowden NA, **van der Westhuizen A**. Hunter Medical Research Institute Project Grant 2017-2018 \$45,000
24. **Zdenkowski N**, Fay M, Sproule V. HCRA infrastructure grant – Research sample freezer: \$10,000

## PALLIATIVE CARE

### RESEARCH STUDIES

1. **Breathlessness, Exertion and Morphine Sulphate Study (BEAMS) dyspnoea study**, PaCCSC
2. **MILD dyspnoea study**, PaCCSC
3. **RAPID pharmacovigilance study**, PaCCSC
4. **Prevalence of cannabis for medicinal purposes in a palliative care population**, Hayes, C, Byfieldt, N, Stabler, J A
5. **Review of Specialist Palliative Care in Residential Aged Care Facilities**, Hayes, C, Byfieldt, N, Stabler, J
6. **Consumer Feedback - Bereavement support group**, Harris, F
7. **Implementing a triage process in SPC**, Wallis J, Maher, J Compton, V, Byfieldt, N
8. **Outreach and inpatient equipment storage and cleaning area re-organisation**, Gleeson, J, Baird, E, Davis, J, Atkinson, J, Collins-Morgan, L, Bagley, B
9. **Seating options for hospice inpatients**, Davis, J, Collins-Morgan, L, Bagley, B, Gleeson, J, Atkinson, N, Baird, E
10. **ADL equipment in hospice**, Bagley, B, Davis, J, Gleeson, J, Collins-Morgan, L
11. **Pressure care equipment guidelines**, Davis, J, Gleeson, J, Atkinson, N, Collins-Morgan, L

### PUBLICATIONS

1. **Clark, K., Lam, L., Talley, N.J., Watts, G., Phillips, J.L., Byfieldt, N., Currow, D.** (2018) A pragmatic comparative study of palliative care clinician's reports of the degree of shadowing visible on plain abdominal radiographs *Supportive Care in Cancer* 26 (11): 3749-3754
2. **Glare, P., Watts, G., Louw, S., Martin, P., Clark, K., Agar, M., Fazekas, B., Currow, D.** (2018) Management of anorexia in people with cancer. A randomised double blind, controlled trial of megestrol acetate, dexamethasone or placebo *Journal of Clinical Oncology* 36 (Supplement) Abstract 10020.
3. **Currow, D., Watts, G.J., Johnson, M., McDonald, C.F., Miners, J.O., Somogyi, A.A., Denehy, L., McCaffrey, N., Eckert D.J. and McCloud, P.** 2017 A pragmatic, phase III, multisite, double-blind, placebo-controlled, parallel-arm, dose increment randomised trial of regular, low-dose extended-release morphine for chronic breathlessness: Breathlessness, Exertion And Morphine Sulfate (BEAMS) study protocol *British Medical Journal* 7(7)
4. **Lucas, C. J., Patel, J., and Martin, J. H.** 2017 Predicting drug interactions in addiction treatment *Internal Medicine Journal* 47(8) 872-878
5. **Patel, J., Martin, J. H., and Lucas, C. J.** 2017 Comment on a paper by Dupoirson et al. A phase III randomized controlled study on

the efficacy and improved bowel function of prolonged-release (PR) oxycodone-naloxone (up to 160/80 mg daily) versus oxycodone PR *European Journal of Pain* 21(10) 1772-1773

6. **Hourn, M.M., Quinn, R., Waller, A., Boyle, K., Jordan, L.A., Salaris, M., Byfieldt, N., Shaw, L. and Marsden, D.** 2017 Exploring current inpatient practice in transitioning people after stroke from acute to palliative care and in advance care planning: The Plan Assess Understand Survival after Stroke (PAUSE after Stroke) Project *International Journal of Stroke* 12 23
7. **Clark, K., Willis, A. and Byfieldt, N.** 2017 An Observational Study to Explore the Feasibility of Assessing Bereaved Relatives' Experiences Before and After a Quality Improvement Project to Improve Care of Dying Medical Inpatients *American Journal of Hospice and Palliative Medicine* 34(3) 263-268

### PRESENTATIONS

1. **Patel, J.** Laxative use in inpatients on oxycodone/naloxone prolonged release and oxycodone prolonged release for cancer and non-cancer pain. ANZSPM Conference 2018. (Authors: Patel, J., Lucas, C., Margalit, M., Martin, J.)

### CONFERENCE POSTERS

1. **Watts, G., Byfieldt N., Compton, V., Wallis, J., Maher, J., Hughes, R.** (2018) The Implementation and Evaluation of a multi-professional triaging process for referrals to a community specialist palliative care service. *BMJ International Forum for Quality and Safety in Healthcare*. Melbourne.
2. **Poon, M., Byfieldt, N., Watts, G.** (2018) Use of Prognostic tools in assessing eligibility for palliative home oxygen therapy. ANZSPM Conference, Sydney.
3. **Glare, P., Watts, G., Louw, S., Martin, P., Clark, K., Agar, M., Fazekas, B., Currow, D.** (2018) Treating Anorexia in People with Advanced Cancer. A Randomised, Double Blind, Controlled Trial of Megestrol Acetate, Dexamethasone or Placebo. *ASCO Annual Meeting*. Chicago.
4. **Hayes, C., Stabler, J., Byfields, N.** (2018) Exploring the use of cannabis for medicinal purposes in a palliative care population. ANZSPM conference.





# Financial Report

Financial Report for the Year Ended 30 June 2018

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





## Being for Others

### Annual Financial Report 30 JUNE 2018

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



Hospitality



Healing



Stewardship



Respect

#### CONTENTS

##### Annual Financial Report 30 JUNE 2018 | 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
24	Independent Auditor's Report



## DIRECTORS' REPORT

### Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

The Board of Directors of Calvary Health Care (Newcastle) Limited submit their report for the year ended 30 June 2018.

#### 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 Ditt. M acq	Chair All Committees, Ex Officio
Michael Roche AM (resigned 22 Nov 2017)	BA (Accounting), FCPA MACS	Deputy Chair Member, Audit & Risk Committee Chair, Strategy & Development Committee
Rebecca Davies (resigned 22 Nov 2017)	BEC, LLB (Hons), FAICD	Director Chair, Mission & Ethics Committee Member, Audit & Risk Committee Member, Performance & Remuneration Committee
Assoc Prof Richard Matthews AM	MBBS	Director Member, Clinical Governance Committee Member, Strategy & Development Committee Member, Mission & Ethics Committee
Prof Katherine McGrath	MBBS, FRCPA, FAICD	Director Chair, Clinical Governance Committee Member, Performance & Remuneration Committee Member, Strategy & Development Committee
Patrick O'Sullivan	CA, MAICD	Director Chair, Audit & Risk Committee Member, Strategy & Development Committee
David Catchpole	BEC, Dip FP, FAICD, FCPA (Retired)	Director Chair, Performance & Remuneration Committee Member, Audit & Risk Committee Member, Strategy & Development Committee
Jennifer Stratton	BA (Economics, English & History), FAICD	Director Chair, Mission & Ethics Committee Member, Performance & Remuneration Committee Member, Clinical Governance Committee
Jim Birch AM	BA (Health Administration), FCHSM, MNATSHC	Director Member, Audit & Risk Committee Member, Clinical Governance Committee Member, Strategy & Development Committee
Lucille Halloran	BCom (Hons), BA (Admin), ESCP, MAICD, Member CA ANZ	Director Member, Performance & Remuneration Committee Member, Mission & Ethics Committee
Annette Carruthers (appointed 22 Nov 2017)	MBBS (Hons), FRACGP, FAICD, Grad Dip App Fin	Director Member, Audit & Risk Committee Member, Clinical Governance Committee
Lucille Scamazzon (appointed 22 Nov 2017)	LLB (Hons 1), BA, GAICD	Director Member, Audit & Risk Committee Member, Mission & Ethics Committee

1

## DIRECTORS' REPORT

### Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

#### Directors (cont'd)

NAME	QUALIFICATIONS	AREAS OF SPECIFIC RESPONSIBILITY
Philip Maloney	Bcom, LLB, GradDip CSP, ACIS, MAICD	Company Secretary
David Bergman	BCom, MEd, ACA ANZ, FFin, GAICD	Alternate Company Secretary

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

Director	Board Meetings		ARC		MEC		PRC		SDC		CGC	
	Held	Att	Held	Att	Held	Att	Held	Att	Held	Att	Held	Att
Hon John Watkins AM	10	8										
Michael Roche AM	3	3	3	3	2	2	1	0				
Rebecca Davies	3	3	3	3	3	3	2	2	2	2	4	4
Assoc Prof Richard Matthews AM	10	10			3	3						
Prof Katherine McGrath	10	10					3	3	2	2	4	4
Patrick O'Sullivan	10	10	5	5								
David Catchpole	10	10	5	4			3	3	2	2		
Jennifer Stratton	10	9			3	3	2	2			2	1
Jim Birch AM	10	10	5	3					2	2	4	4
Lucille Halloran	10	10			3	2	3	3				
Annette Carruthers	7	7	2	2							3	3
Lucille Scamazzon	7	7	2	2	1	1						

Key:

ARC Audit & Risk Committee

MEC Mission & Ethics Committee

PRC Performance & Remuneration Committee

SDC Strategy & Development Committee

CGC 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' within the environment 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.

2



## DIRECTORS' REPORT

### Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

#### 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 \$2.2M was incurred for the financial year ended 30 June 2018 (2017: deficit \$3.2M).

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) Revenues

The Company's revenue from operating activities totalled \$175.7M (2017: \$172.6M). Grants and subsidies from Government for hospital operations totalled \$143.9M (2017: \$139.5M). Grants and subsidies represent 82% (2017: 81%) of revenue from operating activities.

Revenue from operations for the year ended 30 June 2018 included \$0.9M (2017: \$0.9M) resources received free of charge - capital and revenue relating to the Public Private Partnership (PPP) arrangements and recognition of the NSW government funding of superannuation contributions for employees who are members of the defined benefit contribution schemes SASS and SSS.

##### (b) Expenses

The Company's expenses from operating activities totalled \$183.0M (2017: \$180.7M). Expenses on personnel costs represent 65% (2017: 65%) of total operating expense.

Staffing levels for clinical services have increased during the reporting period with total staff of 990 full time equivalents as at 30 June 2018 (2017: 985). The actual number of staff as at 30 June 2018 was 1,335 (2017: 1,340).

##### (c) Hospital activities

The overall inpatient activity for the year was 17,436 separations, a decrease of 1% on the year ended 30 June 2017. Non-inpatient activity for the hospital during the year was 372,339 occasions of service, an increase of 8% on the year ended 30 June 2017.

#### 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.

## DIRECTORS' REPORT

### Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

#### 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").

#### 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 guarantee

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 5 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: MĠĠĠĠĠĠĠĠ this 28<sup>th</sup> day of August 2018.



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 2018 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

SL

Stephen Isaac  
Partner  
Sydney  
28 August 2018

DIRECTORS' DECLARATION

Annual Financial Report 30 JUNE 2018 | 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 23, 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 2018 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 MELBOURNE this 28<sup>th</sup> day of August 2018.

## STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

	Note	2018 \$ '000	2017 \$ '000
Revenue from operations		175,703	172,602
Other income		3,738	3,530
<b>Total revenue for the year</b>	2	<b>179,441</b>	<b>176,132</b>
Employee benefits expense		118,822	117,232
Depreciation expense		6,570	7,323
Supplies		22,474	22,048
Contracted services		25,191	24,786
LCMHC shared service contributions		3,744	2,974
Travel		1,145	959
Other expenses		5,049	5,411
<b>Total expenses for the year</b>		<b>182,995</b>	<b>180,733</b>
<b>Results from operating activities</b>		<b>(3,554)</b>	<b>(4,601)</b>
Finance income		1,350	1,418
<b>Net deficit for the year</b>		<b>(2,204)</b>	<b>(3,183)</b>
Other comprehensive income for the year		-	-
<b>Total comprehensive loss for the year attributable to members of the Company</b>		<b>(2,204)</b>	<b>(3,183)</b>

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 23.

## STATEMENT OF FINANCIAL POSITION

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

	Note	2018 \$ '000	2017 \$ '000
<b>Current assets</b>			
Cash and cash equivalents	4	18,422	20,489
Trade and other receivables	5	3,900	4,098
Inventories		1,351	1,242
Other financial assets	6	45,000	45,000
Other current assets		473	255
<b>Total current assets</b>		<b>69,146</b>	<b>71,084</b>
<b>Non-current assets</b>			
Property, plant and equipment	7	110,806	110,075
<b>Total non-current assets</b>		<b>110,806</b>	<b>110,075</b>
<b>Total assets</b>		<b>179,952</b>	<b>181,159</b>
<b>Current liabilities</b>			
Trade and other payables		7,687	7,449
Provisions	9	35,196	34,578
Income received in advance	22	22	71
<b>Total current liabilities</b>		<b>42,905</b>	<b>42,098</b>
<b>Non-current liabilities</b>			
Provisions	9	1,193	1,003
<b>Total non-current liabilities</b>		<b>1,193</b>	<b>1,003</b>
<b>Total liabilities</b>		<b>44,098</b>	<b>43,101</b>
<b>NET ASSETS</b>		<b>135,854</b>	<b>138,058</b>
<b>Equity</b>			
Retained earnings		135,854	138,058
<b>TOTAL EQUITY</b>		<b>135,854</b>	<b>138,058</b>

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 23.



## STATEMENT OF CASH FLOWS

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

	2018 \$ '000	2017 \$ '000
<b>Cash flows from operating activities</b>		
Receipts from customers	35,258	34,618
Government grants received	135,443	134,661
Capital grants received	7,142	3,539
Payments to suppliers and employees	(177,291)	(172,522)
Interest received	946	1,102
Other income received	3,738	3,530
<b>Net cash provided by operating activities</b>	<b>5,236</b>	<b>4,928</b>
<b>Cash flows from investing activities</b>		
Proceeds on disposal of property, plant and equipment	388	573
Payment for property, plant and equipment	(7,691)	(3,882)
<b>Net cash used in investing activities</b>	<b>(7,303)</b>	<b>(3,309)</b>
<b>Net decrease in cash held</b>	<b>(2,067)</b>	<b>1,619</b>
<b>Cash at the beginning of the financial year</b>	<b>20,489</b>	<b>18,870</b>
<b>Cash at end of the financial year</b>	<b>18,422</b>	<b>20,489</b>
<b>Separate disclosure of operating and other cash at the end of the financial year:</b>		
Operating cash	9,734	9,059
Special purpose, trust and other restricted cash	8,688	11,430
	<b>18,422</b>	<b>20,489</b>

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 23.

## STATEMENT OF CHANGES IN EQUITY

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

	Retained earnings \$ '000	Total earnings \$ '000
<b>2018</b>		
Balance 1 July 2017	138,058	138,058
Net deficit for the year	(2,204)	(2,204)
<b>Total comprehensive loss for the year</b>	<b>(2,204)</b>	<b>(2,204)</b>
<b>Balance 30 June 2018</b>	<b>135,854</b>	<b>135,854</b>
<b>2017</b>		
Balance 1 July 2016	141,241	141,241
Net deficit for the year	(3,183)	(3,183)
<b>Total comprehensive loss for the year</b>	<b>(3,183)</b>	<b>(3,183)</b>
<b>Balance 30 June 2017</b>	<b>138,058</b>	<b>138,058</b>

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 23.

## 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 28 August 2018.

#### Basis 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 2016/191, and in accordance with the Class Instrument, amounts in the financial report are rounded off to the nearest thousand dollars, unless otherwise indicated.

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.

## NOTES TO THE FINANCIAL STATEMENTS

#### 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.

#### (e) Financial Instruments

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.

#### Financial assets

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

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.

## NOTES TO THE FINANCIAL STATEMENTS

Trade receivables are assessed for impairment on a collective basis where they are not assessed to be impaired individually. The amount of the impairment loss recognised is the difference between the asset's carrying amount and the present value of the estimated future cash flows.

The carrying amount is reduced by the impairment loss through the use of an allowance account for trade receivables. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognised in profit or loss.

### *Derecognition*

The Company derecognised 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.

## NOTES TO THE FINANCIAL STATEMENTS

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

	2018	2017
Buildings	2.5%	2.5%
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.

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.

## (g) 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.



## NOTES TO THE FINANCIAL STATEMENTS

### (h) 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.

### (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.

### Critical judgements in applying accounting policies

#### Visiting medical officer accruals

The Company recognises an accrual for services performed by visiting medical officers for which no timesheets or invoices have been received by the Company. The measurement accruals is based on past activity and estimates.

## NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

### 2 Revenue and other income

	Note	2018 \$ '000	2017 \$ '000
<b>Revenue from operating activities</b>			
Revenue from rendering of services		31,815	33,077
Public Health Service recurrent grants		136,585	135,437
Public Health Service capital grants		6,493	3,217
Public Health Service resources received free of charge		810	871
<b>Total revenue from operations</b>		<b>175,703</b>	<b>172,602</b>
<b>Other income</b>			
Donations		439	929
Other income		3,299	2,601
		3,738	3,530
<b>Total revenue and other income</b>		<b>179,441</b>	<b>176,132</b>

### 3 Expenses

Superannuation - defined contribution	8,180	8,018
Superannuation - defined benefit	810	871
Loss on disposal of property, plant & equipment	407	312

### 4 Cash and cash equivalents

Cash at bank and on hand	9,734	9,059
Cash at bank - special purpose funds	8,688	11,430
	<b>18,422</b>	<b>20,489</b>

### 5 Trade and other receivables

<b>Current</b>		
Trade receivables	1,504	1,420
Other receivables	2,359	2,678
Other receivables due from related parties	37	-
	<b>3,900</b>	<b>4,098</b>

### Movement in the impairment of receivables

Balance at the beginning of the year	(73)	(48)
Impairment losses recognised/reversed during the year	(69)	(107)
Amounts written off/recovered	60	82
Balance at the end of the year	<b>(82)</b>	<b>(73)</b>

## NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

### 6 Other financial assets

Term deposits

	2018 \$ '000	2017 \$ '000
Term deposits	45,000	45,000

### 7 Property, plant and equipment

Freehold land - at cost

Freehold land - at cost	7,946	7,946
-------------------------	-------	-------

Buildings - at cost

Buildings - at cost	132,276	131,455
---------------------	---------	---------

Less: Accumulated depreciation

Less: Accumulated depreciation	(43,461)	(40,163)
--------------------------------	----------	----------

	88,815	91,292
--	--------	--------

Plant and equipment - at cost

Plant and equipment - at cost	34,434	32,437
-------------------------------	--------	--------

Less: Accumulated depreciation

Less: Accumulated depreciation	(21,989)	(22,228)
--------------------------------	----------	----------

	12,445	10,209
--	--------	--------

Motor vehicles - at cost

Motor vehicles - at cost	394	394
--------------------------	-----	-----

Assets under construction - at cost

Assets under construction - at cost	1,206	234
-------------------------------------	-------	-----

	110,806	110,075
--	---------	---------

### Reconciliation of property, plant and equipment

Cost

**Freehold land**

Balance at 1 July 2017

Balance at 1 July 2017	7,946	
------------------------	-------	--

Balance at 30 June 2018

Balance at 30 June 2018	7,946	
-------------------------	-------	--

**Buildings**

Balance at 1 July 2017

Balance at 1 July 2017	131,455	
------------------------	---------	--

Additions

Additions	587	
-----------	-----	--

Transfers from Assets under Construction

Transfers from Assets under Construction	234	
--	-----	--

Balance at 30 June 2018

Balance at 30 June 2018	132,276	
-------------------------	---------	--

**Plant and equipment**

Balance at 1 July 2017

Balance at 1 July 2017	32,437	
------------------------	--------	--

Additions

Additions	5,922	
-----------	-------	--

Disposals

Disposals	(3,925)	
-----------	---------	--

Balance at 30 June 2018

Balance at 30 June 2018	34,434	
-------------------------	--------	--

## NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

2018  
\$ '000

2017  
\$ '000

### Motor Vehicles

Balance at 1 July 2017

Balance at 1 July 2017	394
------------------------	-----

Additions

Additions	381
-----------	-----

Disposals

Disposals	(381)
-----------	-------

Balance at 30 June 2018

Balance at 30 June 2018	394
-------------------------	-----

### Assets under construction

Balance at 1 July 2017

Balance at 1 July 2017	234
------------------------	-----

Costs incurred during the year

Costs incurred during the year	1,206
--------------------------------	-------

Transfers to property, plant and equipment

Transfers to property, plant and equipment	(234)
--	-------

Balance at 30 June 2018

Balance at 30 June 2018	1,206
-------------------------	-------

### Accumulated depreciation and impairment

#### Buildings

Balance at 1 July 2017

Balance at 1 July 2017	(40,163)
------------------------	----------

Depreciation expense

Depreciation expense	(3,298)
----------------------	---------

Balance at 30 June 2018

Balance at 30 June 2018	(43,461)
-------------------------	----------

#### Plant and equipment

Balance at 1 July 2017

Balance at 1 July 2017	(22,228)
------------------------	----------

Eliminated on disposal of assets

Eliminated on disposal of assets	3,511
----------------------------------	-------

Depreciation expense

Depreciation expense	(3,272)
----------------------	---------

Balance at 30 June 2018

Balance at 30 June 2018	(21,989)
-------------------------	----------

### Land and buildings

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 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.

## NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2018 | Calvary Health Care (Newcastle) Limited

### 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  
No.2 Account / Conditions imposed by NSW Ministry of Health  
Research grants / Conditions imposed by granting body

17,493	14,974
24,942	28,663
6,253	7,793
48,688	51,430

#### Disclosed in the Statement of Financial Position as:

Cash and cash equivalents  
Other financial assets

8,688	11,430
40,000	40,000
48,688	51,430

2018 \$ '000	2017 \$ '000
-----------------	-----------------

Note

## NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2018 | 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.

### 9 Provisions

#### Current

Employee benefits:

Annual leave  
Long service leave  
Other employee provisions

13,506	13,190
21,519	21,225
171	163

#### Non Current

Employee benefits:

Long service leave

1,193	1,003
-------	-------

#### Other provisions

Other provisions comprise roster days accrued.

### 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 \$7.9M (2017: \$7.8M), 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 2018. 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 2018 | 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	504,007	527,907
---	---------	---------

#### Transactions with other related parties

##### Amounts included in income received during the year from Calvary group companies:

Supplier rebate income	8,278	15,528
Recovery of salaries and wages (incl on-costs)	96,932	16,179
Palliative care education	-	4,055
Recovery for goods and services	-	489
Transfer of leave provisions	63,222	-

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

National Office shared service contribution	1,904,952	1,822,920
National IT shared service contribution - recurrent	1,048,128	744,372
National IT shared service contribution - non-recurrent	790,572	407,028
Payments for goods and services	39,974	41,212
Insurance premiums	60,000	81,200

#### Receivables due from related parties

##### Amounts receivable from Calvary group companies:

Other receivables	36,886	-
-------------------	--------	---

21

## NOTES TO THE FINANCIAL STATEMENTS

Annual Financial Report 30 JUNE 2018 | 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 2012/13 fund year and an interim adjustment for the 2014/15 fund year were not calculated until 2017/18. The 2013/14 final and 2015/16 interim hindsight calculations will be paid in 2018/19.

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.

22

## NOTES TO THE FINANCIAL STATEMENTS

### Annual Financial Report 30 JUNE 2018 | 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, 82% 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.



## Independent Auditor's Report

To the members of Calvary Health Care (Newcastle) Limited

### 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:

- giving a true and fair view of the Company's financial position as at 30 June 2018, and of its financial performance and its cash flows for the year ended on that date; and
- complying with *Australian Accounting Standards – Reduced Disclosure Requirements* and Division 60 of the *Australian Charities and Not-for-profits Commission Regulation 2013*.

The Financial Report comprises:

- Statement of financial position as at 30 June 2018;
- Statement of profit or loss and other comprehensive income, Statement of changes in equity, and Statement of cash flows for the year then ended;
- Notes including a summary of significant accounting policies; and
- Directors' declaration of the Company.

### 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.

Undertaking an audit in accordance with Australian Auditing Standards means exercising professional judgment and maintaining professional skepticism.

Our responsibilities include:

- i. Identifying and assessing the risks of material misstatement of the Financial Report, whether due to fraud or error.
- ii. Designing and performing audit procedures responsive to those risks, and obtaining 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. This is because fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- iii. Obtaining an understanding of internal control relevant to the Audit in order to design audit procedures that are appropriate in the circumstances. This is not for the purpose of expressing an opinion on its effectiveness.

- iv. Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.
- v. Concluding 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.
- vi. Evaluating 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.

82

KPMG

KPMG

Stephen Isaac  
Partner

Sydney  
28 August 2018







Mater Newcastle

Locked Mail Bag 7  
Hunter Region Mail Centre, NSW 2310, Australia  
P: 02 4921 1211

[www.calvarymater.org.au](http://www.calvarymater.org.au)

**Hospitality**  
**Healing**  
**Stewardship**  
**Respect**