Intensive Care Unit Annual Report April 2014-March 2015
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INTRODUCTION

When it comes time to write this introduction for the annual report it always strikes me how quickly time passes. It is time to reflect on the work on the unit over the past year but also from a personal perspective, I reflect that I am still working on the intensive care unit (although my job has changed in the last year). I love my job for a number of reasons: the teamwork, the continuous learning and ideas, the privilege of caring for patients and their loved ones at a vulnerable stage in their life but most of all because of the multidisciplinary team I work with. This report is written by this team and highlights the importance of learning and development through the inter team project work. It features sections on staff and patient experiences and key details on our HR strategies and performance during this year.

2014-15 was a big year for the Trust as we had a CQC inspection. The intensive care was rated good (see inside for details) and also achieved the Customer Service Excellent standard award which it has held since 1999 (previously the Charter Mark Award).

While we reflect on achievements, we also look forward to new developments and challenges in 2015 and 2016. From a unit perspective we are involved in the Gold Standard Framework for End of Life care, have developed a patient survey to add to our user strategy and the re-establishment of the critical care delivery group within the trust.

The acquisition with West Middlesex University Hospital, working closely with the Burns unit and the plans to modernise and expand the unit will ensure we have plenty to write about in future annual reports.

The CQC has spoken publicly about the need for hospitals to demonstrate continuous learning as this will result in continuous improvement; this is the mantra of the multidisciplinary team who work on Chelsea and Westminster Intensive Care Unit. If you read the report, you will see what I mean.

Thank you, team.

Jane Marie Hamill
Lead Nurse Intensive Care
FOREWORD

Year in Review for Intensive Care

The ICU is entering a period of transition and this year has been an opportunity to reflect upon past successes and future opportunities.

The history of the intensive care unit, extend back to the Old Westminster Hospital and Medical School. It has been a beacon of good clinical practice (as its national Customer Service Excellence awards are testimony to), through the compassion and excellent practice of the dedicated, motivated nursing and allied staff. It has also been an important London training Unit for generations of Intensive Care trainees, and has fostered numerous higher degrees through its strong link with the Magill Academic department.

Whilst the year has been particularly challenging for all, through high demand, bed occupancy, imposed resource limits and loss of medical and nursing staff, the spirit of ‘getting the job done’ has prevailed. It cannot be emphasised sufficiently what the highly skilled and motivated nursing staff bring to the hundreds of patients and their loved ones coming through the unit - in their hours of need, and well beyond the ICU stay.

A key strength of the unit, is the excellent working relationships it has nurtured over years with all specialties, who continue to recognise the importance of maintaining a world class academic and educationally driven ICU. The Unit has brought many qualified nurses through their critical care training; mentoring, nurturing, and evolving into the confident, competent staff that this Unit has a tradition of producing. From the medical perspective there have been numerous MD and PhD higher degrees, and the Unit is active in nursing, physiotherapy, clinical and basic science studies (e.g POISE-2, VANISH, VAP(2), SUP-ICU, and numerous further studies on going). There are at least three Clinical Research Fellows at any one time, and a Senior Clinical Education Fellow, driving forward best practice. This has included local, Imperial, Deanery and national education programmes such as the Tracheostomy practice, ICU skills, Bronchoscopy in ICU, and a thriving journal club. The nursing unit, led by its highly experienced senior Nurses and exemplar teams have a highly active education unit continuing the tradition of many years. The Physiotherapy team, led by our ICU research active physiotherapist Eve Corrner push forward modern developments in rehabilitation of the critically ill. Our London Burns service colleagues are very much a large part of the recognised excellence. The unit’s academic staff published and presented over 20 papers last year alone.

It continues to have permanent staff in influential local and regional and national positions of service delivery, Education (Undergraduate and Postgraduate), and Research.

The unit offers good outcomes through its human skills (nursing, medical and allied health professional), education and research despite limited investment in recent years. The opportunity now presents itself for the Trust, in recognising these values, to build a new unit fit for the future, and staffed by the ICU leaders (clinical, educational and academic) that will uphold the traditions of Excellence upon which it has grown.

Dr Suveer Singh
Consultant in Respiratory and Intensive Care Medicine
How do we demonstrate **EXCELLENCE** on the intensive care unit?

- We provide education and training for all our staff to improve our performance and deliver the best care for critically ill patients and their relatives.

- We have daily MDT (multidisciplinary team) ward rounds to ensure a holistic plan of care is developed and implemented.

  ‘We will do what we say we will do, e.g., if we say we will get the doctors to speak to relatives we will organise it.’

How do we demonstrate **SAFETY** on the intensive care unit?

- We will maintain safety by regularly checking and auditing our clinical practice.

- We will provide continuity of care so that you will get to know the staff that look after you.

  ‘We will challenge each other about infection control prevention’

How do we demonstrate **RESPECTFULNESS** on the intensive care unit?

- We will keep the curtains closed when carrying out care.

- We will find out what your likes and dislikes are through our patient profiles.

  ‘We will treat all patients and relatives as individuals’

How do we demonstrate **KINDNESS** on the intensive care unit?

- We will ask you how you are and if you need any help, support, advice we will help you.

- We recognise that it is important that your loved ones are near so we will provide overnight stay rooms and have limited visiting restrictions.

  ‘We will treat you how we would like our relatives to be treated’

Our Values
PATIENT DIARIES -
FEEDBACK FROM PATIENTS AND BEREAVED RELATIVES

Over the past year the patient diary team has continued to work hard to raise awareness of diary writing to staff, patients and relatives and encouraged feedback from those diaries that have been returned. The importance of gaining this feedback is essential to improving the quality of diary entries and overall motivating staff to complete the diaries on every shift. The aim is to provide the patient and relatives with an insight into the patient journey from another perspective.

Patients and relatives were e-mailed and encouraged to give feedback, from those who replied the overall feedback was good. Some comments included it 'personalises everything' and it was 'nice to feel I was given personal interest'. One patient commented on how he 'appreciated the time nurses took to write it' and that they were 'very touched'. Another admitted that the diary was initially 'difficult to read and brought back the reality for their relative'. However, it reminded them of the 'utter care and attention' and that it would be 'treasured forever'.

These comments are a reminder of how important it is to continue to complete the diaries. There is one letter in particular that the patient diary team would like to share as it really emphasises how much it can mean to both patients and relatives.

'Thank you for your e-mail concerning the Diary kept by the nurses in Intensive Care.'

"I have read and re-read the Diary and have been very touched and moved by it, the care the nurses took in their extremely busy schedules to bring me back to life is in every word they took the trouble to say to me even when I was sedated and unable to realise my situation."

"There are no adequate words to extol their dedication to their care of me, nor their expertise. There is no doubt that without them I would not have been writing this to you today. I always prior to this my first and only illness in Intensive Care and afterwards had a cavalier attitude to life, assuming I was 'invincible', taking my energy and fitness for granted, enjoying the benefits of them. I now realise how dangerously fragile life is and for the first time, I no longer 'kid' myself I feel thirty years old still not seventy one which to me is anathema. However, I have come to grudging terms with it and will never allow myself to become so run down and hence unwell again. I hope to make it at least to ninety six as my grandmother did. Above all, I shall try to repay the brilliant medical and nursing care of me by being rather less 'gung-ho' and disrespectful of my life."

"Thank you, everyone, heartfelt thanks and admiration for all you did. I treasure the Diary above all my books and all it has taught me about devotion"

Anon

For many patients the diary provides a personalised view of a time for which they have little or no recollection. To be able to provide such an insight has invaluable meaning and worth for patients. Therefore the importance of continuing to write the diaries cannot be overemphasised. The value of the patient diary for patients and relatives must not be underestimated.
ORGAN DONATION

Currently there are over 7000 people on the UK national transplant waiting list. On average three people die a day in need of an organ and many become too sick to undergo a transplant. As a Specialist Nurse Organ Donation (SNOD) at Chelsea and Westminster Hospital, it is important to continue to raise the profile of organ donation and continue to help save the lives of those waiting for a transplant. One donor can help save or transform the lives of up to nine people; and for people in end stage organ failure, organ donation is their only hope. Over the last two years, Chelsea and Westminster has helped to save or transform the lives of eight recipients. The medical and nursing staff on the Intensive care unit endeavour to offer the service of organ donation to all appropriate families and support them to honour their loved ones wishes.

Chelsea and Westminster Hospital has an active multidisciplinary and community representative Organ Donation Committee whose aim is to raise awareness about organ donation within the surrounding area and within the hospital trust. As the SNOD most of my time is spent working in the critical care areas of the hospital, mainly the intensive care department and sometimes in the emergency department. My role includes:

- Identification of potential organ and tissue donors in collaboration with the clinical teams in critical care environments.
- Provision of end-of-life care
- Provision of support and comfort to grieving relatives
- Teaching and education of medical and nursing staff and lay people

There is a 24 hour on call service available for any advice you may require, discussions of any related end of life care challenges or referrals. Also, we can offer any support, education or training concerning organ and tissue donation. If you need us we can be contacted via the London Organ Donation Service Team pager on 07659 100103.

Kelly Martin
Specialist Nurse for Organ Donation

END OF LIFE CARE

After a period of concern, it was with great sadness that the Liverpool Care pathway (LCP) was withdrawn for use late last year following the independent review chaired by Baroness Julia Neuberger. This review made several recommendations about end of life care, the main one being the LCP should be phased out and replaced by a new system and approach to improving the quality of care for the dying.

In June 2014 the Leadership Alliance for the Care of the Dying People produced a document entitled 'One chance to Get it Right' which proposed five priorities of care which set out the standards of care that dying people and their families should expect to receive when a person is at the end of their life. This requires
regulatory bodies such as the NMC and GMC to produce guidelines to mirror and expand on these five priorities of care.

At present on the Intensive Care Unit (ICU) we are using the Palliative Care Guidance document which allows the healthcare professional to consider the social, spiritual, psychological and physical needs and the nursing care our patients may need addressing when deemed at end of life. There is also a section on the care after death. We continue to audit our deaths and the quality of care our patients and families receive and this is fed back to the Mortality and Morbidity Meetings and the End of Life Steering group, both of which have quarterly meetings. This allows for a review of our current practice and suggestions and improvements to be made.

Ann Sorrie
Sister - Team Leader - Team H
ICU PSYCHOLOGICAL SUPPORT FOR PATIENTS AND RELATIVES

This year I was able to offer one to one mindfulness and Cognitive Behavioural Therapy (CBT) based psychological support sessions to patients and their relatives in the ICU. It was possible to offer these independent sessions as an adjunct to the excellent medical and nursing care that patients and relatives receive in the unit. The experience of being in ICU or having a loved one admitted to the unit can be traumatic and there is evidence to suggest that a proportion of patients and relatives may experience Post Traumatic Stress Disorder (PTSD) as a result of this trauma.

The flexible provision of psychological support may reduce the incidence of PTSD, anxiety and low mood. Our aim was to ensure that these sessions would allow both patients and relatives to discuss their anxieties and emotional difficulties with someone who was not directly involved in their care. Our evaluation will allow us to determine whether psychological support with a Clinical Psychologist is effective and warranted in the unit.

To date 18 patients and 12 relatives have had at least one session with the Clinical Psychologist with some patients and relatives having repeat sessions on a weekly basis. Two patients and two relatives declined the offer of psychological support. The referral system was very flexible and staff liaised directly between the patients, relatives and Psychologist.

The feedback from patients, relatives and staff has been overwhelmingly positive. Patients have indicated that the provision of psychological support has been extremely helpful and this perceived benefit has been supported with significant change on clinical assessments that measure anxiety and depression. In addition mindfulness meditation practices were also associated with changes in physiological measures including a reduction in heart rate, respiratory rate and BP. Relatives were also keen to make use of the one to one sessions and subjective reports were positive with all relatives reporting changes in their perceived stress and their ability to cope. Staff also provided feedback and reported that they witnessed observable changes in anxiety levels and mood and in some cases staff reported that communication and interactions were much improved. All of these changes need to be formally evaluated in a systematic longitudinal study with a wider range of clinical outcomes and measures over time and hopefully lead to the provision of a more formal clinical service for patients and relatives.

Dr Trudi Edginton Clinical Psychologist
Senior Lecturer Cognitive Neuroscience -University of Westminster

MINDFULNESS

This last year has seen the introduction of mindfulness meditation into the unit. I regularly teach and research mindfulness within community and clinical settings and I have a regular personal practice. As a Clinical Psychologist and mindfulness instructor I am familiar with the benefits of mindfulness practices in managing
the stress of daily life. Working in the ICU can be incredibly challenging and rewarding for members of staff but it can also be associated with acute and chronic stress.

Mindfulness meditation is a collection of gentle practices, based on Buddhist traditions, which aim to improve attentional flexibility, emotion regulation and awareness of the present moment. The benefits of mindfulness include a reduction in anxiety, depression and stress responses and improvements in well-being and equanimity, an openness to all experience. Mindfulness has been linked to measurable changes in physiological and psychological function including increased cortical thickness and connectivity in the DLPFC, hippocampus, insula and amygdala, areas of the brain that are associated with well-being, emotion processing, attentional processing and memory.

Western based mindfulness courses are traditionally delivered as part of an 8 week course with 2 hourly weekly sessions that have been designed to relate perception, attention and appraisal with emotional and physiological responses to improve awareness and self-compassion. The sessions include time for inquiry, reflection and discussion and participants are encouraged to embed the techniques into their daily lives between sessions. The collective elements can be powerful, enduring and transformative and, as such, mindfulness is not always appropriate for everyone.

The introduction of mindfulness into the unit was designed to be flexible and responsive to the needs of staff members, their work constraints and changing demands.

To date five members of staff have attended regular sessions and five members of staff have been able to attend between one and three sessions. Shift patterns and patient numbers have been crucial factors as has the availability of suitable rooms. As predicted the flexibility has been the most important element of providing these sessions. Staff have been able to attend hourly sessions and the sessions have been adapted to respond to weekly demands.

Feedback has been excellent. Staff have reported benefits in their daily lives in the way that they respond and manage stress. Benefits in communication and general well-being and outlook have been noted and staff have reported feeling calmer, more aware and more in tune with others. All staff have reported that they would recommend the sessions to other staff members and all staff have appreciated the flexibility.

For me sharing mindfulness in these sessions has been a privilege. I hope to report on the final outcome measures that assess changes in mood and stress responses and I hope that we can introduce more sessions and courses that can be made available for more members of staff in the coming months.

Dr Trudi Edginton Clinical Psychologist
Senior Lecturer Cognitive Neuroscience -University of Westminster

CHANGE OF DIRECTION - FROM ADULT ICU TO PAEDIATRIC ICU

Making the decision to change my career path was not something I took lightly, after having both my children I knew I wanted to work with them. I looked into career options such as health visiting, midwifery and neonates. Having 17 years intensive care experience, I decided to look into paediatric intensive care. They were advertising for staff nurses at the Evelina Children’s Hospital, which is part of Guys & St Thomas’s NHS
Foundation Trust. I went along to meet the Matron and discussed my options. We decided that I would spend 6 months finding my feet there and then go on in September 2015 to start my PGDip in Children’s Nursing, I could APEL all of my previous studies to complete the course over a year.

Although a lot of my skills and experiences were transferable it was still quiet daunting leaving an area I knew very well to develop a new way of working. In adults you have more autonomy, children’s nurses because of the fragility of the children there is more of a top down approach to decision making. It did take me around 3 months to feel happy with my ability and settle into such a big team.

I am now 3 months into my course and it has been quiet hard to move from a sister, to staff nurse then back to student. A lot of the course has given me confidence in what I already know, I’m enjoying the child development side to my studies. I am so grateful to have been given this amazing opportunity to be able to broaden my career options, I love working with the children and their families and feel excited for the future.

I miss my Chelsea team; it has been a great 7 years working with them, Keep up the good work.

Joanne Learney
Previous Sister & Team Leader

A REFLECTION – BEING PREGNANT AND WORKING ON ITU

I was used to coming to work on my own. Being pregnant I always had someone with me who very quietly would ask for my attention. Knowing that the developing baby could hear from a very early age and that they felt the Mother’s emotions, which can have an impact their development, I felt as if I was living in two worlds. On the one hand there was the “usual” work and on the other hand there was this little human being inside me witnessing and “participating” in a way my every move. Whenever I had a moment at work, I would take a blood gas, or would do my safety checks, or during breaks etc. I would then reassure my little one that it was safe. When my baby was initiating contact by kicking softly I would gently stroke my tummy to let it know that I had heard. On really busy days I forgot that I was carrying a baby inside me. Only in the evening when I sat down to write the notes I felt that my legs were very heavy and then I realized again that I was not alone and that those two worlds were not as compatible as I would like. In a practical way, apart from adapting to my size, there was little change in my work routine as I perceived being pregnant as a normal part of life and I was fortunate to be so well.

I feel very lucky that I can work at Chelsea and Westminster Intensive Care Unit, as I was allowed to do day shifts only, while being pregnant, as doing nights really did not agree with me. A major asset of the unit is that it grants me set shifts so I can continue working here while my family lives in Switzerland. Having the opportunity for such flexible working hours it allows me to work a week here and then fly home to Switzerland again. Thanks also to well advanced off duty planning I can book my flights very early on which keeps the expenditure relatively low. Such a family friendly work place, together with my admiration for the NHS, I feel it is worth my while to travel.

Saskia Peerdman
Staff Nurse - Team F
PHARMACY

It is a sincere pleasure to be part of the C&W ICU multidisciplinary team whose members respect, appreciate and acknowledge each other’s roles and contributions to patient care. What makes our unit successful is the incredible level of support we have for one another, our approachability and readiness to learn from others and to share our own knowledge.

As the ICU pharmacist, I am a regular and active member of the ICU and adult TPN ward rounds. I find multidisciplinary team ward rounds to be invaluable. They bring together the other pieces of the puzzle regarding patient presentation and approach to patient care from each health care professional’s perspective. We have learnt an incredible amount from our colleagues over the years.

Pharmacy has gone through significant changes within the last year. The demand on pharmaceutical input into the planned care division has had a significant impact on our team. Our core team has the least number of pharmacists combined compared to any other division but has a clinical commitment that covers more than half the hospital.

TPN activity has increased annually and over the last year, reached critical capacity on several occasions. With no extra funding, we have had to manage the workload within our existing team. The usual indications were postoperative ileus, gut failure as part of multi organ failure and gastrointestinal rest post resection(s). We appear to be admitting more complex surgical patients. £66K was spent on TPN in ICU alone last financial year.

In the past year, we have seen the most number of discharge prescriptions processed for ICU compared to previous years, which highlights the changing times we face. Previous to this, a patient being discharged directly home from ICU was almost unheard of.

More recently, pharmacy has been invited and contributed to the MDT rehabilitation ward rounds for long stay patients. Again, this is an area that I hope to develop further as it highlights how each discipline is interlinked and how obstacles can be overcome more easily with collaboration.

It has been an interesting year, full of clinical and financial challenges. I look forward to see what 2016 has to offer.

Chris Chung
Lead Pharmacist Planned Care and Clinical Support

DIETETICS

The role of the ICU dietitian is to work in collaboration with the multi-disciplinary team (MDT) to promote optimal nutrition of the critically ill patient. In addition, they identify those at risk of malnutrition and plan
patient specific nutritional interventions on this basis to maximise outcome and to follow up patients on a regular basis.

Important aspects of this role include:

- To improve feed delivery (both intravenous and tube feeding)
- To help minimise nutritional losses
- To evaluate nutrition related research and implement evidence based practice
- To provide education and training on ICU nutrition
- To undertake research and audit
- To assist nutrition guideline and protocol development
- To ensure adequate preoperative nutritional optimisation

We continue to work hard as a unit to ensure excellence and safety for all areas of nutrition. The development of bedside post stomach tube placement means patients receive nutrition as soon as possible. This is a new and innovative service that few ICUs are practicing and we presented our work at the European Nutrition conference in September last year. We hope to develop this service further and train additional staff to further improve the service.

Emer Delaney
Dietician

PHYSIOTHERAPY

The name Intensive Care (ICU) is in no way elusive; ICUs provide intensive care to those with life threatening conditions. For survivors, a stay on the ICU comes in two phases: intensive resuscitation, followed by intensive rehabilitation. In the intensive resuscitation phase, patients are often in multi-organ failure and usually require organ support and prolonged bed rest; this combination leads to rapid muscle loss, known as Intensive Care Unit Acquired Weakness (ICUAW). ICUAW presents as profound weakness and disability, and can result in prolonged periods of mechanical ventilation. Hence, intensive rehabilitation following critical illness is vital to optimize recovery and ultimately survival.

The key to a successful ICU is close inter-disciplinary team (IDT) working throughout both the resuscitation and the rehabilitation phases. This is a core value of the unit here at Chelsea and Westminster Hospital, which the Physiotherapy Team is extremely proud to be a part of.

The Physiotherapy Team provide a 24/7 service to all ICU patients, working closely with the team to design and implement early rehabilitation programmes and ventilator weaning plans (right from day one!), as we know that getting people moving quickly maintains muscle mass and hastens recovery. We set rehabilitation goals for our long stay patients in our new IDT meetings to make sure we are addressing all of their needs on keeping their recovery on track.
To maintain the skill of the physiotherapists working on ICU, we provide annual training with our colleagues in the Centre for Clinical Practice, which uses high fidelity simulation to train staff in complex tasks using real-life scenarios. This course is now entering its fourth year and has proved a great success.

The Physiotherapy Team is also research active. We have developed a scoring system called the Chelsea Critical Care Physical Assessment tool (CPAx), which allows us to monitor functional recovery of patients in an objective way to help patients to see their progress. This tool is now used in 43%+ ICU’s in England as well centres across 15 countries worldwide. This work has led to a number of academic publications and we believe it has improved our compliance with the NICE guidance for Rehabilitation after Critical Illness (2009) and ultimately patient care.

The coming year will be a year of change for the Physiotherapy Team, with the team lead taking up an academic research post at Brunel University after nine years at The Trust. We are hoping that this will improve links between the university and the hospital and lead to some exciting collaborative research. With an increase in critical care beds across The Trust and our merger with West Middlesex we are also hoping to look at how we can use these opportunities to improve the service we provide.

Eve Corner
Clinical Lead Physiotherapist (Respiratory and Critical Care) and Clinical Research Fellow

ACTIVITY AND PERFORMANCE

Critically ill patients require organ support and close, constant attention by a team of specially-trained health professionals. Critical care is a specialty which provides support for patients with acute life-threatening injuries and illnesses.

Table 1 outlines activity in terms of admittance, occupancy and discharges for burns, bariatric (elective morbid obesity surgery), high dependency and intensive care patients.

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<th>Refused admissions</th>
<th>LOS</th>
<th>Occupancy</th>
<th>Target</th>
<th>Variance</th>
<th>Total Discharges</th>
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<th>Target</th>
<th>Variance</th>
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<td>23</td>
<td>0</td>
<td>8</td>
<td>66%</td>
<td>75%</td>
<td>-9%</td>
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<td>BARIATRIC</td>
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<td>2</td>
<td>2</td>
<td>N/A</td>
<td>75%</td>
<td>NA</td>
<td>25</td>
<td>75%</td>
<td>100%</td>
<td>-25%</td>
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<td>ICU- Level 2</td>
<td>280</td>
<td>23</td>
<td>3</td>
<td>107%</td>
<td>75%</td>
<td>32%</td>
<td>280</td>
<td>86%</td>
<td>100%</td>
<td>-14%</td>
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<td>ICU- Level 3</td>
<td>138</td>
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<td>5</td>
<td>80%</td>
<td>75%</td>
<td>5%</td>
<td>138</td>
<td>87%</td>
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<td>.</td>
<td>466</td>
<td>87%</td>
<td>100%</td>
<td>-13%</td>
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Table 1

Burns ICU

Even though there was a decrease in the amount of admissions compared to last year (-5), occupancy remained the same at 65% for the reporting period. To assist in analysing the performance of our burns ICU we are aiming to increase the data that is reported to iBID (International Burns Injury Database). This will also include improved compliance with general burns data as well.
Bariatric activity increased this year (increase of 15). Although, it is predicted that this is set to continue as the average BMI (Body Mass Index) has been rising in the general population as has obesity related co-morbidities, such as diabetes and sleep apnoea, that require post-operative critical care management (National Bariatric Surgery Registry (NBSR), 2014).

HDU level 2
Level 2 or HDU (High Dependency) patients are those requiring more detailed observation or intervention, single failing organ system or postoperative care, and higher levels of care than a ward patient.

Level 2 admissions accounted for 69% of the total admissions to the unit. 64% of these level 2 admissions were admitted post-operatively, with the remaining admissions being sourced from other hospitals, HIV & general medicine. Again, we have operated at over 100% occupancy in terms of level 2 activity due to post-operative critical care demands.

APACHE (Acute Physiology & Chronic Health Evaluation) score (0-71 range) is a severity score that is completed after the first 24hrs of admission. A higher APACHE score reflects how ill a patient is. The average for level 2 patients this year was 17.

ICU level 3
Critical care units should run at an average occupancy of around 65-70%. This is so that emergency admissions and elective demand can be accommodated. Capacity however is not just about beds but about a multi-disciplinary workforce providing a flexible approach to a patient’s critical care, ensuring effective and timely care. Our level 3 occupancy rate for the year was 80%, an increase of 17% compared to the previous year.

ICNARC
ICNARC (Intensive Care National Audit & Research Centre) was formed to help critically ill patients by providing information/feedback about the quality of care to those who work in critical care. ICNARC also makes information about the quality of care available to the public through the Annual Quality Report (ICNARC, 2014).

The questions that ICNARC address are:
• What do we know about critical care in the UK?
• How might we monitor the overall impact of critical care in the UK?
• What do we know about the effects of critical care in the UK?
• How might we help evaluate critical care in the UK?

We are one of the last few critical care units to sign up to ICNARC in the UK. The coming year will be our first time taking part and we have everything in place to ensure the transition is as seamless as possible. We are excited that ICNARC will give us further opportunity to review our performance not only locally but also against comparable units throughout the country.

Jason Tatlock
Service Manager
SAFETY THERMOMETER

Developed for the NHS by the NHS the safety thermometer is a point of care survey instrument, which provides a 'temperature check' on harm in providing a care environment free of harm for our patients.

The NHS Safety Thermometer allows teams to measure harm and the proportion of patients that are 'harm free' during their working day. Each month the ICU undertakes a safety thermometer audit to check to see if any of our patients have developed 'harm' in any of these four areas while in ICU:

1. Developed pressure ulcers
2. Developed a urinary tract infection
3. Fell while on the ICU
4. Developed a Venous Thrombosis Event (VTE)

The audit also checks to see if patients have been admitted to ICU with an existing pressure ulcer and if they have had a risk assessment and preventative precautions for VTE's undertaken.

Overall the ICU has performed fairly well although we have found that some of our patients have developed pressure ulcers while in ICU. We have done a great deal of work looking at how we can reduce the risk for this, which you can read about on page 30. The audit findings are presented to staff each month on a noticeboard and feedback at meetings.

Elaine Manderson
Clinical Nurse Specialist

A CRITICAL CARE TECHNOLOGISTS VIEW – 28 YEARS LATER

I began my career in government publishing and was involved in the editing and management of government periodicals pertaining to toxic substances and nuclear reactors. After this I moved on via a brief foray through the anti-terrorism branch of the Home Office to a scientific post in Intensive Care at the former Westminster Hospital.

I started at the Westminster as ICU Technician under a de-facto apprenticeship training which embraced medical and radiation physics, instrumentation, medical gas management, electronics, analytical science, biochemistry and physiology. Many of the fundamentals of critical care were learnt at this stage, dialysis, monitoring and ventilation-ICU is very good place to "see" human physiology and the nature of the interventions made into it. Although I went on subsequently to complete an access degree in medical physiology and a Masters in Biomedical Science Research it was the 5 years at the Westminster which was and remains the underpinning of everything I have achieved scientifically.

In 1987 the concept of the ICU Technician inhabiting a distinct discipline was not recognized and practitioners had various backgrounds. Some were ODPs, some laboratory staff and indeed some were nurses, but it’s only in the last few years that the role of the Critical Care Technologist has been identified with the introduction of a standardized qualification, the BSc in Clinical Physiology. This has evolved further within the context of the Modernizing Scientific Careers programme, an initiative by the Department of Health to harmonize all NHS
scientists into a career pathway based on three divisions, Life Sciences, Physical Sciences and Physiological Sciences where Critical Care appears. Four levels of progression are available, Associate, Practitioner, Scientist and Higher Specialist Scientist and new entrants are embarking on their careers under these auspices with an equivalence faculty running for those already in post. I am eligible to apply for The Higher Specialist Scientist role which requires 5 years of additional training, typically towards a doctoral award which upon completion confers the same status as a medical consultant. Whilst this is attractive it’s rather too late for me. Nevertheless after 28 years I have no regrets.
Mark Costello
ICU Technician

MORBIDITY AND MORTALITY MEETINGS

The intensive care unit has been running quarterly morbidity and mortality meetings for nearly 10 years. These are multidisciplinary last for an hour and a half, and are chaired by one of the consultants on a rotational basis.

The format consists of reviewing the deaths of the patients who have died in the intensive care unit in that quarter. Each patient on admission to the unit is given an APACHE score (illness severity score). Any patient that scores less than 20 but dies, the consultant will review and identify patient cases which will be presented at the meeting. There are usually two case studies presented. A discussion occurs and any learning is identified. For example, the APACHE scoring system may not be sensitive to certain parameters so the score is less than what it should have been.

The second part of the meeting encourages discussion on future treatments, practices and ensures different staffing groups are updated with what is happening on the unit and are able to give their opinions and suggestions in a constructive way. For example in past meetings we have reviewed audits on our drug management, presented business cases for equipment, reviewed our air management and cooling of a patient post cardiac arrest.

The meetings are minuted and are sent to all staff. It is a very useful, informative way of discussing issues, concerns and suggestions in a practical and engaged way. It is extremely well attended—over 15 staff attending each meeting but this may be due not only to the content of the meeting but the lovely lunch provided by money from our trust fund.

Jane Marie Hamill
Lead Nurse ICU and Burns

NURSING HANDOVER

Three times every day the nursing staff will ‘handover’ care from one shift of nurses to another. Nursing handovers are designed to ensure that the nursing staff looking after patients receive the right information to provide the care that they require.

The handovers on the ICU have consisted of a number of parts:

1. A short handover of all patients by outgoing staff to all oncoming staff
2. A detailed bedside handover for the oncoming nurse allocated to a specific patient from the outgoing nurse.

3. A detailed handover from the outgoing shift coordinator (senior nurse on-duty) to the oncoming. At the end of 2014, it was identified that handover was taking longer than ideal and that staff were leaving work later than they should, staff were also concerned that there was variability about the information that staff were handing over in the short handover to all staff.

As a result of this in January 2015 a trial handover was started to see if we could reduce the time taken for handover and improve the information conveyed. The staff decided that the first part of handover could be changed, with the other two parts not changing, so a trial of the outgoing shift coordinator providing a summary of the patients’ to all staff was undertaken. In addition to the summary of patient condition the outgoing coordinator was also summarising a number of quality outcomes for the ICU, so that staff are up to date with key information of the running of the service. These include:

- Pressure sore that have developed
- Delayed discharges
- Out of hours discharges
- Drug incidents
- Informal complaints
- Compliments

The trial was evaluated by the staff in February 2015 and it was found that staff preferred the new system. Comments from staff included:

“This is a much quicker and time efficient way to handover when a brief summary of each patient is given, allows staff to be allocated to bed space quicker and more time for detailed bedside handover.”

“With only the nurse in charge speaking, I think more people are actually listening and paying attention. It provides a better summary than the disruption of different nurses presenting at the nurses station”

Staff also suggested that a template should be developed to assist staff who are carrying out the handovers and this will be developed during 2015.

Elaine Manderson
Clinical Nurse Specialist

STAFFING ON THE INTENSIVE CARE UNIT

While staffing is the single biggest cost in an intensive care unit, in fact a hospital, it is the most important. If staff feel valued, nurtured, listened to, developed and trusted it results in patients getting expert, compassionate care. This links with how we get staff to work here and stay here.

On Chelsea and Westminster Intensive Care Unit the staff provide expert nursing care to look after patients on the general and burns intensive care unit.
Currently the unit consists of 6 level 3 (intensive care beds) and 4 level 2 (high dependency beds), as well as 2 level 3 adult burns intensive care beds. These can be used flexibly depending on the needs of the patient. We also have a policy of not refusing any admissions unless the staffing levels are such that patient safety is compromised.

Recruitment
It is extremely important therefore to keep on top of recruitment and be aware that the process can take a minimum of 6 weeks and maximum 4 months. On the unit we capture the number of leavers and joiners that occur in the year and over the previous years, see table 1. This helps us to identify if there are any trends.

<table>
<thead>
<tr>
<th>TABLE: Leavers and Joiners in ICU in 2005-2014</th>
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<tr>
<td><img src="image" alt="Leavers and Joiners in ICU 2005-2014" /></td>
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In 2014 the number of leavers was spread out over the year. Time spent on the unit is shown in the table. In 2014 there were 11 leavers.

**Time spent on the unit**

<table>
<thead>
<tr>
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<th>Less than two Years</th>
<th>Two Years - Five years</th>
<th>More than 5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leavers</td>
<td>4</td>
<td>7</td>
<td>0</td>
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</table>

Staff left the unit for a variety of reasons. One retired, one changed direction and joined the palliative care team within the trust, one returned to Ireland. One nurse left as they wanted to go to the emergency department. Three staff members left because there were no opportunities to be promoted to Band 6 - this was due to reducing the number of Band 6 posts for cost saving the previous year. This demonstrated that saving that occurs in the short term, may not in the long term.

Retention
When talking about staffing equally important are plans for retaining staff and ensuring they receive the training and skills to do the job.

Each new recruit to the intensive care unit are placed on a pathway relevant to their band. For example a new Band 5 nurse will commence the Band 5 pathway which involves completing the foundations programme.
which will lead to the intensive care course. After a period of consolidation they may undertake the mentorship course. These pathways give the staff structure on how to develop their knowledge and skills through formalized courses, project work and mentoring and helping others.

The aim of these structured pathways is to produce competent, confident expert nurses with excellent observational skills. This is important because the effective use of critical care nurses can greatly improve patient care, and reduce the incidence of complications for patients. Their observations skills can reduce the impact of sudden patient decline, for example and their holistic approach to care can change the experience of care for both patients and their families.

On our intensive care unit we want the critical care nurse to develop skills in stepping up and stepping down care, interventions and treatments so that we intervene when the patient requires more support but equally speed up the process of discharge.

In addition the structured pathways encourage and retain staff so that they are exposed to different situations and develop different skills. For example at Band 6 level the staff on the unit are expected to have active participation in interteam projects. One project is the off duty. Exposing staff to learning how to create a rota and balancing the needs of the unit with individual requests gives insight into the complexity of this task and indirectly helps the individual to gain skills in conflict management.

Recruitment of staff in London will always bring its challenges Therefore the trust has recruited a Recruitment and Retention Lead Nurse, who is developing a variety of recruitment strategies including rotational and overseas posts. Within the trust there is also the desire to ensure staff have their education needs met through re-establishing Practice development roles and structured pathways, like the ones we use on ICU.

There are two areas we will be focusing on over the next couple of years- integration with West Middlesex and how that effects our service and if we hope to expand our services we will need to be creative in developing new roles.

Jane Marie Hamill
Lead Nurse ICU and Burns
INTER-THEAM PROJECTS GROUPS

The inter-team project groups in the ICU have always been used as a mechanism for all staff on the ICU to become involved in practice development, project management and enable changes to be implemented for the benefit of patients and staff members. The groups also enable staff members who work in our primary nursing teams to work alongside other colleagues.

The project groups have changed occasionally during the past according to different needs of the unit and changes in ways that we work. During 2014 a change to the project groups was instigated through the introduction of patient diaries. Our patient diaries were initially introduced as a pilot with some of the teams to see if they would work, with a positive evaluation a decision was made to roll them out to all the teams. This resulted in a considerable increase in work required to manage them and rather than overwhelm the pilot lead, it was decided that a new project group to help oversee the work would be formed.

This meant that one of the project groups would need to be reviewed. The senior nurses on the ICU felt that the work of the teaching group was now fully embedded in the ICU, with the CNS and staff development team providing much of the ongoing work in this area, so a decision was made to disband this group.

The patient diaries team now meets monthly and have made great progress in enabling the greater use of patient diaries to support our patients and staff and are kept up to date on education updates through a monthly update from the CNS.

Our project groups are likely to continue to develop as critical care nursing continues to evolve and adapt.

Elaine Manderson
Clinical Nurse Specialist

OFF DUTY PLANNING TEAM

We have many inter team projects on the unit. Off duty planning team (ODPT) is just one of them. It consists of a representative from each of the nine nursing teams. The team congregates once a month to discuss off duty planning issues and to allocate different roles / responsibilities within the team. These roles vary from hour keeper, annual leave bookings to the coordinators rota and rota creator. Every three months these roles exchange which gives everybody the opportunity to become a rota creator. All members of the team will be trained to become rota creators. Attendance of these meetings is vital so outstanding or concerning issues are discussed and resolved. This information is then dispersed within the individual teams so that each member of the nursing staff is updated.

The aim of the off duty planning team is to adequately staff the ICU with the appropriate number of staff and experience. This is to ensure safety for both staff and patients at all times. It is well recognised how stressful
the ICU environment can be, add to this rotating shifts and it is clear how important a balance for all must be obtained. The O.D.P.T strives to allocate this balance to all staff as far as is feasible through self-rostering which allows for equality and flexibility.

The roster is created six weeks in advance. An off duty template is displayed for all staff to put in their requests in advance allowing staff some flexibility per rota. However staff are encouraged to comply with a number of rules. Staff are reminded of their involvement with inter team projects and staff skill mix and shortages while the rota is being drafted.

The unit uses Manpower Software System (MAPS), a computerised programme which can create and manage the off duty and lightens the workload of the team when creating rotas for the unit. It can be a quick reference to monitoring sickness, annual leave and any study leave allocated. This system automatically calculates staff working hours, so shortfalls can be readily identified and rectified on the rota being drafted. Currently (MAPS) is going to be renewed and updated by Health Roster.

Another responsibility of the (ODPT) is booking annual leave. To ensure that this is carried out justly and fairly the ODPT has to be contacted by email in advance. This will be considered on a first come first served basis. Safety is a priority of the unit so therefore a limit on the number of staff on annual leave at any one time is in place. Its every individual’s responsibility to manage their own annual leave, therefore MAPS helps manage each members annual leave and ensures that the allocated leave is taken in a timely manner.

Working within a team requires team work and negotiation. Negotiations between staff help us to achieve flexibility in working hours. The ODPT endeavours to make these negotiations between staff as fair as possible to avoid disappointment whilst allowing staff to reach a work life balance.

Karen Sisk,
Senior Staff Nurse - Team E

QUALITY GROUP
The Quality Project Group aims to ensure that staff on the ICU provide a high quality of clinical and non-clinical care to patients and their relatives during an ICU admission. The group achieves this by seeking user feedback through a number of different processes. This includes the relative’s satisfaction survey, focus groups where ex-patients and their relatives are invited to discuss the memories of their stay, and now a patient satisfaction survey which is completed when a patient is discharged from ICU to the ward.

The feedback we receive is overwhelmingly positive and particular mention was made that relatives and patients felt that staff were able to answer any questions they had and that relatives felt able to participate in providing care to their loved one where appropriate.

The feedback does also identify areas that we can improve on an example of was regarding the information that we gave to relatives on admission to ICU. All patients and their relatives now receive an admission information pack containing an information booklet, a guide to investigations undertaken in the ICU, guide on the role of physiotherapy in ICU and information on advice for children visiting relatives on the ICU.
When a patient is ready for discharge they also receive a discharge information pack containing the 'on the road to recovery' booklet as well as the relative’s satisfaction survey and information on VIC (virtual intensive care health professional) where relatives, friends or patients can email questions or queries to us and we will respond within two days.

Ben Harold
Senior Staff Nurse - Team J

TISSUE VIABILITY GROUP

The role of the Tissue Viability Group is to promote good practice in pressure ulcer prevention, provide information related to innovations in wound care and liaise with our Trust Tissue Viability Specialist Nurse.

Critically ill patients are particularly susceptible to skin damage caused by the presence of many risk factors, including immobility and the presence of medical devices. Within the ICU, robust procedures for reporting pressure damage have been implemented. These reports have been analysed and used to improve our strategies in order to prevent impairment of skin integrity.

For example, until recently ICU patients were initially admitted onto a high specification foam mattress, and transferred to an alternating pressure relieving mattress (APRM) if indicated by our risk assessment. However, it was apparent when reviewing some of the incident reports that there were delays in the delivery of the APRMs and in some cases patients were too unwell to be transferred onto them.

To eliminate these delays, we now keep a small stock of APRMs on the ICU to enable admission of ICU patients immediately onto an APRM which provides superior pressure relief. If the patient’s condition improves rapidly they may be transferred onto a foam mattress to ensure the APRMs are available for use for other vulnerable patients either in ICU or elsewhere within the hospital.

On some occasions we have found that a simple cost neutral change can reduce the incidence of preventable skin damage. For example, the presence of a nasal feeding tube may cause ulceration of the nostril, but by changing the way the tube is secured we hope to eliminate this problem.

In addition, the group continues to provide updates related to pressure ulcer prevention for the Foundation of Critical Care Course students and audits of our skin care bundle which forms part of our skin assessment. We remain committed to achieving further improvements in this aspect of our patient care by working with all members of the multidisciplinary team and continuing to review our practice.

Caroline Younger
Sister & Team Leader - Team B

INFECTION CONTROL GROUP

Intensive Care Units carry a high risk for hospital acquired (nosocomial) infections, contributing to increased risk of illness and death. In order to limit the incidence of ICU nosocomial infections, healthcare providers should adopt aggressive infection control measures.
The Infection Control Team is a dedicated team with the responsibility for advising and educating staff at all levels on how to prevent and reduce cross-infection in the unit. The team closely monitors infection rates and undertakes audits to maintain consistently high standards.

I am pleased to note there has been a high compliance with the Saving Lives (audit that measures of practice set by the Department of Health) audits this year. Infection Control is the responsibility of every member of staff and can have an impact on every patient. Our ICU acquired infection rates are used as an indicator of the quality of patient care we deliver.

Vancomycin Resistant Enterococci (VRE) are the most frequently occurring gram negative microorganism’s reported to the Department of Health as part of the mandatory surveillance scheme.

This year, seven patients were found to be colonised (not infected) with VRE. It was found that some were the same strain, indicating cross infection. The unit was closed to admissions initially and elective surgical patients were managed in recovery until they could be managed in high dependency. The outbreak policy was triggered and the following was implemented:

- Weekly screening
- Hand hygiene audits three times a week by the Infection control nurses
- Environment review of the ICU by the Public Health England (PHE). Strict Personal Protective Equipment (PPE) for all ICU patients regardless of their infection status
- Discharge patients were transferred to side room’s on the wards.
- The clinical care governance team & PHE were fully informed and involved in the planning and review of the outbreak.

The outbreak was managed effectively; 2 VRE positive patients remained on the unit for several weeks and there were no further incidents of cross infection. Following their discharge from the unit we have had no further incidences of VRE.

Michelle Abad
Staff Nurse – Team D

RESEARCH GROUP

The Research group is responsible for all the guidelines that are relevant to ICU practice. We facilitate and advise on guideline development. The group has been busy updating guidelines and looking at new research on the unit and around the hospital. We have a close relationship with the research and development department and act as a link between them and the ICU. They attend our meetings, update us with their audits and the outcomes of their research studies and present their findings to our team.

Our monthly meeting has now moved from Thursdays to every third Tuesday of the month. At the moment, we are looking at some outstanding guidelines and pairing them with Nurses on the unit who would like to develop a guideline. Our role is also to maintain the guidance at a glance folder, so staff can refer to them when they need information, support and guidance.
As in previous years, we are committed to keeping ourselves updated with current research and practices within the nursing and medical profession. We also look at the guidelines and protocols within the Northwest critical care network and we have standardised practice through our Clinical Nurse Specialist who fed it back to the Group.

I took over from Ann Sorrie as the chair of Research Group in May this year. I am very much looking forward to embarking on all the objectives we have set ourselves as a group.

Jiji Evans
Sister & Team Leader – Team E

END OF LIFE GROUP
Following on from the raised profile of end of life care, the decision was made to create an End Of Life Group that would meet every two months to discuss issues pertaining to end of life. This is a multidisciplinary group with a varied membership to discuss all areas of end of life care. The focus from an Intensive Care perspective is Bereavement Support for families and loved ones, Organ and Tissue donation and the implementation of the Gold Standards Framework.

Chelsea and Westminster Hospital have commenced the process of applying for accreditation for The Gold Standards Framework in End of Life Care, and Intensive Care is one of five pilot sites to implement this framework to ensure excellence of care at end of life for our patients. At present we are undertaking a baseline audit to ascertain what we do at present with the aim of improving our care in the future for our patients and their families.

Ann Sorrie
Sister & Team Leader – Team H

FOUNDATIONS OF CRITICAL CARE (FOCC)
The transition from ward based nursing to an intensive care environment can be both difficult and stressful. The entrant ICU nurse may feel disempowered by a lack of specialist knowledge and skills. A structured programme of learning which provides support, supervision, guidance and reflection can facilitate this transition allowing nurses to gain an understanding of the unique needs of critically ill patients and to become an effective member of the multidisciplinary team.

The FOCC is based upon the National Competencies for Critical Care and our competency booklet and course were adjusted to incorporate all of these competencies in early 2014. These competencies are designed for use by registered nurses embarking on a career working in a Level 3 Critical Care area. They are also used by our local Higher Educational Institute (Kings College, London) to support their adult critical care programmes of education.

These competencies describe what it is that an individual is expected and able to do when they are fully functioning as a competent safe practitioner at each step. Steps 2 & 3 are undertaken during a level 6 or 7
academic programme of study which provides the appropriate underpinning knowledge and understanding to inform practice.

Our Foundations course runs over a 6 month period with a study day per month and a workbook to complete by the students before each study day. The majority of the competencies have to be completed in the six months apart from Renal, Care of the Dying and Burns which they have 12 months to complete.

In the past 12 months we have run 3 foundation courses rather than 2, due to an increase in recruitment needs. The Dec 2014 course had 3 new starters who all completed and passed the course in May 2015. Another course began in March 2015, with 4 new starters and runs until September. And so another year of training will begin again in the new academic year.

Danielle Pinnock & Geraldine Fitzgerald O’Connor
Staff Development Sisters

CUSTOMER SERVICE EXCELLENCE 2015
The ICU has successfully held a customer service award (firstly the Charter Mark and latterly the Customer Service Excellence award) since 1998.

The ongoing accreditation with the CSE award consists on a number of different review processes in a three year period:

- Reaccreditation year – two day visit
- Year one check – 1 day site visit
- Year 2 check – email correspondence

The annual reviews review compliance check to ensure that we are still meeting the levels required for the five criteria for the award, which are
1. Customer insight  
2. Culture of the organization  
3. Information and access  
4. Delivery and timeliness  
5. Quality of service.

The latest compliance visit was a year 1 check to ensure the unit continues to achieve the criteria required, this consisted of a day visit on the 30th of March 2015 by our assessor, Rob Mottram. During the visit the assessor met with the nursing team, senior management team, and other departmental staff that work with the ICU team in providing care to our patients and visitors. The assessor also met ex-patients who were attending a Patient Focus Group.

The assessment demonstrated that the ICU found that we were continuing to fully meet all the criteria and described the following strengths:

- The relentless and continued approach taken by senior management in the pursuit of high quality customer service. The commitment of continual consultation and engagement strategies that are used well to improve services and the impact these strategies have on ensuring that patients and families voice is heard.
- The sensitive and effective ways in which the unit protects patient’s privacy and dignity in all their interactions. The development of patient diaries continues to be promoted despite challenges around ensuring patient confidentiality is maintained.
- The Corporate wider Hospital & partner organisations believe that senior managers within the ICU are role models of customer excellence and continuous improvement and that the ICU is seen as a beacon of customer excellence across the Hospital and always show a willingness to share best practice.
- There is a resolve; positive attitude and commitment to giving excellent customer service amongst staff who display a desire to resolve issues right-first-time wherever possible

Areas for continued development included:

- The unit may wish to consider the value of adding additional and more specific questions to the Satisfaction Survey questions to understand more closely whether patients and relatives are receiving the appropriate information.
- The unit may wish to revisit and explore more fully how patients and relatives would like to engage with 'AskVic' to ensure that the preferred method is identified by the unit and the most appropriate use is made of the 'AskVic' facility.
- The unit may benefit from how best to ensure that more ex-patients and relatives support the feedback groups that are held, as the feedback gathered is a rich source of useful information.

Each of these areas will be considered by our quality improvement interteam project group in the coming months.

Elaine Manderson  
Clinical Nurse Specialist
CQC at Chelsea and Westminster Foundation Hospital

In July 2014, Chelsea and Westminster Foundation Trust underwent a CQC inspection.

What is the CQC?
The Care Quality Commission is an independent regulator of health and adult social care in England. The comprehensive inspection process is used to make sure services are providing care that's safe, caring, effective, responsive to people's needs and well-led. It involves collection of data and visiting services as it gives an opportunity to talk to staff and people who use the services. Carrying out site visits also allows CQC to observe care and to look at people's records to see how their needs are managed.

What did the process involve?
The hospital was aware of the visit at least 6 months in advance so plans were made to inform staff, update policies procedure and prepare for the site visit. The Intensive care unit had an advantage as it was use to external visitors since being involved in the Customer Service Excellent Standard award. It was also use to producing evidence to demonstrate compliance with standards.

A team of CQC inspectors came to the hospital, initially for three days and divided into teams depending on where they were going. The ICU team consisted of a CQC inspector, anaesthetic, and ICU nurse. They quizzed both me and the Clinical Medical Lead for a couple of hours, firing questions and asking for evidence to back up what we said. For the next couple of days I would say every member of staff, visitors etc. were 'CQC'. By this I mean practice was observed and any issues regarding patient care that were brought up in a previous conservations were checked to ensure what we were saying was implemented in practice. Although I would say the quizzing was relentless, I think it was very thorough. I felt the inspectors were there to understand the service both the good and the areas we found frustrating. They wanted us to be honest, transparent and acknowledge that if we have issues what we were doing about them.

Critical Care Results
After a period of time, once the data had been verified a CQC report on Chelsea and Westminster Foundation Hospital was made public. The overall rating for the hospital was 'Needs Improvement '. The Critical Care Unit score GOOD for all five sections

<table>
<thead>
<tr>
<th>Critical Care</th>
<th>Safe</th>
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<tbody>
<tr>
<td>Effective</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Caring</td>
<td>Good</td>
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<tr>
<td>Responsive</td>
<td>Good</td>
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<tr>
<td>Well-led</td>
<td>Good</td>
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<tr>
<td>Overall</td>
<td>Good</td>
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In summary the CQC, felt that the intensive care unit had sufficient numbers of nursing and medical staff on duty and there were effective procedures for safe care. The patient Safety Thermometer ((a local improvement tool for monitoring harm-free care) was not embedded but there were plans to develop this. Medicines were safely and securely stored. Patients received care and treatment according to national guidelines and there was good multidisciplinary team working to support patients. The unit was not part of
ICNARC (Intensive Care National Audit and Research Centre) but are in the process of participating in this project.

Staff cared for patients in a compassionate manner, with dignity and respect. They involved patients and where appropriate relatives in their care. Patients and relatives were happy with the care provided. The leadership on the unit was visible and staff are passionate about providing excellent quality care. There was a culture that supported staff to develop innovative ways of working. Patients' engagement was well developed through a range of feedback approaches.

What's next?

Following on from the report a few actions were highlighted which we have since introduced.

<table>
<thead>
<tr>
<th>Safe Issue</th>
<th>Standard</th>
<th>Action Required</th>
<th>Date</th>
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<tbody>
<tr>
<td>The NHS Safety Thermometer information was not displayed in ICU/HDU</td>
<td>For information to be displayed</td>
<td>Safety Thermometer displayed and discussed at ward meetings</td>
<td>Completed</td>
</tr>
<tr>
<td>Effective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not participating in the ICNARC programme</td>
<td>To participate</td>
<td>Business case passed for Licence. Joined ICNARC programme in January 2015</td>
<td>Completed</td>
</tr>
<tr>
<td>The critical care Outreach team produce a lot of data which needs to be feed through one of the established groups</td>
<td>To channel the information into an established group</td>
<td>The information that the Critical Care Outreach team collect is presented at the quarterly board and Morbidity and Mortality meetings</td>
<td>Completed</td>
</tr>
</tbody>
</table>

In addition, while we have lots of ways users of our service can feedback to us, we also developed a patient survey. This is filled in by patients who have been discharged from the unit. We will collate a report and channel the results via our Quality group. One area that the CQC highlighted which remain challenging is the discharge of our patients in a timely manner. We are working with other groups of staff to establish how we can improve this.

Finally, the trust after 6 months got a peer group to review areas in the trust using the same CQC questions. Critical care was rated as still good overall but caring and the leadership was rated as outstanding.

Jane Marie Hamil  
Lead Nurse ICU and Burns
Research Study - VapRapid-2

VapRapid-2 is a randomised controlled trial of biomarker–based exclusion of VAP to improve antibiotic stewardship. Chelsea and Westminster Hospital (Critical care Unit) was initiated 14th October 2013. The study aims to recruit 210 participants nationally until March 2016. There are 168 patients recruited from 17 hospitals including Chelsea and Westminster. Our site remains the top recruiter locally. We have recruited 24 patients in total. Many thanks to all involved for enabling us to achieve this.

Jaime Carungcong
Senior Research Associate

RESEARCH UPDATE - PERI-OPERATIVE RESEARCH INTO MEMORY (PRiME)

Background

Long term survival of burns patients following critical care admission has improved with recent advances in critical care and surgical management, but overall quality of life and return to employment remains poor. Psychological factors may be a contributory factor as many burns patients experience high levels of anxiety, depression and post-traumatic stress disorder following their injury. However, neurocognitive impairment may also impact on long-term outcomes. We aim to explore the independent and combined effect of psychological symptoms and neurocognitive deficits at 96 (+/- 24 months) following major burn and critical care admission.

Methods

Ethical approval was obtained from Surrey Borders Research Ethics Committee (Reference 14/LO/0049). Patients with a major burn injury (total burn surface area, (TBSA > 15%) previously admitted to the Burns Intensive Care Unit were invited to participate in the study. Patients with head trauma, toxic epidermal necrolysis syndrome, inability to understand verbal or written English and high psychological risk were excluded. Healthy volunteers were recruited as controls. Neurocognitive measures of attention, processing speed, working memory and executive function were assessed using the Cog state computerised battery, Hopkins Verbal Learning Task, Digit Span and Verbal Fluency Tests. All participants completed questionnaires screening for anxiety and depressive symptoms on day of testing (GAD-7, PHQ-9 and TSQ). Data were analysed using Student’s t-test for paired samples using Graph Pad Prism (version 6) software.

Results

6 patients and 6 age and sex-matched volunteers completed all of the assessments. Mean age of patients and volunteers were 49 and 47 years respectively (95% CI 30.5 to 67.7 years and 26.2 to 68.4 years respectively). Patients and volunteers were matched for premorbid intellectual function as estimated on the National Adult Reading Test (mean 5.66, 95% CI -5.78 to 17.12, p = 0.25). There was a statistically significant difference in working memory as assessed by the Verbal Fluency Switching test (mean -4.33, 95% CI -6.87 to -1.791, p = 0.007) (see Figure 1). The Groton maze learning task assessing executive function and visuospatial problem solving ability showed a statistically significant difference in the two groups (mean 27.5, 95% CI 5.3 to 49.68, p = 0.02). Verbal learning and delayed memory on the Hopkins Verbal Learning Test was preserved (mean -5.50, 95% CI -15.36 to 4.363, p = 0.21 and mean -0.6, 95% CI -4.7 to 3.4, p = 0.69). There was no statistical difference in scores on anxiety and depression questionnaires between the two groups.
Conclusions
There were significant differences in working memory, executive function and visual-spatial problem solving after 96 months in our matched cohort of patients and volunteers. There were no differences in verbal learning and delayed memory recall. There were no statistical differences in anxiety and depression scores between the two groups. Further studies with larger numbers need to be conducted to further explore these findings.

Authors
Nordin N, Clancy O, Nilsen A, Williams L, Edginton T, Vizcaychipi M
Naz Nordin
Clinical Research Fellow - Intensive Care

STAFF DEVELOPMENT AND EDUCATION
We have an ongoing commitment to staff development and education this past year has a number of the unit staff to continue to do this by undertaking further study. The unit supports a number of courses that staff may undertake. These are outlined in the table below:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Details</th>
<th>Number of staff undertaking course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations of Critical Care</td>
<td>Six month course which aims to provide a structured learning experience that enables nurses new to the intensive care environment to develop the knowledge and skills necessary to safely and competently care for critically ill patients.</td>
<td>12</td>
</tr>
<tr>
<td>Physiology for Nursing Practice</td>
<td>A course consisting of four study days run by Kings College London which develops the knowledge and skills related to the altered physiology of the critically ill patient.</td>
<td>12</td>
</tr>
<tr>
<td>Intensive Care Nursing</td>
<td>This is a twelve week course run by Kings College London which builds upon the development of knowledge and skills from the Foundations of Critical Care and physiology modules</td>
<td>12</td>
</tr>
<tr>
<td>Mentorship</td>
<td>Three month course that prepares staff members for the role of coaching and supporting staff in the clinical environment</td>
<td>4</td>
</tr>
</tbody>
</table>

Our pre-registration nursing provider universities (London South-Bank University and Kings College London) continue to send student nurses to the unit for placements. The collaboration with the two universities has been very successful with students joining the unit for placements during 2014/15. The placements last between four and twelve weeks and have been very positively evaluated by students and staff alike.

Our mentorship programmes continue to run with in the trust and accredited Kings College University. This prepares our staff to support all learners in the intensive care environment.

We have also support medical students from Imperial College London, who join us for two week placements. During their placement they develop an appreciation of intensive care through spending time with our medical and nursing staff.
The development of staff is of paramount importance to the unit and is made explicit through the unit’s values. It is hoped that through the continued development of our staff we will be able to deliver effective, patient-centred care.

Elaine Manderson
Clinical Nurse Specialist

NORTH WEST LONDON CRITICAL CARE NETWORK (NWLCaN)

The ICU continues to work with the NWLCaN in developing intensive care services throughout North West London.

Some of the work has been moving forward with ensuring that transfers for level 2/3 patients are as safe as possible through the development of a standardised transfer bag. When this rolls out each hospital in North West London will have the same transfer bag that can be used for moving critically ill patients from one area to another, this will assist the many staff who regularly move hospitals as part of their training to be familiar with equipment and so make things safer for patients.

The network has also been working on developing an app for smart phones with all the information from their successful transfer course being accessible to staff on the move, thus increasing the availability of this vital information to staff working in critical care.

The ICU at Chelsea and Westminster also submits quality indicator data on a quarterly basis to the network. This data is based on nationally recognised standards for critical care and helps benchmark the performance of the ICU to other units in North West London.

In April 2015, London also gained some further critical care operational groups for Northeast London and South London, which will work with NWLCaN to develop integrated care for critically ill patients throughout London.

Much of the network’s work can be found on their website that can be accessed on the following web link: http://www.londonccn.nhs.uk

Elaine Manderson
Clinical Nurse Specialist
### Staff in Post: April 2015

#### Team A
- Hazel Boyle
- Toyin Ajayi
- Simon Bateman
- Caoimhe McClafferty
- Nicola Quinn
- Joan Wilson

#### Team B
- Caroline Younger
- Helen Foley
- Imelda San Miguel
- Nerissa Verdejo
- Marita Kilroe
- Sheilia Mensah
- Ben Mills

#### Team C
- Emma Long
- Leigh Paxton
- Janice Blandin
- Soawanit Kampiniy
- Kirsty Hall
- Sue Forester
- Tapiwa Hatitye

#### Team D
- Rose Le Cordeur
- Daisy Maralit
- Basino Reyes
- Michelle Abad
- Nneoma Ezeh
- Eunice Mwiti
- Gina Platts

#### Team E
- Josephine Evans
- Karen Sisk
- Lucie Stepova
- Angela Attoh
- Chris Higginson

#### Team F
- Rebecca Hill
- Bridget Flynn
- Marites Velasco
- Csaba Koczkas
- Eoghan Lavin
- Saskia Peerdeman

#### Team G
- Rose Le
- Cordeur
- Daisy Maralit
- Basino Reyes
- Michelle Abad
- Nneoma Ezeh
- Eunice Mwiti
- Gina Platts

#### Team H
- Ann Sorrie
- Maria Briones
- Sophie Holmes
- Ewa Sobolewska
- Jenny Knapton
- Victoria Lindholt

#### Team I
- Charlene Brown
- Laura Giron
- Samsam Saeid
- Christie Magallon
- Mitzi Rafada
- Taniel Sarafyan

#### Team J
- Amanda Dixon
- Sally-Anne McNae
- Lennie Buslay
- Ben Harold
- Rubina Vard
- Evelyn Chickwanda
- Angela Hill
- Reynaldo Orpilla

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**Jane-Marie Hamill**  
Head Nurse - Critical Care and Burns

**Mark Costello**  
Chief Technician

**Caroline Heslop**  
Volunteer

**Emer Delaney**  
Dietician

**Abderrohmane Benkhdda**  
Housekeeper

**Dr Rick Keays**  
Consultant Anaesthetist & Intensivist - Clinical Director

**Dr Jonathon Handy**  
Consultant Anaesthetist & Intensivist

**Dr Marcella Vizcaychipi**  
Consultant Anaesthetist & Intensivist

**Dr Michelle Hayes**  
Consultant Anaesthetist & Intensivist

**Dr Suveer Singh**  
Consultant Intensivist and Respiratory Medicine

**Dr Jonathon Handy**  
Consultant Anaesthetist & Intensivist

**Dr Michelle Hayes**  
Consultant Anaesthetist & Intensivist

**Dr Suveer Singh**  
Consultant Intensivist and Respiratory Medicine

**Dr Merckel Drummond**  
Consultant Anaesthetist & Intensivist

**Dr Berge Azadian**  
Consultant Microbiologist

---

**Elaine Manderson**  
Clinical Nurse Specialist

**Dany Pinnock & Gerry Fitzgerald**  
O’Connor

**Chris Chung**  
Pharmacist

**Kelly Martin**  
Specialist Nurse Organ Donation

**Mavis Kyeremeteng**  
Housekeeper

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**Jane Hughes**  
Healthcare Assistant

**Emer Delaney**  
Dietician

**Abderrohmane Benkhdda**  
Housekeeper

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**Jason Tatlock**  
Information Officer

**Eve Corner**  
Clinical Lead - Physiotherapy

**Jamie Carungcong**  
Senior Research Associate

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**Jane Hughes**  
Healthcare Assistant

**Emer Delaney**  
Dietician

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ACKNOWLEDGEMENTS

Hazel Boyle
Sister, Intensive Care for editing this report

The staff of the ICU would like to acknowledge and thank the following people for their continued support

Dr Rick Keays
Director of Intensive Care

Dr Berge Azadian
Consultant Microbiologist

The Planned Care and Clinical Support Divisional Management Team