

NSW Directors and Nursing Managers Workshop

The NSW Intensive Care Taskforce (ICT) and ICCMU in collaboration with Statewide Services Development Branch (SSDB) are conducting a Statewide Intensive Care Services Workshop for ICU/HDU Directors and Nursing Managers on Thursday 4th December 2008.

Invitations have been issued to both a medical and a nursing representative of the 47 IC/HD units in NSW. Invitations have also been extended to other key critical care stakeholders.

The objective of the workshop is to engage key ICU/HDU personnel in the activities and future directions of the ICT and ICCMU. In particular the workshop is aimed at information sharing and gaining clinician endorsement on a number of strategies being progressed by the ICT and ICCMU including:

- The Deteriorating Patient
- Access to ICU/HDU
- Critical Care Resource management System (CCRS)
- Intensive Care Data/Information Management
- Quality Management
- Nursing Workforce
- Commonwealth Organ Donation Strategy

Webpage Review:

❖ Six Sigma Dictionary

Are you confused by the terminology used in quality reports?

Don't know your control chart from the Gantt?

What the heck is a CUSUM?

Then this website can help you out. Yes it is part of the Six Sigma brand; however, when you are in a hurry it will explain the old and new terminology of quality.

<http://www.isixsigma.com/dictionary/>

❖ Critical Care Forum

<http://ccforum.com/supplements/12/S3>
(Free Access)

Given the current topic on ICUConnect at the moment (Sedation practices in the ICU) - the free supplements available on the Critical Care Forum are timely!!

Contents of Volume 12 Suppl 3:

Analgesia and sedation in the intensive care unit

Reviews

Edited by Curtis N Sessler and Wolfram Wilhelm

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- *Analgesia and sedation in the intensive care unit: an overview of the issues*
Curtis N Sessler, Wolfram Wilhelm
Critical Care 2008, 12(Suppl 3):S1 (14 May 2008)
- *Evaluating and monitoring analgesia and sedation in the intensive care unit*
Curtis N Sessler, Mary Jo Grap, Michael AE Ramsay
Critical Care 2008, 12(Suppl 3):S2 (14 May 2008)
- *Delirium in the intensive care unit*
Timothy D Girard, Pratik P Pandharipande, E Wesley Ely
Critical Care 2008, 12(Suppl 3):S3 (14 May 2008)
- *Medications for analgesia and sedation in the intensive care unit: an overview*
Diederik Gommers, Jan Bakker
Critical Care 2008, 12(Suppl 3):S4 (14 May 2008)
- *The place for short-acting opioids: special emphasis on remifentanyl*
Wolfram Wilhelm, Sascha Kreuer
Critical Care 2008, 12(Suppl 3):S5 (14 May 2008)
- *Strategies to optimize analgesia and sedation*
William D Schweickert, John P Kress
Critical Care 2008, 12(Suppl 3):S6 (14 May 2008)

Guidelines

International Guidelines

- **National Guideline Clearinghouse**

➤ *Guidelines for evaluation of new fever in critically ill adult patients: 2008 update from the American College of Critical Care Medicine and the Infectious Disease Society of America.*

O'Grady NP, et al. American College of Critical Care Medicine, Infectious Diseases Society of America. Guidelines for evaluation of new fever in critically ill adult patients: 2008 update from the American College of Critical Care Medicine and the Infectious Diseases Society of America. Crit Care Med 2008 Apr; 36(4):1330-49. [202 references]

http://www.guideline.gov/summary/summary.aspx?view_id=1&doc_id=12654

➤ *Recommendations for end-of-life care in the intensive care unit: a consensus statement by the American Academy of Critical Care Medicine.*

Truog RD, et al, American Academy of Critical Care Medicine. Recommendations for end-of-life care in the intensive care unit: a consensus statement by the American College of Critical Care Medicine. Crit Care Med 2008 Mar; 36(3):953-63. [149 references]

http://www.guideline.gov/summary/summary.aspx?view_id=1&doc_id=12655

➤ *Recommendations for the diagnosis and management of corticosteroid insufficiency in critically ill adult patients: consensus statements from an international task force by the American College of Critical Care Medicine.*

Marik PE, et al, American College of Critical Care Medicine. Recommendations for the diagnosis and management of corticosteroid insufficiency in critically ill adult patients: consensus statements from an international task force by the American College of Critical Care Medicine. Crit Care Med 2008 Jun; 36(6):1937-49. [127 references]

http://www.guideline.gov/summary/summary.aspx?view_id=1&doc_id=12810

- **Eastern Association for Surgery of Trauma**

➤ Blunt cerebrovascular injury:
http://www.guideline.gov/summary/summary.aspx?view_id=1&doc_id=12637

➤ Penetrating neck trauma. Chicago (IL): the Surgery of Trauma (EAST);
http://www.guideline.gov/summary/summary.aspx?view_id=1&doc_id=12636

➤ Nonoperative management of penetrating abdominal trauma
http://www.guideline.gov/summary/summary.aspx?view_id=1&doc_id=12639

- **Scottish Intercollegiate Guidelines Network (SIGN).**

➤ Management of invasive meningococcal disease in children and young people. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2008 May. 46 p. (SIGN publication; no. 102). [143 references]

<http://www.sign.ac.uk/guidelines/fulltext/102/index.html>

CLAB Report



RNSH

Since implementation of the CLAB project in January 2008 at RNSH we have made some progress in our care of CVCs and the collection of data. In my role as CLAB project officer I am extremely lucky to be supported by a team of doctors and nurses committed to the project.

At RNSH we have a CLAB form completion compliance of greater than 90%, compared to when we initially started the project of less than 30%. This can be attributed, in part to the active participation of the intensivists in the project. Doctors are reminded and cajoled into completing the forms. At times I chase forms with gentle reminder notes to medical staff.

Recently we have reviewed all our previously declared positive CLABs. Each CLAB was reviewed, taking into consideration positive microbiology results and more importantly incorporating the clinical picture/presentation of the patient. This resulted in many of our previously declared CLABS no longer being positive.

We have recently implemented the new guidelines for post insertion care of the cvc. We have achieved this by an intensive education program in the Intensive Care Units at RNSH. This included academic detailing of individual staff members, prominent large posters displayed in our units and the new guidelines were laminated and placed around the units in places that had high traffic flow or where people congregate. The new guidelines were also printed in our ICU monthly newsletter. Staff were also encouraged to offer suggestions and feedback on the new guidelines.

This is a brief overview of the CLAB project at RNSH; please do not hesitate to contact me if you have any questions or suggestions

Delia Martens

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Westmead

WHO SAYS IT'S A CLAB????

As many of you are aware the Central Line Associated Bacteraemia (CLAB) Project commenced in 2007 in Intensive Care Units (ICU) across NSW.

In August 2008 Westmead Hospital ICU received a facelift. Prior to this facelift, CLAB's had been identified by a retrospective approach using the patients microbiological data. This had been mainly due to lack of allocated resources and time.

As of August 2008, via unique partnerships, the ICU has united with the Microbiology and Infection Control team to identify any ICU CLAB's. It should be noted that ICU have had a long standing and strong relationship previously with Infection Control. The ICU to their credit have been championing the cause of Infection Control and taking ownership for some time.

Our approaches to complying with the requirements for the CLAB project were to incorporate and embed the components of this project into existing Infection Control processes within the Infection Control Department. Our face lift included the allocation of an Infection Control Nurse being allocated time to work on the project which involves the collection of data including CLAB forms, bacteraemia data, and patient information. Any missing data is followed up by an ICU specialist CLAB liaison person.

Guided by the CLAB definition, bacteraemia's are being reviewed twice weekly at the patient's bedside. This review is done by a team round with the ICU team, Microbiology/ID and Infection Control teams. By using this collaborative method the key experts are identifying the CLAB's at point of care at the bedside.

In addition to this, CLAB's that have been confirmed in the above process are also then validated by further discussion at the Clinical Infectious Diseases (ID) and Microbiology weekly meeting. This meeting has in attendance all of the ID and Micro Consultants, Registrars and Infection Control practitioner. Identifying CLAB's from patients that had been discharged before being reviewed are also done at this meeting.

This process continues to be a work in progress but since the facelift there has been a significant drop in the amount of CLAB's in our ICU. This drop can be attributed to the accuracy and the collaboration of

identifying CLAB's and the TEAMWORK approach to this project as well as improved practices.

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SHEA/CDC Cert Infection Control

CNC Infection Control

Westmead Hospital



Members Choice Website

Do you have a website you feel is worth advertising to the collective membership of ICUConnect?

Let us know by email. Include the name of the website, the link and a couple of sentences about why you think it's worth a visit.

Rollsk@wahs.nsw.gov.au

Research

Accuracy of bedside glucose measurement from three glucometers in critically ill patients.

Critical Care Medicine. 36(11):3062-3066, November 2008.

Hoedemaekers, Cornelia W. E. MD, PhD; Klein Gunnewiek, Jacqueline M. T. PhD; Prinsen, Marieke A.; Willems, Johannes L. PhD; Van der Hoeven, Johannes G. MD, PhD

Abstract:

Objective: Implementation of strict glucose control in most intensive care units has resulted in increased use of point-of-care glucose devices in the intensive care unit. The aim of this study was to determine the reliability of point-of-care testing glucose meters among critically ill patients under intensive insulin treatment.

Design: Prospective observational study.

Patients: Intensive care unit and non-intensive care unit patients in a tertiary care teaching hospital.

Measurements: A glucose oxidase method was used to validate the point-of-care testing devices. Three different point-of-care testing devices, Accu-Chek Sensor (Roche Diagnostics), Precision (Abbott Diagnostics), and HemoCue were tested. Glucose measurements were performed in duplicate by an experienced technician under standardized conditions in the hospital's laboratory, using arterial (intensive care unit patients) and arterial or venous (non-intensive care unit patients) heparinized whole blood samples.

Main Results: A strong correlation was found between the glucose oxidase method and the Accu-Chek device ($r^2 = .9596$, $p < 0.001$). Mean absolute difference between the glucose oxidase and Accu-Chek was -0.32 mmol/L (95% confidence interval -0.84 to 1.48 mmol/L). Using the International Organization for Standardization (ISO) criteria, 27 of 197 samples (13.7%) were inaccurate. In all samples that failed to meet the ISO criteria, glucose values measured by the Accu-Chek device were higher compared with the glucose oxidase method. In another set of experiments among intensive care unit patients, strong positive correlations were also found between the other point-of-care testing devices and the glucose oxidase method. However, paired samples from Accu-Chek, HemoCue, and Precision failed the ISO criteria in 9 of 82 (11.0%), 4 of 82 (4.9%), and 11 of 82 (13.4%) of cases, respectively. In non-intensive care unit patients paired samples from Accu-Chek, HemoCue, and Precision failed the ISO criteria in 3 of 120 (2.5%), 11 of 120 (9.2%), and 16 of 120 (13.3%) cases, respectively.

Conclusions: Under standardized conditions, glucose results from three point-of-care testing devices were inaccurate in both intensive care unit and non-intensive care unit patients. Among intensive care unit patients, inaccurate glucose readings were most frequently falsely elevated, resulting in misinterpretation of high glucose values with subsequent inappropriate insulin administration or masking of true hypoglycemia.

Quality

New at NSW Health



• Policy, Directives and Guidelines

- Cardiac Monitoring in Adult Cardiac Patients in Public Hospitals in NSW (PD2008_055)
- Christmas Leave (PD2008_057)
- Cytotoxic Drugs & Related Waste - Safe Handling in the NSW Public Health System (PD2008_059)
- Continuing Education Allowance (CEA) - Public Health System Nurses' and Midwives' (State) Award (PD2008_061)
- Kidney Donation - Living (including Directed & Non-Directed Donation) (PD2008_062)
- Health Facility Guidelines - Australasian Health Facility Guidelines in NSW (GL2008_017)
- Episode Funding Policy 2008/2009 - NSW (PD2008_063)
- Staff Specialists Training, Education and Study leave (TESL) - New Funding Entitlement 2008-2009 (PD2008_064)

<http://www.health.nsw.gov.au/policies/date/2008.asp>

• Lessons learnt on Quality and Safety

At this site NSW health clinicians are invited to share experiences of **incidents** and **proven solutions** to quality and safety issues that arise in the health system. Case studies can be submitted and a discussion forum is available. Contribute your knowledge and join an ongoing dialogue on quality and safety issues.

Mismanagement of Anticoagulation Therapy (Enoxaparin)

A patient with severe renal impairment and on long-term warfarin therapy required amputation of several toes. Following surgery, the patient was restarted on warfarin and was also prescribed enoxaparin to provide anticoagulant cover until the warfarin had achieved therapeutic levels. After two days, the patient's INR was therapeutic and the warfarin dose was lowered to the patient's usual dose. No further INR testing was

done and the patient remained on enoxaparin ...**for more see:**

<http://internal.health.nsw.gov.au/quality/lessons/>

Failure to recognise the deteriorating patient following refusal to accept medication (Desmopressin)

A patient with a complex medical history including diabetes insipidus was admitted to a major metropolitan hospital. The diabetes insipidus was managed with 8 hourly intranasal administration of desmopressin which is used to replace anti-diuretic hormone...**for more see:**

<http://internal.health.nsw.gov.au/quality/lessons/>

Serotonin Syndrome

A patient was admitted to the emergency department with Serotonin Syndrome. The patient was sweaty and hypotensive and had low arterial oxygen saturation, which required oxygen therapy. A medication history revealed that the patient was being treated with sertraline...**for more see:**

<http://internal.health.nsw.gov.au/quality/lessons/>

A Serious and Known Drug Interaction - Allopurinol and Azathioprine

An elderly patient was admitted to a tertiary hospital for management of respiratory failure. The patient's medical history included ulcerative colitis being managed with prednisone and azathioprine. The patient was also taking a considerable number of other medications...**for more see:**

<http://internal.health.nsw.gov.au/quality/lessons/>

- Safety Alert Broadcast System

<http://www.health.nsw.gov.au/quality/sabs>

Use this link to access the latest TGA recall notices



Safety Alert



Safety Notice



Safety Information

Education

For Your Diary (2009):



- ACNC - Annual Conference : Cardiac Nursing the Heart of Cardiac Care **NEW!**
27th - 28th February 2009
Crowne Plaza Hotel, COOGEE BEACH, NSW
Web : <http://www.acnc.net.au/conference.html>
- NECSS - Care of the Critically Ill Patient **NEW!**
5th - 6th March 2009
ORANGE, NSW
Email : RollsK@wahs.nsw.gov.au
Email : iccmu@swahs.health.nsw.gov.au
- Critical Care Conference in the Vineyards **NEW!**
2nd - 3rd April 2009
Grand Mecure, Hunter Valley Gardens, POKOLBIN
CALL FOR ABSTRACTS (Closes 5th December 2008)
Email : criticalcare@hnehealth.nsw.gov.au
- ACCCN - ICE 2009
29th - 30th May 2009
The Hotel Grand Chancellor, HOBART, TAS
Web: www.acccn.com.au
Email: ice@acccn.com.au
Phone: 61 3 9347 8577
- 2nd International Symposium on Extra Corporeal Support in Critical Care **NEW!**
24th - 25th July 2009
Grand Hyatt Hotel, MELBOURNE, VIC
Web: <http://www.ecmo.com.au/>
- 3rd International Conference on Safety Quality Audit & Outcomes. Research in Intensive Care **NEW!**
6th - 7th August 2009
Millennium Hotel, QUEENSTOWN, NZ
Web:
<http://anzics.com.au/conference.asp?Section=sqo0>
- 10th Congress of the World Federation of Societies of Intensive & Critical Care Medicine **NEW!**
28th August - 1st September 2009
Florence, ITALY **NEW!**
Web: <http://www.wfsiccm-florence2009.it/en/index.php>
- 7th Australasian Conference on Safety & Quality in Healthcare **NEW!**
6th - 9th September 2009
Sydney Convention & Exhibition Centre, Darling Harbour, SYDNEY, NSW
Web: <http://www.aaghc2009.org.au>
- 7th International Conference for Emergency Nurses **NEW!**
7th - 10th October 2009
Jupiters Casino, GOLD COAST, QLD
Web: <http://www.cdesign.com.au/cena2009/>
- ACCCN / ANZICS ASM **NEW!**
29th - 31st October 2009
Perth Convention & Exhibition Centre, PERTH, WA
Web:
<http://www.intensivecareasm.com.au/content/view/112/144/>

All web and email addresses were correct at time of publication

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