

▪ The Central Line Associated Bacteraemia Project

Background

This collaborative Clinical Practice Improvement (CPI) project will address a key recommendation of the NSW Expert Group on Multi-Resistant Organisms (July, 2006):

5.2 The NSW Department of Health should, in liaison with Quality and Safety Branch and the Clinical Excellence Commission, develop strategies for development and implementation of clinical improvement initiatives, which will contribute to MRO control and prevention in NSW Health facilities.

The project will build on existing local and national projects, particularly the Safer Systems, Saving Lives (SS-SL) Project based on the 100,000 Lives Campaign initiated by the Institute for Healthcare Improvement (IHI). These initiatives aimed to:

- Actively seek the engagement of ICU clinicians;
- Foster clinician buy-in/ownership;
- Promote the concept and the value of Quality Improvement in general;
- Change the culture of the ICU with regard to key clinical interventions including central venous catheter (CVC) related care.

Potential significance of this project

Central line-associated bloodstream infections (CLABs) are responsible for 20-40 percent of healthcare-associated bloodstream infections.

In Australia, reportedly more than 3,500 intravenous CLABs occur annually, with the number of CLABs occurring at a rate of 23 per 1,000 catheter days. A directly attributable mortality for all CLABs is reported as 12 percent. Nosocomial bloodstream infections prolong hospitalisation by seven days and estimates of attributable cost per bloodstream infection are between \$3,700 and \$29,000.

In NSW, preliminary data from the Department of Health has suggested a longer average

length of stay (LOS) for ICU patients with infection, impacting on both the patient (i.e. prolonged stay in hospital) and health services (i.e. increased use of resources).

Contemporary literature suggests that the application of certain interventions has demonstrated reductions in the rate of CLABs in many hospitals. Although improvements in compliance rates have been made at SS-SL project sites, there is a need to develop a uniform approach to the implementation of standardised practices of care related to reducing CLABs in all hospitals. The Central Line Associated Bacteraemia (CLAB) project will address this by developing a statewide guideline on central line insertion practices and implementing practical strategies that will assist in instituting its recommendations.

Aims and Objectives

The overall aim of the project is to develop an implementation model, in which clinicians have been intimately involved, that fosters a culture of change to ensure safe CVC practices in the ICU. This in turn, should serve to reduce CLABs in the ICU over time. It is envisaged that the experience gained from this project will lead to the development of a generic methodology for implementing such guidelines within hospitals across NSW.

Clinical Expert Group

This working group consists of an experienced panel of Intensive care physicians, nurses, and infection control practitioners. During the planning phase of the CLAB project the CEG is meeting weekly to progress work on guideline development, definitions and data management for the project.

Project Team

This project is the result of collaboration between ICCMU, the Clinical Excellence Commission and NSW Health, Quality and Safety Branch. Dr Tony Burrell is providing clinical leadership for this project.

For more information about the project please contact CLAB Project Co-ordinator:

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News from ICCMU:

Current Projects

ICCMU is currently working on the following projects:

1. Central Line Sepsis Project (see page 1)
2. ENs in Critical Care Project

The Enrolled Nurse - Critical Care Units project aims to investigate a potential role for ENs in the Intensive Care Unit (ICU) and pilot the role in a maximum of six ICUs across NSW.

A Working Party (WP) has been convened to plan the Pilot Program. The Project Officer leads the WP and membership includes Registered Nurses (RN) from potential pilot sites, Enrolled Nurse (EN) and a representative from the Intensive Care Coordination and Monitoring Unit (ICCMU).

The WP have developed a Communication Strategy to ensure that all relevant information about the project is relayed to the stakeholders, including the staff in ICUs across NSW and Professional Organisations with an interest in the project e.g. Enrolled Nurse Professional Association of NSW (ENPA) and the Australian College of Critical Care Nurses (ACCCN). This is in order to increase awareness, understanding and knowledge of the project as it progresses. The WP welcomes feedback from stakeholders in relation to

information disseminated and considers the contribution of people in ICUs, particularly the potential pilot sites, to be of vital importance to inform the development of a pilot program.

3. Intensive Care Collaborative:

External Validation Panel

The statewide guidelines project is now at the final stage of development with the eyecare and arterial line guidelines being sent to the external validation panels (EVP) this week. Oral care, suction, ETT stabilisation and CVC will be going to their respective EVPs in mid May. Panel members include intensive care nursing, medical and allied health clinicians, intensive care nursing academics and specialist nursing and medical clinicians. Panel members have been identified from across Australia.

4. Rural Site Visits

Dr. Tony Burrell (ICCMU, Director), Mr. Brett Abbenbroek (Coordinator Critical Care Services, Statewide Services) and Ms. Di Kowal (ICCMU, Manager) will be undertaking site visits along the north and mid-coast during May. It has been 2 years since our last site visit to this region.

Current Committee Representation

ICCMU currently represents Intensive Care services on multiple committees including:

1. Medical Retrieval Committee (NSW Ambulance)
2. Australia & NZ Intensive Care Society Adult Patient Database Committee
3. Australia & NZ Intensive Care Society Quality and Safety Committee
4. Health Disaster Clinical Advisory Group (NSWHDCAG)
5. Critical Care Health Priority Taskforce (CCHPT)
6. Intensive Care Taskforce (ICT)
7. Surgical Services Taskforce
8. NSW Health Enrolled Nurse (Critical Care Units) Reference Group
9. NSW Health Enrolled Nurse (Critical Care Units) Working Party
10. Pre Hospital Trauma Committee (ITIM)
11. Trauma Death Review Committee (ITIM)
12. ACT Critical Care Taskforce
13. NSW Therapeutic Advisory Group: Labelling of Parenteral Products and Lines Working Party
14. NSW Health Knowledge Management Reference Group
15. ANZICS/ACCCN ASM Sydney, 2008 - Scientific Committee
16. Central Line Sepsis Project - Steering Committee
17. Central Line Sepsis Project - Expert Group
18. SESIH Division of Intensive Care: Nursing Subcommittee

NSW Education Collaborative for Specialty Services: NECSS

In collaboration with the NSW Institute of Trauma and Injury Management (ITIM), the NSW Severe Burn Injury Service (SBIS), the NSW State Spinal Cord Injury Service (SSCIS), the NSW Newborn and Paediatric Emergency Transport Service (NETS) and ICCMU, an education day was held at Dubbo on the 14th March.

Registrations closed at 100 applicants and a waiting list has commenced for the next NECSS seminar.

The seminar proved to be very successful. Feedback results included:

- The general comments were overwhelmingly positive regarding the organisation and value of the seminar. The relevancy to the rural setting was highlighted as well as the need to have the seminar at local facilities to enhance attendance by more clinicians. There were many thank yous for recognising the need for such an initiative in the rural sector.
- All participants thought the conference book was helpful with many comments regarding its value as a resource book.
- All participants would recommend the seminar to their colleagues and many included positive comments.

- 22% felt the format could be improved by:
 - Adding practical/skill sessions
 - Increasing the length to 2 days
 - Case studies presented by local RNs
 - Holding seminar more frequently
- 25% felt the content could be improved by including sessions on:
 - Obstetric emergencies
 - Cardiac emergencies
 - Head injuries
 - Diabetic emergencies
 - Other content suggestions were: bariatric patient; dangerous patient; dental emergencies; and eye emergencies.
- A 70-question, multiple choice quiz (MCQ) was used as an evaluation tool.
 - 53% scored a high distinction
 - 32% scored a distinction
 - 12% scored a credit
 - 3% scored a pass
 - No participant failed the MCQ

NECSS has taken on-board participant feedback from the first seminar. As a consequence, the second rural NECSS seminar, to be held on the South Coast will have a format change.

In addition to lectures on:

Recognising the Critically Ill Patient, Referral & Retrieval, The Paediatric Patient, The Trauma Patient, The Spinal Patient, The Burns Patient, and The Intensive Care Patient; additional lectures will include: Cardiac Emergencies, Diabetic Emergencies and Obstetric Emergencies. The seminar will also include skill stations on: Paediatric Fluid Resuscitation, Spinal Care, Airway Management, Assessing Burns and Fluid Management, Rhythm Interpretation, Inotrope Management, Ventilation, Primary Assessment, Blood Gas Analysis and Preparing a Patient for Retrieval.

The seminar will run over two days on **Wednesday & Thursday 5th & 6th September** with lectures in the morning sessions and skill stations in the afternoon sessions. It is expected that the cost of the seminar will be \$120.00 per person (includes 2-day seminar, morning & afternoon teas and lunch on both days, and all resource materials). The seminar will be held at the Soldiers' Club in Bateman's Bay.

You can contact Kaye Rolls (rollsk@wahs.nsw.gov.au) or Di Kowal (kowald@wahs.nsw.gov.au) if you would like to register your interest.

Registrations forms should be available by end of June

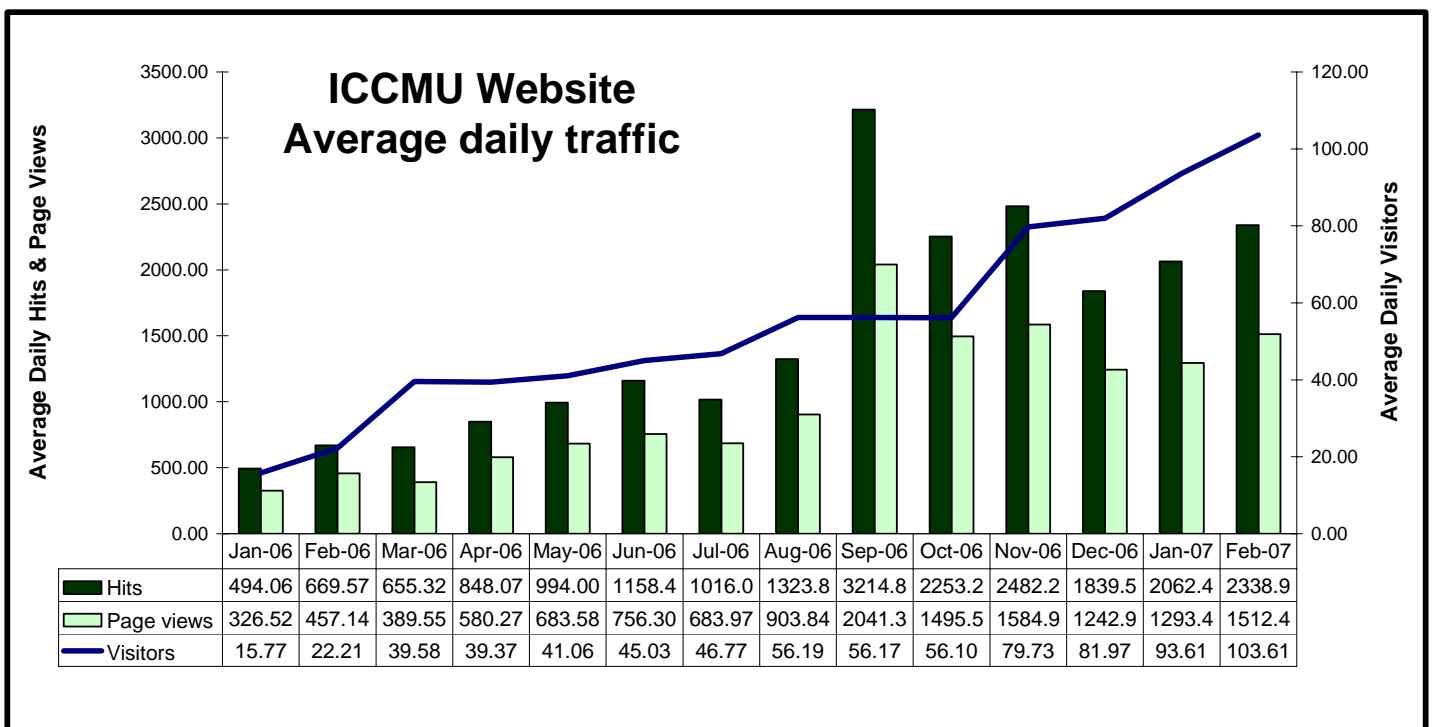
NSW Education Collaborative For Speciality Services

ICCMU Website

<http://intensivecare.hsnet.nsw.gov.au/>

The screenshot shows the ICCMU website interface. On the left is a navigation menu with categories: Community (The ICU, Patient Conditions, Patient and Family, Patient Treatment, ICU Equipment, More >), Clinician (ICU News, ICU Forum, ICU Gallery, ICU Wiki, Education in ICU, ICU Research, ICU Employment, Critical Care Links >), Guidelines (State Guidelines, Guidelines by Type, Guidelines Index, Guidelines on the Internet >), and ICCMU Reports. The main content area features a header with a photo of ICU equipment and a navigation bar (Homepage, Sitemap, Search, Disclaimer, ICU Archives, Admin, Statistics). Below this are sections for 'Community' (with links to The ICU, Patient Conditions, Patient & Family, Patient Treatment, ICU Equipment, More >), 'Clinician' (with links to ICU News, ICU Forum, ICU Gallery, ICU Wiki, Education, Research, Employment, Links >), and 'Guidelines' (with links to Statewide Guidelines, Guidelines by Type, Guidelines Index, Internet >). A disclaimer states: 'Adult Intensive Care Information for the public.' and 'Adult Intensive Care Information for Health Professionals.' A note mentions password protection for the guidelines section. At the bottom, it states: 'In collaboration with the Community and ICU Clinicians, the Intensive Care Coordination & Monitoring Unit (ICCMU) and NSWHealth are committed to promoting excellence across Intensive Care services throughout the State. © ICCMU, NSWHealth.' and 'Powered by [Logo] Personal Content Management System © 2003-2005 Radek Hulán'.

Website traffic continues to increase with daily hits, page views and visitors all increasing over the past 14 months.



Useful Websites:

1. Institute for Healthcare Improvement

<http://www.ihl.org>

IHI have collected extensive content — including change concepts, measures, resources, improvement stories, and downloadable tools — to help you make improvement successful in your organization.

See:

<http://www.ihl.org/IHI/Topics?improvement/ImprovementMethods>

Sections include:

- Learn about the [Model for Improvement](#) and how to use it to select and test changes for improvement. No matter what clinical area you are working in to make improvements, the Model for Improvement will guide you.
- Measurement for improvement is essential. Learn about the three types of fundamental [measures](#) for all improvement efforts, and tips for creating effective measures.
- There is an assembled collection of downloadable [tools](#) so you can use them immediately in your improvement work. They include tools for analysing processes, gathering data, working effectively in groups, and documenting your improvement work.

- All improvement requires change. Learn about some fundamental, general ideas or [change concepts](#) that can be adapted to make specific changes that lead to improvement in many processes and clinical areas. Examples include Eliminate Waste, Improve Work Flow, Focus on Variation, and many more.
- Creating change is great, and spreading it is greater. Has your organization created pockets of excellence? Are you ready to spread the good ideas hiding in those pockets — along with the renewed energy and satisfaction they generate — to the rest of the organisation? See the [Spreading Changes](#) section.
- The [Leading System Improvement](#) section is designed to help leaders of improvement at every level, from improvement project manager to CEO and Chairman of the Board. The content focuses on the specific leadership tasks to drive system improvement, as well as related tools, literature, and other resources.
- Workspace on IHI.org: Track your improvement projects and data using [Improvement Tracker and Projects](#)

2. Medscape

<http://www.medscape.com>

Medscape offers specialists, primary care physicians, and other health professionals a robust and integrated medical information and educational tool. After a simple, 1-time, free registration, Medscape automatically delivers you the specialty site that best fits your profile. You can also change your Medscape homepage to any of our other specialty and profession sites at any time.

Some of Medscape's key features include:

- Original, professional medical content, including review articles, journal commentary, expert columns, patient education articles, book reviews, and more;
- More than 850 online CME activities;
- Conference Coverage;
- The Internet's first primary-source medical journal, *Medscape General Medicine*;
- Selected daily professional medical news in your specialty from Reuters, Medscape Medical News, and medical news journal publishers;
- Physician Optimised MEDLINE;
- Free subscription to Medscape's *MedPulse*, a weekly email newsletter that highlights what's new in your specialty on Medscape;

- More than 125 medical journals and textbooks;
- Business, financial, managed care, and medical practice information;
- And more . . .

Features in this month's 'Critical Care' section include:

Reducing the Need for Mechanical

Ventilation in Delirium Tremens

Identification of patients at risk for DTs is important for aggressive and specific interventions to reduce complications of DTs through symptom-triggered pharmacologic therapy.

Medscape Critical Care, April 5, 2007

Noninvasive Positive Pressure Ventilation in

Critical and Palliative Care Settings:

Understanding the Goals of Therapy

Critical Care Medicine, April 4, 2007

Management of Bleeding Following Major

Trauma: a European Guideline

Critical Care, April 2, 2007

Registration is *FREE!*

3. **Amedeo: *The Medical Literature Guide***

<http://www.amedeo.com/>

AMEDEO has been created to serve the needs of healthcare professionals, including physicians, nurses, pharmacists, administrators, other members of the health professions, and patients and their friends. They can easily access timely, relevant information within their respective fields.

AMEDEO's core components include weekly emails with bibliographic lists about new scientific publications, personal Web pages for one-time download of available abstracts and an overview of the medical literature published in relevant journals over the past 12 to 24 months.

All these information resources from Amedeo are free of charge.

To get the most from AMEDEO

1. Select a medical area, select your favourite medical journals and submit the request form to receive the weekly emails.
2. Consult the weekly literature overviews for additional medical areas, (for a complete overview, please refer to the AMEDEO homepage: <http://www.amedeo.com/index.htm>).

3. Consult the medical literature of the previous 12 to 24 months grouped by journals and topics.

4. **AHRQ: Agency for Healthcare Research & Quality**

<http://www.ahrq.gov>

The AHRQ has just released a systematic review on how Nurse to Patient ratios and nurse work hours were associated with patient outcomes in acute care hospitals, factors that influence nurse staffing policies, and nurse staffing strategies that improved patient outcomes.

Observational studies were reviewed to examine the relationship between nurse staffing and outcomes. Meta-analysis tested the consistency of the association between nurse staffing and patient outcomes; classes of patient and hospital characteristics were analysed separately.

Titled: *Nursing Staffing and Quality of Patient Care* the 115-page report (AHRQ Publication No. 07-E005) and 416-page appendixes can be downloaded separately from: <http://www.ahrq.gov/clinic/tp/nursesttp.htm>

Education:

15 Discoveries in Health and Medicine: Medical Milestones Public Lecture Series

The Greatest Milestones since 1840

Presented by the University of Sydney *in association with the British Medical Journal (BMJ) and with the support of the Medical Foundation.*

Selecting the 15 greatest

Readers of the *BMJ* were asked to nominate which of the medical breakthroughs of the past 167 years they considered the most important. "If we could have only one of them, which would it be? Would it be the identification of penicillin; the mass production of aspirin; the discovery of a link between smoking and lung cancer; or the world's first heart transplant?"*

A series of lectures at the University of Sydney

Readers worldwide submitted nominations and from this the 15 greatest were selected. Join The University of Sydney in celebrating the visionary nature of the work of the pioneers behind the breakthroughs, in this series of public lectures, delivered by the School of Public Health in the Faculty of Medicine.

All lecture times are:

5.30pm - 6.00pm Refreshments
6.00pm - 6.40pm Speaker One
6.40pm - 7.20pm Speaker Two
University of Sydney, Camperdown

WEDNESDAY 2 MAY 2007

- Tissue Culture: Solving the mysteries of viruses and cancer
- X-rayed: the story behind the film.

Venue: Carslaw Lecture Theatre 157

WEDNESDAY 30 MAY 2007

- The Pill: Evolution of a revolution
- Medicines for a tortured mind

Venue: Carslaw Lecture Theatre 157

WEDNESDAY 27 JUNE 2007

- Antibiotics: The epitome of a wonder drug
- Germ Theory: invisible killers revealed

Venue: Eastern Avenue Lecture Theatre

WEDNESDAY 25 JULY 2007

- Smoking & Health: halting the global "brown plague"
- Evidence-based medicine: doctors' & patients' sharpest tools

Venue: Eastern Avenue Auditorium

WEDNESDAY 29 AUGUST 2007

- Just a spoon full of sugar makes the medicine go down
- Sanitation: pragmatism works

Venue: Eastern Avenue Auditorium

WEDNESDAY 26 SEPTEMBER 2007

- Anaesthesia: symbol of humanitarianism
- Discovery of DNA structure: the arrival of molecular medicine

Venue: Eastern Avenue Lecture Theatre

WEDNESDAY 24 OCTOBER 2007

- Vaccines: conquering untreatable diseases
- Transplantations: transforming outcomes

Venue: Eastern Avenue Auditorium

Registration is FREE




Register your attendance at:

<http://www.health.usyd.edu.au/news/events/bmjlectures/>

*Jackson, BMJ;

<http://www.bmj.com/cgi/content/full/333/7567/0-g?ehom>

For Your Diary:

- **Critical Care in the Vineyards**
Thursday 26th April 2007
Hunter Valley,
NEWCASTLE NSW
Contact: Karen Chronister 0438 476 907
Program can be found at ICCMU website.
- **ACCCN ICE - 2007**
8th Annual ICE Meeting
4 - 5 May 2007
Hilton Hotel,
ADELAIDE SA
Website: <http://www.acccn.com.au/>
- **Mass Casualty 2007:** 
'How to prepare your hospital'
Friday 25th May 2007
Research & Education Building
St. George Hospital,
KOGARAH NSW
Contact: Ms. Emma Waygood
Tel: 02 9437 9333
Fax: 02 9901 4586
Email: emma@conferenceaction.com.au
- **Paediatric Trauma Symposium** 
Friday 1st June 2007
Novotel Northbeach
WOLLONGONG NSW
Contact: ITIM
Tel: 02 9887 5726
Fax: 02 9887 5843
- **2007 ASM JFICM in association with ANZICS: 'The Heart of the Matter'** 
1 - 3 June 2007
Sofitel Wentworth
SYDNEY NSW
Website:
<http://www.jficm.anzca.edu.au/asm/welcome.htm>

- **5th Australasian Conference on Safety and Quality in Health Care** 
6-8 August 2007
Brisbane Convention Centre
Brisbane
Website:
<http://www.aqhc.org.au/conf2007.asp>

ICCMU is happy to include details of any critical care related conference or seminar in this newsletter, on the website or both.

Simply email ICCMU with the relevant details.

The newsletter is published bimonthly.


February - April - June -
August - October - December

In-services:

Has your unit had an inservice yet?

Do you want another inservice?

Please contact: **Kaye Rolls**

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Sorry for NSW & ACT members only

All web and email addresses were correct at time of publication.

Edited by Di Kowal & Kaye Rolls

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