Wellington Regional Hospital
Intensive Care Services
Annual Report 2011-2012

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OVERVIEW

2011/2012 has been our busiest year to date with approximately 1600 patients being admitted. This is because in addition to our acute numbers, the hospital has increased the number of vascular operations, bone marrow transplants, and cardiothoracic patients this year.

We have also seen a lot of hard work around governance in the unit - improved handover and discharge protocols, formation of the ICU clinical practice group and Kristy's appointment as Nurse Technician have all improved the support of our clinical practice.

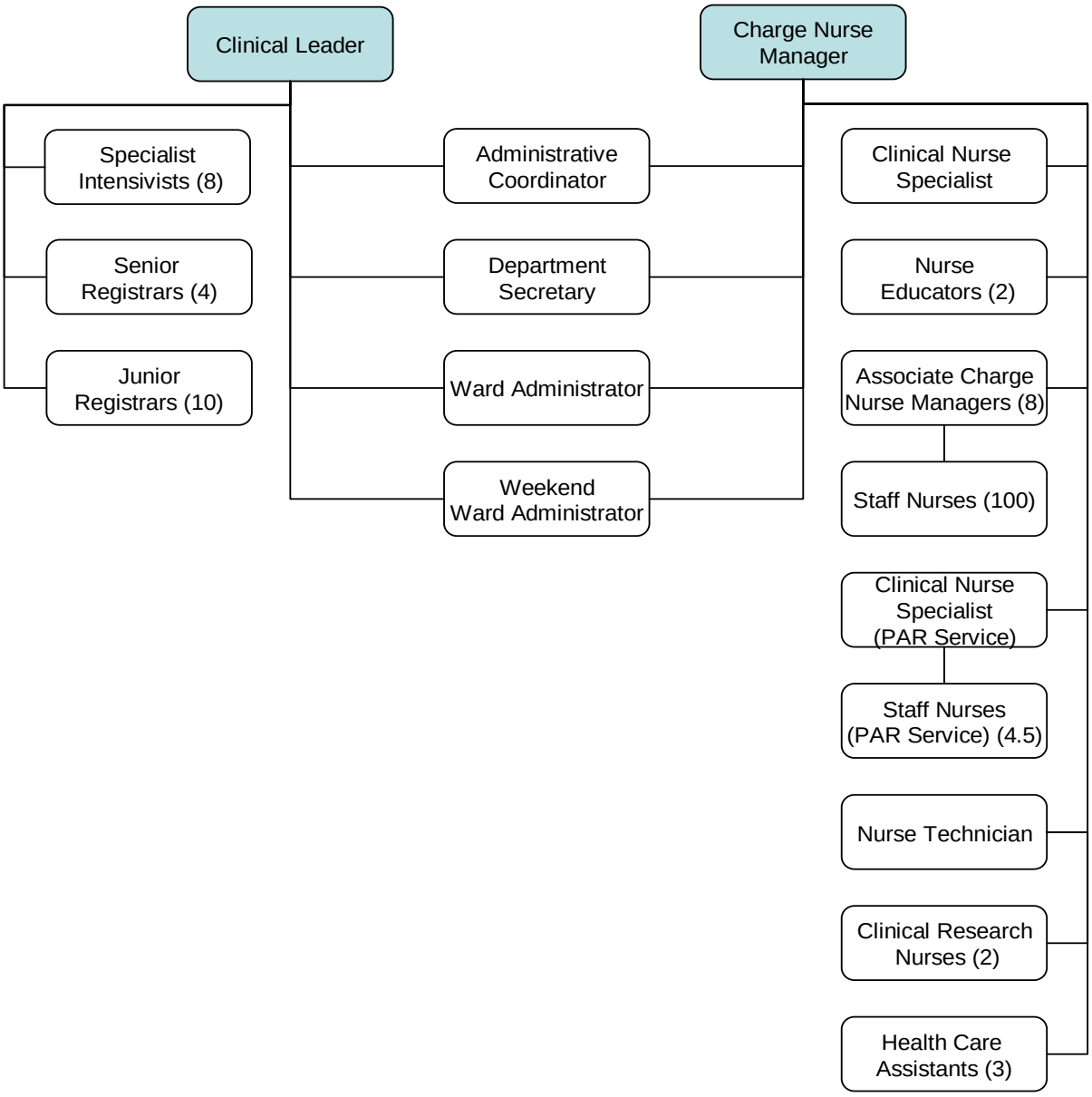
Our Research Unit continues to grow and we are now involved in sixteen clinical trials! It is good to see some original research alongside the CTG trials this year.

Lastly Paul and the CICM 2013 ASM committee have all but completed the organisation of this event for next year – "Down with Dogma". This will be the perfect venue for Wellington to present some of its research.

Shawn Sturland
Clinical Leader

PERSONNEL

Intensive Care Services Organisation Chart



MEDICAL STAFF REPORT

The appointment of Chris Poynter as a specialist this year brings us up to eight SMOs. Chris will work between anaesthesia and ICU and has already taken on the role of Deputy Supervisor of Training as well as organising the 2013 ICU exam course.

Alex has put a tremendous amount of work into our new website www.wellingtonicu.com which has increased our global footprint to being “world famous in New Zealand”.

The next phase will be the round of SMO sabbaticals organised for next year.

Three of our Senior Registrars passed their exam this year, and there is yet more competition for these positions next year.

Shawn Sturland
Clinical Leader

NURSING STAFF REPORT

This year was Wellington ICU's busiest year yet. Increases in our patient numbers were significant across both acute and elective admissions. Meeting the challenge of these increases within our current staffing resources highlighted the team's motivation, along with the ability to be flexible and creative to ensure we delivered safe care.

Work to ensure a consistently high standard of care for our long-term patients is now well established. Improvement in patient discharge was a focus this year. Several changes were introduced. The nursing discharge documentation is now integrated alongside a medical discharge on the ICU database. Standardising how we document discharge has improved the bedside handover on the ward and this has received great feedback. Support from the North End Coordinators and the night staff has also enabled a process of early preparation for morning discharge. Outcomes include patients feeling less rushed and timely morning discharges.

The PAR Team, with ICU's medical support for MET calls, is now well integrated into the hospital. Along with the rotating positions, 15 ICU nurses have worked for PAR this year. The roll out of the standardised observation charts, with the associated Early Warning and mandatory MET call criteria, was a great achievement in 2011. Sharing these successes and learning from the many new services growing around the country are goals for the coming year.

The Research Team had another successful year. Several nurses were orientated to the team in anticipation of several local projects commencing in 2012.

A completed review and update of all the ICU policy and procedure documentation was completed this year. We joined a national collaborative to reduce central line infections. This has been successful locally, with 380 days since the last line infection. At both a local and national level we have taken a lead role in this project.

Post Graduate education continues to be well supported this year with 25 nurses engaged in study. Four ICU nurses successfully completed their Master qualification in 2011. Congratulations to Rebecca James, Jacqui Grannetia, Sarah Rodgers and Jess Ongley.

Over the coming year we hope to continue the good work toward increasing our nursing capability with paediatric patients. Much of the learning from staff visiting Starship Hospital has helped inform our paediatric group improvement strategy for the new year. Sharing our progress both clinically and operationally is another area we will work on in the new year through the Dashboard project.

Through our work at the bedside, our involvement in research, or when a PAR nurse supports a patient on the ward, ICU has been represented as a professional and caring team. This is reflected in the fantastic reputation ICU has and the many kind thank you letters we frequently receive from patients and families. This was recently received from one of our longer-term patients:-

"Thank you and your amazing team in Wellington, you saved my life and inspired me to be a nurse too. I'm in my first year of a Bachelor of Nursing at UCOL, thank you, thank you, thank you".

Stephen James
Charge Nurse Manager

NURSING STAFF REPORT (CONTINUED)

2012 has been a year of enhancement and consolidation of major innovations introduced in 2010 and 2011. These included the Tracheostomy Review and Management Service (TRAMS), care of the long-term patient and the Clinical Practice Group. We were also keen to continue the success we had enjoyed with staff development and progression.

During this past year an increasing number of tracheostomies have been inserted in ICU. Consequently, the number of patients discharged to the Tracheostomy Review and Management Service (TRAMS) for follow up has increased. As a result, TRAMS has continued to evolve the service resulting in following up patients in new areas, such as paediatrics. Whilst this was a challenging episode for the team and the ward, the patients were successfully decannulated and discharged home without a tracheostomy - an extremely positive outcome for all involved. We have managed to successfully decannulate or discharge all of the patients in our care to other facilities.

A major focus this year has been on the care of the long term patient. Due to the aging population and our increased ability to manage the critically ill, this patient population has been on the increase. Following on from the development and roll out of the long term care patient bundles, a review was undertaken. This evaluated the use of the care plans and its effectiveness. The major change was the addition of the care plan to the patient's daily progress notes. As a result the process is now streamlined enabling more time to be spent with the patients. Feedback from patients and families about their experience has been universally positive since these changes were introduced.

The role of the Clinical Practice Group has strengthened this year. After the Group's inaugural year, the process of practice change within the department is now well established. Some examples of changes in clinical practice include blood sampling methods, long-term patient care and documentation, introduction of trauma guidelines, equipment trials approved and changes implemented. The Clinical Practice Group has been crucial in supporting the review and management of ICU policies and procedures, accordingly all are now up to date.

This year our staff continued with post-graduate education with significant success. Twenty-six attended university papers with four completing their Masters in Nursing. We hope to continue this trend over the coming years. Progression on the Professional Development Recognition Plan (PDRP) was also a key area of staff development this year. I am very pleased to report that six nurses progressed to Expert level, with a further seven making the transition to Proficient level. Overall, the motivation of the staff to learn and increase their knowledge has been inspiring. The committment on their part has been demonstrated with new initiatives and care being delivered in a way that is always evidence based, thereby, enhancing the care delivered to our patients.

The ICU was able to send three staff to the ANZICS Annual Meeting in Brisbane and three to the NZ regional meeting in Hamilton. These staff brought back new ideas that we could implement in the unit. The Friends of Fiji Cardiothoracic Mission continued this year and we were able to send two staff members to represent Wellington ICU. They reported how inspiring this opportunity was and that working in a different environment made them aware of how lucky we are to work in the unit we do.

Our goal next year is not only to continue to develop the work we do now and encourage all our staff to be the best clinicians they can be, but to work in a collaborative manner to improve the care delivered to the people of Wellington and the greater Wellington region.

Tom Andrews
Clinical Nurse Specialist

EDUCATION

ICU nursing education has continued this year with two main focuses – administrative work and a strong clinical presence on the ICU floor.

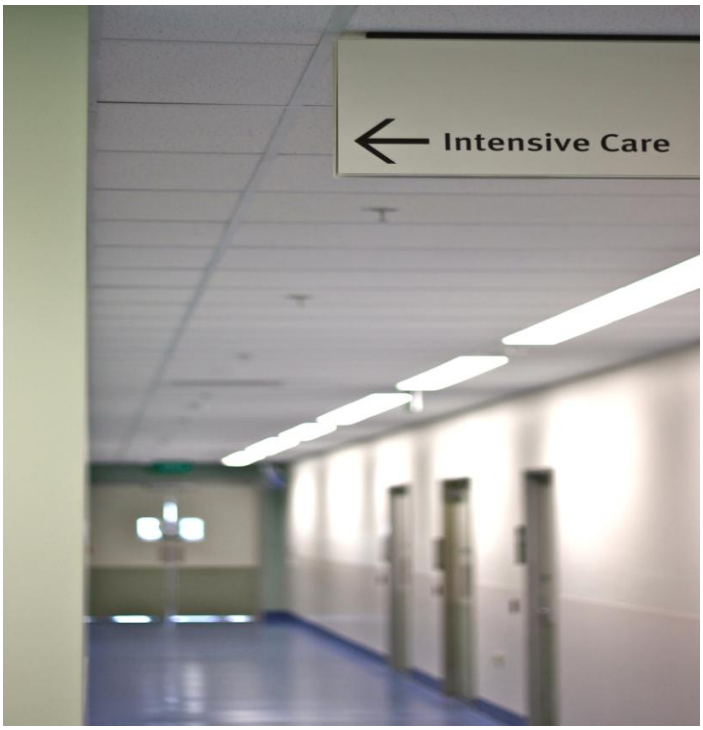
Our ICU continued to hire new staff this year. They generally received a six week orientation with two - three nurses working with them over this time. The nurse educators offer support through their orientation period and work with the new starter post-orientation to support their practice and see how they are faring. These clinical buddy shifts enable one to one teaching in the clinical environment and act as a means of assessing the effectiveness of orientation. An emphasis is put on patient assessment; this then drives a plan of care and further treatment.

The core ICU study days were run again this year. They covered topics such as:-

- Respiratory and Ventilation
- Fundamentals of ICU – 2 days run twice a year
- Care of post-op Cardiac
- Care of Critically-ill child
- Trauma/Neuro
- Shock/Renal

A new study day, care of the Surgical Patient, was held this year in response to a perceived need and a lack of coverage on this topic.

An average of 15 nurses attended these study days, the feedback being very positive. An emphasis is put on interaction and many study days included skill stations. A great deal of support is given to the staff nurses who teach on these days.



EDUCATION (CONTINUED)

The two-year Critical Care rotation continues with many of these nurses demonstrating a rapid development of skills and knowledge in a short space of time. The area that these nurses rotate to include ICU, CCU, Cardiothoracic, ED and Neurosciences.

The IV group continues to develop. An ICU specific questionnaire was developed and completed annually on the Core Competency days. The core competency day is attended by all nurses in a calendar year and gives us the opportunity to teach ASV ventilation - using an interactive computer programme. This has received good reviews and has helped us meet the challenge of teaching ASV - a simple yet advanced ventilation programme which is our default setting for ventilation.

The next teaching topic for the core competency day will be pain control in ICU. This includes epidural/PCA and rectus sheath catheters. Rectus sheath catheters are common in certain post-op patients, while epidural use is becoming less common.

In-service is an ongoing project led by the nursing education team. Three times a week, generally at 3pm, a topic is taught at the bedside. The topic may be a new piece of equipment/consumable, or emphasising an ICU skill. This year we have covered many topics including temporary cardiac pacing, Vigilance monitor, PICCO monitor, Intra Aortic Balloon Pump, Prismaflex updates, Pharmacy updates, blood gas analysis and new equipment. In-service remains a challenge in a busy ICU. At times we have to cancel or postpone due to a heavy workload but we remain committed to the idea of regular bedside teaching.

The past year has seen many ICU nurses continue to participate in postgraduate study. And it is welcome news that the ICU postgraduate paper will again be offered following a few years when it was not able to be supported by Victoria University.

Seven of our staff nurses travelled to Starship for a two day placement which was well received by all staff involved. It was an opportunity for staff to become more familiar with a paediatric focused environment and bring back this knowledge and experience to Wellington. We hope to continue this initiative in 2013.

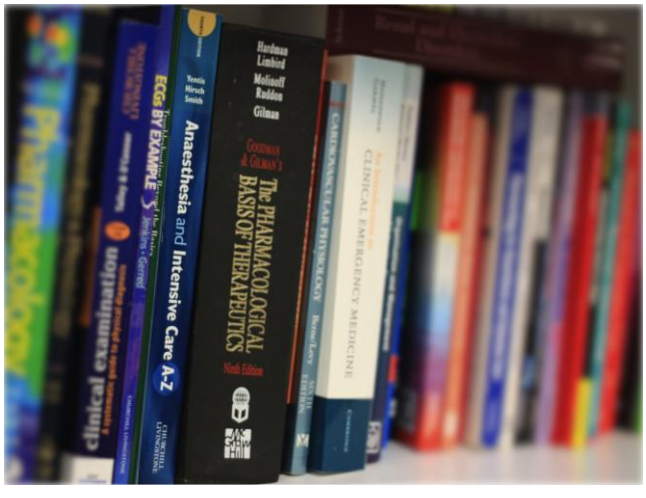
Clinical Focus of the Month has continued to be useful in educating staff on clinical changes or equipment. This is a monthly initiative in which all staff are invited to take part as it is a useful tool in advancing their PDRP or sharing information on a topic in which they are interested. T he topics covered this year include:- Guillain Barré, abdominal compartment syndrome, rectus sheath catheters, PAR (Patient at Risk), health and safety in clinical practice, organ donation, C02 and respiratory assessment. Staff attended many external study days with a total of 21 attending Advanced Cardiac Life Support.

We have had a busy year with undergraduate students with a total of 15 coming through our doors for various periods of time throughout the year. As a whole they have generally loved their placement, finding staff incredibly knowledgeable and supportive. The majority of them wish to continue to work here as a new starter so we use this time to assess them for suitability for the NETP program next year where we hope to be taking two new staff.

Currently, Jacqui Grannetia is on maternity leave and we wish her all the best. Tracy Klap has stepped in and is enthusiastically filling her role.

Jacqui Grannetia
Kevin O'Donnell
Tracy Klap

Clinical Nurse Educators



EDUCATION (CONTINUED)

Medical Education

The Intensive Care Unit currently has 14 registrar training positions accredited with the College of Intensive Care Medicine including 4 Senior Registrar posts. We continue to run an intensive teaching programme which includes didactic teaching on Thursday mornings, bedside clinical examination teaching on Wednesday afternoons, and Journal club on Friday afternoons. In addition, we run a weekly mortality review session. Our website www.wellingtonicu.com is continuing to grow as an online learning resource for our trainees.

Wellington ICU registrars have continued to enjoy significant success in the ICU Fellowship exam and 2012 saw David Tripp and Colin Barnes pass the Fellowship exam. The Wellington ICU intensive medicine course ran again in 2012 for trainee registrars from around New Zealand and beyond. Wellington is hosting the 2013 Annual Scientific Meeting for the College of Intensive Care Medicine and preparations for this major Australasian Intensive Care meeting are now well under way.

Paul Young
Intensive Care Specialist

RESEARCH

The research department continues to be an active member of the Australian and New Zealand Clinical Trials Group (ANZICS CTG), participating in the twice yearly Point Prevalence Program, multi-centre audits and ANZICS CTG endorsed studies. The research department also participated in one pharmaceutical trial – ZORO, over the previous year.

Current Studies

- **ZORO**
  A Phase III international, randomized, double-blind, double-dummy study to evaluate the efficacy and safety of 300 mg or 600 mg of intravenous zanamivir twice daily compared to 75 mg of oral oseltamivir twice daily in the treatment of hospitalized adults and adolescents with influenza.

- **HEAT**
  A randomised trial of paracetamol vs placebo in critically ill patients with fever and known or suspected infection (the HEAT trial). In partnership with the Medical Research Institute of New Zealand, the Intensive Care Unit successfully secured a $1.2M Health Research Council of New Zealand grant to undertake a randomised trial of paracetamol vs placebo in critically ill patients with fever and known or suspected infection (the HEAT trial). This trial is the first New Zealand-led study being run under the auspices of the ANZICS CTG and is due to start recruiting patients in late 2012. A pilot study of 30 patients has been completed.

- **EPO-TBI**
  ANZICS CTG Study - Prospective, double-blind randomised trial to determine the effect of erythropoietin on outcome in patients with moderate and severe traumatic brain injury. .

- **CELSIUS**
  ANZICS CTG Study - two centred observational study to determine the most accurate and practical method of temperature measurement in the critically ill sub-populations with acute brain injury and sepsis.

- **CLARITY**
  ANZICS CTG Study - an audit of temperature regulation in intensive care patients with traumatic brain injury and stroke in Australia and New Zealand.

- **TEAM**
  ANZICS Research Centre - this is a prospective, observational, inception cohort study in ventilated patients to describe current mobility practice and identify patient, site and treatment related factors that are associated with successful mobilisation.

- **DAHLIA**
  This is a randomised, double-blind, multi-centre placebo controlled trial of dexmedetomidine for patients with agitation and delirium in the intensive care unit. This study has ANZICS CTG endorsement.

- **HOT or NOT**
  This is a multi-centre feasibility study investigating whether a strategy of avoidance of hyperoxia leads to lower levels of oxygen exposure than standard care in adults resuscitated from out-of-hospital VF and VT cardiac arrest.

RESEARCH (CONT)

- **SAMM**
  Prospective audit and review of severe acute maternal morbidity, i.e. cases admitted to ICU with a view to identifying preventablility. Four DHBs are currently involved and cases are extensively reviewed by a panel of experts over three annual meetings.

Completed Studies

- **CHEST**
  ANZICS CTG Study – Prospective, double-blind, randomised trial to determine the effects of intravenous fluid resuscitation with 6% hydroxyethyl starch (130/0.4) in 0.9% sodium chloride (Voluven) compared to 0.9% sodium chloride on all-cause mortality in critically-ill patients. This study will be published in October 2012.

Future Studies

- **PHARLAP**
  The primary aim of this single blind randomised controlled trial is to investigate the efficacy of a ventilation strategy that includes low plateau pressure, staircase recruitment manoeuvres and PEEP titration to standard care on duration of mechanical ventilation, length of ICU stay and quality of life indicators. This study has ANZICS CTG endorsement.

- **ADRENAL**
  A randomised blinded placebo controlled trial of hydrocortisone in critically-ill patients with septic shock. This study has ANZICS CTG endorsement. It is being carried out in conjunction with The George Institute and ANZICS Clinical Trials Group.

- **TRANSFUSE**
  A multi-centre randomised double blinded phase III trial of the effect of standard issue red blood cell blood units on mortality compared to freshest available red blood cell units. ANZICS Research Centre.

- **BLING 2**
  A phase IIb randomised controlled trial of continuous beta-lactam infusion compared with intermittent beta-lactam dosing in critically-ill patients.

- **IOS Weaning Study**
  Practice pattern variation in discontinuing mechanical ventilation in critically-ill adults: an international observational study. This study is being conducted under the auspices of The Canadian Critical Care Trials Group.

- **CLOSE I**
  This is a pilot study to determine the feasibility of a “conservative” oxygenation strategy compared to a “liberal” oxygenation strategy in ICU patients requiring mechanical ventilation.

- **CUBIST**
  This is a phase III multi-centre, open-label randomised study to compare the safety and efficacy of intravenous ceftolozane/tazobactam with that of piperacillin/tazobactam in ventilator-associated pneumonia. This is a pharmaceutical study carried out in conjunction with Cubist Pharmaceuticals, Inc.

ICU Research Team

Jess Ongley
Juliana Tang-Hickey
Lynn Andrews
Diane Mackle

Specialty Nurse Research

Paul Young
Dick Dinsdale
Bob Ure

Intensivists

Conference Presentations

Publications

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THE WELLINGTON ICU WEBSITE

wellingtonicu.com

in September 2012. Over this first year there have been 41,358 pages viewed during 12,351 visits from 7,814 unique visitors. Our audience is spread far and wide with most visits coming from NZ, the UK, Australia & the US (see below).

	Country / Territory	Visits ↓
1.	New Zealand	3,526
2.	United Kingdom	3,507
3.	Australia	1,481
4.	United States	1,015
5.	Hong Kong	737
6.	India	192
7.	Ireland	154
8.	Canada	122
9.	Italy	112
10.	Thailand	102

Of note we've also had 9 visitors from Iran, 2 from Somalia, 8 from Finland, and an interested Latvian.

The website was initially set up to provide information on the second Wellington Intensive Care Exam Course that was run in 2012 for senior ICU medical trainees undertaking their fellowship exam. It allowed prospective candidates to read about the course, apply and pay their course fees online. Since then the site has grown to include information on all our activities and a number of services that are affiliated to ICU.

The site consistently ranks in the top three results on Google for a variety of different search terms both locally and internationally; we are the number one ranked Intensive Care Unit in New Zealand for Google searches in the UK, US, Ireland, Canada & Australia. This has resulted not only in increased traffic but has also attracted a number of job applicants for both nursing and medical positions who are now applying directly to the Unit rather than through the hospital.

INTENSIVE CARE WEBSITE (CONT)

It has also brought international recognition to our increasing research output as well as enquiries from three different countries as to how they may adapt our Early Warning Score system to their local hospitals. Several other websites now link to our increasing pool of Education Resources with further teaching packages planned including an interactive chest X-ray interpretation section.

A spin-off from the main site has been the ICU dashboard located at dash.wellingtonicu.com

The dashboard was created to collate the large amount of data that is routinely collected on our activities and present it in a graphical format that is easy to understand. At present, there are separate sections for cardiac surgery, research, the flight service, the medical emergency system, the patient at risk service and operational information. The data shows us where we've been, where we are, and where we are going as a unit. The website displays the data in real time gathered from a variety of online spreadsheets which are updated monthly by various staff from within their non-clinical portfolios.

The website costs are minimal and are funded from course fees for the exam course.

Future developments will include expanding the education section and developing an online staff-only message board. If you have any suggestions, comments or criticisms, please contact me either in person, or through the website.

Alex Psirides
Intensive Care Specialist

QUALITY IMPROVEMENT

Quality Portfolio

The ICU quality portfolio has continued overseeing the monitoring of audit and quality activity, maintenance of the audit schedule, quarterly reports for the C&CDHB quality team, feedback and participation in the Quarterly Risk Management meetings and Senior Nurse meetings, and maintenance of the 'Quality Board' in the ICU and the Quality section on the ICU intranet site.

The audit schedule continues to attend to key areas related to quality and risk management, including infection control, health and safety, manual handling, reportable events, falls and restraints, complaints and pressure and decubitus ulcers. The schedule also incorporates several point prevalence audits related to documentation and the ICU environment, alongside some issues- based audits including potassium storage.

Many ICU staff have been heavily involved in the development and implementation of these audits. Thank you very much for your support and participation in these quality processes. The results from these audits have instigated a variety of changes within the ICU. Some of these include:- improving storage of medication; developing teaching resources and education packages to increase staff knowledge; altering our service provision to improve the patient and their family's journey through the ICU. There are several methods we have used to disseminate the results of our audits and the resulting practice changes, for example the Pulse, Clinical Focus of the Month, 'Quality Board', and intranet.

There has also been a significant effort made to develop, review, update and consolidate our ICU policies, procedures and guidelines to ensure their evidence-base is current and facilitate their accessibility and usability. Some of the most recent documents include:- Iloprost use in ICU, tracheal suctioning in ICU and nursing management of the acute spinally-injured patient.

The plan for next year is to continue working to align the medical and nursing audit and quality initiatives more closely, and to continue to strengthen our networks for dissemination of audit results to the relevant MDTs.

Rebecca Jarden
Associate Charge Nurse Manager

ALLIED HEALTH

Dietetics

Over the past year dietetics have continued to work as part of the multidisciplinary team in ICU. We regularly attend the weekly MDT meetings to discuss any patient related issues with medical, allied health and nursing staff.

A significant change over the past year has been the change of parenteral nutrition solutions. We now have a new standard adult TPN solution which has a longer shelf life and is more cost effective. This will result in significant cost savings each year whilst maintaining a high quality product for our patients. Over the coming year we plan to work closely with members of the senior nursing team to continue to improve nutrition related practice in our Unit.

Kate Inglis
ICU Dietician

Speech-Language Therapy

2011-2012 was a busy and successful year for Speech-language Therapy. The TRAMS team, which was introduced last year, is now incorporated as routine practice. Anecdotally, more patients are being decannulated in ICU and fewer patients are being transferred to the ward with tracheostomies. This means ward nurses have even less opportunity to develop skills in managing patients with tracheostomies and makes the support and education TRAMS provides essential.

Referral numbers to SLT continue to gradually grow as awareness of swallowing and communication disorders increase. Patients with tracheostomies are routinely assessed before initiating oral intake and cuff deflation is often starting sooner.

Next year the ICU SLT will be starting doctoral research through the University of Canterbury looking at ICU patients' ability to reflexively cough after a period of orotracheal intubation. This is hopefully the first of three research projects that will look at the usefulness of cough testing to help make decisions about feeding patients after they are extubated.

Molly Kallesen
Speech-Language Therapy

SPECIAL INTEREST GROUPS

Wellington ICU Wound Care Group

The ICU Wound Care Group maintains a monthly pressure ulcer and documentation audit. The findings continue to show our timely and effective implementation of pressure relieving mattresses. This is reflective in our low incidence of pressure ulcers to heels, sacral and trochanter areas which is especially pertinent in the critically ill who have an increased risk of developing pressure ulcers. Recent audits however have highlighted the development of pressure ulcers to the mouths of intubated patients so this will be a focus for the group to investigate from this point forward.

As part of the development for staff, the group offers bedside education and advice on wounds and their management and the hospital encourages study days ranging from the basic to advanced wound care.

Janine Booth	Fiona Robertson
Cheryl Davidson	Rebecca Somerscales

PAR Team

Four years on and PAR has firmly embedded itself across C&CDHB. In April the final two specialist wards (6 South and 7 South) launched their own vital sign charts and 'went live' for PAR referrals and MET calls. This had been a work in progress, with considerable time spent clarifying each specialty's *escalation pathway*. Work continues with midwifery, paediatrics and mental health to establish their own EWS and escalation processes.

As vital sign charts took over, Alex and Anne were invited to the Wairarapa to assist with their charts. In less than two months they succeeded in creating an early warning scoring system complete with vital sign chart and medical emergency team calls.

In May, Jane Bilik presented a poster at the International Rapid Response System and Medical Emergency Team Conference in Sydney. The Conference proved to be a valuable opportunity to meet key players in the 'Outreach' world and take on board some strategic planning both locally and nationally. Contacts were made with the Health Quality & Safety Commission (HQSCNZ) and a proposal submitted for a national vital sign chart, with mandatory escalation pathways.

In June the 'National Outreach Meeting' was relaunched at Auckland. It had been over 2 years since this meeting had been held. Over twenty Outreach representatives from around the country attended. It was agreed that national planning and governance was needed, consequently the next meeting was planned for Wellington in November 2012.

As the year was unfolding there were several important local projects with which PAR was involved. Ali Lewis and Sarah Imray created a PAR resource folder, containing useful ward-specific and clinical information.

SPECIAL INTEREST GROUPS (CONT)

Nick Suter and Catherine McNamara overhauled the emergency equipment bags that are brought to each '777' clinical emergency event and it was decided that two bags were required, given the increased number of clinical emergencies PAR attend. Donna Tofts started work on E-Learning, covering respiratory and oxygen therapy. An audit schedule was compiled including audits on ICU nursing discharge compliance, MET documentation and PAR assessments.

With winter came PAR's busiest months ever. We had the most number of patients on our books, and a record 89 '777' calls in July. The proportion of clinical emergencies significantly increased from the previous year from 3 – 16%.

In August/September, Anne launched a national survey looking at every Outreach Service in New Zealand. The survey findings are being collated for reporting at the November NCCOM Meeting and hopefully at the RRSMET Conference 2013.

In October PAR agreed to 'go live' for paediatric referrals. This was in response to a high demand for PAR input from the paediatric nurses over winter. PAR supports acutely unwell paediatric patients by providing critical care expertise with A/B/C and through clear planning of care and escalation in order to get help early.

Individual PAR nurses have made some great achievements this year, particularly in terms of pursuing post-graduate study and PDRP development. We were delighted to congratulate Jason Elliott on achieving Proficient on the PDRP and are looking forward to Caz Hales, Sarah Imray and Ruth Stephen's applications to Expert level in the New Year. We have also enjoyed having two ICU/PAR rotation positions, which has allowed many more ICU nurses to work as a PAR nurse for twelve weeks. Our latest recruit, Fiona Robertson, joined the team in June.

Future work for PAR includes the continuing support of the EWS/MET model in all clinical areas at C&CDHB and the region. Over the next twelve months PAR will be working with paediatrics in designing and launching paediatric vital sign charts, and training PAR nurses sufficiently in paediatric nursing. Work will hopefully begin in March 2013 with HQSCNZ on developing a national adult vital signs chart that incorporates an EWS. Locally, PAR nurses will be trained to be Call and Respond Early (CARE) nurses as part of a patient safety initiative for patients, their families and their carers.

Anne Pedersen
Clinical Nurse Specialist (PAR Team)

EQUIPMENT

Dialysis Hours Sept 2011 – Sept 2012: 7, 693 (previous year: 7.329)
Ventilation Hours Sept 2011 – Sept 2012: 76, 257 (previous year: 69,163)

This has been a busy year in the technician/equipment world with Mark Henderwood leaving to pursue a career in academia at Massey University and the caretaking of the role by Tracy McKee till I took over in May. Tracy and I still work together frequently, which is creating a dynamic work atmosphere. Between the two of us we trying to integrate the technician and nursing roles, bring it out of the office and make it visible and accessible to staff on the floor. I still work clinically one day a week which has been a great to keep my nursing skills current and keep up-to-date with any developments on the floor.

It has been a challenge to familiarise myself with the many medical companies and departments that supply and maintain our equipment and stock. However I feel that I am establishing a good rapport with the major players and have been offered great opportunities over the last few months for personal training and education that I will hopefully be able to pass on to the Unit. We have also weathered some interesting supply 'storms' (think Gambro) where as a unit we have had to work as part of a national collective to preserve and prepare the re-location of stock. We have also been very receptive to trying new products, the feedback from which is highly valued by both the organisation and the companies who request it.

The Blanketrol has been the most challenging piece of kit this year. Therefore the Blanketrol along with the Prismaflex have become the focus of my quality work. The development of 'Top Tips' and 'Troubleshooting' guides for staff and education which will be ongoing is improving the staff's expertise in using these units. It is great to see such interest by staff in teaming up with me to deliver education and spearhead the various quality initiatives that keep the Unit running smoothly.

This past year has also seen the introduction of some new equipment and what stock we store; Tracy McKee was influential in the acquisition of five new G5 Ventilators, leaving one lone Drager on the Unit. Tracy also started to streamline the way we store and order stock, in particular paediatric equipment. This is ongoing; we are working closely with Stores to ensure our processes are up-to-date and running well.

Thank you to all who have made my first five months as Nurse Technician so enjoyable, I appreciate it.

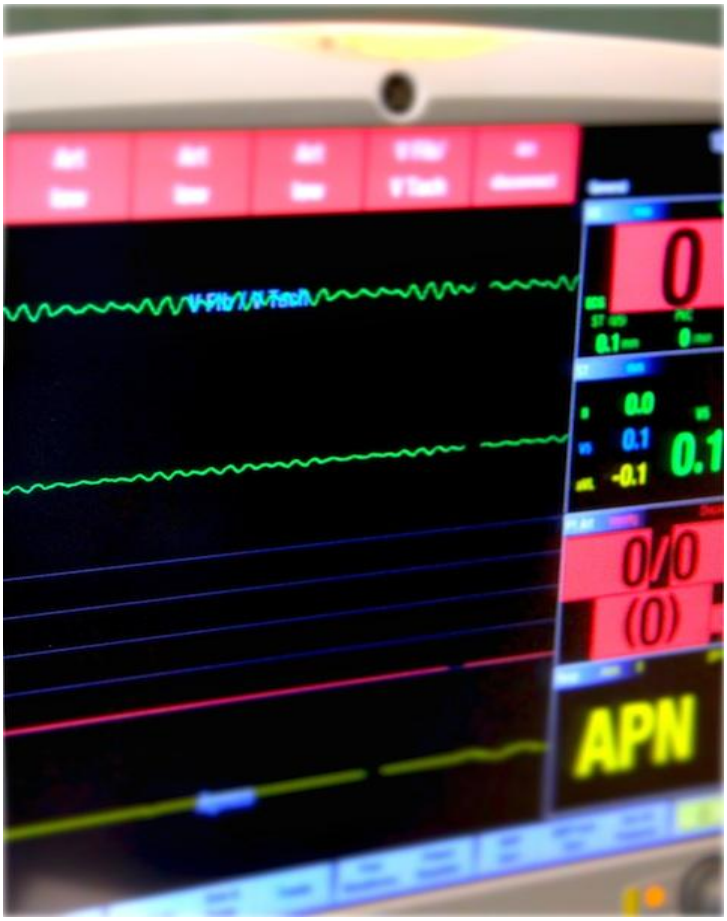
Kristy Whitelaw
Nurse Technician

EQUIPMENT (CONT)

Significant Pieces of New Equipment or Process Changes

- G5 Ventilators
- The “Smurf” Transport Trolley (with T1 Ventilator
- All old Prismas have been removed
- Spinal Hoist
- Paediatric Equipment on Imprest

Kristy Whitelaw
Nurse Technician



BUDGET

Below is a synopsis of the main ICU expenditure for the 2011 - 2012 financial year *

Category	Specifics	Actual Expenditure	Budget	Variance
	Overall	**$15,762,732**	**$16,236,651**	**$473,919**
Personnel	**Medical Staff**	**$4,070,484**	**$4,328,107**	**$257,622**
	Specialists	$1,767,421	$2,053,836	$286,415
	Registrars	$1,821,138	$1,737,213	($83,925)
	Nursing Staff	**$7,719,642**	**$7,731,986**	**$12,343**
	Senior Nurses	$131,232	$132,255	$1,023
	Registered Nurses	$6,269,670	$6,315,355	$45,686
	Administration Staff	**$109,678**	**$150,753**	**$41,075**
	Allied Health	**$68,021**	**$69,753**	**$1,732**
Clinical Supplies	**Treatment Disposables**	**$1,667,423**	**$1,778,456**	**$111,033**
	Blood & Blood Components	$468,694	$625,808	$157,114
	Catheters	$82,746	$115,175	$32,429
	Dressing	$85,563	$70,725	($14,838)
	Protective Clothing	$108,008	$105,576	($2,432)
	IV Supplies	$220,641	$141,915	($78,726)
	Dialysis Supplies	$181,199	$196,469	$15,270
	Syringe, Needles & Sharps Bins	$103,586	$117,554	$13,968
	Tubes, Drainage & Suction	$115,088	$118,787	$3,699
	Patient Consumables	$97,947	$69,215	($28,732)
	Diagnostic & Other Clinical Supplies	**$50,589**	**$41,486**	**($9,103)**
	Electrodes	$14,819	$8,606	($6,213)
	Instruments & Equipment	**$598,981**	**$643,403**	**$44,423**
	Respiratory Equipment	$172,851	$152,408	($20,443)
	Monitoring Equipment	$63,287	$52,266	($11,021)
	Patient Appliances	**$78,166**	**$103,759**	**$25,593**
	Pharmaceuticals	**$735,128**	**$573,318**	**($161,810)**
	Other Clinical & Client Costs	**$218,330**	**$194,055**	**($24,276)**

BUDGET (CONTINUED)

Category	Specifics	Actual Expenditure	Budget	Difference
Infrastructure & Non-Clinical	**Hotel Services, Laundry & Cleaning**	**$244,332**	**$234,324**	**($10,008)**
	Patient Meals	$46,357	$37,160	($9,197)
	Cleaning Supplies	$41,658	$53,338	$11,680
	Food & Groceries	$37,786	$27,528	($10,258)
	Transport	**$6,871**	**$2,958**	**($3,912)**
	IT Systems & Telecommunications	**$536,528**	**$592,573**	**$56,045**
	Other Operating Expenses	**$58,575**	**$60,140**	**$1,566**
	Printing & Forms	$29,992	$32,608	$2,617
	Stationery & Supplies	$9,720	$4,826	($4,893)

Dawn Green
Fiona Wild
Administrative Coordinators

APPENDIX 1 – LIST OF ICU PERSONNEL

Charge Nurse Manager
James, Stephen

Clinical Nurse Specialist
Andrews, Tom

Clinical Nurse Educator
Grannetia, Jacqui
O'Donnell, Kevin

Associate Charge Nurse Managers
Davidson, Cheryl
Harper, Elinore
Hathaway, Karyn
Hurford, Sally
Imray, Dale
James, Rebecca
Jarden, Rebecca
Komen, Bianca
Sutton, Lynsey
Williams, Bronwyn

Nurse Technician
Henderwood, Mark
Whitelaw, Kristy

Specialty Nurses Research
Andrews, Lynn
Mackle, Diane

Clinical Nurse Specialist (PAR Team)
Pedersen, Anne

Staff Nurses (PAR Team)
Aveyard, David
Bilik, Jane
Elliott, Jason
Hales, Caz
Imray, Sarah
Lewis, Alison
McNamara, Catherine
Smith, Melanie
Southerwood, Chris
Stephen, Ruth
Suter, Nicholas
Thornton, Rae
Tofts, Donna

Administrative Coordinators
King, Niamh
Fiona Wild

Department Secretary
Elliott, Marion

Ward Administrator
Puklowski, Sigrid

Weekend Ward Administrator
Costa, Leah

Health Care Assistants
D'Audney, Jessica
Elliott, Karen
Fraser, Dolane

Clinical Leader
Sturland, Shawn

Specialist Intensivists
Barry, Ben
Dinsdale, Dick
Hicks, Peter
Poynter, Chris
Psirides, Alex
Ure, Bob
Young Paul

Senior Registrars
Jeremy Fernando
Amir Haq
Daniel Nistor
Chris Poynter
David Tripp
James Tuckett
Laurence Walker

Registrars
Jalal Alsad
Colin Barnes
Kate Barnett
David Boyd
Gareth Collins
Romilla Franks
Adam Hollingworth
Brigid Hole
Chris Jones
Natasha McKay
Logan Marriott
James Moore
Richard More
Caroline Murphy
Ben Murrin
Renesh Nair
Sumeet Reddy
James Rowe
James Tuckett
Travis Westcott

APPENDIX 1 (CONTINUED)

Staff Nurses

Adams, Michelle
Ancog, Kris
Andrews, Lynn
Arawattigi, Wilma
Asi, Lisa
Aveyard, David
Bell, Michael
Berry, Jason
Blazek, Cindy
Bleakley, Beelah
Bonny, Joanne
Booth, Janine
Bradley, Emma
Broadbent, Rachel
Browne, Sarah
Buckley, Jessica
Catlow, Helen
Delaney, Kirsha
Denton-Giles, Holly
Doolan, Candina
Donovan, Renate
Ducusin, Diana
Duncan, Craig
Dwyer, Janet
Ead, Jennifer
Elliott, Jason
Evelyn, Melissa
Farrar, Rebecca
Florance, Nikki
Fonte, Jay
Francis, Suni
Frost, Therese
Gardiner, Helen
Garmonsway, Kirsty
Gillan-Sutton, Allie
Gray, Wendy
Hambrook, Sarah
Hayes, Carley
Henaghan, Pat
Hobson, Lee
Hunt, Jin
Hutchinson-Daniel, Charmaine
Hutton, Deborah
Ingamells, Helen
James, Rebecca
Jampayas, Anne
Jones, Tanya
Keogh, Penny
Klap, Tracy
Lagonera, Maria
Laing, Claire
Lambo, Tess
Laporte, Katie
Lewis, Alison
Little, Maurethe
Long, Sinead
Low, Desmond
MacDonald, Sirma
MacKay, Kerrie
Mackey, Gemma
Mackle, Diane
Marcelo, Julie
Mathie, Fiona
Maxwell, Alexis
McCombie, Diana
McDonald, Sirma
McKee, Tracy
McNamara, Catherine
Miller-Kopelov, Ruby
Mitchell, Tania
Moore, Maya
Morrell, Janine
Mortimer, Sarah
Mullen, Catherine
Murray, Hilda
Natoli, Terryn
Navarra, Leanlove
Nortje, Helen
Ofoleta, Kelechi
Oliver, Rebecca
Ongley, Jessica
O'Riordan, Zoe
Peacey, Fernah
Potts, Margie
Qi, Xuan
Qin, Ping
Quarterman, Jayne
Richards, Rebecca
Rillstone, Bridget
Roberts, Lois
Robertson, Fiona
Robinson, Carole
Rodgers, Sarah
Rowntree, Peter
Savage, Rachel
Shallard, Emily
Sheppard, Jayne
Simon, Eleanor
Singh, Gurudev
Smith, Hayden
Smith, Melanie
Sommerscales, Rebecca
Southerwood, Christine
Suter, Nick
Tang-Hickey, Juliana
Teahan, Akemi
Thornton, Rae
Tofts, Donna
Townsend, Sarah
van den Beld, Maureen
Walker, Estelle
Watts, Cherie
Wee, Jean
Wespel-Rose, Zita
White, Katy
Whitelaw, Kristy
Williams, Bronwyn
Williams, Nikki
Wilson, Lisa
Wyllie, Stuart
Yncierto, Reyna