

VOLUME 25, NUMBER 2, SUMMER 2014

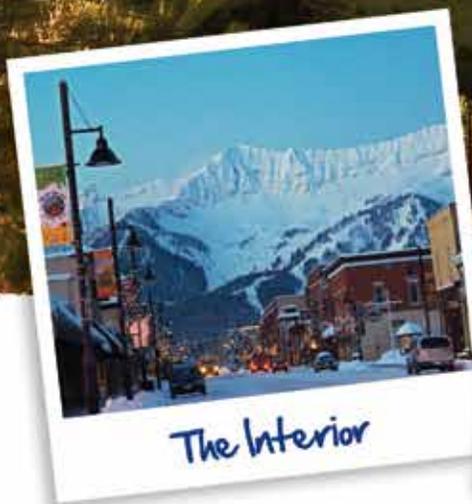
DYNAMICS

IN THIS ISSUE:

- 7 DYNAMICS 2014: SPEAKING FROM EXPERIENCE: INTEGRATING EXCELLENCE AS A CULTURE/ CRÉER UNE CULTURE D'EXCELLENCE: À PARTIR DE L'EXPERIENCE PRATIQUE
- 12 CACCN MEMBERSHIP SURVEY
- 17 CRITICAL CARE NURSING ABSTRACTS
- 57 AWARD INFORMATION

Journal of the Canadian Association of Critical Care Nurses

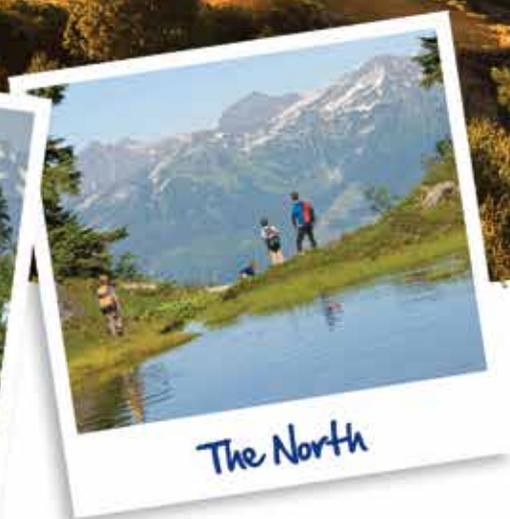
Discover the perfect place to call home.



The Interior



Vancouver Island



The North

Enrich your career. Enhance your quality of life.

Join the many critical care nurses who have moved to British Columbia (BC), Canada to enjoy a quality of life that is envied around the world. Find out how our nurse services team can assist you in matching your lifestyle interests with exciting career opportunities.

***Visit our website to view current opportunities.**

REGISTER TODAY!
healthmatchbc.org

PHYSICIANS

NURSES

ALLIED HEALTH

healthmatchbc.org

FIND A JOB IN BC

Health Match BC is a free health professional recruitment service funded by the Government of British Columbia, Canada



DYNAMICS

Journal of the Canadian Association of Critical Care Nurses

Volume 25, Number 2, Summer 2014

Editor

Paula Price, PhD, RN
Associate Professor, ACCN Program — Critical Care Stream,
Department of Advanced Specialty Health Studies, Mount Royal
University, 4825 Mount Royal Gate SW, Calgary, AB T3E 6K6
phone: 403-440-6553; fax: 403-440-6555; email: pprice@mtroyal.ca

Publications Chairperson

Marie Edwards, PhD, RN, Winnipeg, MB

Managing Editor

Heather Coughlin, Pappin Communications, Pembroke, ON

Editorial Review Board

Adult Consultants:

Marie Edwards, PhD, RN, Winnipeg, MB
Sandra Goldsworthy, PhD(c), RN, CNCC(C), CMSN, Oshawa, ON
Martha Mackay, PhD, RN, CCN(C), Vancouver, BC
Mae Squires, PhD, RN, Kingston, ON

Pediatric Consultants:

Franco Carnevale, MSA, MEd, PhD, RN, Montreal, QC
Judy Rashotte, PhD, RN, Ottawa, ON

Neonatal Consultant:

Debbie Fraser, MN, RNC, Winnipeg, MB

Canadian Association of Critical Care Nurses

Board of Directors

President: Karen Dryden-Palmer, MN, RN, Barrie, ON
Vice-President: Renée Chauvin, MEd, BA BScN, RN, CNCC(C),
Kemptville, ON

Secretary:

Treasurer: Ruth Triner, BScN, RN, CNCCP(C), Toronto, ON

Directors:

Marie Edwards, PhD, RN, Winnipeg, MB (Publications)
Barbara Fagan, BScN, RN, CNCC(C), Middle Sackville, NS (Awards)
Rob Mazur, BScN, RN

CACCN National Office

Chief Operating Officer:

Christine R. Halfkenny-Zellas, CIM
P.O. Box 25322, London, Ontario N6C 6B1
www.caccn.ca
email: caccn@caccn.ca
phone: 519-649-5284
toll-free: 1-866-477-9077
fax: 519-649-1458

DYNAMICS, Journal of the Canadian Association of Critical Care Nurses, is the only peer-reviewed critical care journal in Canada, and is published four times annually by Pappin Communications, Pembroke, Ontario. Printed in Canada. ISSN 1497-3715.

Advertising information: For advertising enquiries, contact Heather Coughlin, Pappin Communications, The Victoria Centre, 84 Isabella St., Pembroke, Ontario K8A 5S5, telephone: 613-735-0952, fax: 613-735-7983, email: heather@pappin.com, website: www.pappin.com

Author enquiries: Send manuscript enquiries or submissions to Paula Price, ACCN Program, Faculty of Health and Community Studies, Mount Royal University, 4825 Mount Royal Gate S.W., Calgary, Alberta T3E 6K6, email: pprice@mtroyal.ca

Subscription Rates for 2014: *Dynamics, Journal of the Canadian Association of Critical Care Nurses*, is published four times annually, Spring, Summer, Fall and Winter—Four Issues: \$75 / eight issues: \$150 (plus GST/HST as applicable). International and institutional subscription rate is four issues: \$100 / eight issues: \$200 (plus GST/HST, as applicable). To order subscriptions, please contact CACCN National Office, P.O. Box 25322, London, Ontario N6C 6B1 or caccn@caccn.ca

Article reprints: Photocopies of articles appearing in *Dynamics, Journal of the Canadian Association of Critical Care Nurses*, are available from the CACCN National Office, P.O. Box 25322, London, Ontario N6C 6B1, at a cost of \$15 (plus GST/HST, as applicable) per article. Back issues can be purchased for \$18 (plus GST/HST, as applicable).

Copyright 2014 by the Canadian Association of Critical Care Nurses, P.O. Box 25322, London, Ontario N6C 6B1. No part of this journal may be reproduced in any manner without written permission from CACCN. The editors, the association and the publisher do not guarantee, warrant or endorse any product or service mentioned in this publication. *DYNAMICS, Journal of the Canadian Association of Critical Care Nurses*, is indexed in the Cumulative Index to Nursing and Allied Health Literature, EBSCO, the International Nursing Index, MEDLINE, and RNdex Top 100: Silver Platter.



Dynamics, Journal of the Canadian Association of Critical Care Nurses, is printed on recycled paper.



CANADIAN
ASSOCIATION OF
CRITICAL
CARE
NURSES



Canadian Association of Critical Care Nurses

Vision statement

The voice for excellence in Canadian Critical Care Nursing

Mission statement

The CACCN is a non-profit, specialty organization dedicated to maintaining and enhancing the quality of patient- and family-centred care by meeting educational needs of critical care nurses.

Engages and empowers nurses through education and networking to advocate for the critical care nurse.

Develops current and evidence-informed standards of critical care nursing practice.

Identifies professional and political issues and provides a strong unified national voice through our partnerships.

Facilitates learning opportunities to achieve Canadian Nurses Association's certification in critical care.

Values and beliefs statement

Our core values and beliefs are:

- Excellence and Leadership
 - Collaboration and partnership
 - Pursuing excellence in education, research, and practice
- Dignity and Humanity
 - Respectful, healing and humane critical care environments
 - Combining compassion and technology to advocate and promote excellence
- Integrity and Honesty
 - Accountability and the courage to speak for our beliefs
 - Promoting open and honest relationships

Philosophy statement

Critical care nursing is a specialty that exists to care for patients who are experiencing life-threatening health crises within a patient/family-centred model of care. Nursing the critically ill patient is continuous and intensive, aided by technology. Critical care nurses require advanced problem solving abilities using specialized knowledge regarding the human response to critical illness.

The critical care nurse works collaboratively within the inter-professional team, and is responsible for coordinating patient care using each member's unique talents and scope of practice to meet patient and family needs. Each patient has the right to receive care based on his/her personal preferences. The critically ill patient must be cared for with an appreciation of his or her wholeness, integrity, and relation to family

and environment. Critical care nurses plan, coordinate and implement care with the health care team to meet the physical, psychosocial, cultural and spiritual needs of the patient and family. The critical care nurse must balance the need for the highly technological environment with the need for safety, privacy, dignity and comfort.

Critical care nurses are at the forefront of critical care science and technology. Lifelong learning and the spirit of enquiry are essential for the critical care nurse to enhance professional competencies and to advance nursing practice. The critical care nurse's ability to make sound clinical nursing judgments is based on a solid foundation of knowledge and experience.



Pathways to success: Five pillars

1. Leadership:

- Lead collaborative teams in critical care interprofessional initiatives
- Develop, revise and evaluate CACCN Standards of Care and Position Statements
- Develop a political advocacy plan

2. Education:

- Provision of excellence in education
- Advocate for critical care certification

3. Communication & Partnership:

- Networking with our critical care colleagues
- Enhancement and expansion of communication with our members

4. Research:

- Encouraging, supporting, facilitating to advance the field of critical care

5. Membership:

- Strive for a steady and continued increase in CACCN membership

CRITICAL THINKING

It is with much excitement I begin my term as president of our association. The health care environment in Canada is shifting and changing all around us. The Canadian Association of Critical Care Nurses is prepared and positioned to meet the challenges that will come. We have successfully created a space amongst all the other voices and are heard above the din. We found our voice, we speak from our convictions and we are poised to influence the future of critical care in Canada.

This status is the result of our engaged and passionate members and the wonderful leadership we have been privileged to have these past years. It is with no small amount of regret that we must bid farewell to Teddie Tanguay, as her president's term has come to a close. Teddie was instrumental in pushing our organization to take on new challenges and maintain clarity of purpose. Her theme of "Speak with Conviction" truly defined her tenure and her legacy. Teddie's vision helped each of us raise our voices about what matters most for our patients and their families and brought national recognition to the unique perspective and insights offered by critical care nurses.

CACCN has enjoyed the tangible results of this important legacy. We have continued to nurture and grow our partnerships with other national and international organizations (CNA, IMSP, CCCF, CICF, CBS, AACN, WFCCN, WFPICC). We have taken on active leadership roles with the national health care agenda through our involvement in a number of projects, including World Sepsis Day, Canadian Intensive Care Week, and Canadian Critical Care Society Symposium to construct guidelines on the procedure of withdrawal of life-sustaining therapy, the Canadian Blood Services Deceased Donations Advisory Committee, and the CAPHC Interfacility Transport Symposium. CACCN has continued to support research that focuses on critical care and nursing, and we have begun to form new relationships in this domain with the Canadian Critical Care Trials Group. These alliances constitute a tremendous gain in a short period of time. Teddie is a trusted mentor and advisor, role model and life-long friend of the association. Thank you for your contributions, Teddie!

We are also saying farewell to Kirk Dawe, Director Eastern Region with responsibility for the website. Kirk has served on the board of directors for the last two years and, under his stewardship, our website has been redesigned for improved functionality and to maximize our members' experiences. Kirk's contribution to our communication platforms and member connections has been outstanding. We wish all the best for Kirk in his future.

We also have the privilege of welcoming a new face to the national board of directors. Rob Mazur joined us this April for his first term as Director Western Region and is being mentored to take over the treasurer role in April 2015. Rob brings great enthusiasm for the work of the association, a passion for critical care nursing and the perspective of an experienced front-line clinician. Welcome, Rob!

You have likely read and heard from many celebrated experts about leadership. Leadership has been a central component of the goals and objectives of the association over these many years and the hidden gem of our past CACCN themes: 'Find Your Voice' and 'Speak with Conviction' are really messages of leadership. When critical care nurses take these words to heart they provide the fuel for the engines of leadership. As these next two years unfold and the goals and priorities of our association evolve, the board of directors, our Chief Operating Officer and I have chosen a theme that builds on this leadership agenda. This theme reflects our past, marks our present and evokes our vision for the future. I hope it will resonate as strongly with you as it does for us.



"Together we can" calls on us to raise our voices, to remain true to our convictions and to translate our intentions into acts that will shape our emerging reality. It requires us to take action and to design intentional acts with the potential to influence at all levels of critical care nursing practice.

It can be daunting to move from voice to action. It requires each of us to identify what we contribute that can influence those around us. As nurses, we directly impact the outcomes for our patients, we impact our teams, our organizations, our science, our view of the world and the world's view of us. Together, as a group of focused professionals, we are powerful and unique. Identifying, defining and embracing our influence every day, every hour, individually and collectively, are the first steps to building an action agenda.

Now that we have placed ourselves in the big picture we can step back and appraise that picture to determine: who are our partners; are we perceived accurately; what resources are available; what resources can we create? We must be clear about what is important to us, as a specialty nursing community. What is important to you, as an individual? What is important in the practice of our craft? What is important to our patients? We must seek out the opportunities to impact our local world, the broader landscape of the health care system and the health of Canadians.

Next, we must take care to connect. "Together we can" is about connecting. Connecting is staying informed—about both the health care environment and our science. This means shaping and preparing for change and figuring out the tool kit we will require, as our practice evolves.

Connecting is about relationships. From coast to coast to coast we are all connected to each other, as critical care nurses. We must strive to strengthen those connections. As the board of directors of the association, we commit ourselves to providing the tools and platforms for those connections to grow. We are committed to exposing new ideas and perspectives—exchanging insights with colleagues across the country and providing

the building blocks of a truly national Canadian critical care nursing community of practice. As your representatives, we will ensure we remain connected to you and to our shared goals.

Finally, we need to act. Sometimes we are subjected to thinking that action requires big bold steps, heroic risks and/or radical motion that will change the world in the grandest sense. I believe that to act is a beautifully simple thing—you don't need a pandemic or even a Supreme Court challenge to act in ways that will shape the world. Critical care nurses are evoking action every time they challenge and question the best way to provide care. To act means to contribute as much as possible, sharing your knowledge and experience without restraint. To act is to be purposeful, to have intent and to take risks. With this in mind, we cannot be afraid to be vulnerable—we can't grow if we can't let people and ideas in. Our partnerships are a testimony to the word 'together'. We are actively growing relationships with colleagues and peers with whom we share the privilege of service. *'Together we can'* captures the essential role we, as critical care nurses, play as individuals, as teams, as a nursing specialty and as a discipline within the larger health care landscape.

On behalf of the board of directors, I would like to express our gratitude and thanks for the opportunity to share these next years with you. We want to hear from you and will reach out often for your perspectives and wisdom. Please share with us what you would like to accomplish, what has meaning and value for you and your practice.

Together we can... create, achieve, change, grow and thrive. 🍁

Karen Dryden-Palmer, MN, RN
President, CACCN

In Memoriam

Nichole Krawec

It is with heavy hearts we share the news of the passing of Nichole Krawec, a long-standing member and the current president-elect of the Southern Alberta Chapter of the CACCN.

Nichole was a friend and colleague who will be missed by those who knew her and had the privilege to work with her in critical care. Nichole was dedicated to excellence as a critical care nurse and we saw that expertise and caring every day that we worked beside her. She was compassionate and kind when providing care to her patients. She will be missed not only by her colleagues but also by the patients for whom she cared. It was her desire for excellence that prompted her decision to become a Nurse Practitioner in ICU and also her decision to become involved with the CACCN.

We will remember Nichole's passion, work ethic and beautiful smile. We are fortunate to have had Nichole in our lives.

Nicki Johal
President, CACCN Southern Alberta Chapter

CACCN calendar of events

DATES TO REMEMBER!

May 31: Draeger Medical Canada Chapter of the Year Award deadline

June 1: Spacelabs Innovative Project Award deadline

June 1: BBraun Sharing Expertise Award deadline

June 1: The Brenda Morgan Leadership Excellence Award deadline

June 1: Cardinal Health Chasing Excellence Award deadline

June 3: Dynamics 2014 Brochure/Online Registration available www.caccn.ca

July 5: CACCN Board of Director Nomination deadline

July 31: Chapter Quarterly Reports (April–June 2014) deadline

August 15: CACCN Canadian Intensive Care Week Spotlight Challenge Award deadline

August 18: Dynamics 2014 Early Bird Registration closes

September 1: Smiths Medical Canada Ltd. Educational Award deadline

September 4: Dynamics 2014 Final Registration closes

September 5: Proxy Vote Forms deadline

September 18–19: BOD F2F Meeting, Quebec City, QC

September 20: Chapter Connections Day, Quebec City, QC

September 20: Dynamics Preconference Day, Quebec City, QC

September 21: CACCN Annual General Meeting

September 21–23: Dynamics 2014 Conference, Quebec City, QC

October 31: Chapter Quarterly Reports (July–Oct 2014) deadline

November 1: Dynamics 2015 Call for Abstract Submission opens – www.caccn.ca

November: CNA Certification Application – Initial deadline

December: CNA Certification Application – Renewal deadline

December 31: Chapter Quarterly Reports (Oct–Dec 2014) deadline

January 31: Dynamics 2015 Call for Abstracts deadline

January 31: Smiths Medical Canada Ltd. Educational Award deadline

Awards available to CACCN members

Criteria for awards available to members of the Canadian Association of Critical Care Nurses are published on pages 57–64 of this issue of Dynamics.

DYNAMICS 2014

Speaking from Experience: Integrating Excellence as a Culture Créer une Culture D'Excellence: À Partir De L'expérience Pratique

September 21–23, 2014 • 21 au 23 Septembre 2014

Quebec Convention Centre, Quebec City, QC • Centre Des Congrès de Québec, Québec, QC

The full colour conference brochure and online registration will be available on the CACCN website www.caccn.ca by June 3, 2014.

Pam Cybulski

- Board of Director from 2007–2011
 - Central Region Representative
 - Secretary/Communications/Partner Relations
- Chair of the 2011 Dynamics Conference in London, Ontario

What I gained from my work with the BOD:

Membership in CACCN and networking with other nurses made me want to participate more. Board members worked and played together resulting in many great friendships. I also learned valuable skills while on the board. The secretarial role afforded me the opportunity to learn about other organizations and associations that have an impact on the provision of critical care, as well as how government impacts health care, nursing demographics and a plethora of new computer skills. My time on the board also provided me with the confidence to do different things that I may have never experienced. It was truly an experience to work with critical care nurses from across the country who share the same professional values to develop a synergy to create change in critical care.

My hospital (Brampton Civic, William Osler Health Systems) was always very supportive of my role with CACCN. I believe they were proud that I was involved, because they recognize the importance of CACCN's professional commitment to critical care nursing.

What would you tell someone thinking of joining the BOD?

I am extremely proud to have been part of the Board of Directors and the Dynamics 2011 Planning Chair. My proudest accomplishment is the coordination of the End of Life Position Statement with other nursing colleagues from across the country. When you think about joining the Board of Directors, my advice is to have faith in yourself and consider it an opportunity for growth and development.

CACCN Board of Directors Call for Nominations

The Canadian Association of Critical Care Nurses (CACCN) is the national specialty group for nurses in critical care.

CACCN is seeking interested members of the association to serve as directors on the National Board of Directors for a two-year period:

- **Western Region** (one position open)
- **Central Region** (one position open)
- **Eastern Region** (one position open)

This information has been revised from the initial Call for Nominations in the Spring 2014 Dynamics Journal.

Criteria

Active current member of CACCN

Director responsibilities

Attend two meetings per year (spring – three days, fall – two days) and teleconferences, as required

Address issues in critical care nursing

Participate in decision-making

Serve on committees as required

Term of office

Two year term commencing April 1, 2015 to March 31, 2017

Nomination packages available:

CACCN website at www.caccn.ca

National Office at caccn@caccn.ca

Please e-mail the following information to be considered for nomination:

Completed CACCN Nomination forms

Curriculum vitae (CV)

Personal Statement and current photo (jpg format)

Only those nomination forms completed in full, accompanied by the nominee's CV, current photo and personal statement received by e-mail or fax by

July 5, 2014 - 23:59 ET, will be considered.

Important dates

Nominations will close July 5, 2014

Nominations will be printed in the Fall Dynamics Journal

Nominees will be invited to speak for three minutes at the Annual General Meeting in Quebec City, QC, in September 2014 (in person or via Skype)

Voting will take place at the Annual General Meeting on September 21, 2014

For further details, please contact Christine Halfkenny-Zellas, Chief Operating Officer at 519-649-5284 or caccn@caccn.ca

Western Region: British Columbia, Alberta, Saskatchewan, Northwest Territories, Nunavut and the Yukon

Central Region: Manitoba and Ontario

Eastern Region: New Brunswick, Newfoundland/Labrador, Nova Scotia, Prince Edward Island and Quebec



CACCN Board of Directors 2014–2015

Karen Dryden Palmer President

I am very excited to start my fourth year on the board and to begin my term as president of the association. I am pleased to continue working with Renée Chauvin, who has accepted the position of vice-president, Barb Fagan (Eastern Region), Ruth Trinier (Central Region), Marie Edwards (Western Region) and Christine Halfkenny-Zellas, Chief Operating Officer. I also am very thrilled to begin work with Rob Mazur representing the Western Region on our board. I wish Kirk Dawe, who is departing from the Eastern director post, all the best, as he continues to pursue his career goals. Thank you, Kirk, for all your efforts towards the advancement of our specialty, work on the CACCN website, in the arena of organ donation and in support of our regional chapters.

Our work as a board, with our chapters and our national partners, has been inspiring and very productive. In the past year, I worked alongside Teddie Tanguay, President, and Kate Mahon, Past President, on the application for Leave to Intervene at the Supreme Court of Canada. I was also very excited to bring the CACCN Mentorship Program to fruition with two mentorship rooms being opened and more to be launched in the next months. Our first online webinar learning session for Pediatric Certification was launched in March 2014, as part of our ongoing efforts to provide flexible and meaningful educational products to members.

The role of the critical care nurse is ever evolving. Therefore, I am



committed to providing our membership with the tools, information and advocacy that contribute to the development of critical care nursing expertise in Canada. Over the next year, I will continue to push forward our mandate utilizing evidence, experience and the informed voice of the critical care nurse to influence the creation of sound health policy and support the efficient administration of health care resources. I am looking forward to the challenges and innovations we will encounter together in 2014–2015.

I have been committed to the specialty of critical care for more than 20 years. I will continue in every capacity to work towards achieving the mission of the Canadian Association of Critical Care Nurses, and building a foundation of excellence for the future care of critically ill Canadians.



Front row: Ruth Trinier, Marie Edwards and Christine Halfkenny-Zellas. Back row: Karen Dryden-Palmer, Rob Mazur, Barb Fagan and Renée Chauvin.

Marie Edwards

Director (Western Region)

It is both an honour and a pleasure to continue to serve on the CACCN Board of Directors. After obtaining a certificate in Intensive Care Nursing in 1982 from the Health Sciences Centre in Winnipeg, I started my nursing career working in the surgical ICU there. I later returned to school to obtain my BN and MN. In 2004, I graduated from the University of Toronto with a PhD in Nursing and Bioethics, having studied the work of critical care nurses to pass along knowledge of patients to other members of the health care team. I currently work in the Faculty of Nursing at the University of Manitoba and carry out research in the area of conflict in intensive care units, ethical practice, moral distress, and napping on breaks on night shift in critical care environments.



I have been on the editorial review board for *Dynamics: Journal of the Canadian Association of Critical Care Nurses* since 2008. In addition, I was a member of the working group that revised the CACCN position statement on *Providing End-of-life Care in the Intensive Care Unit* and am a member of the working group developing a position statement on healthy work environments. My first year on the board was filled with new learning and great opportunity. I continue to work with the Publications and Research portfolio and as the board liaison for the Manitoba and Saskatchewan chapters. I look forward to meeting CACCN members over the course of 2014–2015 and working together to promote the values of this organization. I am serving as the chair of the Conference Planning Committee for Dynamics 2015, and you are all invited to the city of Winnipeg—as our road signs say, the “Heart of the Continent”—for that event.

Renée Chauvin

Vice-President

It is a great pleasure to be nominated as vice-president for the CACCN. I am very passionate about critical care and empowering nurses to pursue excellence while taking responsibility for a healthy and healing work environment.



I have been a CACCN member for more than 10 years. My involvement has been at a local level serving as the Montreal Chapter President for five years, in addition to joining the planning committee for the 2008 Dynamics 25th Anniversary conference held in Montreal.

Since moving to Ottawa, I have joined the CACCN at a national level on the board of directors. I am very excited to have been offered the opportunity as chair of the 2014 Dynamics conference being held in Québec City.

My career in critical care started 27 years ago at the McGill University Health Centre. I have enjoyed many great experiences such as clinical nurse, mentor, assistant head nurse, professional development educator, practice consultant and the last five years as ICU manager in Ottawa.

I believe in excellent care, leading with integrity, and support for education and research in critical care. Critical care is not only a specialty, but also a commitment. I love the CACCN because it enables critical care nurses to collaborate, network, share and learn, and promote excellence. What a privilege to continue to work with such a passionate and dedicated group of professionals.

Rob Mazur

Director (Western Region)

I am an RN from Winnipeg, MB. I graduated in 1999 with a BN from University of Manitoba. Since 1999 I have worked in psychiatry, medicine, northern MB nursing stations and aero-medical transport.



I became a flight nurse with Keewatin Air/Nunavut Lifeline in 2004. After five years of transporting Nunavut patients who, at times, were critically ill, I successfully completed the Winnipeg Critical Care Nurses Education Program (WCCNEP) in 2009. After completing the WCCNEP I worked in ICUs at HSC and the Victoria Hospital in Winnipeg. With the completion of the WCCNEP and my aero-medical experience I was offered the position of CRN/Nurse Manager at Keewatin Air. My current position at Keewatin Air has allowed me to expand my leadership skills through management, logistical/medical on-call, and the education and training of flight nurses.

I joined CACCN to help prepare me for the CNA CNCC(C) certification exam, which I successfully wrote this past spring. I have long been interested in the role of critical care nurses, trying to identify opportunities for improvement in a holistic delivery of nursing care.

I feel my experience in caring for critical care patients in ICUs, nursing stations and in aero-medical transport is of benefit to the CACCN. These environments require critical thinking, and an ability to think “outside the box”. I believe these qualities could benefit in helping shape new approaches to the management of critically ill patients. It is my hope that my participation as a member of the board will have an effect that is beneficial to critical care nurses and their patients everywhere.

Ruth Trinier

Treasurer

It with great pleasure that I begin my fifth year serving on the board of directors as one of the directors from the central region, taking responsibility for the portfolio of National Board Treasurer.



I have taken great pleasure in the relationships I have developed with some energetic and caring nurses in my role as liaison to the Southern Alberta and London Chapters of CACCN. Both chapters have had some challenging times over the last year and it has been rewarding to witness the compassion with which these nurses have worked to overcome those challenges. I would like to both commend and wish them well, as we proceed into another year in partnership.

In my work life, I continue to care for the children and families admitted to the Pediatric Intensive Care Unit at the Hospital for Sick Children in Toronto, as a direct care provider. I believe that working in this capacity allows me to bring a unique perspective to the board. It is one that represents the cornerstone of what critical care nursing is about and it is representative of the majority of our members. I have always felt that this perspective is greatly appreciated and respected by other members of the board.

I can say with all honesty that I love my work. Every day I am privileged to witness the impact of the care that a nurse can provide in the critical care setting.

In addition to patient care, I have continued to refine my knowledge of nursing through formal education. As I enter my last year on the board, I also enter the final phase of my pursuit of a Master's in Nursing. I have also had the opportunity to further my nursing expertise through my exposure to numerous opportunities for growth in the profession including conference planning, education, preceptorships, research and international outreach. Many of these opportunities have come as a direct result of my association with CACCN and its members; compassionate, dedicated, incredible nurses from across Canada who provide care to the critically ill. Nurses just like you.

I am honoured to be both associated with, and connected to you.

Barb Fagan Director (Eastern Region)



I was honoured to be considered for a second term representing the voice of critical care nursing in the Eastern Region, as a member of the CACCN Board of Directors. I am responsible for the Awards and Corporate Sponsorship portfolio and I look forward to recognizing the wonderful talented nurses we have in our association. I have enjoyed liaising with the Nova Scotia, Ottawa Regional and British Columbia Chapters—such diversity and similarities in practice and educational needs across this great country of ours.

I graduated from Dalhousie University with my Baccalaureate in Nursing in 1991. After two years of great medical surgical experience, my thirst for knowledge called me to enroll in the Critical Care Nursing Program at the Post RN programs in Nova Scotia. Critical care nursing has become my passion ever since and I have not looked back. I was blessed with 15 years of amazing intensive care experience—as a staff member, preceptor and charge nurse. Twenty years later, with a wonderful husband and three fabulous children, I am even more called to our profession. For the past five years I have had the privilege of being a nurse educator for the critical care nursing program with the Registered Nurses Professional Development Centre (RN-PDC), what was formerly part of the Post RN program in Nova Scotia. It is funny how things come full circle in life.

I am currently enrolled in the Master's of Nursing program at Athabasca University. I have been an active CACCN member and have had the privilege to present at the 2009 and 2010 Dynamics conferences. My colleagues and I were the fortunate recipients of the 2009 Spacelabs Innovation Award for our work on Creating Life-long Critical Care Thinkers. We presented our findings of implementing a progressive teaching methodology called Team-Based Learning in our programming. In 2010 we presented our innovative interprofessional Simulation Lab team training. Working together with all members of the health care team to our full scopes of practice is another passion of mine. I am a member of our local Nova Scotia Chapter and have participated in local meetings and education sessions. I am looking forward to working with CACCN to increase the voice of excellence in critical care nursing. Together we can accomplish much!

Dynamics: Journal of the Canadian Association of Critical Care Nurses

Share your knowledge and critical care experiences

Dynamics: Journal of the Canadian Association of Critical Care Nurses (CACCN) is an international, peer-reviewed journal focusing on critical care nursing practice, administration, education and research. We are interested in publishing articles by nurses who are looking to share their evidence-based practices, research, quality management/improvement initiatives, and case studies.

Dynamics is published four times annually (Spring, Summer, Fall and Winter) and is indexed in the Cumulative Index to Nursing and Allied Health Literature (CINAHL), EBSCO, the International Nursing Index, MEDLINE and RNdx Top 100. This means that many nurses nationally and internationally will have access to your article.

Share your knowledge by submitting a manuscript to *Dynamics: Journal of the Canadian Association of Critical Care Nurses*. Paula Price, Editor, and the Editorial Review Board are available to assist you with the development of your manuscript for publication.

Manuscripts should be submitted via email to Paula Price, Editor, pprice@mtroyal.ca, with a copy to CACCN National Office at cacn@cacn.ca or via facsimile to 519-649-1458.

For more information regarding *Dynamics: Journal of the Canadian Association of Critical Care Nurses*, please visit "Publications" on the CACCN website at www.cacn.ca.

Dynamics 2015 conference planning committee

The Dynamics 2015 conference planning committee has been selected, as follows:

Conference planning committee

Marie Edwards, Chair

Members:

Tara Carson
Lissa Currie
James Danell
Cathy Ferguson
Joy Mintenko
Colleen Sacrey
Tannis Sidloski
Rhonda Thorkelsson
Lori Wakeman

Karen Dryden-Palmer, Dynamics Liaison
Christine Halfkenny-Zellas, Chief Operating Officer

The committee looks forward to planning an exciting conference from September 27–29, 2015, at the Winnipeg Convention Centre, Winnipeg, MB. Thank you to all members who showed interest in the Dynamics 2015 planning committee.

CACCN Annual General Meeting

The National Board of Directors of the Canadian Association of Critical Care Nurses extends an invitation to the membership to attend the **30th Annual General Meeting**.

The 30th Annual General Meeting of the CACCN will be held **Sunday September 21, 2014, at the Quebec Convention Centre, Quebec City, QC**, in conjunction with Dynamics 2014. Proxy Vote forms are due by September 5, 2014, at 2359 EST.



CANADIAN
ASSOCIATION OF
CRITICAL
CARE
NURSES

Annual General Meeting Proxy Vote Form 2014

I, _____, a **voting member** in good standing of the Canadian Association of Critical Care Nurses (CACCN), hereby give my proxy to **Karen Dryden-Palmer, President** of the Board of Directors, failing her, to **Renée Chauvin, Vice-President** of the Board of Directors.

OR (complete only if you wish to name someone other than the above as your proxy)

_____ as my proxy to attend, act, and vote on my behalf at the Annual General Meeting of members to be held Sunday, September 21, 2014, at the Dynamics of Critical Care Conference 2014, in Quebec City, QC (including adjournments thereof).

Name: _____ Date: _____

Signature: _____

It is the responsibility of the member to determine whether the person to whom they assign the proxy is able and agrees to act in the manner described.

Please ensure delivery of the completed proxy to CACCN by no later than Friday, September 5, 2014 at 2359 ET:

by e-mail: caccn@caccn.ca

by fax: (519) 649-1458

**by mail: Canadian Association of Critical Care Nurses
P. O. Box #25322**

London, ON N6C 6B1

Future sites of Dynamics conferences

Dynamics 2014: September 21–23, Quebec City, QC

Dynamics 2015: September 27–29, Winnipeg, MB

Dynamics 2016: September 25–27, Charlottetown, PEI

Dynamics 2017: September 24–26, Toronto, ON

CACCN Membership Survey

BY MARIE EDWARDS AND RUTH TRINIER

In 2013, the Canadian Association of Critical Care Nurses (CACCN) celebrated its 30th anniversary. The Board of Directors of CACCN viewed this as an opportune time to take stock of how our organization was doing in relation to meeting members' needs. A 45-item survey was developed by the board and, in February 2013, an invitation to complete the survey was sent out through an e-mail message to 1,180 CACCN members. The survey, administered using SurveyMonkey®, included demographic questions and items exploring members' perceptions of, or satisfaction with, various aspects of the organization. A total of 178 people answered the survey questions, for a response rate of 15%. Demographic information for the respondents is found in Table 1.

Holding CACCN membership

Approximately 15% (26) of respondents had been members of CACCN for more than 15 years, 11% (20) between 11 and 15 years, 16% (28) between six to 10 years, and 51% (91) for five years or less. The reasons for holding membership are presented in Table 2. Close to 74% (132) of respondents indicated they were either satisfied (53.4%) or very satisfied (20.8%) with their CACCN membership, 18% (32) were somewhat satisfied, and 2.2% (4) were not satisfied. Most people (89%) indicated they plan to continue membership on an annual basis, and 90% (161) indicated they would recommend membership to a nursing student or colleague.

Perceptions of services and activities offered by CACCN

Members were asked about their perceptions or assessment of CACCN activities and publications. Their responses are summarized in Table 3. Based on combined percentages for excellent and good, areas of strength include: *Standards for Critical Care Nursing Practice* (85.5%); *Dynamics, The Journal of the Canadian Association of Critical Care Nurses* (75.1%); Dynamics national conferences (74%); and position statements (68.2%). Based on combined percentages for fair and poor, areas that present opportunity for improvement include: *Critical Connections E-newsletter* (27.4%); *Dynamics, The Journal of the Canadian Association of Critical Care Nurses* (20.3%); awards and grants (20.1%); and CEU quizzes (18.3%).

Local chapter activities

Approximately 10% (17, n=173) of members indicated they were actively involved in chapter activities, 13% (23) somewhat involved, and 44% (76) not involved. Almost half of the respondents had attended a chapter education day or conference in the past three years. Identified barriers to attending chapter events included distance to events given the vast geographic areas of some of the chapters (5), work schedules (2), and time constraints (2).

Website

Approximately 15% (26, n=170) of the survey respondents indicated that they used the website weekly and 47.6% (81) used it monthly. Eight people had never used the site. The majority (81.5%) identified that the website was easy, very easy, or extremely easy to navigate. One-quarter of respondents (45) found the website very appealing or extremely appealing, while 48.3% (86) viewed the website as moderately appealing; 18% (30) indicated the website was either slightly appealing or not at all appealing. The areas of the website used included membership processing (64%), educational resources (60%), Members Only (48.9%), *Standards for Critical Care Nursing Practice* (47%), and position statements (42.6%). The least used areas of the website were @CACCN1 (Twitter) via website (2.2%), CACCN Facebook via the website (4.5%), members' discussion forum (10.7%), CEU quizzes (12.4%), and the president's blog (20.8%). Approximately 10% (17) of respondents rated the information provided on the website as excellent, 50% (84) as above average, and 31.8% (54) as average.

Issues of concern to CACCN members

CACCN members were asked to rate a list of 11 practice issues on a four-point scale (i.e., not at all important, somewhat important, important, very important). The ranking of issues identified as very important or important is found in Table 4. Nineteen people indicated that the issues that concern them most were not specified in this list. These included: encouraging nurses to get involved in research; preparing for in-hospital emergencies, including possible evacuation; providing evidence-based care; workload; access to education funding; models of care issues; recognizing critical care nurses' scope of practice; and recognition of the various roles in critical care, including advanced practice roles.

Discussion

Our mission, as found on our website, is as follows: "The CACCN is a non-profit, specialty organization dedicated to maintaining and enhancing the quality of patient- and family-centred care by meeting educational needs of critical care nurses" (CACCN, n.d.). Included within the mission statement are points that address the roles of CACCN: engaging and empowering nurses through education and networking to advocate for critical care nursing; developing evidence-informed standards of critical care nursing practice; identifying professional and political issues; providing a national voice through partnerships; and facilitating learning opportunities to achieve CNA certification in critical care.

So, what have we learned from survey respondents regarding how CACCN is doing in relation to this mission statement? After reviewing the data, it is fair to say that while those who responded are reasonably satisfied with their CACCN membership, they also identified opportunities for growth and development. In consideration of issues facing critical care nurses in Canada,

Characteristics	n	%
Age		
18-24 years	2	1.1
25-34 years	31	17.4
35-44 years	43	24.2
45-54 years	62	34.8
55+ years	40	22.5
Place of residence		
BC and NWT	23	13.0
AB	20	11.2
SK and MB	26	14.6
ON	66	37.1
QC	16	9.0
Atlantic Provinces	24	13.5
Other	3	1.7
Focus of Practice		
Adult	163	91.6
Paediatric or Neonatal	20	11.2
Other	7	3.9
<i>Note: Multiple responses possible</i>		
Years of experience as a critical care nurse		
< 1 year	3	1.7
1-5 years	25	14.0
6-10 years	25	14.0
11-15 years	29	16.3
16-20 years	25	14.0
21-25 years	20	11.2
>25 years	44	24.7
Other	7	3.9
Type of position in critical care		
Direct Patient Care	122	68.5
Educator	38	21.3
Manager	9	5.1
Other Administrator	9	5.1
Research	9	5.1
APN	12	6.7
<i>Note: Multiple responses possible</i>		

and in response to the survey results, the Board of Directors at CACCN have made the following observations.

- We are pleased to note that close to 89% of respondents indicated they plan to continue their CACCN membership on an annual basis and just over 90% would recommend membership to a nursing student or colleague. The responses regarding satisfaction, however, illustrate an opportunity for growth (i.e., 20% of respondents were somewhat satisfied or not satisfied with membership). In our efforts to improve services to all members, survey data, including the open-ended responses, will be reviewed closely to better understand members' concerns. We continue to welcome feedback from members regarding strategies to strengthen and improve services provided by CACCN.
- As the top-ranked issue of concern for respondents was remaining current in one's knowledge related to critical care, it is significant to note that members identified the annual Dynamics national conferences, the *Standards for Critical Care Nursing Practice*, and *Dynamics, The Journal of the Canadian Association of Critical Care Nurses* as strengths of our organization.
- The survey data highlight particular opportunities for growth in relation to the website, e-newsletters, awards, and member involvement in chapter activities. We are currently working on updates and improvements to the website. We hope you will enjoy the new, fresher look and increased usability of the site. Thanks to a number of generous donors, we have been able to provide several awards in recognition of the work and expertise of our members. Considerable time and effort is currently being spent to streamline the award application process and strengthen the overall awards program. The open-ended comments will be reviewed to identify additional opportunities for development in these areas.
- Members' responses to the list of issues in critical care are interesting and can be used to inform topics selected for educational events and future position statements. A group is currently working on a position statement on healthy work environments, directly related to the issue of the health and

Reason	n	%
To be part of specialty organization	146	82
Educational opportunities	143	80.3
Professional accountability	97	54.5
To advocate for critical care issues	85	47.8
Networking	84	47.2
Access to Certification Study Guide	35	19.7
Political interest in health care system	34	19.1
Scholarship and funding	28	15.7
Other	6	3.4
Note: Respondents were asked to select all that apply		

Table 3: Rating of CACCN Activities and Publications (n = 173)

Activity or Publication	Excellent n (%)	Good n (%)	Fair n (%)	Poor n (%)	No opinion n (%)	Do not attend/use n (%)
Dynamics National Conferences	70 (40.5%)	58 (33.5%)	8 (4.6%)	0	7 (4.0%)	30 (17.3%)
<i>Standards for Critical Care Nursing Practice</i>	64 (37.2%)	83 (48.3%)	11 (6.4%)	1 (0.6%)	4 (2.3%)	9 (5.2%)
<i>Dynamics, The Journal of the CACCN</i>	41 (23.7%)	89 (51.4%)	33 (19.1%)	2 (1.2%)	3 (1.7%)	5 (2.9%)
Position Statements	35 (20.6%)	81 (47.6%)	27 (15.9%)	1 (0.6%)	14 (8.2%)	12 (7.1%)
Critical Connections E-newsletter/Flashes	20 (11.7%)	78 (45.6%)	43 (25.1%)	4 (2.3%)	11 (6.4%)	15 (8.8%)
Awards and Grants	16 (9.5%)	54 (32%)	31 (18.3%)	3 (1.8%)	17 (10.1%)	48 (28.4%)
CEU Quizzes	12 (7.1%)	51 (30.2%)	24 (14.2%)	7 (4.1%)	22 (13.0%)	53 (31.4%)

Table 4: Issues that concern me most in my critical care nursing practice (N = 174)

Issue	Very important n (%)	Important n (%)	Combined %
Remaining current in knowledge	133 (78.2)	35 (20.6)	98.8
Patient safety	106 (62.4)	58 (34.1)	96.5
Health and safety of critical care nurses	101 (60.8)	58 (34.9)	95.7
Work-life balance	104 (61.9)	53 (31.5)	93.4
Moral/ethical challenges	86 (50.6)	72 (42.4)	93
End-of-life conflicts	79 (47.6)	71 (42.8)	90.4
Health care funding	63 (38.4)	75 (45.7)	84.1
Aging workforce	57 (33.9)	75 (44.6)	78.5
Pandemic/surge preparedness	34 (21.0)	79 (48.8)	69.8
Workplace bullying	56 (32.2)	58 (35.2)	67.4
Job security	46 (28.4)	62 (38.3)	66.7

safety of critical care nurses, ranked third on the list of issues of concern. Another group is working on a position statement related to models of care.

- The low response rate for the survey (15% of membership) is concerning. We will continue to investigate alternate forms of communication to enable us to reach out to those who did not respond to the survey to understand their concerns, satisfaction with our organization, and suggestions for improving CACCN. Should you be part of this group, we encourage you to contact us to provide feedback.
- Recent statistics from the Canadian Nurses Association (2012) indicate that more than 19,000 registered nurses are employed in critical care in Canada. Approximately 6% of these nurses are members of CACCN. Clearly, there is room for growth in our organization. CACCN must remain responsive to current needs of the profession while broadcasting the advantages of membership in the only Canadian association that represents critical care nursing.

Continued growth in membership numbers will allow for increased representation.

Thank you to all members who took the time to respond to the survey. Your feedback will inform the Board of Directors' deliberations, as we engage in strategic planning for the years ahead. We welcome your comments, so please feel free to contact us with additional suggestions. If we are to truly live up to our vision of being "the voice for excellence in Canadian critical care nursing", it is important that we hear from you. 🍁

REFERENCES

- Canadian Association of Critical Care Nurses. (n.d.). *Vision, mission, values*. Retrieved from http://www.caccn.ca/en/about/caccn_philosophy_statement.html
- Canadian Nurses Association. (2012). *RN workforce profiles by area of responsibility*. Retrieved from http://www.cna-aaic.ca/~media/cna/page%20content/pdf%20en/2013/07/26/11/07/2010_rn_profiles_e.pdf



VCH Critical Care Nurses - VGH

Come for the **job**. Stay for the **team**.

Vancouver Coastal Health is world renowned for innovation and a focus on quality care and outcomes. The remarkable range of specialties places VCH at the forefront of career destinations. Launch an exciting career with us where you can apply your skills and develop new ones alongside some of Canada's finest practitioners.

- ✓ **Incredible Lifestyle**
- ✓ **Outstanding Career Move**

We are hiring Registered Nurses who have completed an advanced certificate program in Critical Care Nursing, or have a minimum of two (2) years' recent critical care nursing experience

Positions available at:

- **Richmond Hospital**
- **Vancouver General Hospital**
- **Powell River General Hospital**
- **St Mary's Hospital, Sechelt**

To find out more and to apply, visit:

jobs.vch.ca

Phone: 604.675.2500
Toll-Free in North America: 1.800.565.1727

**Vancouver
CoastalHealth**
Promoting wellness. Ensuring care.

CACCN Membership Recruitment Program

No one knows the benefits of a CACCN membership better than our current CACCN members. Consider sharing your CACCN membership experience and get rewarded for doing so.

If you are not a CACCN member, what are you waiting for? Please visit www.caccn.ca to join us now.



Poster Award Recipients, Dynamics 2013

Current CACCN members are eligible to receive a \$10 coupon for each new member referred to CACCN.

By working together, we are building a stronger Association!

Criteria:

1. Current / Active CACCN Members may participate.
2. Applicable on NEW member applications only. A new member is one who has not been a CACCN member previously or has not been a CACCN member for a minimum of 12 months.
3. To qualify, your name must be included on the new member's application form or in the online application, as the "sponsor" or "person who recommended joining CACCN". Coupons cannot be awarded if the sponsor / recommending information is not included when the member application is processed.
4. Members may receive a maximum of seven (7) coupons towards their next renewal. Coupons expire on the members' renewal date.

www.caccn.ca

What's new at www.caccn.ca?

CACCN Facebook Page



Find us on Facebook!

Visit us on Facebook for updated information!

Follow us on Twitter:

@CACCN1



CACCN Members Only!

- Start or join a discussion! The CACCN Members Only Discussion Forum is available to share information and meet nurses from coast to coast.

The CACCN website has had a facelift! Visit www.caccn.ca!



Advertising opportunities

CACCN Dynamic Career Connections

CACCN is offering the opportunity to post individual employment opportunities on the CACCN website. If you are interested in taking advantage of this advertising opportunity, please visit CACCN Advertising Opportunities on the CACCN website at www.caccn.ca for rates and information.

JobLINKS on www.caccn.ca

JobLINKS is a simplified web link page on the CACCN website designed to provide immediate links to critical care nursing career opportunities in Canada and around the world. If your facility is interested in taking advantage of this service, please visit www.caccn.ca.

Reach your audience directly on our website

CACCN is pleased to announce a new opportunity for you—the chance to advertise your company's products and services directly on the CACCN website.

Together with our publishing partner, MultiView, we are bringing you closer to your audience and connecting your business with the buyers you need.

If you have any questions or are interested in learning more about how to feature your company on the CACCN website, please call Jon Smith, Display Advertising Manager, at 972-402-7023. For more information about this opportunity, please request a media kit via jsmith@multiview.com.

CRITICAL CARE NURSING ABSTRACTS

Four of the strategic goals of CACCN are: 1) to provide educational opportunities for critical care nurses; 2) to optimize quality of critical care nursing practice; 3) to provide varied opportunities to profile critical care nursing research; and 4) to provide opportunities for nursing colleagues to network.

CACCN's national conference, Dynamics of Critical Care, provides an excellent venue for accomplishing all of these. CACCN is pleased to be printing its 14th annual "Special Dynamics of Critical Care Issue", which includes the abstracts from Dynamics of Critical Care 2014.

The following abstracts represent the concurrent session and poster abstracts being presented during Dynamics of Critical Care 2014 being held in Quebec City, Quebec, September 21–23, 2014.

It is our hope that CACCN members interested in pursuing a profiled topic will contact our national office at (519) 649-5284 or e-mail caccn@caccn.ca to receive information regarding how to contact the author about the work.

We hope you will carefully consider the critical care nursing topics currently being investigated and discussed in various centres across Canada!

SPEAKING FROM EXPERIENCE:

Integrating Excellence as a Culture

QUEBEC CONVENTION CENTRE, QUEBEC CITY, QC



CACCN

ORAL PRESENTATIONS

Critical Care Nurses' Attitudes Related to Families Importance in Nursing Care

Sandy Alguire, MN, RN, Marie Edwards, PhD, RN, Kendiss Olafson, MD, MPH, FRCPC, and Janelle Plouffe, MN, NP, RN, DNP, Winnipeg, MB

While family-centred care (FCC) has been implemented in pediatric intensive care unit (ICU) settings for some time (Harrison, 2010), work continues to implement this approach to care in adult ICUs. The purpose of this study was to identify Canadian critical care nurses' attitudes about the importance of families in nursing care in adult ICUs using the Families Importance in Nursing Care: Nurses' Attitudes (FINC-NA) instrument (Benzein, Johansson, Arestedt, Berg, & Saveman, 2008; Benzein, Johansson, Arestedt, & Saveman, 2008), explore their perceptions of FCC, and examine policies and practices in place in their units to promote FCC. Members of the Canadian Association of Critical Care Nurses (CACCN) were invited to take part in this web-based survey, with 207 nurses responding. Nurses over the age of 50 years and with greater than five years of ICU experience were found to have higher FINC-NA scores (i.e., more positive attitudes towards families) than their younger and less experienced colleagues (n=193); direct care providers had lower scores on the FINC-NA than nurses in other roles

(i.e., advance practice nurses, educators, managers). In response to an open-ended question regarding perceptions of FCC, 135 nurses described their support for FCC and/or the benefits of FCC for patients, families, and staff members, while 98 nurses described some of the challenges associated with implementing FCC in their units. In relation to FCC policies or practices, approximately 62% of nurses indicated that families were always or usually asked to leave the unit during nursing care and patient procedures, 25% identified that family members were always or usually permitted to be present during resuscitation, and 15% identified that family members were always or usually included in rounds. In this presentation, the results of the study will be discussed and the implications of the results for practice, education, and future research will be explored.

References

- Benzein, E., Johansson, P., Arestedt, K.F., Berg, A., & Saveman, B.I. (2008). Families' importance in nursing care: Nurses' attitudes—An instrument development. *Journal of Family Nursing*, 14(1), 97–117. doi:10.1177/1074840707312716
- Benzein, E., Johansson, P., Arestedt, K.F., & Saveman, B.I. (2008). Nurses' attitudes about the importance of families in nursing care: A survey of Swedish nurses. *Journal of Family Nursing*, 14(2), 162–180. doi:10.1177/1074840708317058
- Harrison, T. (2010). Family-centered pediatric nursing care: State of the science. *Journal of Pediatric Nursing*, 25(5), 335–343. doi:10.1016/j.pedn.2009.01.006

DYNAMICS OF CRITICAL CARE 2014

Soutenir la démarche de certification nationale en soins intensifs adultes pour optimiser la santé psychologique des infirmières

Genevieve Beaudoin, M.Sc.Inf, CSI(C), Marie Alderson, inf. Ph.D. et Lyne St-Louis, M.Sc.inf, CSI(C), Montréal, QC

La certification nationale dans une spécialité infirmière est un processus d'apprentissage et de validation des connaissances qui est gérée par des organismes comme l'Association des infirmières et infirmiers du Canada (AIIC). Des études ont démontré l'apport de cette démarche pour l'amélioration des facteurs intrinsèques associés à une croissance personnelle et professionnelle (Beaudoin, Alderson & St-Louis, 2013 ; Spence Laschinger, 2008 ; Wade, 2009). Ils ont également relevé que la certification nationale, en favorisant le développement des savoirs et des aptitudes réflexives, permet d'améliorer la santé psychologique de ces professionnelles et favoriser leur rétention tout en améliorant l'attractivité des unités de soins intensifs. Cependant, l'élément qui nuit à la motivation face à la certification est le manque de formations et de cours préparatoires offerts aux infirmières pendant le processus d'étude (Stromborg, Niebuhr, Prevost, Fabrey, Muenzen, Spence, Towers et Valentine, 2005). Ces dernières sont, par conséquent, moins enclines à s'engager dans ladite démarche (Wade, 2009). Considérant ces éléments problématiques ainsi que les pistes de solution apportées par les écrits scientifiques, j'ai développé, dans le cadre d'un stage de fin d'études à la maîtrise, une activité éducative pour soutenir et favoriser la santé psychologique des infirmières œuvrant dans une unité de soins intensifs qui étaient engagées dans ce processus à l'hiver 2014. Basée sur l'approche humaniste (Cara, 2013) et la méthode d'apprentissage par problème, la démarche visait à optimiser la préparation des infirmières par la construction de relations significatives et la prise en compte des besoins individuels de ces professionnelles. La présentation orale traitera de la démarche en elle-même et des résultats obtenus dans le milieu clinique.

Références

- Beaudoin, G., Alderson, M., & St-Louis, L. (2013). Fostering professional development and improving the psychological health of nurses through the North American certification process in critical care. *Journal of Nursing Education and Practice*, 4(1), 177-188. doi:10.5430/jnep.v4n1p177
- Cara, C. (2013). *Pratique clinique: démarche et modèle humaniste des soins UdeM*. Atelier de formation présentée à la Faculté des Sciences Infirmières, Université de Montréal.
- Spence Laschinger, H.K. (2008). Effect of empowerment on professional practice environments, work satisfaction, and patient care quality. *Journal of Nursing Care Quality*, 23(4), 322-330. doi:10.1097/01.NCQ.0000318028.67910.6b
- Stromborg, M.F., Niebuhr, B., Prevost, S., Fabrey, L., Muenzen, P., Spence, C., ... Valentine, W. (2005). Specialty certification more than a title. *Nursing Management*, 36(5), 36-46.
- Wade, C.H. (2009). Perceived effects of specialty nurse certification: A review of the literature. *AORN Journal*, 89(1), 183-192.

No Excellence Without Evidence: The Therapeutic Use of Oxygen

Penelope Benedik, PhD, CRNA, College Station, TX

Oxygen is rarely considered a "drug" despite its ubiquitous use by critical care nurses. This presentation will discuss the evidence for the proper use and dosing of oxygen in critical care environments. Four specific areas will be reviewed: resuscitation, perianesthetic, oxygen toxicity, and special circumstances. First, oxygen doses delivered during neonatal and adult resuscitation will be analyzed, including the effects of dose on resuscitation outcomes. Second, perianesthetic increases in the fraction of inspired oxygen during anesthesia are well known to contribute to pulmonary atelectasis and shunt. Oxygen therapy that is routinely applied in the post-anesthesia recovery unit has been characterized as a successful method with which to mask hypoventilation and delay the recognition of respiratory failure. Third, prolonged exposure to high oxygen concentrations during critical care is known to cause inflammatory cell damage due to excess formation of reactive oxygen species. The phenomenon of oxygen toxicity, known as hyperoxia-induced acute lung injury (HALI) will be defined and discussed. Last, the Cochrane database will be reviewed to evaluate the evidence for the use of oxygen in specific circumstances such as acute myocardial infarction or stroke and maternal use for fetal distress.

References

- Bennett, M.H., Lehm, J.P., & Jepson, N. (2011). Hyperbaric oxygen therapy for acute coronary syndrome. *Cochrane Database of Systematic Reviews*, 2. doi:10.1002/14651858.CD004818.pub3
- Cabello, J., Burls, A., Emparanza, J., Bayliss, S., & Quinn, T. (2010). Oxygen therapy for acute myocardial infarction. *Cochrane Database of Systematic Reviews* 2010(6). doi:10.1002/14651858.CD007160.pub2
- Fawole, B. & Hofmeyr, G. (2012) Maternal oxygen administration for fetal distress. *Cochrane Database of Systematic Reviews*, 2012(12). doi: 10.1002/14651858.CD000136.pub2.
- Lumb, A., & Walton, L. (2012). Perioperative oxygen toxicity. *Anesthesiology Clinics*, 30, 591-605.
- Suzuki, S., Eastwood, G., Peck, L., Glassford, N., & Bellomo, R. (2013). Current oxygen management in mechanically ventilated patients: A prospective observational study. *Journal of Critical Care*, 28, 647-654.

Top 10 Problems that Anesthesia Creates for Critical Care Nurses

Penelope Benedik, PhD, CRNA, College Station, TX

Anesthesia engenders multiple opportunities for potential harm in major organ systems and that potential for harm extends into the post-operative period. Anesthesia-induced atelectasis occurs in 90% of patients under general anesthesia. Safe and effective manoeuvres to prevent and treat anesthesia-related atelectasis have been developed. Endotracheal tube issues include the presence of an inappropriate size or type of tube for postoperative care, misplacement during transport, or over- or under-inflation of the cuff with the potential for mucosal injury or air leak/aspiration of secretions. Inadequate humidification is common during operation and even when the anesthetist uses humidification, 100% relative humidity is not usually achieved. Anesthetics alter ciliary function and impair lung clearance contributing to poor pulmonary hygiene. Lack of oral care is common and the use of chlorhexidine is not routine in these areas. The oropharynx is also compromised by tubes and suctioning. Intraoperative fluid is mobilized in the first several days during recovery, leading to relative fluid overload. Prolonged immobility when coupled with anesthesia-related hypotension may lead to compromised skin integrity during long cases and is a risk factor for thromboemboli.

Residual anesthetics and adjunct drugs may be left in intravenous lines during transport and delivery to recovery. Inadequate pain control may be evident as anesthetics are exhaled or metabolized. A stress response to pain is detrimental to immune function and tissue healing. Mild hypothermia is common even in day cases; it can lead to shivering, increased oxygen consumption and adverse cardiovascular effects. Hypothermia also slows metabolism of drugs and can impair full reversal of neuromuscular blockade. Evidence-based prevention and treatment of postoperative nausea and vomiting include risk assessment and selection of appropriate medications.

References

- Fagerlund, M., & Eriksson, L. (2009). Current concepts in neuromuscular transmission. *British Journal of Anaesthesia*, 103(1), 108–114.
- Hamilton, M. (2009). Perioperative fluid management: Progress despite lingering controversies. *Cleveland Clinic Journal of Medicine*, 76(Suppl. 4), S28–S31.
- Lippi, G., & Franchini, M. (2008, November). Pathogenesis of venous thromboembolism: When the cup runneth over. In *Seminars in thrombosis and hemostasis*, 34(8), 747–761. Thieme Medical Publishers.
- Palmer, L.B. (2009). Ventilator-associated infection. *Current Opinion in Pulmonary Medicine*, 15(3), 230–235.
- Ricard, J., Boyer, A., & Dreyfuss, D. (2006). The effect of humidification on the incidence of ventilator-associated pneumonia. *Respiratory Care Clinics of North America*, 12, 263–273.

La prise de décision par les proches du patient en contexte d'unités de soins intensifs : une recension des écrits

Pascale Bouchard, BSc, inf., Étudiante MSc et Mireille Lavoie, PhD, inf., Québec, QC

Dans la perspective de soins palliatifs, le respect de la personne et de son autonomie est au cœur des préoccupations de la pratique clinique. De plus, le processus décisionnel en fin de vie s'inscrit dans la mise en œuvre du droit à l'autonomie. Dans le contexte des unités de soins intensifs (USI), la famille a un rôle pivot dans toutes les prises de décision, puisque les patients gravement malades sont souvent incapables d'exprimer leurs souhaits et décisions. Alors, il est important de comprendre comment ces proches vivent l'expérience de prendre des décisions pour autrui, dans une situation si particulière. Cette recension des écrits met en lumière les différents facteurs influençant la prise de décision par les proches des patients hospitalisés à l'USI. Les données disponibles indiquent plusieurs facteurs pouvant influencer les habiletés des proches à prendre des décisions. Les émotions vécues rendent la reconnaissance et l'acceptation de la réalité plus difficile. Le sentiment de culpabilité, le besoin de prendre des décisions rapidement et l'influence de la « pensée magique », d'un possible miracle, créée par l'environnement très technologique des USI, peuvent affecter le jugement et par conséquent, la prise de décision. Des facteurs comme la connaissance préalable du patient, la relation avec les professionnels de la santé, la qualité de vie du patient, la relation entre les membres de la famille et les croyances, valeurs et caractéristiques personnelles du proche semblent aussi influencer la façon dont les décisions sont prises. Trois thèmes sont proposés pour mieux comprendre le processus de prise de décision par les proches: obtention de l'information requise, remémoration de la perception du proche et intégration d'une décision qui fait sens. Ces facteurs doivent être considérés par l'infirmière lors de l'implication de proches dans le processus décisionnel qui vise à assurer l'autonomie et le respect aux droits du patient dans le contexte des USI.

Références

- Abbott, K.H., Sago, J.G., Breen, C.M., Abernethy, A.P., & Tulsky, J.A. (2001). Families looking back: one year after discussion of withdrawal or withholding of life-sustaining support. *Critical Care Medicine*, 29(1), 197–201.
- Beauchamp, T.L., & Childress, J.F. (2008). *Les principes de l'éthique biomédicale*. Paris: Les Belles Lettres.
- Chambers-Evans, J., & Carnevale, F.A. (2005). Dawning of awareness: The experience of surrogate decision making at the end of life. *The Journal of Clinical Ethics*, 16(1), 28–45.
- Elliott, J., & Olver, I. (2008). Choosing between life and death: Patient and family perceptions of the decision not to resuscitate the terminally ill cancer patient. *Bioethics*, 22(3), 179–189.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Un traumatisme crânien cérébral sévère : 1001 traitements

Luc-Etienne Boudrias, M.Sc. CSI(c) et Sébastien Touchette,
B.Sc. CSI(c), Montréal, QC

En 2010, plus de 190 000 personnes ont subi un traumatisme crânien cérébral (TCC) au Canada. D'ailleurs, les TCC restent l'une des principales causes de mortalité chez les personnes de 45 ans. L'objectif principal du traitement demeure depuis toujours la prévention des lésions secondaires telles que : l'hypoxie, l'œdème cérébral et l'hypertension intracrânienne (HTIC). Conséquemment, le monitoring intracrânien possède toujours une place importante dans l'identification, le suivi et la détermination du traitement de ces complications. Depuis quelques années, il est possible d'observer une émergence d'avenues thérapeutiques où l'approche individualisée semble se démarquer. Dans cette présentation, il sera question de la physiopathologie de la lésion cellulaire (au niveau biomoléculaire), l'autorégulation, les différents types de lésions cérébrales ainsi que les traitements actuels. Enfin, il sera question des perspectives d'avenir et de la recherche en matière de TCC sévères.

Références

- Albano, C., Commandante, L., & Nolan, S. (2005). Innovations in the management of cerebral injury. *Critical Care Quarterly*, 28(2), 135-149.
- Bernard, F. (2012). *Guide de gestion de l'hypertension intracrânienne*, [Brochure]. Montréal, Hôpital Sacré-Cœur de Montréal.
- Brain Trauma Foundation. (2007). Guidelines for the management of severe traumatic brain injury (3rd edition). *Journal of Neurotrauma*, 24, s1-106.
- Cecil, S., Chen, P.M., Callaway, S.E., Rowland, S.M., Adler, D.E., & Chen, J.W. (2011). Traumatic brain injury: Advanced multimodal neuromonitoring from theory to clinical practice. *Critical Care Nurse*, 31(2), 25-36.
- Rose, J.C., & Mayer, S.A. (2004). Optimizing blood pressure in neurological emergencies. *Neurocritical Care*, 1(3), 287-299.

L'environnement de travail des infirmières des USI

Myriam Breau, RN, Moncton NB

But : Déterminer dans quelle mesure l'empowerment et l'environnement de travail (ET) prédisent la satisfaction au travail, l'intention de quitter et la qualité de soins chez les infirmières des USI.

Problématique : La littérature scientifique indique que les infirmières travaillent dans des milieux plutôt malsains (1). Les études récentes démontrent que les ET malsains contribuent à l'insatisfaction au travail, au roulement (2) et à la prestation de soins inefficace (3). L'ET des USI est exigeant, bruyant et chaotique. La rétention de ces infirmières qualifiées est donc très importante, surtout que les projections indiquent que le nombre de patients en soins critique doublera d'ici à 2026(4). La création d'environnement de travail sain devrait favoriser le recrutement et la rétention de ces infirmières ainsi qu'améliorer la qualité de soins.

Méthodologie : Un échantillon de 533 infirmières a répondu à un sondage en ligne. Ce sondage évaluait la perception des infirmières de l'empowerment, l'environnement de travail, la satisfaction au travail, l'intention de quitter et la qualité de soins ainsi qu'une section portant sur les données sociodémographiques.

Résultats : Notre étude indique que les infirmières perçoivent leur environnement de travail comme modérément sain et elles ont des bonnes relations professionnelles avec les médecins. Seulement 6 % des infirmières sont généralement très satisfaites avec leur environnement de travail. Le leadership de la gestionnaire était fortement relié à toutes les dimensions de l'environnement de travail. De plus, la satisfaction au travail est prédite par l'empowerment et l'environnement de travail.

Conclusion : L'ET des infirmières des USI est modérément sain. Nos résultats indiquent que l'environnement de travail peut être amélioré en mettant l'accent sur les facteurs modifiables tels le leadership de l'infirmière gestionnaire, en favorisant les relations avec les médecins ainsi qu'en assurant la dotation adéquate de personnel infirmier

Références

- Aiken, L.H., Sloane, D.M., Bruyneel, L., Van Den Heede, K., & Sermeus, W. (2013). Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *International Journal of Nursing Studies*, 50(2), 143-153.
- Aiken, L.H., Sloane, D.M., Clarke, S., Poghosyan, L., Cho, E., Yu, L., Finlayson, M., ... Aunguroch, Y. (2011). Importance of work environments on hospital outcomes in nine countries. *International Journal of Quality in Health Care*, 23(4), 356-364.
- Laschinger, H.K.S., Leiter, M., Day, A., & Gilin, D. (2009). Workplace empowerment, incivility and burnout: Impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management*, 17(3), 302-311.
- Fischer, A., Baumann, A., Hunsberger, M., Blythe, J. & Fitzpatrick, L. (2008). *The production of critical care nurses: A collaborative evaluation of critical care nursing education in Ontario*. Health Human Resources Series Number 8. McMaster University.

Augmentative and Alternative Communication: Helping the “Communication Vulnerable” Patients in Critical Care

Fiona Campbell, SLP, and Jennifer Burch Gill, OT, Hamilton, ON

The Augmentative and Alternative Communication (AAC) service offered in critical care at this hospital has been modelled on the direct AAC service in the ICU model developed by John Costello for the Boston Children’s Hospital (Costello, 2010). A pilot project was started in August 2011 to introduce an AAC service to the “communication vulnerable” patients in critical care and to measure the impact on the patient population. Research has been carried out to measure whether AAC interventions change patients’ perspectives of their Quality of Communication Life (Paul et al., 2005).

The service has dedicated AAC staff who work at this acute hospital site on three ICU wards, a burn trauma unit, and two medical wards (receiving patients with neurological and spinal cord injuries) with integration to patients by the critical care nurses on those wards. The AAC staff consist of a part-time SLP, OT and CDA and they have an extensive loan bank of high-tech, low-tech and graphic materials. Critical care was chosen as the area of focus because the use of AAC with this population is critical to their participation in decisions about treatment, discharge, asking questions about care, explaining symptoms, communicating concerns/fears/discomforts or planning for end of life. In addition, AAC has a vital role to play in social closeness with loved ones and caregivers. The ICU is a high-technology and high-touch care environment. Thus, it lends itself to interventions that range from low-tech graphic picture books to high-tech eye tracking devices.

During this presentation the research outcomes and patient stories will illustrate the impact of this service in critical care, and these will also facilitate discussion and questions about using AAC to support the “communication vulnerable” to also help patients participate in end of life discussions. Attendees will also be able to view all of the specific materials developed for multicultural populations.

References

- Costello, J.M., Patak, L., & Pritchard, J. (2010). Communication vulnerable patients in the pediatric ICU: Enhancing care through augmentative and alternative communication. *Journal of Pediatric Rehabilitation Medicine*, 3(4), 801–806.
- Divi, C., Koss, R.G., Schmaltz, S.P., & Loeb, J.M. (2007). Language proficiency and adverse events in US hospitals: A pilot study. *International Journal for Quality in Health Care*, 19(2), 60–67.
- Etchels, M., MacAulay, F., Judson, A., Ashraf, S., Ricketts, I., Walter, A., ... Shearer, A. (2003). ICU-Talk: The development of computerized communication aid for patients in ICU. *Care of the Critically Ill*, 19, 4–9.
- Hertig, R., & Downey, D. (2008). *Augmentative and Alternative Communication in Acute and Critical Care settings*. San Diego, CA: Plural Publishing Inc.
- Paul, D., Frattali, C., Holland, A., Thompson, C., Caperton, C., & Slater, S. (2005). *Quality of Communication Life Scale*. Rockville, MD: American Speech-Language Hearing Association.

Citrate Versus High flow for Continuous Renal Replacement Therapy (CRRT) in Critically Ill Patients: What Method Best Suits Our ICU

Sarah Carriere, BSN, RN, and Kevin Carriere, RN, Brackendale, BC

Anticoagulation during CRRT is the preferred method for renal replacement therapy at our institution. Sufficient anticoagulation performance is associated with filter longevity, increased therapy time, reduced nursing time for filter changes, less blood loss, and reduced cost. Patients are either treated on a standard CRRT citrate or CRRT high flow order sets, depending on their admission diagnosis and coagulation screen.

Anecdotal feedback from critical care staff stated that since the preference and introduction of citrate CRRT, they feel they are able to efficiently run high-flow CRRT with no difference in filter longevity, and that there is a significant decrease in workload, laboratory use and decreased reporting of adverse events.

To date, there is an abundance of literature examining citrate versus heparin CRRT or heparin versus no anticoagulation CRRT. However, there is no evidence on examining citrate versus high flow.

We, therefore, seek to collect data to determine the association of (1) citrate versus high-flow CRRT in critically ill patients, and (2) factors associated with filter longevity, laboratory costs, workload, and reportable adverse events in both groups. The study design will be a retrospective cohort study of 100 patients treated with CRRT in 2013 within 24 hours of admission to the ICU.

Our theory is that a patient treated on high-flow CRRT can have a similar filter life as a patient treated with citrate, but is associated with lower laboratory costs, reduced nursing workload, and fewer reportable adverse events compared to those treated with citrate.

We aim to support our current practice with evidence-based research specific to our patient population, move towards patients only being treated on high-flow CRRT and, ultimately, reduce patient adverse events, nurse workload and improve patient care and quality.

References

- Kossman, R.J., Gonzales, A., Callan, R., & Ahmad, S. (2009). Increased efficiency of hemodialysis with citrate dialysate: A prospective controlled study. *Clinical Journal of the American Society of Nephrology*, 4(9), 1459–1464.
- Kramer, L., Bauer, E., Joukhadar, C., et al. (2003). Citrate pharmacokinetics and metabolism in cirrhotic and non-cirrhotic critically ill patients. *Crit Care Med*, 31(10), 2450–2455.
- Oudemans-van Straaten, H.M., Kellum, J.A., & Bellomo, R. (2011). Clinical review: Anticoagulation for continuous renal replacement therapy – heparin or citrate? *Critical Care*, 15(202). Retrieved from <http://ccforum.com/content/15/1/202>

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

- Tan, H.K., Baldwin, I., & Bellomo, R. (2000). Continuous venovenous hemofiltration without anticoagulation in high risk patients. *Intensive Care Med*, 26, 1652–1657.
- Tobe, S.W., Aujla, P., Walelle, A.A., Oliver, M.J., Naimark, D.M., Perkins, N.J., & Beardsall, M. (2003). A novel regional citrate anticoagulation protocol for CRRT using only commercially available solutions. *Journal of Critical Care*, 18(2), 121–129.

Beyond Expectations: Fostering Nursing Leadership in Critical Care by Integrating Excellence in Mentorship and Preceptorship

Leigh Chapman, BA(Hons), MScN, RN, and Andrea Bodnar, BA, BSN, MSN/ED, RN, Toronto, ON

Preceptorship and mentorship roles are often blurred in everyday practice despite their definitional differences (Jackson, McCloughen, & O'Brien, 2006). While preceptorship is defined as a finite teaching and learning relationship used to support students and new staff in clinical settings (Stewart & Krueger, 1996), mentorship is considered a long-term relational process focused on professional development and career advancement (CNA, 2004). Although these terms saturate the literature, there is a paucity of evidence to describe the evolution of preceptorship experiences into mentoring relationships and vice versa, especially in critical care nursing practice. The authors hypothesize that reciprocity of these relationships and their temporal evolution is a new leadership phenomenon worthy of further examination.

This presentation will explore the progression of a preceptorship experience that occurred between a registered nurse and nursing student in a critical care unit at an academic health sciences centre. The positive learning experience resulted in the student being hired to work as a new graduate in the same unit. The subsequent evolution of a decade-long mentoring relationship and its outcome will be described. The outcome of this reciprocal relationship was beyond expectations: a role-reversal in which the preceptee, now a strong nurse leader, became a preceptor for her mentor.

There is an urgent need to foster nursing leadership and educate critical care nurses to take on new roles to address current and future needs. Thus, a re-examination of traditional boundaries between preceptor and mentor roles is needed. The reciprocal nature of such relationships is one success strategy for building

critical care nursing leadership and human health resource capacity. The experience of two critical care nurse leaders' role reversal suggests that obfuscation of preceptorship and mentorship roles is more beneficial to the nursing profession than formerly considered.

References

- Canadian Nurses Association (2004). *Achieving excellence in professional practice: A guide to preceptorship and mentoring*. Ottawa, ON: Author.
- Jackson, D., McCloughen, A., & O'Brien, L. (2006). Positioning mentorship within Australian nursing contexts: A literature review. *Contemporary Nurse*, 23(1), 120. Retrieved from <http://www.contemporarynurse.com/>
- Stewart, B., & Krueger, L. (1996). An evolutionary concept analysis of mentoring in nursing. *Journal of Professional Nursing*, 12(5), 311–321. Retrieved from <http://www.professionalnursing.org/>

A Call For Action: Preventing Catheter-Acquired Urinary Tract Infections (CAUTI) in Pediatric Intensive Care

Annie Chevrier, MSc(A), RN, CMSN(C), Elaine Doucette, MSc(N), RN, Kathryn Jones, BScN U2, Audrey Michaud, BScN, U2, Teodora Pecingina, BScN, U2, Estelle Simon, BScN, U2, Montréal, QC

The use of urinary catheters in the pediatric intensive care unit (PICU) is a frequent phenomenon. Unnecessary catheterization often increases the risk of complications in children suffering from critical illnesses. Catheter-acquired urinary tract infections (CAUTI) are the third most frequent nosocomial infections in the PICU (Stockwell, 2007). They are associated with higher mortality and morbidity rates, resistance to bacterial infections, and increased lengths of stay, as well as an increase in health care expenditures (Rosenthal et al., 2012). Evidence-based guidelines for the appropriate use of urinary catheters and their required maintenance has not been widely disseminated nor implemented in most critical care settings (Rosenthal et al., 2012).

Few studies have explored CAUTIs in the pediatric critical care population, and the role of prevention and implementation of measures that can potentially reduce the complications related to these nosocomial infections (Navaeifar & Rezaei, 2013). Pediatric critical care nurses have had little to guide this practice, yet the implications and high infection rates warrant an immediate call for action. Bray and Sanders (2006) examined best practices for catheterization in the PICU, and the use of protocols associated with the care and maintenance of this intervention, revealing improved outcomes for these patients.

The goal of this presentation is to demonstrate the need for rigorous and evidence-based practices for urinary catheterization in the PICU. Comparing the evidence-based guidelines with current practices will serve to highlight potential discrepancies, heighten awareness, and facilitate the dissemination of best practice guidelines to provide safe and high-quality care while optimizing patient outcomes in the PICU.

References

- Bray, L., & Sanders, C. (2006). Nursing management of paediatric urethral catheterisation. *Nursing Standard*, 20(24), 22–28.
- Navaeifar, R.M., & Rezai, S.M. (2013). Device-associated nosocomial infection in children. *J Pediatr Rev*, 1(2), 26–41.
- Rosenthal, V.D., Ramachandran, B., Dueñas, L., Álvarez-Moreno, C., Navoa-Ng, J.A., Armas-Ruiz, A., ... & Dursun, O. (2012). Findings of the International Nosocomial Infection Control Consortium (INICC), part I: Effectiveness of a multidimensional infection control approach on catheter-associated urinary tract infection rates in pediatric intensive care units of 6 developing countries. *Infection Control and Hospital Epidemiology*, 33(7), 696–703.
- Stockwell, J.A. (2007). Nosocomial infections in the pediatric intensive care unit: Affecting the impact on safety and outcome. *Pediatric Critical Care Medicine*, 8(2), 21–37. 10.1097/01.PCC.0000257486.97045.D8

Should we Rethink the Use of Epinephrine in Cardiac Arrest?

Michelle Cleland, MSN(c), RN, CCN(C), CNCC(C), CNN(C), Toronto, ON

Epinephrine has been considered one of the foundations of advanced cardiac life support since the first course was designed in 1973. It is the first drug you see characters calling for in the movies and on television when a patient has a cardiac arrest. No one has thought to question its utility in cardiac arrest management until recently. How can we question what is thought to be the most important cardiac arrest drug we give patients? Does epinephrine improve return of spontaneous circulation? Does it improve cardiac arrest patients' hospital admission rates? Does epinephrine improve patients' hospital discharge rates? Most importantly, does epinephrine help to preserve patients' neurologic function? This presentation will look at the previous and more recent published evidence regarding the use of epinephrine in adult cardiac arrest. Some of the results may surprise you.

References

- Hagihara, A., Hasegawa, M., Abe, T., Nagata, T., Wakata, Y., & Miyazaki, S. (2012). Prehospital epinephrine use and survival among patients with out-of-hospital cardiac arrest. *JAMA*, 307, 1161–68.
- Jacobs, I.G., Finn, J.C., Jelinek, G.A., Ozer, H.F., & Thompson, P.L. (2011). Effect of adrenaline on survival in out-of-hospital cardiac arrest: A randomized double-blind placebo-controlled trial. *Resuscitation*. <http://dx.doi.org/10.1016/j.resuscitation.2011.06.029>
- Koscik, C., Pinawin, A., McGovern, H., Allen, D., Media, D.E., Ferguson, T., ... & Swor, R. (2013). Rapid epinephrine administration improves early outcomes in out-of-hospital cardiac arrest. *Resuscitation*, 84(7), 915–20. doi:10.1016/j.resuscitation.2013.03.023. Epub 2013 Mar 22.
- Nakahara, S., Tomio, J., Takahashi, H., Ichkawa, M., Nishida, M., Morimura, N., & Sakamoto, T. (2013). Evaluation of pre-hospital administration of adrenaline (epinephrine) by emergency medical services for patients with out of hospital cardiac arrest in Japan: Controlled propensity matched retrospective cohort study. *BMJ*. <http://dx.doi.org/10.1136/bmj.f6829>
- Olasveengen, T.M., Sunde, K., Brunborg, C., Thowsen, J., Steen, P.A., & Wik, L. (2009). Intravenous drug administration during out-of-hospital cardiac arrest. *JAMA*, 302, 2222–29.

End-of-Life Care in the ICU: Creating Nursing Clinical Practice Guidelines

Sarah Crowe, MN, RN, CNCC(C), and Kim McFarlane, BsN, MA, RN, Surrey, BC

ICU care traditionally focuses on curative treatment; but there is an increasing awareness of the key role palliative and comfort care play. Through a review of recent literature on end-of-life care and withdrawal of life-sustaining therapies in the intensive care unit, four themes emerged: the challenges of making the decision to withdraw life-sustaining therapies, the barriers to providing good end-of-life care, factors that support good end-of-life care, and specific guidelines for the withdrawal of life-sustaining therapies. Using this information, a framework for creating clinical nursing practice guidelines for the withdrawal of life-sustaining therapies was suggested, along with an example of a potential bedside checklist.

References

- Attia, A.K., Abd-Elaziz, W.W., & Kandeel, N.A. (2012). Critical care nurses' perception of barriers and supportive behaviors in end-of-life care. *American Journal of Hospice & Palliative Medicine*, 30(3), 297–304.
- Efstathiou, N., & Clifford, C. (2011). The critical care nurse's role in end-of-life care: Issues and challenges. *British Association of Critical Care Nurses*, 16(3), 116–123.
- Jensen, H.I., Ammentorp, J., Johannessen, H., & Ording, H. (2013). Challenges in end-of-life decisions in the intensive care unit: An ethical perspective. *Bioethical Inquiry*, 10(1), 93–101.
- Nelson, J.E. (2006). Identifying and overcoming the barriers to high-quality palliative care in the intensive care unit. *Critical Care Medicine*, 34(11 Suppl.), S324–S331.
- Rocker, G., & Dunbar, S. (2000). Withholding or withdrawal of life support: The Canadian Critical Care Society position paper. *Journal of Palliative Care*, 16, S53–S64.

Cardiomyopathy Code Blue...

Then There Were Two

Lissa Currie, BN, RN, CNCC(C), and Tannis Sidloski, BN, RN, CNCC(C), Winnipeg, MB

Pregnancy should be an exciting and happy time. This can dramatically change when a pregnant woman experiences extreme fatigue and becomes short of breath. It is life altering when her echocardiogram shows a large left ventricle and cardiomyopathy. With critical thinking, complex therapies and compassion, our team showcased our culture of integrating excellence into patient care.

In the adult intensive care unit, we are prepared to expect the unexpected. Our multidisciplinary team works well together. In all the days we have cared for critically ill patients, we never anticipated that we would care for an unstable young pregnant woman who had cardiomyopathy. Our multidisciplinary team expanded and now included labour and delivery, and the neonatal intensive care staff. We never anticipated an obstetrical code blue.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

This presentation will cover the pathophysiology of peripartum cardiomyopathy, including the increased hemodynamic burden of pregnancy and its associated complications, using a case study. We will discuss the devastating impact of peripartum cardiomyopathy on the lives of the mother and family.

References

- Carson, M. (2013). *Peripartum cardiomyopathy*. Retrieved from <http://emedicine.medscape.com/article/153153-overview>
- Givertz, M. (2013). Peripartum Cardiomyopathy. *Circulation Journal of the American Heart Association*, 127, e662–e626. Retrieved from: <http://circ.ahajournals.org/content/128/16/e240.full.pdf+html>
- Johnson-Coyle, L., Jensen, L., & Sobey, A. (2012). Peripartum cardiomyopathy review and practice guidelines. *American Journal Critical Care*, 21(2), 89–98.
- Stergiopoulos, K., Shiang, E., & Bench, T. (2011). Pregnancy in patients with pre-existing cardiomyopathies. *Journal of the American College of Cardiology*, 58, 337–349. doi:10.1016/j.jacc.2011.04.014
- Twomley, K., & Wells, G. (2010). Peripartum cardiomyopathy: A current review. *Journal of Pregnancy*, 2010, 1–5. doi:10.1155/2010/149127

“In the moment”—Supplemental Education Tools Provide “Just-in-time” Clinical Support

Maria Teresa (Tessa) Diston, BScN, RN, CNCC(C), and Karen Wannamaker, BSc, RN, CNCC(C), Toronto, ON

In order to integrate the latest evidence into practice, we must embrace the fundamentals of adult learning. We need to recognize differences in learning styles and provide opportunities for engagement in learning through a variety of modalities. Learners should have the opportunity to learn through their preferred style and educators should develop specific learning activities that reinforce each style. This may mean that, as educators, we need to step out of our own comfort zone and seek out novel approaches.

Results from the recently published PROSEVA Trial show a 50% absolute mortality benefit in patients with severe Acute Respiratory Distress Syndrome (ARDS) who receive proning therapy. In our medical surgical intensive care unit (MSICU) our data suggest that we have one to two patients per month who meet the new criteria for this therapy. Our focus, as educators, became translation of this new evidence into practice at the bedside. We began with didactic education sessions

reviewing pathophysiology and introducing the new ARDS definition and treatment algorithm. Journal club was another venue to review the latest evidence in more detail. Simulation labs provided a forum for hands-on practice and to discuss the rationale, as well as the revised policy and procedure for proning. While these traditional methods are valuable, a gap was identified, as the teams still needed just in time support immediately prior to moving the patient to the prone position.

A review of the literature identified that supplemental videos enhance clinical skills. Thus began our steep learning curve, as we developed skills as writers, producers, directors and marketers in the mysterious world of film. Six videos were produced outlining key steps in the proning procedure.

The team now has access to written, audio and visual supports in the moment. This multimodal approach meets the needs of a diverse group of learners. From the aural to the kinesthetic, these methods meet the needs of all.

References

- Cardoso, A.F., Moreli, L., Braga, F.T., Vasques, C.I., Santos, C.B., & Carvalho, E.C. (2012). Effect of a video on developing skills in undergraduate nursing students for the management of totally implantable central venous access ports. *Nurse Education Today*, 32(6), 709–13.
- Duncan, I., Yarwood-Ross, L., & Haigh, C. (2013). YouTube as a source of clinical skills education. *Nurse Education Today*, pii:S0260-6917(12), 00410-8. doi:10.1016/j.nedt.2012.12.013.
- Guérin, C., Reignier, J., Richard, J.C., Beuret, P., Gacouin, A., Boulain, T. ... Ayzac, L. (2013). Prone positioning in severe acute respiratory distress syndrome. *New England Journal of Medicine*, 368, 2159–2168. doi:10.1056/NEJMoa1214103
- Maloney, S., Storr, M., Paynter, S., Morgan, P., & Ilic, D. (2013). Investigating the efficacy of practical skill teaching: A pilot-study comparing three educational methods. *Advances in Health Sciences Education*, 18(1), 71–80.
- Mehrpour, S.R., Aghamirsalim, M., Motamedi, S.M., Larijani, F., & Sorbi, R. (2013). A supplemental video teach tool enhances splinting skills. *Clinical Orthopaedics and Related Research*, 471(2), 649–54.

Maternal Brain Death and Pregnancy

Ann Doll, RN, and Elizabeth McMullen, RN, Victoria, BC

Prolongation of pregnancy in maternal brain death is, fortunately, a rare occurrence. Our adult intensive care unit was presented with the immense challenge of caring for a 32-year-old, brain-dead patient in her twenty-second week of gestation. With only 30 published cases, resources were limited.

The challenges of caring for the medically unstable brain-dead patient were familiar to our staff, but caring for an unborn fetus in this environment was both daunting and rewarding. Decisions needed to be made, ethical dilemmas surfaced and a devastated family required continuous emotional and educational support.

Nurses, physicians, educators, physiotherapists, occupational therapists, respiratory therapists, social workers and the chaplain collaborated to form a multidisciplinary team dedicated to creating care plans and protocols in order to support the family,

the brain-dead mother and to sustain the viability of her unborn fetus. A multi-level delivery plan was developed in conjunction with the intensive care, operating room, labour delivery and neonatal intensive care units' staff. We committed to providing excellent end of life care for the family, as they faced the reality of saying goodbye in order to say hello to a new life.

Our case study will present the patient's and her unborn child's journey from admission to delivery. We will explore and share how one family coped with such a tragedy, discuss the emotional and intellectual challenges our team faced and examine the ethical dilemmas we wrestled with.

At the time of this abstract submission the patient continues to be maintained and her unborn child is nearing 27 weeks gestational age.

References

- Catlin, A.J., & Volat, D. (2009). When the fetus is alive but the mother is not: Critical care somatic support as an accepted model of care in the twenty first century? *Critical Care Nursing Clinical North America*, 21(2), 267–76. doi:10.1016/j.ccell.2009.01.004
- Dickens, B. (2011). Brain death and pregnancy: FIGO committee for the ethical aspects of human reproduction and women's health. *International Journal of Gynecology and Obstetrics*, 115(1), 84–85. Retrieved from <http://www.journals.elsevier.com/international-journal-of-gynecology-and-obstetrics/>
- Esmailzadeh, M., Dictus, C., Kayvanpour, E., Sedaghat-Hamedani, F., Eichbaum, M., Hofer, S., ... Ahmadi, R. (2010). One life ends, another begins: Management of a brain-dead pregnant mother-A systematic review. *BMC medicine*, 8(1), 74.
- Said, A., Amer, A.J., Massood, U.R., Dirar, A., & Faris, C. (2013). A brain-dead pregnant woman with prolonged somatic support and successful neonatal outcome: A grand rounds case with a detailed review of literature and ethical considerations. *International Journal of Critical Illness Injury and Science*, 3(3), 220–224. doi:10.4103/2229-5151.119205

Mental Health: Is it Critical? Evidence-Based Practice for Patients with Mental Illness in a Critical Care Setting

Elaine Doucette, MSc(N), RN, Annie Chevrier, MSc(A), RN, Melanie Gauthier, MSc(N), RN, Maude Bellemare, BScN, U2 Student, Ismahane Ghersi, BScN, U2 Student, David Olmstead, BScN, U2 Student, Clarice Poirier, BScN, U2 Student, Sasha Selby, BScN, U2 Student, Montréal, QC

Mental illness affects one in four people worldwide and approximately 7.5 million people in Canada (Zolnierrek, 2009; Smetanin et al., 2011.). The estimated cost of health care for this population is approximately \$14 billion annually (Smetanin et al., 2011). Research has demonstrated that individuals diagnosed with a mental health illness are more likely than those in the general population to experience complications from other existing co-morbid conditions, such as diabetes, COPD, and cardiovascular disorders (Dickey, Normund, Weiss, Drake, & Azena, 2002; Leucht, Burkard, Henderson, Maj, & Sartorius, 2007).

Nurses in critical care settings are often required to care for patients with both mental and serious physiological life-threatening illnesses. However, the knowledge and skills to care for individuals with a mental health illness are often perceived to be out of the realm of their critical care competencies. Other factors that may contribute to this situation are personal beliefs and biases towards mental illnesses (Bone & Smith, 2012).

At present, few studies have focused on evidence-based practice (EBP) for patients with mental illnesses in the context of critical care, leaving clinicians with little guidance for implementing nursing interventions that will optimally address the complex needs for these individuals and their families.

The goal of this presentation is to provide insight about the experiences of critical care nurses having cared for patients with co-morbid mental illnesses. We will discuss their perspectives on what constitutes evidence-based holistic care for the mentally ill patient during a life-threatening illness.

The role of critical care nurses and the evidence-based care they provide to this vulnerable population during an acute illness episode is pivotal in ensuring that these patients have the best possible outcomes.

References

- Bone, Y., & Smith, G.B. (2012). Critical care nursing and delirium management in the mentally ill client. *Critical Care Nursing Clinics of North America*, 24(1), 101–104.
- Dickey, B., Normund, S.T., Weiss, R.D., Drake, R.E., & Azena, H. (2002). Medical morbidity, mental illness, and substance use disorders. *Psychiatric Services*, 5, 861–867.
- Leucht, S., Burkard, T., Henderson, J., Maj, M., & Sartorius, N. (2007). Physical illness and schizophrenia. *Acta Psychiatrica Scandinavica*, 116, 317–333.
- Smetanin, P., Stiff, D., Briante, C., Adair, C.E., Ahmad, S. and Khan, M. (2011). *The life and economic impact of major mental illness in Canada: 2011–2041*. Mental Health Commission of Canada.
- Zolnierrek, C.D. (2009). Non-psychiatric hospitalization of people with mental illness: Systematic review. *Journal of Advanced Nursing*, 65, 1570–1583.

Risk Factors for Unplanned Extubations in the Pediatric Intensive Care Unit

Belinda Dundon, MN, RN, Kusum Menon, MD, MSc, Betty Lou Twolan, RRT, and Salman Alshammari, MD, Ottawa, ON

Background: An unplanned extubation is a potentially life-threatening event associated with complications such as laryngeal/tracheal injury or spasm, pulmonary or cardiac failure, increased length of mechanical ventilation, and increased PICU length of stay. Therefore, eliminating unplanned extubations is of paramount importance.

Objective: To identify modifiable risk factors associated with unplanned extubations in a tertiary care pediatric intensive care unit.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Methods: A three-year retrospective safety audit was carried out at a tertiary care pediatric hospital for the years of 2010 to 2013. Eighteen unplanned extubations were reported through the hospital safety reporting system. Additional information surrounding the unplanned extubation events was collected using a data tracking tool designed for this audit.

Results: A total of 18 unplanned extubations were reported over a three-year period. Of these, eight children required re-intubation. Fourteen of the 18 children were less than nine months of age. Seven of the 18 children were difficult airway cases. Nine of the 18 children experienced an unplanned extubation during a bedside intervention. In seven of the 18 children, discussions surrounding a planned extubation occurred in the 24 hours prior to the unplanned extubation. Inadequate sedation was subjectively associated by the bedside nurse with unplanned extubations.

Conclusion: This preliminary quality assurance project revealed a significant number of risk factors for unplanned extubations, the most common being age less than nine months, followed by bedside interventions. Validation of these findings in a bigger population, as well as research into preventative measures for unplanned extubations, is warranted.

References

- daSilva, L., & de Carvalho, W. (2010). Unplanned extubation in pediatric critically ill patients: A systematic review and best practice recommendations. *Pediatric Crit Care Med*, *March 2010*(11), 287–294. doi:10.1097/PCC.0b013e3181b80951
- King, J.N., Elliott, V.A. (2012). Self/unplanned extubation: Safety, surveillance, and monitoring of the mechanically ventilated patient. *Crit Care Nurs Clin North Am.*, *24*(3), 469–79. doi:10.1016/j.ccell.2012.06.004. Epub 2012 Jul 11.
- Kurachek, S.C., Newth, C.J., Quasney, M.W., Rice, T., Sachdeva, R.C., Patel, N.R., ... Lindgren, B. (2003). Extubation failure in pediatric intensive care: A multiple-center study of risk factors and outcomes. *Critical care medicine*, *31*(11), 2657–2664.
- Marcin, J., Rutan, E., Rapetti, P., Brown, J., Rahnamari, R., & Pretzlaff, R. (2005). Nurse staffing and unplanned extubations in the pediatric intensive care unit. *Pediatric Crit Care Med*, *2005*(6), 254–257.
- Sadowski, R., Dechert, R., Bandy, K., Juno, J., Bhatt-Mehta, V., Custer, J., Moler, F., & Bratton, S. (2004). Continuous quality improvement: Reducing unplanned extubations in a pediatric intensive care unit. *Pediatrics*, *2004*(114), 628–632.

Responding Ethically When Asked “What would you do?”

Marie Edwards, PhD, RN, Winnipeg, MB

At a recent education event, a former patient expressed puzzlement at the perceived reluctance of the people caring for her in an intensive care unit (ICU) to respond to the question: “What would you do if you were faced with these treatment decisions?” Such questions may be posed by critical care patients themselves or by their family members (e.g., parents or a spouse or partner), particularly in the face of a difficult decision. There is a small but growing body of literature exploring health care providers’ approach to requests for advice or “professional recommendations” (Baylis & Downie, 2001, p. 20). In the pediatric literature, the focus has been on the question: “What would you do if this were your child?” (Kon, 2006; Truog, 1998). Meyer, Lamiani, Rosenthal, and Truog (2012) have argued that the “current consensus is that parents deserve a response; the issue for practitioners is no longer whether, but how to answer the question” (p. e375). While less has been written about such questions in adult care settings, the issue may be the same: how ought we to respond? Underlying how we think about such questions are concerns regarding therapeutic boundaries, power differentials, possible undue influence, and the potential imposition of one’s values on another (Baylis & Downie, 2001; Canadian Nurses Association, 2008). In this presentation, the literature related to professional recommendations will be summarized. In addition, the challenges associated with these sorts of questions in critical care settings will be explored and strategies for developing ethical responses to such questions will be considered.

References

- Baylis, F., & Downie, J. (2001). Professional recommendations: Disclosing facts and values. *Journal of Medical Ethics*, *27*, 20–24.
- Canadian Nurses Association. (2008). *Code of ethics for registered nurses*. Ottawa: Author.
- Kon, A. (2006). Answering the question: “Doctor, if this were your child, what would you do?” *Pediatrics*, *118*(1), 393–397. doi:10.1542/peds.2005-2655
- Meyer, E., Lamiani, G., Rosenthal, M., & Truog, R. (2012). “What would you do if this were your child?”: Practitioners’ responses during enacted conversations in the United States. *Pediatric Critical Care Medicine*, *13*(6), e372–e376. doi:10.1097/PCC.0b013e31825b84e2
- Truog, R. (1998). “Doctor, if this were your child, what would you do?” *Pediatrics*, *103*, 153–154.

An Integrated Approach to Service Excellence

Alison Eichler, RN, and Lisa Parker, RN, Toronto, ON

Rouge Valley Health System (RVHS) consists of two sites (Centenary Site and Ajax and Pickering Site), each with an intensive care unit (ICU). The new leadership approach to integration and standardization reinforces practice changes that integrate knowledge, competencies and a culture of service excellence across the organization. Implementation of evidence-based practice recommendations further support quality and safe care delivery.

To date, acute respiratory distress syndrome (ARDS) continues to result in devastating complications for patients in critical care (Dirkes, Dickinson, Havey, & O'Brien, 2012; Meade, Cook, Guyatt, Slutsky, Arabi, et al., 2008; Pelosi, Brazzi & Gattinoni, 2002). Previous trials involving proning of ARDS patients failed to show therapeutic significance. However, more recent studies reported significant reduction in patient mortality and improved outcomes (Dirkes, Dickinson, Havey, & O'Brien, 2011; Guérin, Reignier, Richard, Beuret, Gacouin et al., 2013; Harcombe, 2004).

In collaboration with the inter-professional team, the RVHS ICUs committed to the implementation of a proning protocol for ARDS patients. Literature search was completed, environmental scan performed, and information reviewed with staff. Discussions resulted in the allocation of resources for a structured, safe and supportive rollout plan consisting of order set and policy development that standardized our approach to ARDS patient management. Collaboration with internal partners was completed that ensures patient and staff safety in the clinical application of the proning protocol.

The integrated approach for the management of ARDS patients culminated in a two-week education rollout that targeted all staff. To validate success in service excellence culture integration, an evaluation process will follow. Analysis of the evaluation results may identify future opportunities for quality improvement that will continue to promote a culture of integrated excellence.

References

- Dirkes, S., Dickinson, S., Havey, R., & O'Brien, D. (2012). Prone positioning: Is it safe and effective?. *Critical Care Nursing Quarterly*, 35(1), 64–75. doi:10.1097/CNQ.0b013e31823b20c6
- Guérin, C., Reignier, J., Richard, J., Beuret, P., Gacouin, A., Boulain, ... Ayzac, L. (2013). Prone positioning in severe acute respiratory distress syndrome. *The New England Journal of Medicine*, 2013(368), 2159–2168. doi:10.1056/NEJMoa1214103
- Harcombe, C. (2004). Nursing patients with ARDS in the prone position. *Nursing Standard*, 18(19), 33–39. doi:10.7748/ns2004.01.18.19.33.c3529
- Meade, M., Cook, D., Guyatt, G., Slutsky, A., Arabi, Y., Cooper, D. ... Stewart, T. (2008). Ventilation strategy using low tidal volumes, recruitment maneuvers, and high positive end-expiratory pressure for acute lung injury and acute respiratory distress syndrome. *Journal of American Medical Association*, 299(6), 637–645. doi:10.1001/jama.299.6.637
- Pelosi, P., Brazzi, L., & Gattinoni, L. (2002). Prone position in acute respiratory distress syndrome. *European Respiratory Journal*, 20, 1017–1028.

La fin de vie dans les USI : les pistes de solutions organisationnelles, professionnelles et émotionnelles des infirmières

Diane Francoeur, M.Sc.(c), inf., Céline Gélinas, Ph. D., inf., Marie-Anik Robitaille, M.A., Lise Fillion, Ph. D., inf., Québec, QC

Contexte : L'évolution technologique, le développement des connaissances et l'augmentation des facteurs de comorbidité entraînent une augmentation de la clientèle dans les unités

de soins intensifs (USI). La mort frappe et les infirmières sont confrontées à des deuils multiples dans un contexte difficile. Au pays, chaque année 235,217 personnes meurent. Même si la plupart des gens expriment le désir de mourir chez eux, la majorité, soit 66,6 %, décèdent dans les hôpitaux. Dans la province visée par cette étude, la proportion augmente à 84,9%. Un constat s'impose, on meurt en USI et l'intégration des soins palliatifs (SP) de fin de vie tarde à se faire.

Objectif : Cette étude vise à décrire les pistes de solutions proposées par les infirmières pour optimiser la gestion des SP en fin de vie dans un contexte d'USI.

Méthode : Un devis qualitatif descriptif a été utilisé pour cette étude. Au total, 42 infirmières de 5 centres hospitaliers ont participé à 10 groupes de discussion. Les pistes de solutions ont été regroupées selon trois catégories : organisationnelle, professionnelle et émotionnelle.

Résultats : Les pistes de solutions prioritaires au niveau organisationnel incluent le développement d'une approche en SP de fin de vie dans les USI et la modulation du travail des infirmières en fonction de soins mixtes (i.e., curatifs et palliatifs). Quant aux principales pistes de solutions professionnelles, l'amélioration de la communication avec le patient et la famille ainsi que la collaboration interprofessionnelle ont été ciblées. Enfin, la gestion de la souffrance et des deuils multiples représente une piste de solution prioritaire au niveau émotionnel.

Discussion : Les résultats de cette étude sont cohérents avec plusieurs pistes de solutions soulevées par la recension des écrits. Les pistes de solutions identifiées par les infirmières de cette étude permettent d'envisager l'intégration des SP de fin de vie d'une manière tangible.

Références

- Angus, D.C., Barnato, A.E., Linde-Zwirble, W.T., Weissfeld, L.A., Watson, R.S., Rickert, T., ... Robert Wood Johnson Foundation ICU End-of-Life Peer Group. (2004). Use of intensive care at the end of life in the United States: An epidemiologic study*. *Critical Care Medicine*, 32(3), 638–643.
- Christakis, N.A., & Lamont, E.B. (2000). Extent and determinants of error in doctors' prognoses in terminally ill patients: Prospective cohort study. *British Journal of Nursing*, 320, 469–473.
- Gross, A.G. (2006). End-of-life care obstacles and facilitators in the critical care units of a community hospital. *Journal of Hospice & Palliative Nursing*, 8(2), 92–102.
- Kirchhoff, K.T., & Beckstrand, R.L. (2000). Critical care nurses' perceptions of obstacles and helpful behaviors in providing end-of-life care to dying patients. *American Journal of Critical Care*, 9(2), 96–105
- Losa Iglesias, M.E., Pascual, C., & Becerro de Bengoa Vallejo, R. (2013). Obstacles and helpful behaviors in providing end-of-life care to dying patients in intensive care units. *Dimensions of Critical Care Nursing*, 32(2), 99–106.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Nursing Care of the Pediatric Population with Thoracic and Abdominal Injury

Sara-Claude Gilbert, BN, RN, CNCCP(C), Montréal, QC

Children suffering from thoracic and abdominal injuries often require care in a pediatric intensive care unit (PICU). In this presentation, I will start by describing the different types of thoracic and abdominal injuries and their statistical incidence in the pediatric population. The pediatric population is special because of its specific anatomy, its developmental stages, and its psychology, which influence the mechanism of injury, the clinical assessment, and the severity of the patient's condition following a traumatic incident. The literature on the subject suggests that surgical intervention is often the treatment of choice for both thoracic and abdominal injuries. However, patient outcome also depends on early recognition of thoracic and abdominal injuries, as well as the prevention of the possible complications requiring adequate nursing knowledge and skills in caring for this patient population. This presentation will aim at providing knowledge to develop these skills. The thoracic injuries discussed in this presentation will include rib fractures, pneumothoraces, hemothoraces, pulmonary and cardiac contusions, and their complications as they are the most common relevant injuries seen in the PICU population. The abdominal injuries looked at will consist of splenic, hepatic and renal injuries. The monitoring (including somatic NIRS monitoring), the issues in nursing care, family support and prevention will be addressed.

References

- Hazinski, M.F. (2013). *Nursing care of the critically ill child*. St-Louis, MO: Elsevier.
- Lee, L.K., & Schonfeld, D. (2012). Blunt abdominal trauma in children. *Emergency and Critical Care Medicine*, 24(3), 314–318.
- Moloney-Harmon, P.A., & Czerwinski, S.J. (2003). *Nursing care of the pediatric trauma patient*. St-Louis, MO: Saunders.
- Slota, M.C. (Ed.). (2006). *Core curriculum for pediatric critical care nursing*. St-Louis, MO: Saunders.
- Tovar, J.A. (2008). The lung and the pediatric trauma. *Seminars in Pediatric Surgery*, 17(1), 53–59.

The Development of Functional Data Tracking and Research Tools: A Practical Guide to Aid in Research and Quality Improvement

Alana Harrington, PhD (ABD), MSC, HBSC, Ellen Lewis, RN, Mary Mustard, MN, CCN(C), CNCC(C), NP-adult, Mark Kataoka, MD, FRCP(C), Toronto, ON

Health care involves a diverse set of data collection systems that in turn are used by nurses, physicians, management, researchers and other allied professionals. For hospitals particularly, staff are responsible for data collection and reporting through internal channels, information that typically centres on process and patient outcomes. With external organizations such as Safer Healthcare Now! data reporting and tracking quality initiatives, improvements are becoming a vitally important part of the healthcare process. The development of a data collection method surrounding care and processes allow staff and managers to clearly determine what changes need to be made and which initiatives require sustainability planning. A variety of tools and data collection methods are imperative to ensure the consistency and the quality of the data and information collected.

This talk will use practical examples to discuss methods for the development, and sustainability of the data collection process for research, reporting and quality improvement initiatives in health care. Practical uses will be highlighted through examples that include the development of novel tools, using administrative and clinical data, and data linkage systems. This focus would allow for strategic decision making to be implemented using evidence ensuring that changes are rooted in a practice of excellence.

References

- Bauer, J.C., & Polakoff, P.L. (2007). The growing importance of data in healthcare. *Executive Briefing & Exchange*, 3(2), 1–2. Retrieved from <http://www.jeffbauerphd.com/EWHBauer.pdf>
- Rhodes, J., & Ferrara, L. (2012). *The Global Institute for Emerging Healthcare Practices: Transforming healthcare through better use of data*. Retrieved from http://www.csc.com/health_services/insights/80497transforming_healthcare_through_better_use_of_data
- Safer Healthcare Now. (2012). *Who we are*. Retrieved from <http://www.saferhealthcarenow.ca/EN/about/WhoWeAre/Pages/default.aspx>

Rapid Response Team: Initial Phases and Implementation within a Small Urban Pediatric Health Centre

Kailee Joudrie, BScN, RN, Joanne Gallant, BSc, BScN, RN, Emily Bales, BHSc, RRT, and Christine Donnelly, RN, Halifax, NS

Rapid response teams (RRT) are composed of specialized health care professionals who deliver high acuity care to the bedside of inpatients experiencing a significant deterioration in clinical status (Massey, Aitken, & Chaboyer, 2010; Wolf, 2007). The structure of the RRT varies between hospitals, but the common competencies include the ability to provide critical care outside of the ICU via: 1) obtaining central venous access, 2) providing advanced airway management, and 3) the prescription and delivery of medications and diagnostic therapies (Van Voorhis & Willis, 2009). The ultimate goal of the RRT is to improve quality of care and health outcomes through the reduction of morbidity and mortality (Massey, Aitken, & Chaboyer, 2010; Safer Healthcare Now! The Quebec Campaign, 2009).

According to a 2007 survey, one hundred and thirty six pediatric hospitals in Canada and the United States of America currently have RRTs (Winberg, Nilsson & Aneman, 2008). At the present time, a small tertiary pediatric health centre in Canada has not yet implemented a RRT despite active care delivery to critically ill children. The pediatric health centre of interest is restructuring their pediatric critical care program to achieve excellence and improve their health care delivery. At the heart of this redevelopment is the implementation of a RRT.

Through the use of *Getting Started Kit: Rapid Response Teams How-to Guide* (Safer Healthcare Now! The Quebec Campaign, 2009) and additional literary resources, 10 steps have been developed to implement an RRT. These steps will form the basis of the presentation. Further information to be presented will include; structure and function of the RRT, collected data, benefits of implementation and future recommendations.

The CACCN Dynamics of Critical Care Conference 2014 is an ideal venue to present the current and future works of this group, as they strive towards promoting excellence in their health centre.

References

- Massey, D., Aitken, L., & Chaboyer, W. (2010). Literature review: Do rapid response systems reduce the incidence of major adverse events in the deteriorating ward patient? *Journal of Clinical Nursing*, 19, 3260–3273. doi:10.1111/j.13652702.2010.03394.x
- Safer Healthcare Now! The Quebec Campaign. (2009). *Getting started kit: Rapid response teams how to guide*. Retrieved from <http://www.safehealthcarenow.ca/EN/Interventions/RRT/Documents/RRT%20Getting%20Started%20Kit.pdf>
- Van Voorhis, K., & Willis, T. (2009). Implementing a pediatric rapid response system to improve quality and patient safety. *Pediatric Clinics of North America*, 56, 919–933. doi:10.1016/j.pcl.2009.05.017
- Winberg, H., Nilsson, K., & Aneman, A. (2008). Paediatric rapid response systems: A literature review. *Acta Anaesthesiologica Scandinavica*, 52: 890–896. doi:10.1111/j.13996576.2008.01672.x
- Wolf, Z. (2007). Rapid response team in a pediatric hospital: One nurse's focus on outcomes, quality, and safety. *Pennsylvania Nurse*, 62(3), 22–23. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/18019312>

Fostering Excellence in Communication: Shift to Bedside Nursing Handover to Enhance Patient Safety and Patient Family Partnerships

Sally Kilborn, MSc, BSc, BScN, RN, Toronto, ON

Background: Since the pivotal report *To Err is Human*, a central discourse has asked how to make healthcare safer. Nurses play essential roles keeping patients safe and optimizing outcomes. At change-of-shift report, critical patient information is communicated between nurses. Due to the potential of forgotten or erroneous information transfer, this is a high-risk procedure. Doing nursing handover at the bedside and including patients and families aims to support excellence in communication and the safest possible patient handover.

Purpose: The goal of this quality improvement initiative was to facilitate a shift to bedside nursing handover in a cardiovascular intensive care unit.

Process: A literature review and environmental scan were used to identify existing resources. Using stakeholder engagement and positive deviance to inform the change process, a needs assessment and targeted education were done to engage nurses, identify strengths and barriers. Tools were developed by adapting existing resources and creating novel ones. Pilot testing and rapid-cycle improvement were used to test and modify the process. Feedback was summarized and shared with all nurses to ensure a complete and accurate picture.

Outcomes: In-services were attended by 49% of nurses, and there was a 37% questionnaire response rate. Nurses were provided the opportunity to assist in protocol development. Key concerns were patient privacy, increased time for report, and setting professional boundaries. Several resources were developed, including a toolbox that was made available to assist other nursing units trying to develop bedside handover. Bedside handover or one-to-one debriefing was facilitated with 57% of staff.

Future directions: Unit-wide rollout is scheduled for February 3. Post implementation audits and feedback will be used to assess nursing response. Incident data pre- and post-bedside handover will be examined to see if there are any notable impacts on incidents reported.

References

- British Medical Association (2005). Safe handover, safe patients. National Patient Safety Agency, NHS Modernization Agency. Retrieved from <http://bma.org.uk/search?query=safe%20handover,%20safe%20patients>
- Kohn, L.T., Corrigan, J.M., & Donaldson, M. (Eds.) (1999). *To Err Is Human: Building a Safer Health System*. Washington, DC: National Academic Press, Institute of Medicine.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

National Research Council (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: The National Academies Press.

Rush, S.K. (2012). Bedside reporting: Dynamic dialogue. *Nursing Management*, 40–44.

World Health Organization, (2007). Communication during patient hand-overs. *Patient Safety Solutions*, 1(3), 1–4. Retrieved from <http://www.ccforspatientsafety.org/common/pdfs/fpdf/presskit/PS-Solution3.pdf>

Where are the Zzzzs in ICU? Creating a Culture of Sleep Promotion in the Intensive Care Unit

Katherine Kissel, BScN, RN, ACCN(C), Victoria Bohm, MPH, Rachel Lessoway, BN, RN, Karen Nadeau, BN, RN, CNCC(C), and Melissa Redlich, BN, RN, Calgary, AB

It is well described that patients in intensive care experience sleep deprivation due to physiological changes and the ICU environment (Parthasarathy & Tobin, 2004). Delirium in the intensive care unit is associated with adverse patient outcomes, and sleep has been identified, as a significant modifiable risk factor (Brummel & Girard, 2013). Within the past year, a Calgary-based 10-bed, adult medical-surgical intensive care unit (ICU) has implemented several interdisciplinary protocols to improve delirium care aimed at early mobility, analgesia and sedation management, and earlier extubation. Implementing a night routine to support patients' ability to sleep is the next step in our delirium prevention and management strategy. We plan to share our experience, as we work towards the implementation of a night routine in the ICU.

Obtaining reliable and valid measurements of sleep is challenging. Observational assessment has been shown to overestimate both sleep quantity and quality while physiologic measurement relies on equipment not typically found in the ICU setting (Bourne, Minelli, Mills, & Kandler, 2007).

Both a literature search and an ICU Google group search were completed and no night routines unique to the ICU were noted. From the literature, various potential ways to promote sleep in the ICU were identified; strategies for consideration include the introduction of light cycles, the use of earplugs, masking of background noise via white noise machines, and coordinating interruptions with other members of the interdisciplinary team (Kamdar et al., 2013; Richards, Nagel, Markie, Elwell, & Barone, 2003).

In this presentation, we will report on the development and implementation of a night routine aimed at improving sleep for patients in our ICU. We will also identify areas in which we plan to perform data collection and analysis, in order for our findings to be of benefit to other ICUs in the future.

References

- Bourne, R.S., Minelli, C., Mills, G.H., & Kandler, R. (2007). Clinical review: Sleep measurement in critical care patients: Research and clinical implications. *Critical Care*, 11(4), 226–242.
- Brummel, N.E., & Girard, T.D. (2013). Preventing delirium in the intensive care unit. *Critical Care Clinics*, 29(1), 51–56.
- Kamdar, B.B., King, L.M., Collop, N.A., Sakamuri, S., Colantuoni, E., Neufeld, K.J., ... Needham, D.M. (2013). The effect of quality improvement intervention on perceived sleep quality and cognition in a medical ICU. *Critical Care Medicine*, 41(3), 800–809.
- Parthasarathy, S., & Tobin, M.J. (2004). Sleep in the intensive care unit. *Intensive Care Medicine*, 30(2), 197–206.
- Richards, K., Nagel, C., Markie, M., Elwell, J., & Barone, C. (2003). Use of complementary and alternative therapies to promote sleep in critically ill patients. *Critical Care Nursing Clinics of North America*, 15(3), 329–340.

STEP-Up to Excellence: A Change in Culture in Critical Care

Mary Kobylecky, BScN, RN, CNCC(C), Suzanne Watts, BHSc, PT, Jeanene Luckhardt, DipPT, and Celina Rogers, RRT, Mississauga, ON

In recent years, there has been an increase in documentation citing complications due to prolonged bed rest and heavy narcotic sedation experienced by patients who have survived a stay in critical care. Early mobilization of critically ill patients has become a major focus of interest in the critical care setting. Prolonged bed rest, narcotic sedation, duration of mechanical ventilation, and length of ICU stay are factors that negatively affect patient outcomes. These factors contribute to severe muscle weakness, delirium, post-traumatic stress disorder, impaired exercise capabilities and ambulation. The purpose of this initiative was to develop and implement a progressive four-step mobility program specifically designed for critical care registered nurses. However, respiratory therapists and physiotherapists working in a critical care unit need orientation and education to this mobility program, as it includes an inter-professional team effort to accomplish safety. This initiative is intended to increase awareness about the detrimental effects of prolonged bed rest and heavy narcotic sedation, morbidity and mortality rates of critically ill patients and nursing interventions that will improve overall patient outcomes.

References

- Adler, J., & Malone, D. (2012). Early mobilization in the intensive care unit: A systematic review. *Cardiopulmonary Physical Therapy Journal*, 23(1), 5–13.
- Dang, S.L. (2013). ABCDEs of ICU. *Critical Care Nursing Quarterly*, 36(2), 63–168.
- Hopkins, R.O., & Spuhler, V.J. (2009). Strategies for promoting early activity in critically ill mechanically ventilated patients. *American Association of Critical Care Nurses Advanced Critical Care*, 20(3), 277–289.
- Koo, K.Y., & Fan, E. (2013). ICU-acquired weakness and early rehabilitation in the critically ill. *Journal of Clinical Outcomes Management*, 20(5), 223–31.
- Zanni, J.M., & Needham, D.M. (2010). Promoting early mobility and rehabilitation in the intensive care unit. *PT in Motion*, 2(4), 32–8.

Using the Knowledge to Action Cycle to Improve Delirium Management. From Knowledge, to Action, to Research Informed by Practice

Allana LeBlanc, BSN, RN, CNCC(C), Vininder K. Bains, BSN, RN, CNCC(C), Christina Choung, BSN, RN, and Simmie Kalan, BSN, RN, Vancouver, BC

Delirium in critical illness is associated with higher mortality and long-term cognitive impairment similar to brain injury (Pandharipande et al., 2013). It is an issue that we, like many, have made a priority (Balas et al., 2012; Barr et al., 2013). A few years ago, we implemented a delirium initiative that included an educational intervention along with practice changes such as screening with the Intensive Care Delirium Screening Checklist (ICDSC), and a delirium protocol. While our team developed a greater appreciation for the effects of delirium and early recognition of hypoactive delirium, practice changes were haphazard. A chart audit revealed a 49% compliance with the ICDSC, informal observation indicated delirium rarely being discussed on rounds, and use of the delirium protocol was inconsistent.

Our team of direct-care RNs, informed by the theories of knowledge translation, specifically the knowledge to action cycle (KTA cycle) (Straus, Tetroe, & Graham, 2009), took another approach to delirium. The KTA cycle is an iterative cycle, in which both knowledge creation and translation are integrated together in each step of the process (Straus et al., 2009). Beginning by surveying our unit, we learned that direct care staff was knowledgeable and interested in the problem of ICU delirium; barriers (such as structural, process and communication barriers) impaired our ability to provide care. With little funds, and working off the side of our non-existent desks, we developed creative strategies to address barriers; discovered some unexpected facilitators (i.e., the ICU database; the unit's research team; partnering with other initiatives) and, ultimately, enhanced team engagement.

Nursing work may play the biggest role in the prevention and treatment of delirium, but that impact is under-researched and under-appreciated. It was time to close the KTA loop by creating practice-informed research.

References

- Balas, M.C., Vasilevskis, E.E., Burke, W.J., Boehm, L., Pun, B.T., Olsen, K.M., ... Ely, E.W. (2012). Critical care nurses' role in implementing the "ABCDE bundle" into practice. *Crit Care Nurse*, 32(2), 35–8, 40–7; quiz 48. doi:10.4037/ccn2012229
- Barr, J., Fraser, G.L., Puntillo, K., Ely, E.W., Gélinas, C., Dasta, J.F., ... Jaeschke, R., American College of Critical Care Medicine. (2013). Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. *Crit Care Med*, 41(1), 263–306. doi:10.1097/CCM.0b013e3182783b72
- Pandharipande, P.P., Girard, T.D., Jackson, J.C., Morandi, A., Thompson, J.L., Pun, B.T., ... Ely, E.W. (2013). Long-term cognitive impairment after critical illness. *N Engl J Med*, 369, 1306–1316. doi:10.1056/NEJMoal301372
- Straus, S.E., Tetroe, J., & Graham, I. (2009). Defining knowledge translation. *Canadian Medical Association Journal*, 181(3–4), 165–168. doi:10.1503/cmaj.081229

Development and Utilization of a Cardiac Handover Tool in a Pediatric Intensive Care Unit

Denise MacIntrye, BSc, BScN, RN, CNCCP(C), Kimberly Pellerine, BScN, RN, CNCCP(C), Barb Ellsmere, RN, CNCCP(C), and Catherine Whitelaw, RN, CNCCP(C), Halifax, NS

The transfer of patient care from the OR to the PICU is a crucial time for information exchange. A lot of the information transfer and communication failures at the postoperative phase are deemed to be due to an incomplete handover (Nagpal, Abboudi, Fischler, Schmidt, Vats, Moorthy, et al., 2011).

Use of a structured handover tool has been shown to improve communication between operating room and intensive care staff (Craig, Moxey, Young, Spenceley, & Davidson, 2012). Communication significantly improved with the implementation of a structured handover (Segall, Bonifacio, Barbeito, Rogers, Thornlow, Emery, et al., 2012).

Zavalkoff, Razack, Lavoie and Dancea (2011) report a more complete exchange of critical information without a significant prolongation of the handover duration with the usage of a simple tool. According to a 2012 study, a standardized handover tool equated with a decrease in the loss of patient information, an improved quality of communication and an improvement in patient outcomes after 24 hours (Agarwal, Saville, Slayton, Donahue, Daves, Christian, Bichell, & Harris, 2012).

The goal in our PICU was to develop and implement a comprehensive, face to face handoff tool for use at the bedside in the PICU for patients undergoing heart surgery. The tool was modified and adapted from those currently in use at two other hospitals. This tool was reviewed and approved for usage by the leadership group within our hospital.

The main objective behind the usage of this tool was to streamline the report process that occurred when cardiac surgical patients were transferred from the OR to the PICU. In particular, we wanted to eliminate the numerous small reports given between different groups and, instead, have one comprehensive report that everyone heard at the same time eliminating possible loss of information between various team members.

References

- Agarwal, H.S., Saville, B.R., Slayton, J.M., Donahue, B.S., Daves, S., Christian, K.G., ... Harris, Z.L. (2012). Standardized postoperative handover process improves outcomes in the Intensive Care Unit: A model for operational sustainability and improved team performance. *Critical Care Medicine*, 40(7), 2109–15. doi:10.1097/ccm.0b013e3182514bab
- Craig, R., Moxey, L., Young, D., Spenceley, N.S., & Davidson, M.G. (2012). Strengthening handover communication in pediatric cardiac intensive care. *Pediatric Anaesthesia*, 22(4), 393–0. doi:10.1111/j.1460-9592.2011.03758.x

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

- Nagpal, K., Abboudi, M., Fischler, L., Schmidt, T., Vats, A., Manchanda, C., ... Moorthy, K. (2011). Evaluation of postoperative handover using a tool to assess information, transfer and teamwork. *Annals of Surgery*, 253(4), 831–7. doi:10.1097/SLA.0b013e318211d849
- Segall, N., Bonifacio, A.S., Schroeder, R.A., Barbeito, A., Rogers, D., Thornlow, D.K., ... Mark, J.B. (2012). Can we make postoperative patient handovers safer? A systematic review of the literature. *International Research Society*, 115(1) doi:10.1213/ANE.0b013e318253af4b
- Zavalkoff, S.R., Razack, S.L., Lavoie, J., & Dancea, A.B. (2011). Handover after pediatric heart surgery: A simple tool improves information exchange. *Pediatric Critical Care Medicine*, 12(3), 309–13. doi:10.1097/pcc.ob013e3181fe27b6

The Challenge of an Organ Donor Program: When Professional and Social Responsibilities Meet

Pierre Marsolais, MD intensivist, and Anne-Marie Lagacé, MN, RN, Montréal, QC

Intro: Beside the donor's will, organ donation is subjected to many limiting factors. In 2004, the Department of Health and Human Services published their conclusions. Some of the limiting factors were: resources dedicated to organ donation, access to an intensive care bed, physician's lack of knowledge, access to an operating room and the reality that transplantation disturbs the regular OR schedule.

Method: In response to these needs, a new organizational structure has been established as a pilot project. The main goal is to facilitate the whole process of organ donation from initial hemodynamic support to retrieval. Since June 10, 2013, two intensive care unit beds have always been available (24/7). Within an hour, the potential organ donor (from another hospital or in house) can be transferred to our unit. From that time, an intensivist is at his bedside 24/7 until transferred to the operating room. Also, this intensivist can be reached at all times to counsel physicians from other centres in the difficult task of supporting donors. On a voluntary basis, many health care professionals are "on call", waiting to be mobilized around a potential donor: two critical care nurses, one physician (critical care), two operating room nurses, one respiratory therapist, one pathologist, one pathology technician, one anesthesiologist and one organ and tissue donation nurse.

Result: From now on, all donors have been accepted within the one-hour delay and the operating room has been available, as predicted. Placement rate for the lungs is more than 50%. At this time, 145 organs have been retrieved from 36 donors at Sacré-Coeur Hospital.

References

- Malinoski, D.J., Patel, M.S., Daly, M.C., Oley-Graybill, C., & Salim, A. (2012). The impact of meeting donor management goals on the number of organs transplanted per donor: Results from the United Network for Organ Sharing Region 5 prospective goals study. *Critical Care Medicine*, 40(10), 1–8. doi:10.1097/CCM.0b013e31825b252a
- Meyer, K., Bjork, I.T., & Eide, H. (2012). Intensive care nurses' perceptions of their professional competence in the organ donor process. *Journal of Advanced Nursing*, 68(1), 104–115. doi:10.1111/j.1365-2648.2011.05721.x
- Rech, T.H., Moraes, R.B., Crispim, D., Czepielewski, M.A., & Leita, C.B. (2013). Management of the brain-dead organ donor: A systematic review and meta-analysis. *Transplantation*, 95(7), 966–974. doi:10.1097/TP.0b013e318283298e
- Singbart, K., Murugan, R., Kaynar, A.M., Crippen, D.W., Tisherman, S.A., Shutterly, K., Stuart, S.A., & Simmons, R. (2011). Intensivist-led management of brain dead donors is associated with an increase in organ recovery for transplantation. *American Journal of Transplantation*, 11, 1517–1521. doi:10.1111/j.1600-6143.2011.03485.x
- St. Ledger, U., Begley, A., Reid, J., Prior, L., Mcauley, D., & Black-Wood, B. (2013). Moral distress in end-of-life care in the intensive care unit. *Journal of Advanced Nursing*, 69(8), 1869–1880. doi:10.1111/jan.12053

Endocarditis: More than a Problem of the Heart

Mary Mustard, MN, CCN(C), CNCC(C), NP-adult, and Cara Silva, BN, RN, Toronto, ON

Endocarditis is an infection of the inner lining of the heart, but its impact extends far beyond. Endocarditis can compromise multiple organ systems, including (but not limited to) the heart, brain, spleen, and kidneys. The identification and management of endocarditis begins with early clinical diagnosis. Intensive care nursing care is integral to its timely diagnosis and treatment.

This presentation will examine endocarditis in relation to: the associated anatomy and physiology; clinical assessment findings; diagnostic testing; and, therapeutic options. Integration and consolidation of evidence-based knowledge, through case-based learning strategies, promote the practice of excellence in caring for these complex patients.

References

- American Heart Association. (2007). Prevention of infective endocarditis: Guidelines from the American Heart Association. *Circulation*, 116, 1736–1754. doi:10.1161/CIRCULATIONAHA.106.183095
- American Heart Association. (2005). Infective endocarditis: Diagnosis, antimicrobial therapy, and management of complications. *Circulation*, 111, e394–e434. doi:10.1161/CIRCULATIONAHA.105.165564
- European Society of Cardiology. (2012). Guidelines on the management of valvular heart disease. *European Heart Journal*, 33, 2451–2496. doi:10.1093/eurheartj/ehs109
- Karth, G.D., Koreny, M., Binder, T., Knapp, S., Zauner, C., Valentin, E., ... Siostrzone, P. (2002). Complicated infective endocarditis necessitating ICU admission: Clinical course and prognosis. *Critical Care*, 6(2), 149–154.

- Keynan, Y., Singal, R., Kumar, K., Arora, R., & Rubinstein, E. (2013). Infective endocarditis in the intensive care unit. *Critical Care Clinics*, 29, 923–951. doi:10.1016/j.ccc.2013.06.011
- Sharma, V., Candilio, L., & Hausenloy, D. (2012). Infective endocarditis: An intensive care perspective. *Trends in Anaesthesia and Critical Care*, 2, 36–41. doi:10.1016/j.tacc.2011.11.004

Guideline for Resuscitation in Cardiac Arrest after Cardiac Surgery

Marie Page, MScN, CCN, NP, ACLS-IT, Montréal, QC

The incidence of perioperative cardiac arrest after heart surgery ranges from 0.7% to 2.9%. Remarkably, a relatively good outcome occurs in those suffering a cardiac arrest with 17%–79% of patient surviving to hospital discharge, a far higher proportion than can be hoped for when cardiac arrest occurs in other settings. Recent published protocol-based arrest management guidelines have been shown to significantly decrease the time to adequate resuscitation manoeuvres, including chest reopening, and reduce complications in the conduct of the re sternotomy after cardiac surgery. As many patients may potentially be saved by prompt treatment, caregivers must be well versed in managing cardiac arrests.

References

- Dunning, J., Fabbri, A., Kolh, P.H., Levine, A., Lockowandt, U., Mackay, J., ... Nashef, S.A.M., on behalf of the EACTS Clinical Guidelines Committee. (2009). Guideline for resuscitation in cardiac arrest after cardiac surgery. *European Journal of Cardio-Thoracic Surgery*, 36, 3–28.

Bringing Education Alive: Connecting Theory and Practice with eBooks and iPads

Lara Parker, MSN, RN, Andrea Ford, MSN, RN, Michelle House Kokan, MSN, RN, Petra Davis, BSN, RN, El Ladha, RN, Sarah Desrosiers, BSN, RN, BSN, and Cecilia Baylon, MN RN, Vancouver, BC

The faculty of a Critical Care Nursing Program is challenging the boundaries of critical care nursing education by creating course modules as eBooks and providing them to students on iPads. Used in distance, classroom and clinical learning contexts, this innovative approach helps prepare practice ready nurses by engaging students at higher levels. eBooks enable the integration of multimedia alongside of theory discussions supporting interactive learning, thereby accommodating various learning styles and effectively bridging any potential ‘theory practice gap’. This assists students to develop the highly specialized skills of critical inquiry, clinical decision making, and reflective practice, thus preparing graduates to navigate complex situations in critical care.

Literature identifies many factors that influence the theory practice gap including the learning environment, teaching learning strategies, and curriculum (Swardt et al., 2012). Benner et al. (2010), in calling for transformation of nurse education, recommend the use of technology that fosters

integration of theoretical concepts with clinical practice, while others propose computer-based support (Billings & Kowalski, 2006). Developing and delivering the critical care nursing curriculum, as eBooks and iPads, is consistent with these recommendations, and evaluation data have demonstrated overall positive outcomes.

The need in our current health care system is for practice ready critical care nurses. This presentation describes how eBooks and iPads enhance effective theoretical and clinical preparation of nurses for critical care nursing practice. During this engaging and interactive presentation, participants will experience eBooks from a student’s perspective, allowing them to understand and explore the impact of embedded multimedia and how it supports and engages learners. The role of iPads in providing point-of-care access to information during clinical learning will be highlighted.

References

- Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating Nurses: A call for Radical Transformation*. San Francisco: Jossey Bass.
- Billings, D.M., & Kowalski, K. (2006). Bridging the theory-practice gap with evidence-based practice. *The Journal of Continuing Education in Nursing*, 37(6), 248–249.
- Swardt, H.C., Toit, H.S., & Both, A. (2012). Guided reflection as a tool to deal with the theory-practice gap in critical care nursing students. *Health SA Gesondheid*, 17(1), 591–600.

Family-Centred Care: Aiming for Excellence. Exploring the Past, Present, and Future

Lara Parker, MSN, RN, Vancouver, BC

Across Canada, patients are admitted into critical care units. Each of these patients probably will be accompanied by a distressed family beginning to experience psychological and social alterations due to their loved one’s admission. These families are in crisis, experiencing such phenomena as “role alterations, uncertainty, loss of control, being in an unfamiliar environment, financial constraints, and fear of loss” (Holden et al., 2002, p. 143). A task force for The Society of Critical Care Medicine has coined the term, post-intensive care syndrome-family (PCIS-F) to explain the cluster of complications that families experience.

Family-centred care is the response and essential approach. Family-centred care is “not a singular intervention, but rather a philosophical approach to care that recognizes the needs of patients’ family members” (Henneman & Cardin, 2002, p. 13). It distinguishes family as more than extensions of the patient by placing emphasis on their needs. It involves fostering a relationship and recognizing the importance family presence has on patient’s response to treatment (McLaughlin, 1993). Unfortunately, while family-centred care is the ideal model, it is not delivered consistently.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

This multimedia presentation will engagingly explore family-centred care from its grassroots and current practice. Policy, practice, leadership, assessment tools, and education will be explored including institutions created to support families. Case examples will be presented, boundaries will be explored, known practices will be challenged. This journey will stimulate discussion and reflection, providing vision for the future so that advancements can be made, seeking excellence in family-centred care, as a critical care nurse culture.

Families have described admission to critical care as an emotional roller coaster; we can't take them off, but we can slow it down and make it smoother.

References

- Henneman, E.A., & Cardin, S. (2002). Family centered critical care: A practical approach to making it happen. *Critical Care Nurse*, 22(6), 12–19.
- Holden, J., Harrison, L., & Johnson, M. (2002). Families, nurses and intensive care patients: A review of the literature. *Journal of Clinical Nursing*, 11(2), 140–149.
- McLaughlin, P. (1993). A standard to meet high expectations: assuring quality care for families of intensive care patients. *Professional Nurse*, 9, 170–175.

Multiple Intravenous Infusions: Using Human Factors to Move Research Evidence into Practice

Sonia Pinkney, MHSc, PEng, Mark Fan, MHSc, Andrea Casaano-Piche, MAsc, PEng, Christopher Colvin, MHSc, Caterina Masino, MA, Tony Easty, PhD, PEng, CCE, and Patricia Trbovich, PhD, Toronto, ON

The administration of multiple intravenous (IV) infusions to a single patient is common in critical care environments, and associated with a variety of risks (Cassano-Piché et al., 2012; Health Technology Safety Research Team, 2010; Kane-Gill et al., 2012; Nunnally & Bitan, 2006; Trbovich et al., 2010). In 2013, the Ontario Health Technology Advisory Committee recommended the adoption of 12 evidence-based interventions to reduce the risks associated with this practice. However, implementing these interventions is complex due to various factors, including the number of stakeholders involved (e.g. manufacturers, nursing educators, frontline staff) and limited organizational capacity to adopt innovation. These interventions must be accompanied with practical implementation guidance to promote uptake. To this end, two tools are being developed: a hospital implementation toolkit and an interactive training tool.

Human factors (HF) is a discipline that carefully studies the interaction between people, processes, technologies and environments. It emphasizes repeated cycles of design and evaluation with the stakeholders most affected by the proposed changes. When used to develop implementation tools that will guide change in clinical units, HF ensures that the needs of critical care nurses (among others) are incorporated into the design. This increases the likelihood that these tools will be adopted.

This presentation will use the current efforts in Ontario to improve multiple IV infusion safety, as a case study to show how HF can help build knowledge translation tools. Audience members will:

- Learn what HF is and why it is rapidly becoming common in health care
- How to combine various HF methods (e.g., heuristic analysis, simulation usability tests) to maximize the quality and effectiveness of tools that can support change in clinical units
- Preview the innovative training tools currently in development, and the implementation toolkit that will be piloted in 2014/5

References

- Cassano-Piché, A., Fan, M., Sabovitch, S., Masino, C., & Easty, A. (2012). Multiple intravenous infusions phase 1b: Practice and training scan. [Report]. *Ontario Health Technology Assessment Series*, 12(16), 1–132.
- Health Technology Safety Research Team. (2010). Multiple intravenous infusions phase 1a: Situation scan summary report.
- Kane-Gill, S.L., Kirisci, L., Verrico, M.M., & Rothschild, J.M. (2012). Analysis of risk factors for adverse drug events in critically ill patients*. [Research Support, N.I.H., Extramural Research Support, Non-U.S. Gov't]. *Crit Care Med*, 40(3), 823–828. doi:10.1097/CCM.0b013e318236f473
- Nunnally, M.E., & Bitan, Y. (2006). Time to get off this pig's back? *Journal of Patient Safety*, 2(3), 121–134.
- Trbovich, P.L., Pinkney, S., Cafazzo, J.A., & Easty, A.C. (2010). The impact of traditional and smart pump infusion technology on nurse medication administration performance in a simulated inpatient unit. [Research Support, Non-U.S. Gov't]. *Qual Saf Health Care*, 19(5), 430–434. doi:10.1136/qshc.2009.032839

L'évacuation aéromédicale: quand la culture d'excellence est essentielle!

Nicolas Poissant-Gilbert, BN, Sébastien Gauvreau, RN, Sylvain Lavoie, BScN, RN et Pierre Carrier PSP, Airmédic

En 2011–2012, l'avion-hôpital du gouvernement québécois a participé à plus de 1 800 évacuations aéromédicales d'urgence, en plus de celles effectuées par les entreprises privées. Notre entreprise permet aux communautés en régions éloignées et aux communautés autochtones d'avoir accès à des soins spécialisés malgré le fait qu'elles soient isolées. Lorsque l'attente n'est pas une option, l'évacuation aérienne devient cruciale dans la chaîne de survie. L'évacuation médicale requiert des soins spécialisés, particulièrement parce que le syndrome sérotoninergique ainsi que les 8 stress de vol peuvent influencer l'état de santé du patient. Les infirmiers à bord doivent également réaliser leurs soins dans un espace restreint, là où le matériel et le personnel sont limités. À bord de l'appareil, un leadership

spécifique est nécessaire pour le bien des patients. Compte tenu de l'environnement particulier dans lequel nous donnons nos soins, il est nécessaire pour l'ensemble de l'équipe de promouvoir une culture d'excellence. C'est pourquoi, pour certains types d'évacuations, le pairage infirmier-paramédic est bénéfique. De plus, la formation est très importante et comprend un nombre important d'heures théoriques et pratiques. Avant même de commencer, une expérience pertinente en soins critiques est nécessaire compte tenu que les patients relèvent souvent de l'urgence ou des soins intensifs. Actuellement, aucune réglementation claire n'existe pour régir ce domaine précis, mais des développements en ce sens sont en cours.

Les membres présents aimeraient présenter en quoi consiste réellement le contexte aéromédical du point de vue clinique, éducationnel et de leadership dans notre réalité actuelle. Nous discuterons de notre mode de fonctionnement et de la préparation d'un patient pour une évacuation.

Références

- Arumugam, G.P. (2012). Aeromedical transportation of the critically ill: A review. *Malaysian Society of Anesthesiologists*, 40–44.
- Birmes, P., Coppin, D., Schmitt, L., & Lauque, D. (2003). Syndrome sérotoninergique: une brève analyse. *Canadian Medical Association Journal*, 168(11), 1–5.
- Fédération des médecins omnipraticiens du Québec (2006). Une évacuation médicale dont vous êtes le héros. *Le médecin du Québec*, 41(10), 53–59.
- Flight Safety Foundation (2006). Accumulated stress presents range of health risks. *Human Factors and Aviation Medicine*, 53(1), 1–6.
- MedEvac Foundation International (2006). *Médecine de l'air: Accéder au futur des soins de santé*. MedEvac Foundation International: Alexandria, États-Unis.

Politique de visite à l'unité de soins intensifs pédiatriques : de la philosophie à la mise en œuvre

Sophie Poulin, Chargé d'enseignement, Faculté de sciences infirmières, Université Laval

La philosophie de soins au Centre mère-enfant (CME) du CHU de Québec prône l'approche orientée vers la famille - source de soutien à la personne et une composante centrale de son environnement. Conséquemment, sur les unités de pédiatrie, dont l'unité des soins intensifs pédiatriques (USIPed), le fait d'être peu favorable à la présence de la fratrie auprès de l'enfant hospitalisé ne démontre pas l'arrimage avec cette approche. Le constat des bienfaits de la présence de la fratrie, tant pour l'enfant hospitalisé et pour sa famille que pour l'équipe soignante, renforçait le besoin de proposer un changement à la politique de visites au sein de ces unités. Le but de cette étude est de présenter les étapes d'un projet de transfert des connaissances envisageant l'implantation d'une nouvelle politique de visites dans les USIPed du CME, en ayant comme cadre de référence le modèle conceptuel de Moyra Allen. La première étape a consisté à effectuer une recension des écrits ainsi qu'une revue des politiques de visite existantes dans les centres hospitaliers pédiatriques du Canada, des États-Unis, de l'Europe et de l'Australie. Par la suite, un questionnaire (10 énoncés de principe)

a été complété par 33/40 experts dans le domaine pédiatrique (représentant du comité des usagers, gestionnaires, médecins, travailleurs sociaux, assistantes infirmière-chef, physiothérapeutes). Un consensus a été obtenu à partir de ces réponses ainsi que des données probantes recueillies. Par la suite, une nouvelle politique sur la réglementation des visites aux usagers hospitalisés a été proposée. Sur l'USIPed, les frères et sœurs sont maintenant les bienvenues. Les visites doivent être d'abord planifiées. Un questionnaire de dépistage des infections doit être rempli par les parents puis remis à l'infirmière responsable le jour de la visite. Un feuillet d'information à l'intention des familles accompagne cette nouvelle réglementation (durée et préparation des visites, prévention des infections, nombre de visiteurs et traitement des situations particulières). Pour répondre aux besoins des familles de façon adéquate, l'infirmière doit donner une forme à la philosophie centrée sur la famille. Reconnaître les besoins de la famille et de leur enfant ne suffit pas; la mise en œuvre est nécessaire.

Références

- Beaton, D.E., Bombardier, C., Guillemin, F., & Ferraz, M.B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine (Phila Pa 1976)*, 25(24), 3186–3191.
- Jaarsma, T., Arestedt, K.F., Martensson, J., Dracup, K., & Stromberg, A. (2009). The European Heart Failure Self-care Behaviour scale revised into a nine-item scale (EHFScB-9): A reliable and valid international instrument. *European Journal of Heart Failure*, 11(1), 99–105. doi:10.1093/eurjhf/hfn007
- Macinnes, J. (2013). Relationships between illness representations, treatment beliefs and the performance of self-care in heart failure: A cross-sectional survey. *European Journal of Cardiovascular Nursing*. doi:10.1177/1474515112473872
- Moser, D.K., Dickson, V., Jaarsma, T., Lee, C., Stromberg, A., & Riegel, B. (2012). Role of self-care in the patient with heart failure. *Curr Cardiol Rep*, 14(3), 265–275. doi:10.1007/s11886-012-0267-9
- Oosterom-Calo, R., van Ballegooijen, A.J., Terwee, C.B., te Velde, S.J., Brouwer, I.A., Jaarsma, T., & Brug, J. (2012). Determinants of heart failure self-care: A systematic literature review. *Heart Failure Reviews*, 17(3), 367–385. doi:10.1007/s10741-011-9292-9

L'utilisation de l'écho-guidage à l'urgence pour l'insertion de cathéters intraveineux périphériques par les infirmières

Marie-Audrey Roy, B.Sc.inf., étudiante M.Sc.Inf., inf.clin. Soins Critiques, Geneviève Roch, PhD, inf., Maria Cecilia Gallani, PhD, inf., Université Laval, Québec, QC

L'insertion d'un cathéter intraveineux périphérique est une technique réalisée couramment par les infirmières d'urgence. Certaines particularités physiopathologiques du patient peuvent toutefois contraindre la réalisation de cette technique. La procédure d'écho-guidage pour l'insertion de cathéters intraveineux périphériques a été développée afin de pallier à une difficulté d'accessibilité veineuse. Des études ont démontré

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

que les infirmières initiées à la procédure performant aussi bien pour la cannulation d'un cathéter intraveineux périphérique par écho-guidage que les médecins. Les études portant sur l'introduction de l'écho-guidage dans la pratique se concentrent principalement sur des stratégies de formation des infirmières. Il existe pourtant d'autres stratégies reconnues pour maximiser le transfert des connaissances vers l'adoption d'un changement de pratique qui gagnent à être mobilisées pour pérenniser l'introduction de cette procédure de soins.

But : Élaborer des stratégies visant l'utilisation de l'écho-guidage pour l'insertion de cathéters intraveineux périphériques chez la clientèle adulte par les infirmières d'urgence. Une démarche de gestion de projet, basée sur des données probantes, a été suivie en partenariat avec des infirmières et un médecin de manière à concevoir des stratégies adaptées au contexte hospitalier. Au terme du projet, 4 stratégies de changement de pratique ont été développées et destinées à 4 infirmières d'urgence (formation pratique et théorique, méthode de soins interactive, carte aide-mémoire et évaluation de type ECOS). Suite à la mise en place du projet, 8 autres infirmières d'urgence ont bénéficié d'une séance de formation de 4 h entourant la pratique d'écho-guidage. L'élaboration des différentes stratégies a suscité l'intérêt d'autres unités afin d'initier des infirmières de soins critiques à la procédure d'écho-guidage ainsi qu'a motivé les experts concernés à développer une procédure adaptée pour la clientèle pédiatrique.

Références

- Crowley, M., Brim, C., Proehl, J., Barnason, S., Leviner, S., Lindauer, C., ... Papa, A.M. (2012). Emergency nursing resource: Difficult intravenous access. *Journal of Emergency Nursing*, 38(4), 335–343. doi:10.1016/j.jen.2012.05.010
- Miles, G., Salcedo, A., & Spear, D. (2012). Implementation of a successful registered nurse peripheral ultrasound-guided intravenous catheter program in an emergency department. *Journal of Emergency Nursing*, 38(4), 353–356. doi:http://dx.doi.org/10.1016/j.jen.2011.02.011
- Moore, C. (2013). An emergency department nurse-driven ultrasound-guided peripheral intravenous line program. *Journal of the Association for Vascular Access*, 18(1), 45–51. doi:10.1016/j.java.2012.12.001
- Stone, P., Meyer, B., Aucoin, J., Raynor, R., Smith, N., Nelles, S., ... Grissom, J. (2013). Ultrasound-guided peripheral IV access: Guidelines for practice. *American Nurse Today*, 8(8). http://www.americannursetoday.com/Article.aspx?id=10634&fid=10604
- White, A., Lopez, F., & Stone, P. (2010). Developing and sustaining an ultrasound-guided peripheral intravenous access program for emergency nurses. *Advanced Emergency Nursing Journal*, 32(2), 173. doi:10.1097/TME.0b013e3181dbca70

Fighting the Fog—A Collaborative Approach to Decreasing ICU Delirium

Kimberly Scherr, MN, NP, and Jennifer Barker, RN, CNE,
Edmonton, AB

In January 2012, our ICU joined the Canadian ICU Collaborative on Delirium with the goal of improving care of the critically ill at risk for delirium through the implementation of standardized screening and identification of prevention and management strategies. As part of the collaborative, our interdisciplinary team, which was led by the nurse practitioner, met monthly with other teams across Canada, to develop our delirium strategy. Over the course of 12 months, our team developed and implemented a delirium screening tool; developed an educational program to teach our interdisciplinary team about the importance of delirium prevention and management; developed and implemented an early mobilization protocol as a delirium prevention tool; and reviewed and updated our ICU admission orders to reflect our new delirium strategy. Early outcomes have shown a greater than 90 per cent compliance with delirium screening; a delirium incidence of 35 per cent, which is significantly less than that reported in the literature; and a 50 per cent improvement in number of daily mobilizations. These are significant practice changes that have shown to be important in improving long-term cognitive outcomes of ICU patients. We have almost eliminated the use of narcotic/benzodiazepine infusions in ICU patients, and decreased our overall restraint usage to less than 15 per cent. Despite some initial resistance, our outcomes show that a collaborative team approach can make significant changes to improve quality patient care in a relatively short period of time. A “nurse champion” as change agent is critical in the knowledge translation process, and an advanced practice nurse is perfectly situated in this role to facilitate quality improvement and best practice in the ICU.

References

- Barr, J., Fraser, G., Puntillo, K., Ely, W., Gelinas, C., Dasta, J., ... Jaeschke, R. (2013). Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit: Executive summary. *American Journal of Health-System Pharmacy*, 70, 53–58.
- Davidson, J., Harvey, M., Bemis-Dougherty, A., Smith, J., & Hopkins, R. (2013). Implementation of the pain, agitation, and delirium clinical practice guidelines and promoting patient mobility to prevent postintensive care syndrome. *Critical Care Medicine*, 41(9), S136–145.
- Pandharipande, P., Girard, T., Jackson, J., Morandi, A., Thompson, J., Pun, B., ... Ely, E., BRAIN-ICU Study Investigators. (2013). Long-term cognitive impairment after critical illness. *New England Journal of Medicine*, 369(14), 1306–16.
- Peitz, G., Balas, M., Olsen, K., Pun, B., & Ely, W. (2013). Top 10 myths regarding sedation and delirium in the ICU. *Critical Care Medicine*, 41(9), S46–56.
- Wilcox, M., Brummel, N., Archer, K., Ely, E., Jackson, J., & Hopkins, R. (2013). Cognitive dysfunction in ICU patients: Risk factors, predictors, and rehabilitation interventions. *Critical Care Medicine*, 41(9) S81–98.

Alcohol Withdrawal Syndrome

Tom Scullard, MSN, RN, CCRN, Farmington, MN

Alcohol withdrawal syndrome is a common complication of the critical care patient that can lead to increased morbidity, mortality, and length of stay. Goals of therapy are to alleviate symptoms, prevent further progression, treat underlying comorbidities and plan for long-term rehabilitation. Discussion of this starts with prevalence and populations at risk for alcohol withdrawal. The stages of alcohol withdrawal syndrome are explained including, autonomic hyperactivity, hallucinations, neuronal excitation and delirium tremens. Nursing interventions include recognition of alcohol withdrawal, patient safety and nursing safety. Instruments such as the Clinical Institute Withdrawal Assessment Scale will help the participant grade the patient's severity of alcohol withdrawal. Treatment strategies, symptom triggered regimen and fixed scheduled regimens, and medications used to treat alcohol withdrawal are covered. To integrate these concepts several case studies are presented.

References

- Awissi, D., Lebrun, G., Fagnan, M., & Skrobik, Y. (2013). Alcohol, nicotine, and iatrogenic withdrawals. *Critical Care Medicine*, 41(9), S57–S68. doi:10.1097/CCM.0b013e3182a16919
- Bayard, M., McIntyre, J., Hill, K.R., & Woodside, J. (2004). Alcohol withdrawal syndrome. *American Family Physician*, 69(6), 1443–1450. Retrieved from <http://www.aafp.org/afp/2004/0315/p1443.html>
- Darrouj, J., Pur, N., Prince, E., Lomonaco, A., Spevetz, A., & Gerber, D.R. (2008). Dexmedetomidine infusion as adjunctive therapy. *The Annals of Pharmacotherapy*, 42, 1703–1705. doi:10.1345/aph.1K678
- Hoffman, R.S., & Weinhouse, G.L. (2013). Management of moderate and severe alcohol withdrawal syndromes. *UpToDate*, Retrieved from <http://www.uptodate.com/contents/management-of-moderate-and-severe-alcohol-withdrawal-syndromes>
- Keys, V. (2011). Alcohol withdrawal during hospitalization. *American Journal of Nursing*, 111(1), 40–44. doi:10.1097/01.NAJ.0000393058.86439.9e

The Use of High-Dose Insulin Therapy in Beta-blocker and Calcium Channel-blocker Overdose

Tom Scullard, MSN, RN, CCRN, Farmington, MN

Calcium channel-blocker and beta-blocker overdoses are typically the result of a suicide attempt, unintentional ingestion, medication error such as double dosing, or interaction with another drug. Due to cardiovascular toxicity, including profound hypotension and conduction disturbances, the morbidity and mortality rate associated with overdoses are high. The presentation and treatment of the patient with a calcium channel-blocker or beta-blocker overdose is similar. Characteristic features seen in calcium channel-blocker and beta-blocker and overdose are hypotension, bradycardia, decreased systemic vascular resistance, and cardiogenic shock. Unfortunately, patients are often refractory to standard resuscitation measures. In addition to supportive care, initial interventions include administration of fluids, calcium,

glucagon, atropine, catecholamines, inotropes, and vasopressors. These interventions may not improve hemodynamic parameters enough to guarantee survival of the severely intoxicated patient. Recent experimental data and clinical experience suggest that high-dose insulin therapy may be effective in restoring hemodynamic stability. This presentation will review the initial supportive care of the overdosed patient. The pathophysiology of beta-blockers and calcium channel-blockers and the physiologic changes associated with an overdose will be discussed. The pathophysiology and effects of high-dose insulin will be examined. A case study will be used to demonstrate the use of high-dose insulin therapy and nursing management.

References

- Engbretsen, K.M., Kaczmarek, K.M., Morgan, J., & Holger, J.S. (2011). *Clinical Toxicology*, 49(4), 277–283. doi:10.3109/15563650.2011.582471
- Kerns, W. (2007). Management of the B-adrenergic blocker and calcium channel antagonist toxicity. *Emergency Medicine of Clinics of North America*, 25, 309–331. doi:10.1016/j.emc.2007.02.001
- Lheureux, P.E., Zahir, S., Gris, M., Derry, A.S., & Penaloza, A. (2006). Bench-to-bedside review: Hyperinsulinaemia/euglycaemia therapy in the management of overdose of calcium-channel blockers. *Critical Care*, 10(3). doi:10.1186/cc4938
- Shepherd, G. (2006). Treatment of poisoning caused by β -adrenergic and calcium-channel blockers. *Am J Health-Syst Pharm*, 63, 1828–35. doi:10.2146/ajhp060041

Ventilation: What Every Critical Care Nurse Needs to Know

Teddie Tanguay, MN, NP, RN, CNCC(C), Edmonton, AB

One of the main reasons that patients are admitted to the ICU is the need for mechanical ventilation. There are many advances in mechanical ventilation, increasing the number of ventilation strategies available to help ensure adequate ventilation. The ventilation strategy that is chosen allows us to best ventilate the patients according to their clinical problem whether that is ARDS, or COPD, as examples. To add to this complexity, each ventilator manufacturer has their own individual patented names for ventilation modes. The critical care nurse, as the constant care provider, plays a crucial role at the bedside, as the one who will be able to evaluate whether the patient is receiving the best mode of ventilation in order to expertly navigate this highly technical therapy to ensure excellent practice to deliver quality patient care.

This presentation will include review of the different modes of ventilation, the terminology for those modes and how to assess patient's tolerance through a case study approach. Learning from the presentation will allow the nurse to better understand what are the assessment strategies and critical thinking required to determine the best mode of ventilation for their increasing patient comfort and tolerance to mechanical ventilation.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

References

- Georgopoulos, D., Prinianakis, G., & Kondili, E. (2006). Bedside waveforms interpretation as a tool to identify patient-ventilator asynchronies. *Intensive Care Medicine*, 32(1), 34–47.
- Hess, D.R. (2005). Ventilator waveforms and the physiology of pressure support ventilation. *Respiratory Care*, 50(2), 166–183.
- Kallet, R.H., Campbell, A.R., Dicker, R.A., Katz, J.A., & Mackerzie, R.C. (2005). Work of breathing during lung-protective ventilation in patients with acute lung injury and acute respiratory distress syndrome: a comparison between volume and pressure-regulated breathing modes. *Respiratory Care*, 50(12), 1623–1631.
- Kondili, E., Xirouchaki, N., & Georgopoulos, D. (2007). Modulation and treatment of patient-ventilator dyssynchrony. *Current Opinion in Critical Care*, 13(1), 84–89.
- Modrykamien, A., Chatburn, R.L., & Ashton, R.W. (2011). Airway pressure release ventilation: An alternative mode of mechanical ventilation in acute respiratory distress syndrome. *Cleveland Clinic Journal of Medicine*, 78(2), 101–110.
- Norman, M.A. (2010). Ventilator management in the surgical intensive care unit. *Texas Heart Institute Journal*, 37(6), 681–682.

Blood Prime, What is it?

Why is it? Let's do it!

Ruth Triner, BScN, RN, CNCCP(C), Lori Liske, BScN, RN, and Cecilia Hyslop, M Ed, BScN, RN, BA Gen, CNCCP(C), Toronto, ON

Critically ill infants and children frequently require the addition of continuous renal replacement therapy (CRRT) to their treatment, as a result of acute kidney injury, or for the treatment of conditions such as drug intoxication, tumour lysis syndrome, inborn errors of metabolism or hemolytic uremic syndrome. CRRT is frequently considered the treatment of choice for these children, as they are often unable to compensate for the large fluid shifts seen in conventional hemodialysis, or the increased abdominal pressure seen in peritoneal dialysis.

Preparing the dialysis circuit for treatment requires priming the filter and tubing with a physiologically compatible solution, usually heparinized normal saline, in order to remove air and any remaining sterilization agents. In small infants and children, the initiation of therapy can lead to significant complications of hypotension and inadequate oxygen carrying capacity as a result of hemodilution, as the child's blood is mixed with the priming solution in the extracorporeal circuit.

To prevent the complications associated with hemodilution, circuit priming with blood is recommended for those patients who are less than 10–15 kg and when the circuit is to be connected to extracorporeal membrane oxygenation.

This brief presentation will include a review of the indications for blood prime, potential complications and appropriate interventions to prepare nurses to initiate CRRT therapy for smaller, critically ill pediatric patients. Following the presentation, attendees will have the opportunity to participate in a simulation session, preparing a blood-primed circuit on the Gambro Prismaflex system.

This session is designed to prepare nurses to successfully initiate CRRT therapy using a blood prime for smaller, critically ill pediatric patients with improved confidence and skill.

Thank you Jessica Huck and Frans Richter of Gambro for providing the equipment for simulation.

This presentation will be limited to 20 participants.

References

- Askenzai, D.J., Goldstein, S.L., Koralkar, R., Fortenberry, J., Baum, M., Hackbarth, R., ... Somers, M.J.G. (2013). Continuous renal replacement therapy for children <10 kg: A report from the prospective pediatric continuous renal replacement therapy registry. *Journal of Pediatrics*, 162(3), 587–592.
- Bunchman, T.E., Brophy, P.D., & Goldstein, S.L. (2008). Technical considerations for renal replacement therapy in children. *Seminars in Nephrology*, 28(5), 488–492.
- Gambro Lundia, A.B. (2009). *Continuous renal replacement therapy for low body weight patients*. Retrieved from <http://scribeofegypt.org/wp-content/uploads/2013/07/CRRT-book-for-Low-Weight-Patients.pdf>
- Goldstein, S.L. (2009). Overview of pediatric renal replacement therapy in acute kidney injury. *Seminars in Dialysis*, 22(2), 180–184.
- Pasko, D.A., Mottes, T.A., & Mueller, B.A. (2003). Pre dialysis of blood prime in continuous hemodialysis normalizes PH and electrolytes. *Pediatric Nephrology*, 18, 1177–1183. doi:10.1007/s00467-003-1258-2

Complexity Science: Understanding the Implications for Critical Care Nursing

Ruth Triner, BScN, RN, CNCCP(C), Lori Liske, BScN, RN, and Vera Nenadovic, PhD, NP, Toronto, ON

The critical care environment is a complex adaptive system (CAS), characterized by interconnected individual components, which may interact unpredictably impacting other system components. As a CAS, the critical care unit is dynamic; adapting and evolving over time. Each component of the system is itself a CAS, embedded within another CAS. The nurse is a CAS, functioning in the critical care unit, embedded in a hospital, embedded in the health care system, embedded in a community. Every CAS is dynamic, with changes in one system affecting all connected systems to varying degrees. Changes may be nonlinear, with small changes having large effects or large changes may have small effects.

Critically ill patients require specialized care to support life and respond to changes in condition that can occur at very small time scales. The critical care unit is a dynamic system through which information flows allowing for identification of patient status and timely intervention. Nurses are the primary feedback loop of information exchange and treatment.

Patient physiology has the property of hysteresis, wherein the patient's current state is dependent on that at preceding time points. Thus, seemingly sudden deterioration can be anticipated by clinicians who know the hysteresis. Analysis of streams of physiological data and continuous observation by the bedside nurse provide information on the patient through pattern recognition. Variables that enhance information flow in the nurse-patient feedback loop can improve patient outcomes, while barriers lead to errors and adverse events. Examining the critical care environment from a dynamic systems perspective provides insight into nursing care delivery, prevention of adverse events, and impact on outcomes.

Using a complexity science framework, this presentation examines the dynamic, complex environment of critical care, leading to better understanding of information flow and its impact on patient outcome.

References

- Begun, J.W., Zimmerman, B., & Dooley, K. (2003). Health care organizations as complex adaptive systems. In S.M. Mick & M. Wyttenbach (Eds.), *Advances in health care organization theory* (pp. 253–288). San Francisco: Jossey-Bass.
- Davidson, A.W., Ray, M.A., & Turkel, M.C. (2011). *Nursing, caring, and complexity science: For human-environment well-being*. New York, NY: Springer Publishing Company.
- Ebright, P.R., (2010). The complex work of RNs: Implications for healthy work environments. *The Online Journal of Issues in Nursing*, 15(1). doi:10.3912/OJIN.Vol15No01Man04. Retrieved from <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol152010/No1Jan2010/Complex-Work-of-RNs.html?css=print>
- Henneman, E.A., Gawlinski, A., & Giuliano, K.K. (2012). Surveillance: A strategy for improving patient safety in acute and critical care units. *Critical Care Nurse*, 32(2), e9–e18. doi:10.4037/ccn2012166
- Kirsch, V., VanSell, S., & Grant, R. (2002). Synergy or complexity theory: Which one belongs in the ICU? *ICUs and Nursing Web Journal*, 11, 1–14.

Continuous Renal Replacement Therapy: Adding Complexity to the Nursing Care of the Critically Ill Child

Ruth Trинier, BScN, RN, CNCCP(C), and Cecilia Hyslop, M Ed, BScN, RN, BA Gen, CNCCP(C), Toronto, ON

Acute kidney injury, a common occurrence in the critically ill child, is frequently seen as a result of complications from other disease treatments or processes. Children who require intensive care as a result of sepsis, cardiopulmonary bypass, acute respiratory distress syndrome or inborn errors of metabolism, may develop acute kidney injury requiring prompt intervention to prevent further deterioration. With the gradual removal of fluids and toxins minimizing the hemodynamic

instability seen in more rapid methods of fluid removal, continuous renal replacement therapy is often considered the treatment of choice. Recent developments in equipment for use in lower body weights have addressed the concern of adapting equipment designed and tested in an adult population for pediatric use, however, morbidity and mortality remain high, and complications of therapy are frequent.

Although the treatment plan is initiated and guided by the direction of a physician, the addition of a highly invasive therapy to the nursing care of a critically ill child requires a solid understanding of the critically ill child, continuous renal replacement therapy and the potential for complications. An expert nurse clinician will anticipate, monitor, assess and intervene appropriately to positively impact patient outcomes and minimize complications.

This presentation will include a case-based approach to the nursing care of the critically ill child requiring continuous renal replacement therapy. Scenarios will review the nursing care needs of emergent, life-threatening situations, as well as conditions requiring a prolonged course.

References

- Askenzai, D.J., Goldstein, S.L., Koralkar, R., Fortenberry, J., Baum, M., Hackbarth, R., ... Somers, M.J.G. (2013). Continuous renal replacement therapy for children <10 kg: A report from the prospective pediatric continuous renal replacement therapy registry. *Journal of Pediatrics*, 162(3), 587–592.
- Gambro Lundia, AB. (2009). *Continuous renal replacement therapy for low body weight patients*. Retrieved from <http://scribeofegypt.org/wp-content/uploads/2013/07/CRRT-book-for-Low-Weight-Patients.pdf>
- Hayes, L.W., & Tofil, N.M. (2009). Outcomes of critically ill children requiring continuous renal replacement therapy. *Journal of Critical Care*, 24, 394–400. doi:10.1016/j.jcrc.2008.12.017
- Santiago, M.J., López-Herce, J., Urbano, J., Solana, M.J., del Castillo, J., Ballester, Y., ... Bellón, J.M. (2009). Complications of continuous renal replacement therapy in critically ill children: A prospective observational evaluation study. *Crit Care*, 13(6), R184, 1–11. doi:10.1186/cc8172
- Sutherland, S.M., Zappitelli, M., Alexander, S.R., Chua, A.N., Brophy, P.D., Bunchman, T.E., ... Goldstein, S.L. (2010). Fluid overload and mortality in children receiving continuous renal replacement therapy: The prospective pediatric continuous renal replacement therapy registry. *American Journal of Kidney Diseases*, 55(2), 316–325. doi:10.1053/j.ajkd.2009.10.048

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Intensive Care Nursing in Canada, 1960–2002: Historical Perspectives on Education, Knowledge Development, Technology and Identity

Brandi Vanderspank-Wright, MScN, RN, CNCC(C), Ottawa, ON

Intensive care units (ICUs) began to emerge across Canada during the early 1960s, significantly contributing to the image of Western hospitals as places of scientific advancement that predominated over much of the twentieth century (Wishart, 2001). ICUs quickly flourished, growing in size and number to accommodate diverse patient populations and treatment options. Early ICU nurses played a pivotal role in socially constructing a new and specialized practice identity. The experiences of these early nurses influenced ICU nursing in important and lasting ways. Over time, the development of their knowledge, skills, and, ultimately, expert nursing practice helped to reconcile contemporary debates such as how nurses working in such a highly technological environment could provide a humanized type of care.

From a historical perspective, there is limited research on the development of Canadian ICUs and the nature of nurses' work in this context of care. Therefore, this study used a social history approach with primary sources including oral history interviews, published professional literature, and photographs, to build on previous work specific to the history of ICU nursing (Fairman & Lynaugh, 1998; Zalumus, 1995). This study examined the nature of ICU nurses' work in Canada from 1960 to 2002. Berger and Luckmann's *Social Construction of Reality* provided a lens for analysis and interpretation of primary sources (Berger & Luckmann, 1966). Analysis of the data identified three main themes: ICU nurses' education and learning in the context of developing ICUs, situating technology in ICU nursing practice, and ICU nursing as individual, as well as national identity. Canadian ICU nurses' national identity culminated in the establishment of the Canadian Association of Critical Care Nurses, which played an integral role in the formal recognition of ICU nursing as a specialty practice area.

References

- Berger, P.L., & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin Books.
- Fairman, J., & Lynaugh, J. (1998). *Critical Care Nursing: A History*. Philadelphia, PA: University of Pennsylvania Press.
- Hamilton, D. (2010). *The historical development of intensive care nursing at Vancouver General Hospital*. (Unpublished master's thesis). University of British Columbia, Vancouver.
- Wishart, J.M. (2001). Class difference and reformation of Ontario public hospitals, 1900–1935: "Make every effort to satisfy the tastes of the well-to-do." *Labour/Le Travail*, 48, 27–61.
- Zalumus, J. (1995). *Caring in crisis: An oral history of critical care nursing*. Philadelphia, PA: University of Pennsylvania Press.

Nursing Science and Practice have to be at the Core of a New Health System, Because we know Nursing Care is Effective, it's Affordable and it Makes Sense. The National Expert Commission, 2012

Michael J. Villeneuve, MSc, RN, Mountain, ON

Canada and the United States are both on the cusp of transformational changes across their health systems—driven by steadily climbing costs, a growing gap between population health needs and the services we deliver, and by mediocre outcomes including serious safety concerns across the system. For nurses to meet the needs of a transformed system, experts in both countries have issued battle cries for new models of nursing education, more effective transitions from nursing schools into nursing practice, expanded scopes of practice, and a dramatic overhaul of our approach to safety and quality in all practice settings. Perhaps in no other place in the system is the care more complex than in ICU settings, and nowhere are nurses more critical in the safety chain that must work seamlessly to prevent adverse events including preventable deaths. If we are to create and sustain cultures of excellence, specialty organizations like CACCN should be active and engaged in accelerating the safe transition of *generalist* graduates into a world of highly specialized clinical knowledge where the practice capabilities of all nurses will need lifelong support and testing. In his multi-media presentation today, Mike will harness humour and compelling evidence to encourage us to imagine our place in a new and safer system—and to understand the need for all of us to respond with urgency to the transformation challenges laid down across the continuum of care.

Nuts and Bolts: Brain Tissue Oxygenation Monitoring in the ICU

Grace Walter, BScN, RN, CNCC(C), and Julie Mauceri, RN, Toronto, ON

Traumatic brain injury (TBI) is the leading cause of death and disability in patients ages 1–44. In 2012, 2,043 trauma patients presented to the emergency departments of two major urban trauma centres. One third of all these trauma patients sustained a TBI while three quarters required admission to a Level III ICU. Of these patients admitted to ICU, one quarter died as a result of their injuries.

Upon arrival to the Level III ICU, multi-modal neurological monitoring was implemented by a team of neuro-critical care specialists. Strategies of this monitoring aimed to identify and prevent secondary brain injury to optimize patient outcome and reduce mortality. Secondary brain injury includes impaired cerebral metabolism, hypoxia, and ischemia, which result in a complex, potentially irreversible pathophysiologic cascade of events.

Brain tissue oxygenation monitoring (PbtO₂), through the use of a Licox® intraparenchymal catheter, has become our standard of care for the treatment of severe TBI. The Licox® system allows for continuous measurement of oxygen tension, trending, and management of PbtO₂ values. These levels can provide health care providers with relevant information on regional oxygen supply, demand and cerebral blood flow. Furthermore, practitioners can assess brain tissue oxygen levels and direct medical management towards the goal of reducing secondary brain injury.

This presentation will review basic concepts of secondary brain injury, brain tissue oxygenation and the advantage of multi-modal monitoring systems in the management of severe TBI patients. In addition we will present our standardized approach for managing this patient population using PbtO₂ monitoring.

References

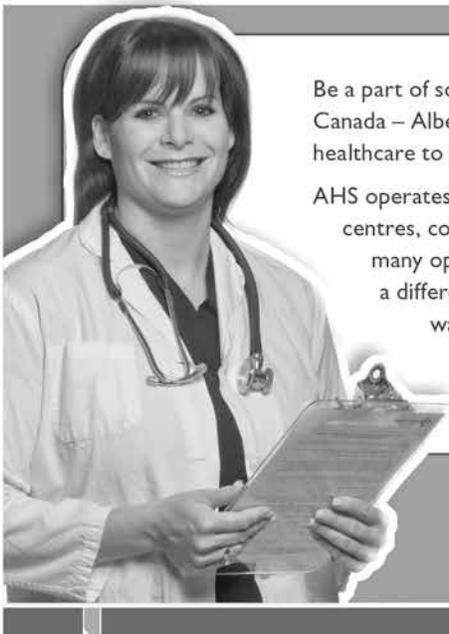
- Bohman, L.E., Heuer, G.G., Macyszyn, L., Maloney-Wilensky, E., Frangos, S., Le Roux, P.D., ... Stiefel, M.F. (2011). Medical management of compromised brain oxygen in patients with severe traumatic brain injury. *Neurocrit Care*, 14, 361–369. doi:10.1007/s12028-011-9526-7
- Brain Trauma Foundation (n.d.). TBI Statistics: Facts About TBI in the USA. Retrieved from <https://www.braintrauma.org/tbi-faqs/tbi-statistics>
- Littlejohns, L.R., Bader, M.K., & March, K. (2003). Brain tissue oxygen monitoring in severe brain injury, I: Research and usefulness. *Crit Care Nurse*, 23, 17–25.
- Littlejohns, L.R., Bader, M.K., & March, K. (2003). Brain tissue oxygen monitoring in severe brain injury, II: Implications for critical care teams and case study. *Crit Care Nurse*, 23, 29–38, 40–2, 44.
- Maloney-Wilensky, E. (2009). Brain tissue oxygen and outcome after severe traumatic brain injury: A systematic review. *Crit Care Med*, 37(6).

ABSTRACTS



CAREER OPPORTUNITIES

Critical Care Nurses



Be a part of something big by joining one of the largest healthcare organizations in Canada – Alberta Health Services. A world-class leader in health, AHS provides healthcare to over 3.9 million Albertans.

AHS operates more than 450 facilities, including acute care hospitals, cancer treatment centres, community health centres, and mental health and addiction facilities. With so many opportunities it's easy to find the perfect place where your skills can make a difference in people's lives and a position that can take your career where you want to go.

We are looking for Pediatric and Adult Critical Care Nurses to join our dynamic teams across the province.

what's your reason?

www.albertahealthservices.ca/careers

For more information email careers@albertahealthservices.ca



DYNAMICS OF CRITICAL CARE 2014

POSTER PRESENTATIONS

Implementation of Evidence-Based Practices: Integrating a Delirium Assessment Tool into Clinical Practice

Karine Allard, RN, Montréal, QC

For decades there has been a direct link between development of intensive care unit delirium and prolonged hospital stays, medical complications, an increase in morbidity and mortality rates, and long-term cognitive impairments. ICU delirium leads to prolonged intubation, a higher use of restraints and sedatives, and a higher incidence of post-ICU syndrome, a condition in which patients suffer from a condition similar to PTSD for several months post-ICU discharge. In 2013 the Society of Critical Care Medicine (SCCM) released their reviewed Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit, which identified the Confusion Assessment Method for the Intensive Care Unit (CAM ICU) as one of the most reliable and valid assessment tools available for detecting the presence of ICU delirium, whether it be hypo-active, hyper-active, or a mixed presentation.

In May 2013, a 22-bed medical/surgical ICU in a large tertiary-care centre had yet to implement a delirium assessment tool and there was a 0% frequency rate in CAM ICU assessment and documentation. In collaboration with a unit-based nursing educator and attending staff physicians' staff education on ICU delirium was initiated with the goal of implementing the use and documentation of the CAM ICU. An initial surveying and education period of two months preceded an official CAM ICU "launch" date, which produced a 4.5% CAM ICU use response. A six-month re-education period, followed by supportive measures, reassessments of staff needs, and alternate implementation approaches led to a 20% increase in frequency of CAM ICU use. Education continues, as efforts are underway to increase the participation to 80% in the next six months.

A poster will present the final results of the project, as well as the barriers involved in implementing evidence-based practices in this intensive care unit, staff response to the tools implementation, and how barriers were overcome.

References

- Barr, J., Fraser, G.L., Puntillo, K., Ely, E.W., Gelinas, C., Dasta, J., ... Jaeschke, R. (2013). Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit. *Critical Care Medicine*, 41(1), 263–306.
- Desai, S., Chau, T., & George, L. (2013). Intensive care unit delirium: An overview. *Critical Care Nursing Quarterly*, 36(4), 370–389.
- Ely, E.W., Margolin, R., Francis, J., May, L., Truman, B., Dittus, R., ... Inouye, S.K. (2001). Evaluation of delirium in critically ill patients: Validation of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). *Crit Care Med.*, 29(7), 1370–1379.
- Pandharipande, P.P., Girard, T.D., Jackson, J.C., Morandi, A., Thompson, J.L., Pun, B.T., ... Ely, E.W. (2013) Long-term cognitive impairment after critical care illness. *New England Journal of Medicine*, 369(14), 1306–1316.
- Van Rompaey, B., Schuurmans, M.J., Shortridge-Baggett, L.M., Truijen, S., & Bossaert, L. (2008). Risk factors for intensive care delirium: A systematic review. *Intensive and Critical Care Nursing*, 24, 98–107.

L'orientation en soins critiques pour l'infirmière novice basée sur l'approche par compétence

Judith Allard, Infirmière clinicienne, France Patenaude, Inf. M.Sc, Sophia Merisier, Inf. M.Sc, Claudia Reuzé Infirmière, clinicienne, Catherine Dieu, Infirmière, Joëlle Jolicoeur, Inf. M.Sc, Nadia Perreault, Infirmière clinicienne, Montréal, QC

Les unités de soins critiques sont confrontées à une pénurie d'infirmières (MSSS, 2008). De ce fait, plusieurs infirmières novices œuvrent sur ces unités. L'infirmière en soins critique, doit évaluer l'état de santé de patients présentant des problèmes de soins complexe (Loi sur les infirmières et les infirmiers). En raison de la complexité des soins à offrir en soins critiques, un programme d'orientation des infirmières novices est nécessaire afin de faciliter leur intégration et assurer la qualité des soins (Baxter, 2011).

Traditionnellement, le programme de formation en soins critiques du centre hospitalier était basé sur l'acquisition de connaissances théoriques et se résumait à trois journées de cours magistraux. Afin de promouvoir l'excellence des soins, nous avons construit et implanté un programme de formation en soins critiques basé sur l'approche par compétence (Tardif, 2006). L'accent est mis sur l'expérience active des apprenantes au moyen d'une variété de stratégies d'apprentissages (Lasnier, 2010). Ainsi, au cours de leur première année de pratique sur l'unité de soins critiques, l'infirmière novice alterne entre des périodes de formation théorique et une application immédiate de ses acquis dans la pratique. Sur l'unité de soins, l'accompagnement des infirmières novices est assuré par une monitrice clinique experte dédiée qui agit à titre de préceptrice. Les infirmières novices bénéficient d'un accompagnement individuel et personnalisé qui permet de faciliter les apprentissages significatifs.

L'évaluation de l'implantation du programme révèle une amélioration du jugement clinique et du leadership des infirmières novices sur l'unité de soins. De plus, nous avons observé une amélioration de l'évaluation de l'état de santé des patients présentant des problématiques complexes ainsi que des soins et des traitements prodigués avec rigueur. Le taux d'attraction et de rétention des infirmières a été améliorés.

Références

- Baxter, P E. (2011). Providing orientation programs to new graduate nurses. *Journal for Nurses in Staff Development*, 26(4), E12-E17. doi:10.1097/NND.0b013e3181d80319
- Lasnier, F. (2000). *Réussir la formation par compétences*. Montréal: Guérin.
- Loi sur les infirmiers et les infirmières, L.R.Q. c. I-8, art. 36.
- Ministère de la santé et des services sociaux (2008). *Table nationale de concertation sur la main d'oeuvre en soins infirmiers*. Québec, Gouvernement du Québec.
- Tardif, J. (2006). *L'évaluation des compétences*. Montréal, Chenelière.

Errors are Part of Being Human, but Should We Accept the Cost of Medication Errors to Patients/Families?

Anita Au, MN, RN, CNCC(C), Barb Duncan, BScN, RN, Nicky Holmes, MN, RN, Barnes Maria, BSc in Phm, RPh, Gurau Dara, RD, Jonathan Russells, RN, and Andre Amaral, MD, Toronto, ON

Ontario hospitals reported that out of 36 adverse events, 10 were fatal due to medication errors (Ubelacker, 2013). One in nine emergency department visits are related to adverse drug events, of which nearly 70% are preventable (ISMP, 2013). Communication factors, drug product confusion and distractions or frequent interruptions were the most-cited reasons given for the critical incidents (ISMP, 2013). Nearly one-fifth of RNs working in Canadian hospitals reported a medication error involving patients in their care over the year (Wilkins & Shields, 2008).

The goal of this project is to examine ways nurses can proactively be involved in the medication management process by decreasing or preventing medication errors from occurring.

To gain baseline data, E-safety reports were examined to identify common medication and fluid errors. However, limitations exist in E-safety reporting because staff perceived them as punitive and time consuming. This, coupled with the lack of incident recognition, results in under-reporting of errors (ISMP Canada, 2014). Thus, RNs' compliance to the present practice guideline was also examined and found RNs were inconsistent performing medication transcription. Significant revisions to the practice guidelines occurred.

Nurses were educated using a multi-model: one-on-one and group in-services, bi-weekly email reminders over two months, and unit posters. The Plan Do Study Act cycle was used to examine the medication error process. Literature search was conducted to find a medication error audit tool. No audit tool was located so one was created and used to review convenience

sample of medication records. An audit was conducted to establish the top four most common process and medication errors. The next phase is to use focus groups to identify possible interventions and solutions. This information is utilized to develop and implement strategies to reduce the incidence of medication errors.

This project is the first place recipient of the Spacelabs Innovative Project Award for 2013-2014.

References

- ISMP (2013). *Health Canada funding announced for Medication Incident Prevention Program*. Retrieved from <http://www.ismp-canada.org/news/index.php>
- ISMP (2013). *In medication errors and risk management in hospitals*. Retrieved from <http://www.ismp-canada.org/Riskmgm.htm>
- Ubelacker, S. (2013, August 20). *Medication errors caused death or severe harm to 36 Ontario patients: Report*. Retrieved from <http://www.ctvnews.ca/health/health-headlines/medication-errors-caused-death-or-severe-harm-to-36-ontario-patients-report-1.1419539>
- Wilkins, K., & Shields, M. (2008). *Correlates of medication error in hospitals*. Retrieved from <http://www.statcan.gc.ca/pub/82-003-x/2008002/article/10565-eng.pdf>

Power Injectable Peripheral Inserted Central Catheters (PICC): East Meets West

Anita Au, MN, RN, CNCC(C), Barb Duncan, BScN, RN, Educational Practice Council Members, Judy Knighton, RN, Karen Smith, MHS, RN, Toronto, ON, and Ellen Riel, BA, RN, CNCC(C), Edmonton, AB

ICU patients usually have intravascular devices in-situ and PICC is more frequently used. Burn patients are at higher risk of coagulation disorders and the risk of infection. Thus, the PICCs are an alternative to the central venous catheters (CVC) since they offer: (1) multiple lines for medications/fluids, (2) hemodynamic monitoring, (3) obtaining blood samples, and (4) injectable port for contrast media with procedures/tests (Pittiruti et al., 2012). In contrast, patients with PICC are not at risk for pleural lung damage, have lesser clinical risk for local hemorrhage/hematoma, and lower risk for infective maintenance complications (Pittiruti et al., 2009).

Comparing PICCs with peripheral intravascular catheter (PIV), the PIVs (1) require frequent changes, (2) are difficult to access due to repeated puncture, and (3) reduce ability to visualize the vessels, due to underlying physical conditions (Frank et al., 2013).

PICCs are used more frequently in ICU, so the hospital policy was reviewed and an absence pertaining to the PICCs was found. In addition, RNs maintain the PICCs, but inserting and discontinuing the lines are deemed advanced competency skills that are delegated to the Vascular Access Team.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

When performing a literature search, questions arise:

1. Do the PICCs need to be flushed when an IV fluid/medication is infusing through it?
2. Is there a minimal infusion rate to keep the catheter patent?
3. Can the initial dressing be the gauze and tegaderm after insertion?
4. How often does the dressing need to be changed?

Literature review is done to ensure adherence to the best practice. The hospital PICCs maintenance procedure is questioned as to whether it is transferable to an ICU setting. A comparison with another hospital in the West with a Burn Centre is done. In sharing information with colleagues, a bridge is formed between the East and West to create a positive culture that builds upon the ICU knowledge.

References

- Frank, R., Wolfson, A., & Grayzel, J. (2013). *Peripheral venous access in adults*. Retrieved from <http://www.uptodate.com/contents/peripheral-venous-access-in-adults>
- Pittiruti, M., Brutti, A., Celentano, D., Pomponi, M., Giasucci, D., Annetta, M.G., & Scoppettuolo, G. (2012). Clinical experience with power-injectable PICCs in intensive care patients. *Critical Care*, 16(1), R21–R27.
- Pittiruti, M., Hamilton, H., Biffi, R., MacFie, J., & Pertkiewicz, M. (2009). ESPEN guidelines on Parenteral Nutrition: Central venous catheters (access, care, diagnosis and therapy of complications). *Clinical Nutrition*, 28, 365–377.

Prepare Patient/Family for Transferring Out of ICU

Anita Au, MN, RN, CNCC(C), Biji Thomas, BScN, RN, Liseth McMillan, BScN, RN, Peggy Escalona, BScN, RN, Barb Duncan, BScN, RN, Nicky Holmes, MN, RN, and Andre Amaral, MD, Toronto, ON

Patient/family exhibits fear, stress, and anxiety when being transferred out of the ICU. This transfer process sometimes is viewed even with dread by both patients and family (Cypress, 2013). However, do they experience more anxiety from being transferred out of ICU versus out of a general ward? Using the State-Trait Anxiety Survey (1983) for three months enabled the generalization that the ICU patients/family experienced similar level of anxiety as the general medical-surgical population.

The next question, then, is what stressors during the transferring process may contribute to the high level of anxiety experienced by the patients/family? To identify the stressors, a modified “Transfer Process Questionnaire” was used with permission (Waning et al., 2005) in asking patients and families. The results of this questionnaire were:

- Lack of proper explanation of medical conditions leading to ward transfer
- Lack of proper information about the receiving unit including, for example, longer nurse response time due to higher nurse-patient ratio or how to contact other health care providers and the need for increased independence
- Lack of de-escalation of ICU care to get patients ward-ready

The post transfer surveys conducted in different wards identified pain control as an issue in the units within 24-48 hours post transfer period from ICU.

To address the above stressors, interventions such as development of a transfer checklist, educating the ICU multidisciplinary team, a patient/family enquiry information sheet, and sharing of information with the receiving ward will be used. These interventions, along with the Transfer of Accountability Form and an information pamphlet, are to be implemented. A post-intervention survey will be used to re-evaluate the effectiveness of these interventions in enabling the patient/family to experience less anxiety upon transferring out of the ICU.

References

- Cypress, B. (2013). Transfer out of intensive care: An evidence-based literature review. *Dimensions of Critical Care Nursing*, 32(5), 244–261.
- Spielberger, C., Gorsuch, R., Lushene, R., Vagg, P., & Jacobs, G. (1983). *State-Trait Anxiety Inventory for Adults (Forms Y1 and Y2)*. Author: Midgard Inc.
- Waning, N., Kleiber, C., & Freyberger, B. (2005). Development and implementation of a protocol for transfers out of the pediatric intensive care unit. *Critical Care Nurse*, 25(3), 50–55.

Speaking from Experience: This was a Septic Shock Puzzle

Marie Aue, BScN, RN, Scarborough, ON

Septic shock is a leading cause of death in hospitals. A search of critical care literature reveals that sepsis is part of a continuum leading to shock and organ failure. Early detection of sepsis and timely treatment improves patient outcome. Experts recommend more communication and understanding of septic shock, as well as access to available resources and treatment to guide management.

The focus of this presentation is to provide experienced and novice nurses with knowledge regarding septic shock and to provide a 2013 update on the guidelines for management of sepsis and septic shock. A collaborative team approach to evidence-based care for the critically ill patient will be discussed.

Discussion and a case study will be used to emphasize the challenges encountered in caring for a patient with septic shock.

References

- Ahrens, T. (2013). Update on sepsis management. *AACN/NTI Conference May 24*.
- Daniels, R. (2011). Surviving the first hours in sepsis: Getting the basics right. *Journal of Antimicrobial Chemotherapy*, 66(2), 11–23.
- Dillinger, R., & Levy, M. (2013). Surviving sepsis campaign: International guidelines for management of sepsis & septic shock: 2012. *Critical Care Medicine*, 41(2), 580–637.
- Kumar, A.D. (2006). Duration of hypotension before initiation of effective antimicrobial therapy is the crucial determinant of survival in human septic shock. *Critical Care Medicine*, 34(6), 1589–1596.
- Paciullo, C., McMahon, H., Hatton, K., & Flynn, J. (2010). Methylene blue for the treatment of septic shock. *Pharmacotherapy*, 30(7), 702–715.
- Rivers, E. (2006). The outcome of patients presenting to the emergency department with severe sepsis or septic shock. *Critical Care*, 10(4), 154.

Perception des infirmières sur l'application de lignes directrices pour le soulagement de la douleur à l'unité de soins intensifs

Dominique Beaulieu, inf. Ph.D., Québec, QC

Introduction : La douleur est un phénomène omniprésent dans les unités de soins intensifs [e.g. 1, 2] pouvant affecter négativement la récupération des patients et prolonger la durée du séjour hospitalier [e.g. 2]. Les sources de douleur sont nombreuses : pathologies sous-jacentes, traitements (ex. chirurgie), soins (ex. mobilisation, aspirations), présence de cathéter (ex. drain thoracique), etc [3]. Il a été démontré que l'application de lignes directrices pour le soulagement de la douleur permet d'en réduire son intensité [e.g. 4]. L'objectif de cette étude visait à identifier les principales croyances des infirmières de soins intensifs à utiliser un algorithme (lignes directrices) pour le soulagement de la douleur aigue.

Méthode : Un questionnaire auto-administré basé sur la Théorie du comportement planifié de Ajzen [5] a été complété par 24 infirmières de soins intensifs. Une analyse qualitative de contenu a permis d'identifier la liste des croyances modales quant aux avantages, désavantages et obstacles à l'application de lignes directrices pour le soulagement aigue.

Résultats : Les principaux avantages perçus par les infirmières en regard de l'application d'un algorithme étaient le sentiment d'une plus grande autonomie professionnelle, la facilité d'utilisation, un meilleur suivi et la facilité d'utilisation. Les principaux désavantages soulevés étaient le temps requis, la rigidité des lignes directrices et l'absence de considération de différentes composantes de la douleur. Les principaux obstacles mentionnés étaient le manque de temps, la crainte des effets secondaires des opiacés (infirmières, médecins, patients), l'inaccessibilité des outils d'évaluation et de l'algorithme, le manque de connaissances et le manque de motivation.

Conclusion : Les résultats ont permis de dégager des recommandations pour faciliter l'application de lignes directrices pour un soulagement optimal de la douleur aux soins intensifs et réduire les conséquences négatives associées.

References

- Ajzen, I. (2002). Constructing a TPB questionnaire: Conceptual and methodological considerations. Retrieved from <http://people.umass.edu/ajzen/pdf/tpb.measurement.pdf>
- Carroll, K.C., Atkins, P.J., Herold, G.R., Mlcek, C.A., Shively, M., Clopton, P., & Glaser, D.N. (1999). Pain assessment and management in critically ill postoperative and trauma patients: A multisite study. *American Journal of Critical Care*, 8(2), 105–117.
- Chanques, G., Sebbane, M., Barbotte, E., Viel, E., Eledjam, J.J., & Jaber, S. (2007). A prospective study of pain at rest: Incidence and characteristics of an unrecognized symptom in surgical and trauma versus medical intensive care unit patients. *Anesthesiology*, 107(5), 858–860.
- Desbiens, N.A., Wu, A.W., Broste, S.K., Wenger, N.S., Connors, A.F., Lynn, J., ... Fulkerson, W. (1996). Pain and satisfaction with pain control in seriously ill hospitalized adults: findings from the SUPPORT research investigations. *Critical Care Medicine*, 24(12), 1953–1961.
- Diby, M., Romand, J.A., Frick, S., Heidegger, C.P., & Walder, B. (2008). Reducing pain in patients undergoing cardiac surgery after implementation of a quality improvement postoperative pain treatment program. *Journal of Critical Care*, 23(3), 359–371.

Integrating Research to Create Excellence in Nursing Practice in CVICU

Sandra Belbeck, BScN, RN, Yue Gao, BScN, RN, Alexandra Juhasz, BScN, RN, Kiok Kim, BN, RN, and Heather Harrington, BScN, RN, CNCC(C), CCN(C), Toronto, ON

Introduction: Integrating research into patient care to optimize patient outcomes and develop a culture of nursing excellence is a goal of our health care team. Research has demonstrated that early extubation following cardiac surgery may decrease the incidence of nosocomial pneumonia, accelerate post-operative recovery and potentially shorten ICU and hospital length of stay. We wanted to incorporate this evidence into the standard nursing practice within our cardiovascular intensive care unit (CVICU).

Purpose: We developed and implemented a quality improvement initiative aimed at early extubation of our post-operative coronary artery bypass grafting (CABG) patients. The goal was to extubate 80% of uncomplicated CABG patients within four hours of admission to the CVICU.

Method: An interprofessional working group had identified patient selection criteria and developed an early extubation algorithm. Nursing assessment and documentation were altered to integrate the algorithm into the standard post-operative care plan and permit data collection. Interprofessional educational sessions were provided, the algorithm was posted in the unit and data collection sheets were provided to the team.

Conclusions: Early extubation has changed the nursing practice within the CVICU. Assessments for extubation eligibility have been integrated into the immediate post-operative care plan. Ongoing data collection will provide the nursing team with validated tools to monitor the post-operative progress of their patients.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

References

- Camp, S.L., Stamou, S.C., Stiegel, R.M., Reames, M.K., Skipper, E.R., Madjarov, J., ... Lobdell, K.W. (2009). Can timing of tracheal extubation predict improved outcomes after cardiac surgery? *HSR Proc Intensive Care Cardiovasc Anesthesia*, 1(2), 39–47.
- Camp, S.L., Stamou, S.C., Stiegel, R.M., Reames, M.K., Skipper, E.R., Madjarov, J., ... Lobdell, K.W. (2009). Quality improvement program increases early tracheal extubation rate and decreases pulmonary complications and resource utilization after cardiac surgery. *Journal of Cardiac Surgery*, 4, 414–423.
- Kiricka, A.K. (2006). Ask the experts. *Critical Care Nurse*, 26, 70–72.
- Raahid, A., Sattar, K.A., Dar, M.I., & Khan, A.B. (2007). Analyzing the outcome of early versus prolonged extubation following cardiac surgery. *Annals of Thoracic Cardiovascular Surgery*, 14(4), 218–223.
- Zhu, F., Lee, A., & Chee, Y.E. (2012). Fast-track cardiac care for adult cardiac surgical patients. *Cochrane Database Syst Rev*, 10.

The Development of a Temporary Cardiac Pacing Program: A Quality Improvement Initiative

Patrick Blute, MN, RN, CNCC(C), Mary Mustard, MN, NP-adult, CCN(C), CNCC(C), and Alana Harrington, HBSc, MSc, PhD (ABD), Toronto, ON

Continuous quality improvement is a vital component within health care today. This is especially true for critical care areas, as timely interventions for critically ill patients are essential. St. Michael's Hospital, in partnership with the University of Toronto Centre for Patient Safety, implemented an Improvement Fellowship to support individuals who would play key roles in quality improvement activities within their clinical areas. The selection of projects was based on sustainability of the improvements within the candidate's work environment.

To that end, a quality improvement initiative developed a protocol and education package that would provide ICU nurses with the authorization to initiate temporary cardiac pacing (TCP) as a delegated controlled act (DCA). The application of TCP can be an important intervention for patients who exhibit sudden symptomatic bradycardia. The timeliness of the application of TCP has the potential to significantly decrease any further deterioration of the post-op cardiac patient, and contributes to improved clinical outcomes. The end goal of this

initiative was to improve the quality and promptness of care delivered in the cardiovascular ICU (CVICU) through the integrating of best practices into the nursing culture. An educational package has been designed to educate, evaluate and authorize CVICU registered nurses. The authorization process includes completion of the learning module, successful completion of a written quiz and demonstration of the skill to a designated staff physician or their delegate in a simulated clinical situation.

This poster will outline the development of this quality improvement initiative, the educational roll out and the methods used to develop the clinical reasoning and problem-solving skills that are aimed to advance and sustain a practice of excellence within the CVICU nursing team.

References

- Curtis, J.R., Cook, D., Wall, R., Angus, D., Bion, J., & Kocmarek, R. (2006). Intensive care unit quality improvement: A "how to" guide for the interdisciplinary team. *Critical Care Medicine*, 34(1).
- Jencks, S., & Wilensky, G. (1992). The health care quality improvement initiative: A new approach to quality assurance in medicine. *JAMA*, 268(7), 900–903.
- Karlowish, C., & Sugarman, J. (2000). Determining when quality improvement initiatives should be considered research: Proposed criteria and potential implication. *JAMA*, 283, 2275–2280.
- Tanaka, H., Okishige, K., Mizuno, T., Kuriu, K., Itoh, F., Shimizu, M., ... Sunamori, M. (2002). Temporary and permanent biventricular pacing via left ventricular epicardial leads implanted during primary cardiac surgery. *Japanese Journal of Thoracic Cardiovascular Surgery*, 50(7), 284–289.
- Varkey, P., Reller, M.K., & Resar, R. (2007). Basics of quality improvement in health care. *Mayo Clinical Protocol*, 82(6), 735–739.

Les autosoins et l'insuffisance cardiaque : une valeur à être ajoutée à la pratique de l'infirmière aux soins critiques

Sophie Boisvert, inf., étudiante à la maîtrise, Julie Francoeur, IPS-Cardiologie, Céline Gélinas, inf., PhD et Cécilia Gallani, inf., PhD, Québec, QC

Il est bien documenté que le manque d'autosoins par le patient atteint d'IC est lié à une mauvaise évolution clinique. Alors il est important que l'infirmière, lors de l'hospitalisation du patient, soit à l'urgence ou à l'unité des soins intensifs, soit en mesure d'évaluer et de quantifier la prise en charge des autosoins par le patient, pour bien cibler ses activités éducatives. Cette étude a pour but de présenter les étapes de l'adaptation culturelle et de la validation de l'échelle "The European Heart Failure Self-care Behaviour Scale-9" (EHFScB-9) pour le contexte québécois. Les résultats de l'évaluation de la fidélité seront présentés ainsi que les résultats préliminaires de l'évaluation de la validité de l'outil. Les étapes préconisées dans la littérature internationale ont été utilisées pour l'adaptation : traduction, backtranslation, évaluation par le comité de juges et prétest. Ensuite, l'outil a été soumis à l'analyse de fiabilité selon les critères de stabilité temporelle (test-retest, dans un intervalle de 7 à 15 jours; n=29

patients; analysé par le coefficient de corrélation intraclasse) et de consistance interne (coefficient alpha de Cronbach). Deux versions des questionnaires sont évaluées. Une, avec le format de réponse équivalente à l'outil original et autre avec le format de réponse en fréquence. Les résultats suggèrent des évidences de fidélité des deux versions de l'échelle et cela selon les critères de stabilité et de consistance interne. Les résultats préliminaires de l'évaluation de la validité auprès de 30 patients seront également présentés. Les résultats préliminaires de notre étude suggèrent évidences de validité, selon le teste des hypothèses. Cette échelle, en bref disponible pour le contexte québécois, pourrait être un outil important à l'infirmière pour guider ses activités éducatives auprès du patient et leur famille, dans le contexte de soins critiques.

Références

- Beaton, D.E., Bombardier, C., Guillemin, F., & Ferraz, M.B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, 25(24), 3186–3191.
- Jaarsma, T., Arestedt, K.F., Martensson, J., Dracup, K., & Stromberg, A. (2009). The European Heart Failure Self-care Behaviour scale revised into a nine-item scale (EHFScB-9): A reliable and valid international instrument. *European Journal of Heart Failure*, 11(1), 99–105. doi:10.1093/eurjhf/hfn007
- MacInnes, J. (2013). Relationships between illness representations, treatment beliefs and the performance of self-care in heart failure: A cross-sectional survey. *European Journal of Cardiovascular Nursing*, 12(6), 536–543. doi:10.1177/1474515112473872
- Moser, D.K., Dickson, V., Jaarsma, T., Lee, C., Stromberg, A., & Riegel, B. (2012). Role of self-care in the patient with heart failure. *Current Cardiology Reports*, 14(3), 265–275. doi:10.1007/s11886-012-0267-9
- Oosterom-Calo, R., van Ballegooijen, A.J., Terwee, C.B., te Velde, S.J., Brouwer, I.A., Jaarsma, T., & Brug, J. (2012). Determinants of heart failure self-care: A systematic literature review. *Heart Failure Reviews*, 17(3), 367–385. doi:10.1007/s10741-011-9292-9

Arrhythmias: At the Heart of Nursing Skills! A Self-directed Multimedia for Nursing Students

Michel Doré, inf. BSc, CSI(C), Cécilia Gallani, PhD, inf., Jean-François Giguère, and Amélie Véronique Dubé, Québec, QC

This communication presents the pedagogical steps utilized in the design of the multimedia “*The Arrhythmias: At the heart of nursing skills!*” planned to support learning and development of the skills of nursing students to interpret an EKG.

A multidisciplinary team including specialized nurses, pedagogues, a graphic designer and computer technicians developed the content and the pedagogical design of the multimedia. The content included concepts of cardiac anatomy and electrophysiology; a description of the normal cardiac rhythm; electrophysiological mechanisms of the arrhythmias, systematic analysis of the EKG and classification; as well as the assessment, the treatment and the appropriate nursing interventions for each type of arrhythmia. This content was organized according to learning objectives. The pedagogical strategies utilized different approaches, emphasizing the inductive method, rich in feedback, facilitating self-learning.

The first stage of implementation consisted of a pretest with students. The tested excerpts were the tutorial concerning the estimating of the heart rate and exercises on the interpretation of EKGs (static and animated). The second stage included the development of videos reproducing the reality of a nurse during the installation of the cardiac monitoring and intervening when a patient presents an acute arrhythmia.

The pedagogical tool was evaluated and was well received by the peers—specialists in the clinical, as well as in pedagogical domains and by the students. The use of such technology of information and communication seems to be an important avenue to facilitate the process of learning related to the content of cardiac arrhythmias in the context of nursing sciences. The next step of development is the integration of knowledge through the application of clinical cases, when the learner must make the link between the clinical condition, the EKG and nursing interventions, enhancing the development of clinical competence.

References

- Ismail, H., & Lewin, R.J. (2013). The role of a new arrhythmia specialist nurse in providing support to patients and caregivers. *European Journal of Cardiovascular Nursing*, 12(2), 177–183.
- Main, C.C. (1988). Nursing care of the dysrhythmia patient hospitalized for electrophysiology testing. *Journal of Cardiovascular Nursing*, 3(1), 24–32.

Palliative Care in ICU: Not There Yet, But One Step Further

Diane Guay, RN, Cécile Michaud, PhD, Luc Mathieu, PhD, Sherbrooke, QC

Context: Although most patients admitted to the intensive care unit (ICU) benefit from technological advances and modern medicine, contact with death remains part of daily practice in this clinical setting, as more than 20% of them will die during their ICU stay or shortly after their transfer. Despite considerable collective improvement efforts and clinical initiatives, few patients are currently receiving palliative care as promoted by the World Health Organization (WHO) in this particular setting in Quebec (INSPQ, 2006). A recent phenomenological study showed that three conditions facilitate the integration of palliative care in the ICU, namely a common vision, a concerted decision-making process and a proper environment (Guay et al., 2013). In light of these results, we developed, implemented and evaluated an intervention aiming to integrate these previously identified conditions.

Purpose: This communication will present our research process, its challenges and main results.

Method: An action research design was chosen for this study because this method is highly collaborative and provides an organizational structure valuing a consensual

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

decision-making process, which enhances success and sustainability of the intervention (Stringer, 2007). The first phase led to the development of a two-component communication intervention: an educational workshop and a structured interdisciplinary rounds. This intervention was implemented in the ICU and evaluated with a constructivist approach through case studies.

Perspectives: The integration of a palliative care approach in the ICU is challenging, as cultural change takes time. Our research approach is undoubtedly an innovative strategy that can enhance and improve the quality of care in the ICU.

References

- Guay, D., Michaud, C., & Mathieu, L. (2013). Conditions facilitant les «bons soins» palliatifs aux soins intensifs selon la perspective infirmière. *Recherche en soins infirmiers*, (1), 61–75.
- Institut national de Santé publique [INSPQ] (2006). Soins palliatifs de fin de vie au Québec : définition et mesure d'indicateurs. Québec : Bibliothèque nationale du Québec.
- Stringer, E.T. (2007). *Action Research* (3rd ed.). California: Sage.

Integrating Excellence into Culture: Developing Procedures for the TOA from CVICU to the Ward

Alana Harrington, MSC, HBSC, PhD (ABD), Angelo Cruz, BScN, RN, Brenda Bjerkseth, BScN, RN, Janice Glen, RN, Alison Carre, RN, Mary Mustard, MN, NP-adult, RN, CCN(C), CNCC(C), and Ellen Lewis, RN, Toronto, ON

Background: Nearly 70% of all sentinel events are caused by a breakdown in communication. Previous research found ward nurses feel they don't receive enough information to provide direct patient care, and a more contemporary qualitative study of both ward and ICU nurses found both identified gaps in clinical transition including uncertainty of how to properly communicate. Poor quality of clinical handover may be associated with preventable risks of adverse events. However, despite these issues, many Canadian centres do not have policies or standards for Transfer of Accountability (TOA).

Objective: To develop strategies to improve TOA and the consistency of patient care during transition from the ICU to the ward.

Methods: Two TOA initiatives were rolled out to facilitate the transition of care from the CVICU to the ward. First, information deemed essential in all ICU transfers to the ward nursing staff was identified and incorporated into a nursing handover tool. Second, a separate medical handover tool was built into the written transfer summary. In addition to the TOA documentation, nurse practitioners (NPs) from the ward were invited to attend the daily CVICU morning handover rounds, to directly exchange information regarding the patients who would be transitioning from ICU to the ward.

Results: Conversations between CVICU and the ward resulted in a nursing tool that incorporated clinical system details, patient safety checks, patient demographics and family information. The medical tool received positive feedback from both the ICU and ward medical staff/NP(s). Caregivers in the ICU and the ward both report a greater sense of continuity of care. Other patient transition outcomes, such as ICU returns, are being investigated.

Conclusions: Preliminary results indicate that medical and nursing strategies developed to improve TOA have the potential to aid in the provision of consistent and relevant information, and in doing so, improve the quality of care.

References

- Alvarado, K., Lee, R., Christoffersen, E., Fram, N., Boblin, S., Poole, N., ... Forsyth, S. (2006). Transfer of accountability: Transforming shift handover to enhance patient safety. *Healthcare Quarterly*, 9(Suppl.), 75–79.
- Hägström, M., Asplund, K., & Kristiansen, L. (2009). Struggle with the gap between intensive care units and general wards. *International Journal of Qualitative Studies on Health and Well-being*, 4(3), 181–192. doi:10.1080/17482620903072508
- Jeffercott, S.A., Evans, S.M., Cameron, P.A., Chin, G.S.M., & Ibrahim, J.E. (2009). Improving measurement in clinical handover. *Quality and Safety in Health Care*, 18(4), 272–276. doi:10.1136/qshc.2007.024570
- Petersen, L.A., Brennan, T.A., O'Neil, A.C., Cook, E.F., & Lee, T.H. (1994). Does house staff discontinuity of care increase the risk for preventable adverse events? *Annals of Internal Medicine*, 121(11), 866–872. doi:10.7326/0003-4819-121-11-199412010-00008
- Whittaker, J., & Ball, C. (2000). Discharge from intensive care: A view from the ward. *Intensive Critical Care Nursing*, 16(3), 135–143. doi:10.1054/iccn.2000.1488

Nurse Perceptions of Care Provided in a Virtual Neurocritical Care Unit

Lars Kure, MN, RN, CNCC(C), Grace Walter, BScN, RN, CNCC(C), and Martin Chapman, BM, FRCA, FRCPC, DTM&H, Toronto, ON

Background: Research suggests that patients with acute neurocritical illness benefit from care in a dedicated neurocritical care (NCC) unit. Previously at our tertiary trauma centre, this patient population was treated in a general medical-surgical level III ICU. Since creating a new ICU was not feasible, a virtual NCC unit was established within the existing ICU in order to provide specialized care. Our ICU was re-organized to incorporate a patient streaming system, with two intensivist-led

Bring your expertise here!
New Challenges, Rewards & Breathtaking Scenery!

fraserhealth
 Better health. Best in health care.

Together, we create great workplaces.

Apply online: careers.fraserhealth.ca **Toll-Free:** 1-866-837-7099

Facebook: facebook.com/fraserhealthcareers **Twitter:** @FHcareer

2014
 BC's Top Employers

multidisciplinary teams functioning in parallel within the same ICU. Patients who are allocated to the NCC team are managed using special protocols and pre-printed orders, which contain key benchmarks and reminders of best practices.

Methods: One year after this reorganization, nurses were asked to complete an anonymous survey gauging their perceptions of these changes. The questions were related to:

1. The NCC team
2. The standardization of care and
3. Staff comfort with these changes.

Results: Approximately 140 full- and part-time registered nurses work in this ICU. The response rate was approximately 25%. Overall, 85% of respondents supported these changes. With respect to implementation of the NCC team, 79% of respondents felt that their jobs were more straightforward and 74% said that it improved inter-professional communication. When asked about employing a standardized order set, 85% felt it contributed to the delivery of better care. 88% of respondents said they were comfortable explaining these changes to newer staff members.

Conclusion: Overall, we are pleased with the reception of these modifications as change can be difficult. Data outliers show us important next steps. For example, a number of respondents were undecided about whether these changes contribute to better outcomes for patients. This underscores a need to increase communication about long-term outcomes of our former patients to reinforce the importance of the care provided by our nurses.

References

- Botting, M.J., Phan, N., Rubenfeld, G.D., Speke, A.K., & Chapman, M.G. (2014). Using Barriers Analysis to Refine a Novel Model of Neurocritical Care. *Neurocritical Care*, 20(1), 5–14. doi:10.1007/s12028-013-9905-3
- Kramer, A.H., & Zygun, D.A. (2011). Do neurocritical care units save lives? Measuring the impact of specialized ICUs. *Neurocritical Care*, 14(3), 329–333. doi:10.1007/s12028-011-9530-y

Contribution of a Debriefing After Simulation to Student Nurses' Clinical Judgment Regarding Patient Deterioration: A protocol

Patrick Lavoie, MSN, RN, Jacinthe Pepin, PhD, RN, and Sylvie Cossette, PhD, RN, Montréal, QC

Background: High-fidelity simulation followed by debriefing is seen as an effective teaching strategy to prepare future nurses to recognize and act upon patient deterioration (Fisher & King, 2013). However, research is needed to link debriefing interventions with learning outcomes that address students' performance in such situations.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Objective: To present a research protocol to evaluate a debriefing intervention's effect on nursing students' clinical judgment in patient deterioration simulated experiences.

Methodology: The debriefing intervention was developed according to theoretical and empirical knowledge (Decker et al., 2013; Dewey, 1938; Tanner, 2006). An explanatory sequential mixed method design (Creswell & Plano Clark, 2001) was chosen for its evaluation. In the quantitative experimental strand, students (n=120) will experience three patient deterioration clinical scenarios (hypovolemia, pulmonary edema, septic shock). Students in the experimental group will participate twice in the debriefing intervention, which consists of a reflective process from simulated clinical data to a global understanding of their meaning. Students' debriefing in the control group will be based on the appraisal of their performance. Clinical judgment, assessed by perception, comprehension and projection of signs of patient deterioration will be measured during randomly allocated freezes in the scenarios. The qualitative strand will comprise semi-structured interviews with students selected on the basis of their profile of improvement on the dependent variables in the experimental strand. These interviews will address students' perception of the contribution of the debriefing's elements in the improvement of their clinical judgment regarding patient deterioration.

Summary: It is expected that the mixing of quantitative and qualitative data will yield knowledge that explains if and how the debriefing intervention leads to expected learning outcomes.

References

- Creswell, J.W., & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.
- Decker, S., Fey, M., Sideras, S., Caballero, S., Rockstraw, L. R., Boese, T., ... Borum, J.C. (2013). Standards of best practice: Simulation standard VI: The debriefing process. *Clinical Simulation in Nursing*, 9(6), S26S29.
- Dewey, J. (1997). *Experience and education*. New York, NY: Touchstone.
- Fisher, D., & King, L. (2013). An integrative literature review on preparing nursing students through simulation to recognize and respond to the deteriorating patient. *Journal of Advanced Nursing*, 69, 2375–2388.
- Tanner, C.A. (2006). Thinking like a nurse: A research-based model of clinical judgment in nursing. *Journal of Nursing Education*, 45, 204–211.

Comparing Nursing's Experience Caring for Critically Ill Patients with H1N1 Influenza A

Shirley Lee, BSN, RN, Wayne Fritz, BSN, RN, and Louise Warnock, RN, Vancouver, BC

During the 2009 H1N1 influenza pandemic, patients were admitted with respiratory failure requiring prolonged mechanical ventilation, as well as advanced ventilator support such as high levels of inspired oxygen and PEEP, pressure control, high-frequency oscillatory ventilation, and inhaled nitric oxide (Kumar et al, 2009). With the reemergence of H1N1 influenza this 2013–2014 influenza season, the care of critically ill patients has been challenged again predominantly due to the severity of respiratory failure requiring the use of rescue therapies such as extracorporeal membrane oxygenation (ECMO).

ECMO has been used as a “salvage therapy that can be used in extreme cases of acute respiratory distress syndrome (ARDS) refractory to conventional ventilation techniques” (Bibro et al., 2011). There have been considerable advances in extracorporeal respiratory technology since the 2009 H1N1 influenza pandemic for the treatment of acute respiratory distress (ARDS) such as Novalung® iLA device and Hemolung®, so the use and management of critically ill patients during this 2013–2014 influenza season has provided bedside nurses the knowledge to expertly care for critically ill patients who are placed on ECMO.

Comparing patient care to the H1N1 influenza epidemic in 2009 where modalities for treatment were limited in our ICU to the current H1N1 influenza season where access to resources, improved technologies and experience gained from the pandemic have provided opportunities to enhance and guide nursing care.

References

- Bibro, C., Lasich, C., Rickman, F., Foley, N.E., Kunugiyama, S.K., Moore, E., ... Schulman, C.S. (2011). Critically ill patients with H1N1 influenza A undergoing extracorporeal membrane oxygenation. *Critical Care Nurse*, 31(5), e8–e24.
- Bonastre, J., Suberviola, B., Pozo, J.C., Guerrero, J.E., Torres, A., Rodríguez, A., & Martín-Loeches, I. (2012). Extracorporeal lung support in patients with severe respiratory failure secondary to the 2010–2011 winter seasonal outbreak of influenza A (H1N1) in Spain. *Medicina Intensiva (English Edition)*, 36(3), 193–199.
- Kumar, A., Zarychanski, R., Pinto, R., Cook, D.J., Marshall, J., Lacroix, J., ... Canadian Critical Care Trials Group H1N1 Collaborative. (2009). Critically ill patients with 2009 influenza A (H1N1) infection in Canada. *JAMA*, 302(17), 1872–1879.
- MacLaren, G., Combes, A., & Bartlett, R.H. (2012). Contemporary extracorporeal membrane oxygenation for adult respiratory failure: Life support in the new era. *Intensive Care Medicine*, 38, 210–220.
- Wang, W.Y., & Honey, M. (2012). Acute respiratory failure brings challenges to ECMO nurses in flu pandemic. *Nursing New Zealand (Wellington, NZ: 1995)*, 18(9), 26–27.

Checking All the Right Boxes: The Development of a Checklist for Prone Positioning of the Adult Critical Care Patient

Beth Linseman, BScN, RN, CNCC(C), Kaitlin Black, BScN, RN, Dee Dee Corey, BScN, RN, Amanda Cornacchia, BN, RN, Rowena Odejar, BScN, RN, and Grace Walter, BScN, RN, CNCC(C), Toronto, ON

Prone positioning of critically ill patients with acute respiratory distress syndrome (ARDS) has been used as a treatment option for a number of years with mixed results on mortality and benefit. Current research has shown decreased mortality in those with severe ARDS when applied early. In our critical care unit, prone positioning to date has been an infrequent occurrence but, in light of current research, we expect it will be used more often as a treatment option in our patients.

The Education Practice Council (EPC) members sent a survey to the interdisciplinary team members who work in the three level III ICUs in our hospital to gain their perspective on the frequency they prone patients, their comfort and knowledge level around the procedure and resources they currently use. The results of this survey show only 15 per cent of respondents were comfortable with prone positioning and 40 per cent reported having no experience with prone positioning. In addition, only 25 per cent of respondents could correctly identify patients appropriate for this procedure based on current research and only 11 per cent felt they could explain prone positioning thoroughly to new staff members.

In order to help our team members feel more comfortable when initiating and caring for a patient requiring prone positioning and to mitigate some of the complications associated with prone positioning, the EPC developed a checklist for the interdisciplinary team to use at the bedside. Checklists used in high-intensity environments integrate best practices, standardize protocols to reduce human error and improve quality of care. In developing this checklist our goal is to provide a standardized tool that can be used promptly in a critical situation to ensure patient safety and integrate excellence into our practice.

References

- Balas, M.C. (2000). Prone positioning of patients with acute respiratory distress syndrome: Applying research to practice. *Critical Care Nurse*, 20(1), 24–36.
- Guerin, C., Reigner, J., Richard, J.C., Beuret, P., Gacouin, A., Boulain, T.,...Ayzac, L. (2013). Prone positioning in severe acute respiratory distress syndrome. *New England Journal of Medicine*, 386(23), 2159–2168.
- Hales, B., Terblanche, M., Fowler, R., & Sibbald, W. (2008). Development of medical checklists for improved quality of patient care. *International Journal for Quality in Health Care*, 20 (1), 22–30.
- Kopterides, P., Siempos, I.I., & Armaganidis, A. (2009). Prone positioning in hypoxemic respiratory failure: Meta-analysis of randomized controlled trials. *Journal of Critical Care*, 24, 89–100.
- Messerole, E., Peine, P., Wittkopp, S., Marini, J.J., & Albert, R.K. (2002). The pragmatics of prone positioning. *American Journal of Respiratory and Critical Care Medicine*, 165(10), 1359–1363.

Piloting the Corporate Approach to Shift to Shift, RN to RN Bedside Transfer of Accountability in the Coronary Care Unit

Norine Meleca, MN, RN, Cecilia Santiago, MN, RN, CNCC(C), Norma Ferrer-Pilarta, BScN, RN, CCRN, Jacqueline Little, BScN, RN, and Miriam McFadyen, MNSt, RN, Toronto, ON

Transfer of accountability, referred to as TOA, occurs frequently during the day for most patients, which presents opportunities for communication breakdown. Communication breakdown resulting from inadequate TOA remains among the most common factors contributing to the occurrence of adverse events (Bates & Gawande, 2003). Recognizing the importance of a standardized mechanism for timely and accurate transfer of information, the corporate shift-to-shift, RN-to-RN bedside transfer of accountability approach was piloted in the coronary care unit.

Aim: To pilot an evidence-based redesigned intershift TOA process, test the improvements and sustain the practice.

Improvement: The redesigned intershift TOA process includes these elements:

- standardized format with the use of a TOA checklist
- standardized process by going to the bedside for intershift TOA
- inviting the patient and family to participate during TOA
- conducting safety checks.

Measures:

1. An evaluation questionnaire was distributed and collected at the end of each nursing education session.
2. Pre- and post-implementation survey was distributed to assess nursing attitudes and perceptions towards bedside TOA.
3. Qualitative reports were provided by patients through interviews.
4. Compliance of the four TOA elements is assessed through observation audits.

References

- Accreditation Canada. (2010). *Required organizational practices 2010*. Retrieved from www.accreditation.on
- Alvarado, K., Lee, R., Christoffersen, E., Fram, N., Boblin, S., Poole, N., ... Forsyth, S. (2006). Transfer of accountability: Transforming shift handover to enhance patient safety. *Healthcare Quarterly*, 9(Suppl.), 75–79.
- Arora, V., Johnson, J., Lovinger, D., Humphrey, H.J., & Meltzer, D.O. (2005). Communication failures in patient sign-out and suggestions for improvement: A critical incident analysis. *Quality and Safety in Health Care*, 14(6), 401–407.
- Baker, S.J., & McGowan, N. (2010). Bedside shift report improves patient safety and nurse accountability. *Journal of Emergency Nursing*, 36(4), 355–8.
- Bates, D.W., & Gawande, A.A. (2003). Improving safety with information technology. *New England Journal of Medicine*, 348(25), 2526–2534.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Bedside Report and Two-Nurse Safety Check: A Patient Safety Initiative

Marian Racco, MSN, RN, Annandale, NJ

Effective communication at end of shift report is essential for patient safety. Traditional nurse-to-nurse report occurs at the nurses' station without visualizing the patient. Bedside Report and Two-Nurse Safety Check incorporates a visual inspection of the patient and increases nurse accountability and decreases the potential for mistakes. Nurse satisfaction is increased, as less time is spent resolving ambiguous issues.

Pre-measurement questionnaire was sent to the intensive care nurses to determine the efficiency of current method of hand-off, at the nurses' station. Results revealed that nurses were spending time correcting inaccurate intravenous records, tidying patients' rooms, replacing empty intravenous bags and investigating whether an unsigned medication was given.

Interventions included creating and distributing a Bedside Report Self-Study module and choosing bedside report champions to support the change in practice. Bedside report includes: introduction of incoming nurse to patient, Two-Nurse Safety Check and questions for nurse and patient. During the safety check, nurses observe patient's appearance, accuracy in intravenous fluids, pump settings and oxygen delivery, cleanliness of patient's room and completeness of medication record.

Bedside Report and Two-Nurse Safety Check was initiated in August 2013. Designated champions encouraged peers to comply with the practice. Discussions were held at staff meetings to troubleshoot challenges in adapting practice change.

Follow-up questionnaires were sent to staff post implementation to assess compliance and improvements in practice. Results revealed that 71 per cent of the nurses were compliant. Nurses were spending less time cleaning patient room and fixing inaccuracies passed on in report. Improvements in unsigned medications were determined by pre- and post-implementation pharmacy audits. Results showed that there was approximately a 50 per cent decrease in unsigned medications.

References

- Grant, B., & Colello, S.H., (2010). Culture change through patient engagement. *Med/Surg Insider*, 40(10), 50–52. doi:10.1097/01.NURSE.0000388520.46890.1d
- McMurray, A., Chaboyer, W., Wallis, M., Johnson, J., & Gehrke, T. (2011). Patients' perspectives of bedside nursing handover. *Collegian*, 18(1), 19–26.
- Riesenberg, L.A., Leisch, J., & Cunningham, J.M. (2010). Nursing handoffs: A systematic review of the literature. *The American Journal of Nursing*, 110(4), 24–34.
- Rush, S.K. (2012). Bedside reporting: Dynamic dialogue. *Nursing management*, 43(1), 40–44.

Enhancing a Culture of Excellence

Utilizing a Shared Governance Model

Lisa Rodger, BScN, RN, CNCC(C), Carolyn Roche, RN, CNCC(C), Jennifer Wright, BScN, RN, CNCC(C), Sabrina Drepaul Jeethan, RN, CNCC(C), Johanna Zantinge, BScN, RN, CNCC(C), Susan Papp, RN, and Ruth Milton, RN, Toronto, ON

Empowering a multidisciplinary team through a shared governance model has been proven essential in the delivery and structure of an effective high-functioning critical care unit (Barden, Quinn Griffin, Donahue, & Fitzpatrick, 2011). In order to sustain a practice of excellence, frontline staff need to be involved in the integration of evidence-informed knowledge, clinical reasoning, and problem solving. A shared governance model enhances collaboration and communication within the team. Furthermore, this spirit of shared leadership encourages the team to make changes in their work environment and patient care management processes, thereby improving the quality of care provided to patients and their families (Wessel, 2012).

Our professional practice council has allowed our frontline staff to be actively involved in identifying and resolving patient care management concerns. The professional practice council focuses on projects that are driven to improve patient outcomes, patient and family satisfaction, and that promote a healthy work environment for the critical care team. The skill of the council members, their knowledge, and compassion for healing inspires them to expertly navigate changes within the delivery of health care for patients requiring high-intensity therapies and critical life-threatening situations. The team has successfully developed and implemented a withdrawal of life-sustaining care management protocol, a new transfer of accountability process and unit visitation guidelines.

Our success has been enhanced by full leadership support, this being the provision of time for monthly meetings, the provision of identified educational resources, and the willingness of the leadership to trust the wisdom and creativity of the council members (Fray, 2011), thus inspiring commitment, ownership, accountability, and creating a culture of excellence.

References

- Barden, A.M., Quinn Griffin, M.T., Donahue, M., & Fitzpatrick, J.J. (2011). Shared governance and empowerment in registered nurses working in a hospital setting. *Nursing Administration Quarterly*, 35(3), 212–218. doi:10.1097/NAQ.0b013e3181ff3845

- Fray, B. (2011). Evaluating shared governance: Measuring functionality of unit practice councils at the point of care. *Creative Nursing*, 7(2), 87–95. doi:10.1891/1078-4535.17.2.87
- Jacobs, C., & Ward, C. (July 2012). Empowering frontline nurses to transform shared governance. *Nursing*, 18–20. doi:10.1097/01.NURSE.0000415321.70217.0d
- Wessel, S. (2012). Impact of unit practice councils on culture and outcomes. *Creative Nursing*, 18(4), 187–192. doi:10.1891/1078-4535.18.4.187

Nursing Advocacy in Mobilization of Patients in ICU

Catherine Rodriguez, RN, and Sherly Mathew, RN, Vancouver, BC

Weakness, profound loss of strength and mobility that can impair the daily functioning are commonly experienced among patients discharged from the intensive care unit (ICU). Prolonged periods of immobility, especially among those who undergo mechanical ventilation and sedation can result in major disability and protracted rehabilitation (Schweickert, 2009). Benefits of early mobilization includes improvement in respiratory function, muscle wasting, ICU and hospital length of stay (Leditschke, 2010).

A trial conducted by Dr. Schweickert and colleagues concluded that patients in the mobilization group were nearly twice as likely to regain functional independence at hospital discharge and experienced less delirium than their counterparts who did not receive the intervention (Schweickert, 2009).

In our ICU we have identified the following barriers that hinder early mobilization. Timing of procedures are in conflict, decreased level of consciousness or agitation, hemodynamic instability and respiratory instability. To be able to address the identified barriers to early mobilization, a framework was devised consisting of stages of mobility, goals on each stage, and clearly defined roles of the patient, physical therapist and nurses. The said document was prepared to provide clinicians, working in the ICU with a framework to assist in decision-making regarding the mobilization of patients.

References

- Adler, J., & Malone, D. (2012). Early mobilization in the intensive care unit: A systematic review. *Cardiopulmonary Physical Therapy Journal*, 23(1), 6–9.
- Garber, C.E. (2010). *General principles of exercise prescription. ACSM's guidelines for exercise testing and prescription* (pp. 209–210). Philadelphia: Lippincott, Williams and Wilkins.
- Hopkins, R.O. (2010). Early activity in the ICU: Beyond safety and feasibility. *Critical Care Nurse*, 30(2), 481–484.
- Schweickert, W.D., Pohlman, M.C., Pohlman, A.S., Nigos, C., Pawlik, A.J., Esbrook, C.L., ... Kress, J.P. (2009). Early physical and occupational therapy in mechanically ventilated, critically ill patients: A randomised controlled trial. *Lancet (London, England)*, 373(9678), 1874–1882.
- Schweickert, W.D., & Kress, J.P. (2011). Implementing early mobilization interventions in mechanically ventilated patients in the ICU. *American College of Chest Physicians*, 140(6), 1612–1617.
- Zomorodi, M., Topley, D., & McAnaw, M. (2012). Developing a mobility protocol for early mobilization of patients in a surgical/trauma ICU. *Critical Care Research and Practice*. Retrieved from PubMed. doi:10.1155/2012/964547

Nurses' Evaluations of the Critical Care Pain Observation Tool Use at 12-month Post-implementation in the Intensive Care Unit

Melody Ross, BScN, RN, Madalina Boitor, BSc, RN, Sylvie Desjardins, MSc, BSc, RN, Francine Vaillant, BSc, RN, Cécile Michaud, PhD, RN, PhD, and Céline Gélinas, PhD, RN, Montreal, QC

Background: Performing routine pain assessments in all intensive care unit (ICU) patients is strongly recommended in practice guidelines, and Critical-Care Pain Observation Tool (CPOT: Gélinas et al., 2006) is suggested for clinical use in those unable to self-report (Barr et al., 2013). Although recent research has shown positive impacts of the CPOT implementation on frequencies of pain assessments and medication use in the ICU (Gélinas et al., 2011; Rose et al., 2013), no study has described the evaluation of its use in ICU daily practice from a nursing perspective.

Objective: To describe the nurses' evaluation of the feasibility, clinical relevance, and satisfaction with the CPOT use 12 months after its implementation in the ICU.

Method: A descriptive study design was used. The study was conducted in the medical-surgical ICU of a university affiliated setting in Canada. A self-administered evaluation questionnaire was anonymously completed by ICU nurses who were all trained to use the CPOT.

Results: A total of 38 ICU nurses returned their completed questionnaire. Regarding its feasibility, more than 90 per cent of them rated the CPOT as quick to use, simple to understand, and easy to complete. According to clinical relevance, close to 70 per cent of ICU nurses acknowledged that the CPOT had influenced their practice, and more than 80 per cent was satisfied with its daily use. However, less than 50 per cent agreed that the tool use led to effective communication with the medical ICU team, which was identified as an area for improvement.

Conclusions: The CPOT use was deemed feasible and relevant in nursing daily practice, but did not allow an effective communication with the medical ICU team. Training should be offered to all members of the ICU care team, and other implementation strategies should be explored, as well, to ensure optimal uptake of a pain assessment approach that impacts on their decision-making process for pain management.

References

- Barr, J., Fraser, G.L., Puntillo, K., Ely, E.W., Gélinas, C., Dasta, J.F., ... Jaeschke, R. (2013). Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. *Critical Care Medicine*, 41(1), 263–306.
- Gélinas, C., Arbour, C., Michaud, C., Vaillant, F., & Desjardins, S. (2011). The implementation of the Critical-Care Pain

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Observation Tool on pain assessment/management nursing practices in an intensive care unit with nonverbal critically ill adults: A before and after study. *International Journal of Nursing Studies*, 48(12), 1495–1504.

Gélinas, C., Fillion, L., Puntillo, K., Viens, C., & Fortier, M. (2006). Validation of the Critical-Care Pain Observation Tool in adult patients. *American Journal of Critical Care*, 15(4), 420–427.

Rose, L., Haslam, L., Dale, C., Knechtel, L., & McGillion, M. (2013). Behavioral pain assessment tool for critically ill adults unable to self-report pain. *American Journal of Critical Care*, 22(3), 246–255.

Nursing Perspectives on Designing a Space to Deliver Quality Care

Cecilia Santiago, MN, RN, CNCC(C), Lara Zinagano, BScN, RN, Karen Wannamaker, BSc, RN, CNCC(C), Kathryn Bell, BScN, RN, Prafulla Savedra, RN, Maria Teresa Diston, BScN, RN, CNCC(C), and Orla Smith, MN, RN, Toronto, ON

Background: As our hospital moves towards the construction of a new patient care tower, critical care registered nurses (RNs) in the medical surgical intensive care unit have the opportunity to be involved in designing a space to deliver quality care. Although the new tower will not be completed for another five years, some design features need to be confirmed now. Based on space limitations, government standards, and infrastructure requirements there are components of the design that we can change and elements that are fixed. End-user feedback is essential to the design process.

Objective: To describe nursing perspectives on the design of a brand-new intensive care unit to deliver quality care for patients using multiple feedback mechanisms.

Methods:

1. structured RN interview using a seven-item questionnaire;
2. ICU design template distributed to RNs to situate mandatory and movable items; and
3. conducted tours to the mock-up ICU rooms and elicited qualitative feedback.

Results: Twenty-nine RNs provided responses to the interviews. An additional 29 RNs provided design feedback by writing suggestions and drawing equipment configurations. Finally, 32 RNs participated in six mock-up tours. Collated feedback from all strategies demonstrated consensus:

1. concerns about visibility/sightlines between patient rooms;

2. “ideal” room set-up would adopt a “same-sided approach” oriented to the patient; and
3. nursing area outside patient room should be large enough to ensure patient visibility and accommodate technological needs and belongings storage.

Next steps: In collaboration with simulation centre and the planning department, we will conduct a research study using simulation to test three potential room configurations based upon staff feedback. All feedback, including the evaluation of design performance in the simulation exercises, will be provided to the planning department in order to confirm the design plans for the new rooms.

References

- Cahnman, S. (2008). The changing face of critical care. *Healthcare Design*, 1–7.
- Hamilton, K. (2010). Design for critical care. *Impact of the ICU 2010 Report*, 169–180.
- Pati, D., Cason, C., Harvey, T.E. & Evans, J. (2010). An empirical examination of patient room handedness in acute medical-surgical settings. *Health Environments Research & Design Journal*, 4(1), 11–33.
- Thompson, D., Hamilton, K., Cadenhead, C., Schwindel, S., Anderson, D., Schmitz, E., St. Andre, A., ... Axon, D. (2012). Guidelines for intensive care unit design. *Critical Care Medicine*, 40(5), 1586–1600.
- Watkins, N., Kennedy, M., Ducharme, M., & Padula, C. (2011). Same-handed and mirrored unit configurations. Is there a difference in patient and nurse outcomes? *The Journal of Nursing Administration*, 41(6), 273–279.

Nurse-to-Nurse Inter-shift Transfer of Accountability in the Intensive Care Unit

Cecilia Santiago, MN, RN, CNCC(C), Karen Michelsen, MN, RN, CNCC(C), Angelina Berlin, BScN, RN, Karen Wannamaker, BSc, RN, CNCC(C), and Orla Smith, MN, RN, Toronto, ON

Background: Accreditation Canada (2010) included establishing a standardized mechanism for transfer of information at transition points, as a required organizational practice. In response, inpatient units in our organization embarked on implementing transfer of accountability (ToA) processes. In 2012, the ToA subcommittee was tasked with reviewing existing structures, processes, and tools related to inter-shift nurse-to-nurse ToA, and finalized its guiding principles to provide over-arching guidance for implementing and sustaining ToA. Bedside ToA has been the standard practice in our ICU for many years. Despite bedside ToA being a routine process, content of ToA has never been standardized. We evaluated the use of a ToA guide.

Objective: To describe current state of ToA in ICU using multiple data collection strategies.

Methods:

1. assessment of current state and evaluation of structured tools;
2. development of MSICU ToA tool;
3. implementation of ToA changes where oncoming and

- offgoing RNs: perform safety checks at shift change, initial ToA/break section (back of the flowsheet), and complete 12-hour chart check of orders;
4. audits to assess RN compliance; and
 5. booster training sessions.

Results and conclusion: Sixteen RNs participated in interviews and 46 RNs evaluated I-PASS guide. Themes from interviews highlighted strengths and weaknesses of current ToA. Sixty-three per cent of RNs felt that I-PASS should be used as conversational guide and not as documentation tool. The modified version of I-PASS is now mounted at each bedside charting table. Adoption of the tool was supported by a series of education sessions (n=83). Initial roll out resulted in low compliance necessitating the provision of booster sessions. We achieved higher compliance rates following the booster sessions to 120 nurses. Next step is to conduct observational reviews to ascertain whether ToA decreased the incidents associated with communication failure.

References

- Accreditation Canada. (2010). Required organizational practices 2010. Retrieved from www.accreditation.on.ca
- Alvarado, K., Lee, R., Christoffersen, E., Fram, N., Boblin, S., Poole, N., ... Forsyth, S. (2006). Transfer of accountability: Transforming shift handover to enhance patient safety. *Healthcare Quarterly*, 9(Suppl.), 75–79.
- Athwal, P., Fields, W., & Wagnell, E. (2008). Standardization of change-of-shift report. *Journal of Nursing Care Quality*, 24(2), 143–147.
- Committee on Patient Safety and Quality. (2012). Communication strategies for patient handoff. *The American College of Obstetricians and Gynecologist Committee Opinion*, 517, 2–4.
- Ong, M., & Coiera, E. (2011). A systematic review of failures in handoff communication during intrahospital transfers. *The Joint Commission Journal on Quality and Patient Safety*, 37(6), 274–84.

Blood Sampling Practices in Critical Care: How Critical are They?

Janie Venis, MSN, RN, Mia Marles, BSN, RN, Martina O'Regan, BSN, RN, and Martha Mackay, PhD, RN, CCN(C), Vancouver, BC

Blood sampling (BS) is a relatively non-invasive, yet much relied-upon technique for investigation in health care. Sixty to seventy per cent of critical decisions in health care, such as discharge, admission and drug therapy, rely on laboratory testing. Blood sampling is a complex process that poses a significant risk of injury and harm if done improperly. With as many as 11 steps involved in the total testing process (TTP), there is great potential for error. Reducing errors in health care to improve patient safety has become a focus of attention recently.

Up to 61.9% of BS errors occur during the pre-pre-analytical (PPA) stage, which involves the greatest number of manual steps. Health practitioners other than trained phlebotomists are often responsible for BS in critical care units, which may contribute to PPA errors. Blood sampling errors can lead to repeated sampling, wrong diagnoses and inappropriate care, resulting in increased risk and unnecessary costs. No studies

to date have examined factors that contribute to BS errors by bedside practitioners in critical care, leaving a knowledge gap regarding possible strategies for improvement.

A study is underway to identify bedside practitioners' blood sampling practices from invasive lines, and the environmental factors, knowledge and attitudes that may contribute to BS errors in the critical care units of a university-affiliated hospital. All nursing and respiratory therapy staff (345) of five critical care units were invited to participate. A 25-item questionnaire exploring these variables is self-administered by consenting volunteers. Recruitment has occurred over two months. Data will be summarized and relationships between various demographic, and professional/employment factors and BS practices will be explored. These findings could inform quality improvement efforts related to BS practices in critical care, an important element of excellent care.

References

- Carraro, P., & Plebani, M. (2007). Errors in a stat laboratory: Types and frequencies 10 years later. *Clinical Chemistry*, 53(7), 1338–1342.
- Forsman, R.W. (1996). Why is the laboratory an afterthought for managed care organizations? *Clinical Chemistry*, 42(5), 813–816.
- Plebani, M. (2006). Errors in clinical laboratories or errors in laboratory medicine? *Clinical Chemistry and Laboratory Medicine*, 44(6), 750–759.
- Plebani, M., & Carraro, P. (1997). Mistakes in a stat laboratory: Types and frequency. *Clinical Chemistry*, 43(8), 1348–1351.
- Wagar, E.A., Stankovic, A.K., Raab, S., Nakhleh, R.E., & Walsh, M.K. (2008). Specimen labeling errors: a Q-probes analysis of 147 clinical laboratories. *Archives of Pathology & Laboratory Medicine*, 132(10), 1617–1622.

A Quality Improvement Project to Decrease Non-Value Blood Work in Critical Care

Grace Walter, BScN, RN, CNCC(C), Andre Amara, ACKB MD, Barb Duncan, BScN, RN, Heather Harrington, BScN, RN, CNCC(C), CCN(C), and Lars Kure, MN, RN, CNCC(C), Toronto, ON

In 2012, the Choosing Wisely campaign, initiated by the American Board of Internal Medicine, was implemented in an effort to encourage interprofessional teams and patients to be aware of medical testing that may not provide value, or may cause harm. When compared to routine testing, clinical guidelines led to reduced testing, without compromising patient safety. Routine testing may cause more harm due to painful phlebotomy and iatrogenic anemia, which may result in potentially hazardous transfusions.

Following this recommendation, our interprofessional quality improvement teams' objective was to decrease the frequency of non-value added blood work. We utilized quality walk-about rounds, the relevant literature and logistical process mapping to identify opportunities for improvement.

ABSTRACTS

DYNAMICS OF CRITICAL CARE 2014

Our baseline data demonstrated an average of 250 ml of blood sampled in the first 48 hours of admission. It was also observed that on Day 7 of admission to critical care, regardless of severity of illness, 89% had coagulation studies performed and 95% had lactate tested daily; less than 5% of all tests were critically abnormal.

In response to these data, our team developed a strategic protocol aimed at conserving blood across our critical care program. Our pre-printed orders stratify patients into severity of illness and discontinue all testing after Day 5. We modified order entry processes and collaborated with the laboratory to perform multiple testing on the same sample. Additionally, we performed routine quality improvement rounds to dispel misconceptions around the value of laboratory testing for clinical indicators.

The purpose of this presentation is to illustrate our processes for conserving blood, a simplified protocol for routine testing and specific outcome measures; numbers of tests performed, number of abnormal tests, number of tubes drawn on a monthly basis and number of patients transfused before and after intervention.

References

- The ABIM Foundation (n.d.). *Critical Care Societies Collaborative – Critical Care: Five Things Physicians and Patients Should Question*. Retrieved from <http://www.choosingwisely.org/doctor-patient-lists/critical-care-societies-collaborative-critical-care/>
- Kumwilaisak, K., Noto, A., Schmidt, U.H., Beck, C.I., Crimi, C., Lewandowski, K., & Bigatello, L.M. (2008). Effect of laboratory testing guidelines on the utilization of tests and order entries in a surgical intensive care unit. *Critical Care Medicine*, 36(11), 2993–2999.
- Low, L.L., Harrington, G.R., & Stoltzfus, D.P. (1995). The effect of arterial lines on blood-drawing practices and costs in intensive care units. *CHEST Journal*, 108(1), 216–219. Retrieved from <http://journal.publications.chestnet.org>
- Zimmerman, J.E., Seneff, M.G., Sun, X., Wagner, D.P., & Knaus, W.A. (1997). Evaluating laboratory usage in the intensive care unit: Patient and institutional characteristics that influence frequency of blood sampling. *Critical Care Medicine*, 25(5), 737–748.

Ambulating Patients with Pulmonary Artery Catheters Who Are Awaiting Heart Transplant in the Cardiac ICU

Joanna White, BSN, RN, BSN, CCRN-CMC, Sarah Gillespie-Heyman, BSN, RN, CCRN, Mary Harris, RN, Prasama Sangkachand, MSN, RN, CCRN-CMC, Janet Parkosewich, DNSc, RN, Marjorie Funk, PhD, RN, and Elisa Mattioli, BSN, RN, New Haven, CT

Purpose: To describe patients' physiologic and emotional responses to ambulating with a pulmonary artery (PA) catheter while awaiting heart transplantation (HT). Specific aims are to determine changes in PA catheter position while ambulating; if ambulation is associated with patient's feelings of fatigue and their exercise tolerance; and patient's perception on how ambulation affects their sense of well-being.

Background: Patients awaiting HT often have a PA catheter to monitor their hemodynamic response to medical therapy. Traditional care of critically ill patients with PA catheters dictates bedrest. No evidence exists to support this practice in hemodynamically stable patients with PA catheters. It is important for nurses to help stable patients awaiting heart transplant maintain their optimal physical and emotional condition while ensuring their safety.

Methods/procedures: The sample of this prospective descriptive study contained eight patients in the cardiac ICU who had a PA catheter, were awaiting HT, and provided informed consent. Data were obtained each walk (N=148 walks). PA catheter waveform, cardiac rhythm, and PA catheter position were assessed for changes. Perceived level of exertion and fatigue were measured before and after ambulating. The patient's perception of how ambulation affected their sense of well-being was also assessed weekly.

Results: There was no evidence of catheter migration or catheter-induced arrhythmias, nor reports of excessive feelings of exertion or fatigue. Patients expressed appreciation for the opportunity to increase activity and walk, as well as feelings of improved physical well-being.

Discussion/application to practice: Findings indicate that for stable patients awaiting HT, ambulating with a PA catheter is safe and results in an enhanced sense of well-being. With regular ambulation, patients should be better prepared to undergo transplant surgery and have an easier recovery than if they remained on bedrest.

References

- Frazier, S.K. & Skinner, G.J. (2008). Pulmonary artery catheters: State of the controversy. *Journal of Cardiovascular Nursing*, 23(2), 113–121.
- Hale, K., Sibel, E., & Mehdi, Z. (2008). Health related quality of life in patients awaiting heart transplantation. *Tohoku Journal of Experimental Medicine*, 214, 17–25.
- Hopkins, R.O., Spuhler, V.J., & Thomsen, G.E. (2007). Transforming ICU culture to facilitate early mobility. *Critical Care Clinics*, 23, 81–96.
- Shah, M.R., & Miller, L. (2007). Use of pulmonary artery catheters in advanced heart failure. *Current Opinion in Cardiology*, 22, 220–224.

AWARD INFORMATION

The Draeger Medical Canada Inc. “Chapter of the Year” Award



The Draeger Medical Canada Inc. “Chapter of the Year” Award is presented to recognize the effort, contributions and dedication of a CACCN Chapter in carrying out the purposes and goals of the association.

The Chapter of the Year criteria are founded on the CACCN Mission Statement and recognize the Chapter activity in this regard with specific emphasis on Member Service, Innovation, Specialty Promotion and Fiscal/Membership Health.

Award funds available: \$500.00 plus a plaque

Deadline for submission: May 31 annually

Application process: Chapters must apply for consideration

Criteria for the award program

- The award program will be for the period of April 1 to March 31 each year
- Chapters may receive the award for one year followed by a two-year lapse before receiving again
- A point system has been developed to fairly evaluate chapter accomplishments during the year
- The chapter that accumulates the most points will be the successful recipient of the Chapter of the Year Award
- CACCN reserves the right to adjust points depending upon supporting materials submitted
- In the case of a tie, CACCN reserves the right to determine the recipient of the award
- The award recipient will be announced at Chapter Connections Day and at the annual awards ceremony at Dynamics.

Conditions for the award program

- All chapters of CACCN are eligible for consideration of the Chapter of the Year Award provided all quarterly and annual financial/activity reports are on file with CACCN National Office for the qualifying period
- Chapters will be responsible for ensuring the national office receives all required documentation to validate accumulated points
- If the above conditions are not met, the chapter will not be eligible for consideration
- Announcement of the successful chapter will be published in CACCN publications
- All chapter reports /scoring will be available for review at Chapter Connections Day/Dynamics.

Points system

Innovation

Member Service

- Any educational event coordinated and hosted by the local chapter is eligible. Total hours of education offered in the award period will be total (concurrent sessions are accumulated) and divided by the membership number as a denominator. This will be converted to a rate/1000

Submission guidelines:

- Brochure, advertising or pamphlet and copy of agenda (including hours of education)
- Attendee numbers
- Evaluation of session

Formula: Total hours of education offered/total chapter members × 1000 = innovation score

- Using this calculation, the final educational contribution hours will be adjusted for size of chapter and expressed in rates for direct comparison.

Public education, community service: Promoting the image of critical care nursing

- Any public or community service event coordinated and hosted by the local chapter is eligible. Total hours offered in the award period will be totalled (concurrent activities are accumulated) and divided by the membership number as a denominator. This will then be converted to a rate/1000
- These projects must be presented under the auspices of the CACCN chapter (i.e., participating in blood pressure clinics, teaching CPR to the public, participating in health fairs)

Submission guidelines:

- Validation must be provided that the event was a CACCN-sponsored project
- For example, submitting a letter from the receiving group or a picture of the event, etc.

Formula: Total hours of events offered/total chapter members × 1000 = innovation score.

Communication—Fiscal health—Membership sustainability

Recruitment Points

- Calculated based on the percentage of new members recruited, as compared to the total membership of the previous year:

Percentage	Points	Percentage	Points
01–10%	10	51–60%	60
11–20%	20	61–70%	70
21–30%	30	71–80%	80
31–40%	40	81–90%	90
41–50%	50	91–100%	100

Formula: Total new members/total chapter members × 100 = Recruitment points

Sustained membership points

- Points are allotted for percentage of membership sustained over this past year
- Any member with a membership lapse of 12 months or more will be considered a new member
 - i.e., a membership expires April 2011 and is renewed February 2012. This member would be considered a **renewing** member
 - i.e., a membership expires April 2011 and is renewed June 2012. This member would be considered a new member due to the lapse in membership of more than 12 months.
- Sustained membership points are calculated based on the percentage of renewing members in the fiscal year.

Percentage	Points	Percentage	Points
01–10%	10	51–60%	60
11–20%	20	61–70%	70
21–30%	30	71–80%	80
31–40%	40	81–90%	90
41–50%	50	91–100%	100

- **Formula: Total renewed members/total chapter members × 100 = Recruitment points.**

Contribution to specialty knowledge—

Publications and presentations

Publications

- Points will be calculated for chapter members who have contributed articles to:
 - the chapter newsletter or *Dynamics*, Journal of the Canadian Association of Critical Care Nurses (Fall, Winter, Spring Journals for the fiscal year—the Summer Abstract Journal is not included)
- Chapters are responsible for providing:
 - list of member contributions, together with a copy of the chapter newsletter
 - list of member contributions to the journal, together with the journal issue/date.

Each article = 25 points

Presentations

- Points will be calculated for chapter members who have contributed presentations at local, provincial and national CACCN activities
- Points will be awarded only once for a presentation, regardless of the number of times/venues at which it is presented
- Chapters are responsible for providing:
 - list of member contributions, together with a copy of the brochure or flyer for the event.

Each presentation = 25 points

Critical care certification—CNCC(C) and CNCC(P)

- Points will be calculated for chapter members who have successfully completed the CNA Certification Examination
- Points will be calculated for chapter members who have successfully renewed their CNA Certification
- Members' names must appear on the certification list received directly from the CNA to qualify.

Initial certification = 10 points per %

Renewal certification = 5 points per %

Add together for total certification score

- Formula Initial Certification: Number of members certified / total chapter membership × 100 = Percentage
- Formula Certification Renewal: Number of members re-certified/total chapter membership × 100 = Percentage
- Add the two percentages together for certification score.

Good luck in your endeavours!

The CACCN Board of Directors and Draeger Medical Canada retain the right to amend the award criteria.

CACCN Research Grant

The CACCN research grant has been established to provide funds to support the research activities of a CACCN member that are relevant to the practice of critical care nursing. A grant will be awarded yearly to the investigator of a research study that directly relates to the practice of critical care nursing.

Award funds available: \$2,500.00

Deadline for submission: February 15

Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or mail to: CACCN, PO Box 25322, London, ON N6C 6B1. Mailed applications must be post-marked on or before February 15.

Eligibility:

The principal investigator must:

- Be a member of CACCN in good standing for a minimum of one year
- Note: where a student is submitting the research grant application and is ineligible to act as the principal investigator, the student must be a member of CACCN in good standing for a minimum of one year
- Be licensed to practise nursing in Canada
- Conduct the research in Canada
- Publish an article related to the research study in *Dynamics*
- CACCN members enrolled in a graduate nursing program may also apply
- Members of the CACCN board of directors and the awards committee are not eligible.

Budget and financial administration:

- Funds are to be issued to support research expenses
- Funds must be utilized within 12 months from the date of award notification.

Review process:

- Each proposal will be reviewed by a research review committee
- Its recommendations are subject to approval by the board of directors of CACCN
- Proposals are reviewed for potential contribution to the practice of critical care nursing, feasibility, clarity and relevance
- The recipient of the research grant will be notified in writing.

Terms and conditions of the award:

- The research is to be initiated within six months of receipt of the grant
- Any changes to the study timelines require notification in writing to the board of directors of CACCN
- All publications and presentations arising from the research study must acknowledge CACCN
- A final report is to be submitted to the board of directors of CACCN within three months of the termination date of the grant
- The research study is to be submitted to the *Dynamics* Journal for review and possible publication.

Application requirements:

- A completed application form
- A grant proposal not in excess of five single-spaced pages exclusive of appendices and application form

- Appendices should be limited to essential information, e.g., consent form, instruments, budget
- A letter of support from the sponsoring agency (hospital, clinical program) or thesis chairperson/advisor (university faculty of nursing)
- Evidence of approval from an established institutional ethical review board for research involving human subjects and/or access to confidential records. Refer to CNA publication *Ethical Guidelines for Nursing Research Involving Human Subjects*
- A brief curriculum vitae for the principal investigator and co-investigator(s) describing educational and critical care nursing background, CACCN participation, and research experience. An outline of their specific research responsibilities
- Proof of CACCN active membership and Canadian citizenship
- Facility approval for commencement of study.

CACCN Research Grant Application located at <http://www.caccn.ca/en/awards/index.html> or via CACCN National Office at caccn@caccn.ca.

The CACCN Board of Directors retains the right to amend the award criteria.

The Editorial Awards

The Editorial Awards will be presented to the authors of two written papers in *Dynamics*, the Journal of the Canadian Association of Critical Care Nurses, which demonstrate the achievement of excellence in the area of critical care nursing.

Award funds available: \$1,250.00 total

- \$750.00 award will be given to the author(s) of the best article
- \$500.00 award will be given to the author(s) of the runner-up article
- It is expected that the award funds will be used for professional development
- More specifically, the funds must be used by the recipient within 12 months following the announcement of the winners, or within a reasonable time, to cover and/or allay costs incurred while attending critical care nursing-related educational courses, seminars, workshops, conferences or special programs or projects approved by the CACCN, and to further one's career development in the area of critical care nursing.

Deadline for submission: Fall, Winter and Spring Journal manuscripts annually.

Send *manuscripts for publication* to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Eligibility

- The author is an active member of the Canadian Association of Critical Care Nurses (minimum of one year)
 - Should there be more than one author, at least one has to be an active member of the Canadian Association of Critical Care Nurses (minimum of one year)
- The author(s) is prepared to present the paper at Dynamics of Critical Care Conference (optional)

- The paper contains original work, not previously published by the author(s)
- Members of the CACCN board of directors, awards committee or editorial committee of *Dynamics*, the Journal of the Canadian Association of Critical Care Nurses, are excluded from participation in these awards.

Criteria for evaluation

- The topic is approached from a nursing perspective
- The paper demonstrates relevance to critical care nursing
- The content is readily applicable to critical care nursing
- The topic contains information or ideas that are current, innovative, unique and/or visionary
- The author was not the recipient of the award in the previous year.

Style

- The paper is written according to the established guidelines for writing a manuscript for *Dynamics*, the Journal of the Canadian Association of Critical Care Nurses
- For the *Dynamics* manuscript submission guidelines, please refer to the CACCN Information for Authors at <http://www.caccn.ca/en/publications/dynamics/authors.html>

Selection

- The papers are selected by blind review by the awards committee in conjunction with the CACCN board of directors.
- The awards committee reserves the right to withhold the awards if no papers meet the criteria.

Presentation

The awards are presented by representatives of the sponsoring company or companies at the Dynamics of Critical Care Conference.

The CACCN Board of Directors retains the right to amend the award criteria.

The Spacelabs Innovative Project Award



The Spacelabs Innovative Project Award will be presented to a group of critical care nurses who develop a project that will enhance their professional development.

Award funds available: \$1,500.00 total

- \$1,000.00 will be granted to the Award winner
- \$500.00 will be granted for the runner up
- A discretionary decision by the review committee may be made, for the award to be divided between two equally deserving submissions for the sum of \$750.00 each.

Deadline for submission: June 1 each year

Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or Mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Mailed applications must be postmarked on or before June 1

Do you have a unique idea?

Award criteria:

- The primary contact person for the project must be a CACCN member in good standing for a minimum of one year
- Applications will be judged according to the following criteria:
 - the number of nurses who will benefit from the project
 - the uniqueness of the project
 - the relevance to critical care nursing
 - consistency with current research/evidence
 - ethics
 - feasibility
 - timeliness
 - impact on quality improvement.
- If the applicant(s) are previous recipients of this award, there must be a one-year lapse before submitting an application
- Members of the CACCN board of directors and the awards committee are not eligible.

Award requirements:

- Within one year, the winning group of nurses is expected to publish a report that outlines their project in *Dynamics*.

The CACCN Board of Directors and Spacelabs Healthcare retain the right to amend the award criteria.

Smiths Medical Canada Ltd

smiths medical
bringing technology to life

Educational Awards

The Smiths Medical Canada Educational Awards have been established to provide funds (\$1,000.00 each) to assist critical care nurses to attend continuing education programs at the baccalaureate, master's and doctorate levels.

Award funds available: Two awards – \$ 1,000.00

Deadline for submission: January 31 and September 1

Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or

Mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Mailed applications must be postmarked on or before January 31 or September 1

Eligibility criteria

The applicant must:

- be an active member of the Canadian Association of Critical Care Nurses for a minimum of one (1) year
- be accepted to an accredited continuing education program relevant to the practice, administration, teaching and research of critical care nursing
- not have been the recipient of this award in the past two years

Application process

- submit a completed Smiths Medical Canada Educational Award application including all required documentation
- submit a letter of reference from his/her current employer
- incomplete applications will not be considered
- presentations considered for merit points are those that are **not** prepared as part of your regular employment role/responsibilities—oral and poster presentations will be considered.

Selection process

- CACCN reserves the right to withhold the award if no candidate meets the criteria
- the successful candidate will be notified via email and regular mail
- the successful candidate will be recognized at the Awards Ceremony at the Dynamics of Critical Care Conference (annually in September)
- the successful candidate's name/photograph will be published in *Dynamics, Journal of the Canadian Association of Critical Care Nurses* (Winter edition)
- current members of the National Board of Directors are not eligible

The Board of Directors of the Canadian Association of Critical Care Nurses & Smiths Medical Canada retain the right to amend the award criteria.

Smiths Medical Canada Educational Award

Content Revision: December 2013

CACCN Recruitment and Retention Awards

The Canadian Association of Critical Care Nurses Recruitment and Retention Awards were established to recognize chapters for their outstanding achievements with respect to recruiting and retaining membership.



Award funds available:

Full Dynamics Conference Tuition Coupons

Partial Dynamics Conference Tuition Coupons

Deadline: Fiscal year end – March 31

The CACCN Office will track chapter recruitment and retention for the fiscal year.

Chapters will receive a copy of the Recruitment and Retention Report annually in April with coupon allotment noted.

Coupons will be issued electronically to all chapters.

Recruitment initiative

This initiative will benefit the chapter if the following requirements are met:

- **Minimum of 25%** of membership is "**NEW**" between April 1 to March 31, the chapter will receive **one (1) – Dynamics of Critical Care Conference three-day early bird** tuition coupon.
- **Minimum of 33%** of membership is "**NEW**" between April 1 to March 31, the chapter will receive **one (1) – Dynamics of Critical Care Conference three-day early bird** tuition coupon and **one (1) – Dynamics of Critical Care Conference partial** tuition coupon

Partial coupons are equal to one-day early bird members tuition.

Retention initiative

This initiative will benefit the chapter if the following requirements are met:

- If the chapter has **greater than 80% renewal** of its previous year's members, the chapter will receive **one (1) – Dynamics of Critical Care Conference three-day early bird** tuition coupon and **two (2) – Dynamics of Critical Care Conference partial** tuition coupons

- If the chapter has **greater than 70% renewal** of its previous year's members, the chapter will receive **two (2) – Dynamics of Critical Care Conference partial** tuition coupons
- If the chapter has **greater than 60% renewal** of its previous year's members, the chapter will receive **one (1) – Dynamics of Critical Care Conference partial** tuition coupon

Partial coupons are equal to one day early bird members tuition

Tuition coupon policy

- Tuition coupons are for full or partial tuition
- Tuition coupons may only be used by active members of the Canadian Association of Critical Care Nurses
- Coupons are issued to chapters annually in May
- Coupons are valid on early bird tuition only
- Coupons must be redeemed by the early bird tuition deadline
- Coupon codes may only be used once
- Tuition coupon values are determined annually by the CACCN National Board of Directors
- Coupons may not be used for dinner, tour, hotel or other conference activities
- Coupons are not redeemable for cash
- Tuition coupons cannot be carried over to the next fiscal year
- Tuition coupons are non-transferrable
- Exceptions to this policy must be approved by the CACCN National Board of Directors

For additional information, please refer to the Canadian Association of Critical Care Nurses Tuition Coupon Policy.

The Board of Directors of the Canadian Association of Critical Care Nurses retains the right to amend the award criteria.

CACCN Document: Award Criteria

Content Revision Date: March 2014

Form Design Revision Date: January 2011

Content Revision Date: April 2008

Chapter Recruitment and Retention Awards

BBraun Sharing Expertise Award

The BBraun Sharing Expertise Award is a peer-nominated award and will be presented to an individual who exhibits stellar leadership and mentoring abilities in critical care.

The nominee for this award is an individual who supports, encourages, and teaches colleagues. The nominee must demonstrate a strong commitment to the practice of critical care nursing and the nursing profession. These qualities **may be** demonstrated by continuous learning, professional involvement, and a commitment to guiding novice nurses in critical care. It is not necessary for the candidate to be in a formal leadership or education role to qualify for this award.

The award funds may be used to attend educational programs or conferences related to critical care.

Award funds available: \$ 1,000.00

Deadline for submission: June 1



Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or

Mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Mailed applications must be postmarked on or before June 1

Eligibility criteria

- The nominee must be an active CACCN member for a minimum of one (1) year
- The nominee must have a minimum of three (3) years of critical care nursing experience
- Preference is given to a nominee who has CNA Certification [CNCC(C) or CNCCP(C)]
- The nominee practises to the CACCN Standards of Critical Care Nursing Practice (4th ed., 2009)
- Each nomination must have the support of a critical care nursing colleague and the nominee's manager
- Members of the CACCN Board of Directors are not eligible for consideration of the BBraun Sharing Expertise Award

Nomination process

- Three letters in support of the nominee are required and must be sent to the CACCN
- The nomination letter must provide information outlining the qualities of the nominee and the reasons the nominee should be selected for the award
- One letter of support must be written by a CACCN member
- The other two letters must include one written by the nominee's manager—must testify to the eligibility
- Incomplete nomination packages will not be considered

Selection process

- Each nomination will be reviewed by the CACCN Award Review Committee
- The awards committee reserves the right to withhold the award if no candidate meets the criteria
- The successful candidate will be notified by the CACCN Director of Awards and Corporate Sponsorship via email and regular mail
- The successful candidate will be recognized at the Awards Ceremony at the Dynamics of Critical Care Conference (annually in September)
- The successful candidates name/photograph will be published in *Dynamics, Journal of the Canadian Association of Critical Care Nurses* (Winter edition)

The Board of Directors of the Canadian Association of Critical Care Nurses and BBraun Medical retain the right to amend the award criteria.

CACCN Document: Award Criteria

Content Revision Date: March 2014

Form Revision Date: April 2012

Form Design Revision Date: January 2011

Content Revision Date: January 2010

BBraun Sharing Expertise Award

The Brenda Morgan Leadership Excellence Award

The Brenda Morgan Leadership Excellence Award is a peer-nominated award. The award was established to recognize Brenda Morgan's contribution and leadership to CACCN.

The Brenda Morgan Leadership Excellence Award will be presented to a nurse who, on a consistent basis, demonstrates outstanding performance in the area of leadership in critical care. This leadership may have been expressed as efforts toward clinical advances within an organization, or leadership in the profession of nursing in critical care. The results of the nominee's leadership must have empowered people and/or organizations to significantly increase their performance capability in the field of critical care nursing.

The Brenda Morgan Leadership Excellence Award has been generously sponsored by the Canadian Association of Critical Care Nurses to recognize and honour a nurse who exemplifies excellence in leadership, in the specialty of Critical Care.

Award funds available: \$1,000.00 plus award trophy

Deadline for submission: June 1

Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or

Mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Mailed applications must be postmarked on or before June 1

Eligibility criteria

Critical Care Nurses who are nominated for this award will have consistently demonstrated qualities of leadership and are considered a visionary and an innovator in order to advance the goals of critical care nursing.

The nominee must:

- be an active member of CACCN for a minimum of five (5) years
- have a minimum of five (5) years of critical care nursing experience
- be registered to practise nursing in Canada
- hold a valid adult or pediatric specialty in critical care certification from CNA (preferred)
- demonstrate leadership in the specialty of critical care
- engage others in the specialty of critical care nursing
- role model and facilitate professional self-development and lifelong learning
- exemplify the following qualities and values:
 - Innovation
 - Accountability
 - Visionary
 - Teamwork and Collaboration
 - Respect/Integrity
- contributes or has contributed to the Canadian Association of Critical Care Nurses at the regional and/or national levels.

Application process

- the application involves a nomination process
- submit two (2) letters describing how the nominee has met the requirements under the Eligibility Criteria:
 - Use as many examples as possible to highlight why the nominee should be considered for the award and what this nominee does that makes her/him outstanding
 - The nomination letters should be as detailed as possible, as the CACCN Award Committee depends on this information to select the award recipient from amongst many deserving candidates.

Selection process

- each nomination will be reviewed by the CACCN Director of Awards and Corporate Sponsorship and the CACCN Award Review Committee
- The Brenda Morgan Leadership Award Review Committee will consist of:
 - Two members of the Board of Directors
 - Brenda Morgan (when possible)
- the Awards Review Committee reserves the right to withhold the award if no candidate meets the eligibility criteria
- the successful candidate will be notified by the CACCN Director of Awards and Corporate Sponsorship via email and regular mail
- the successful candidate will be recognized at the Awards Ceremony at the Dynamics of Critical Care Conference (annually in September) conference
- the successful candidates name/photograph will be published in *Dynamics, Journal of the Canadian Association of Critical Care Nurses* (Winter edition).

Terms and Conditions of the Award:

- the award recipient will be encouraged to write a reflective article for *Dynamics: Journal of the Canadian Association of Critical Care Nurses* sharing their accomplishments and describing their leadership experience
- the article should reflect on their passion for critical care nursing, their leadership qualities and how they used these effectively to achieve their outcome.

The Board of Directors of the Canadian Association of Critical Care Nurses retains the right to amend the award criteria.

CACCN Document: Award Criteria

Content Revision: March 2014

Form Design Revision Date: January 2011

Content Revision Date: January 2010

The Brenda Morgan Leadership Excellence Award

The Cardinal Health “Chasing Excellence” Award

The Cardinal Health “Chasing Excellence” Award is presented annually to a member of the Canadian Association of Critical Care Nurses who consistently demonstrates excellence in critical care nursing practice.

The Cardinal Health Chasing Excellence Award is to be used by the recipient for continued professional or leadership development in critical care nursing.

Award funds available: \$ 1,000.00

Deadline for submission: June 1

Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or

Mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Mailed applications must be postmarked on or before June 1

The Cardinal Health Chasing Excellence Award is a peer nominated award. The Cardinal Health Chasing Excellence Award is awarded to a critical care nurse who:

- is an active member of the Canadian Association of Critical Care Nurses for a minimum of one (1) years
- has a primary role in direct patient care in critical care
- holds Canadian Nurses Association certification in critical care [CNCC(C) or CNCCP (C)] (*preferred*)
- consistently practises at an expert level as described by Benner (1984)
- **Expert practice** is exemplified by most or all of the following criteria:
 - participates in quality improvement and risk management to ensure a safe patient care environment
 - acts as a change agent to improve the quality of patient care when required
 - provides high-quality patient care based on experience and evidence
 - effective clinical decision making supported by thorough assessments
 - has developed a clinical knowledge base and readily integrates change and new learning to practice
 - is able to anticipate risks and changes in patient condition and intervene in a timely manner
 - sequences and manages rapid multiple therapies in response to a crisis (Benner, Hooper-Kyriakidis, & Stannard, 1999)
 - integrates and coordinates daily patient care with other team members
 - advocates and develops a plan of care that consistently considers the patient and family and ensures they receive the best care possible
 - provides education, support and comfort to patients and their families to help them cope with the trajectory of

illness and injury, to recovery, palliation or death



- role models collaborative team skills within the inter-professional health care team
- assumes a leadership role, as dictated by the dynamically changing needs of the unit
- is a role model to new staff and students
- shares clinical wisdom as a preceptor to new staff and students
- regularly participates in continuing education and professional development

Nomination process

- **Three** letters in support of the nominee must be sent to CACCN by the deadline
 - One letter of support must be written by a CACCN member. A supporting letter from a **supervisor** such as a unit manager or team leader is also required.
- The nomination letters must describe three clinical examples outlining the nominee’s clinical excellence and expertise
- Incomplete nomination packages will not be considered.

Selection Process

- each nomination will be reviewed by the Canadian Association of Critical Care Nurses Awards Review Committee
- the awards committee reserves the right to withhold the award if no candidate meets the criteria
- the successful candidate will be notified by the CACCN Director of Awards and Corporate Sponsorship via email and regular mail
- the successful candidate will be recognized at the Awards Ceremony at the Dynamics of Critical Care Conference (annually in September)
- the successful candidate’s name/photograph will be published in *Dynamics, Journal of the Canadian Association of Critical Care Nurses* (Winter edition)
- current members of the National Board of Directors are not eligible

The Board of Directors of the Canadian Association of Critical Care Nurses and Cardinal Health Canada retain the right to amend the award criteria.

REFERENCE

Benner, P., Hooper-Kyriakidis, P., & Stannard, D. (1999). *Clinical Wisdom and Interventions in Critical Care A Thinking-in-action Approach*. Philadelphia: Saunders.

Content Revision: March 2014

Logo Revision: 2012

Form Design Revision Date: January 2011

The Cardinal Health “Chasing Excellence” Award

CACCN Certification Draw

The Canadian Association of Critical Care Certification Draw was established to recognize members of the association who successfully certify or renew their certification in our specialty—Certified Nurse in Critical Care Canada [CNCC(C)] and Certified Nurse in Critical Care Paediatrics Canada [CNCCP(C)].



Award funds available: Eight prizes of \$250.00 each

Deadline: September 1

Draw eligibility

To be eligible for the Canadian Association of Critical Care Nurses Certification Draw:

- the certified nurse must provide the Canadian Nurses Association (CNA) with permission to release their name and contact information to their nursing specialty, the Canadian Association of Critical Care Nurses
- the certified nurse must be an active member in good standing as of September 1 of the year in which the nurse certified or renewed their certification
 - i.e., certification in April 2013 = entered into draw September 2013

Draw process

- The names of eight (8) nurses will be drawn, as follows:
 - Adult Initial Certification – three (3) recipients
 - Adult Certification Renewal – two (2) recipients
 - Pediatric Initial Certification – two (2) recipients
 - Pediatric Certification Renewal – one (1) recipient
- the awards are completed by a random blind draw of eligible members from each category
- the Canadian Association of Critical Care Nurses Certification Draw is held at the Board of Directors' meeting prior to the Dynamics of Critical Care Conference annually in September
- the Board of Directors reserves the right to not award a prize or to draw additional names in another category, if there are no qualifying nurses in a specific category

Notification

- recipients are recognized at the Canadian Association of Critical Care Nurses Award Ceremony (annually in September)
- names of the recipients are noted in *Dynamics: Journal of the Canadian Association of Critical Care Nurses* (Winter Edition)
- names of the recipients are noted on the Canadian Association of Critical Care Nurses website under Awards/Recognition
- recipients are notified and receive the award funds via the Canadian Association of Critical Care Nurses National Office (annually in October)

One never knows... next year... it could be YOU!

The Board of Directors of the Canadian Association of Critical Care Nurses retains the right to amend the award criteria.

CACCN Document: Award Criteria

Content Revision Date: March 2014

Form Design Revision Date: January 2011

Certification Draws

Canadian Intensive Care Week “Spotlight” Challenge



The Canadian Association of Critical Care Nurses Canadian Intensive Care Week “Spotlight” Challenge will be presented to a group of critical care nurses who develop an activity and/or event that will profile their local Critical Care Team during Canadian Intensive Care Week (annually in October/November).

Award funds available: \$500.00 total

Deadline for submission: August 15

Send applications to CACCN National Office at caccn@caccn.ca or fax to 519-649-1458 or

Mail to: CACCN, PO Box 25322, London, ON N6C 6B1

Mailed applications must be postmarked on or before June 1

Award criteria

- the primary contact person must be an active member of the Canadian Association of Critical Care Nurses for a minimum of one (1) year
- a completed Canadian Association of Critical Care Nurses application form must be submitted

Award requirements

- the event/activity must be held during Canadian Intensive Care Week
- following the event/activity, a report must be submitted for publication, with photographs*, for publication on the Canadian Association of Critical Care Nurses website and/or in *Dynamics: Journal of the Canadian Association of Critical Care Nurses*
- Canadian Association of Critical Care Nurses photographic consent forms must accompany all submitted photographs
- all submissions become the property of the Canadian Association of Critical Care Nurses and may be used in current/future publications (print and electronic)

Award review

- applications will be judged by blind review
- applications will be considered based on the following criteria:
 - increase the visibility of critical care services in your local community
 - uniqueness/creativity of the activity/event
 - relevance to the objectives of Canadian Intensive Care Week
 - feasibility of activity/event

The Board of Directors of the Canadian Association of Critical Care Nurses retains the right to amend the award criteria.

Canadian Intensive Care Week “Spotlight” Challenge

Criteria Revision: March 2014

Criteria Revision: December 2013

Approved: March 2013



DYNAMICS

Information for Authors

Dynamics: The Journal of the Canadian Association of Critical Care Nurses (CACCN) is distributed to members of the CACCN, to individuals, and to institutions interested in critical care nursing. The editorial board invites submissions on any of the following: clinical, education, management, research and professional issues in critical care nursing. Critical care encompasses a diverse field of clinical situations, which are characterized by the nursing care of patients and their families with complex, acute and life-threatening biopsychosocial risk. While the patient's problems are primarily physiologic in nature, the psychosocial impact of the health problem on the patient and family is of equal and sometimes lasting intensity. Articles on any aspect of critical care nursing are welcome.

The manuscripts are reviewed through a blind, peer review process.

Manuscripts submitted for publication must follow the following format:

1. Title page with the following information:

- Author(s) name and credentials, position
- Place of employment
- If there is more than one author, the names should be listed in the order that they should appear in the published article
- Indicate the primary person to contact and address for correspondence.

2. A brief abstract of the article on a separate page.

3. Body of manuscript:

- Length: a maximum of 15 pages including tables, figures, and references
- Format: double spaced, 1-inch margins on all sides. Pages should be numbered sequentially including tables, and figures. Prepare the manuscript in the style outlined in the American Psychological Association's (APA) Publication Manual 6th Edition
- Use only generic names for products and drugs
- Tables, figures, illustrations and photographs must be submitted each on a separate page after the references
- References: the author is responsible for ensuring that the work of other individuals is acknowledged accordingly. Direct or indirect quotes must be acknowledged according to APA guidelines
- Permission to use copyrighted material must be obtained by the author and included as a letter from the original publisher when used in the manuscript.

4. Copyright:

- Manuscripts submitted and published in *Dynamics* become the property of CACCN. Authors submitting to *Dynamics* are asked to enclose a letter stating that the article has not been previously published and is not under consideration by another journal.

5. Submission:

- Please submit the manuscript electronically as a Word attachment to the editorial office as printed in the journal. Accepted manuscripts are subject to copy editing.
- All authors must declare any conflicts of interest and acknowledge that they have made substantial contributions to the work and/or contributed substantially to the manuscript at the time of acceptance.

Revised November 2011



WHY CACCN?

Vision: The voice for excellence in Canadian Critical Care Nursing

CACCN Mission Statement

The CACCN is a non-profit, specialty organization dedicated to maintaining and enhancing the quality of patient- and family-centred care by meeting educational needs of critical care nurses.

Engages and empowers nurses through education and networking to advocate for the critical care nurse.

Develops current and evidence informed standards of critical care nursing practice.

Identifies professional and political issues and provides a strong unified national voice through our partnerships.

Facilitates learning opportunities to achieve Canadian Nurses Association's certification in critical care.

CACCN Values Statement

Our core values are:

Excellence and Leadership

- • Collaboration and partnership
- • Pursuing excellence in education, research, and practice

Dignity & Humanity

- • Respectful, healing and humane critical care environments
- • Combining of compassion and technology to advocate and promote excellence

Integrity & Honesty

- • Accountability and the courage to speak for our beliefs
- • Promoting open and honest relationships

Revised April 2013

Application for membership

Name: _____

Address: _____
(Street)

_____ (City) _____ (Province) _____ (Postal code)

W (____) ____ - _____ H (____) ____ - _____ F (____) ____ - _____

E-mail: _____

Employer: _____

Position: _____

Area of Employment: _____

Nursing Registration No.: _____ Province: _____

Chapter Affiliation (if known): _____

Sponsor's Name: _____
(If applicable)

Type of membership:

New Member—one year \$75.00 + taxes New Member—two years \$140.00 + taxes

Renewal—one year \$75.00 + taxes Renewal—two years \$140.00 + taxes

CACCN # _____

Student Member—one year \$50.00 + taxes

Membership fees: add GST/HST based on province of residence

Are you a CNA/RNAO member? Yes No

Signature: _____

Date: _____

This application is for both national and chapter membership.

Make cheque or money order payable to:

Canadian Association of Critical Care Nurses (CACCN)

Mail to: CACCN, P.O. Box 25322, London, ON N6C 6B1

Or fax with Visa/MasterCard number, expiry date to: 519-649-1458

Telephone: 519-649-5284; Fax: 519-649-1458; Toll-free: 1-866-477-9077

e-mail: caccn@caccn.ca; website: www.caccn.ca

Visa/MasterCard: _____ Expiry: _____

Automatic renewal

CACCN has implemented an "Automatic Renewal" feature. Under the auto renewal, if you provided a credit card number, your membership will automatically renew on your next membership expiry date, so you will no longer have to worry about remembering to renew! Depending on the month and type of membership selected (one or two years) when your membership application is completed, one or two years later, CACCN will charge your credit card for membership dues based on your membership at the time of renewal. Following automatic renewal, CACCN will mail your membership card/receipt. You will no longer have to worry about a thing, as your member benefits will continue without interruption! For FAQs on Automatic Renewal, visit www.caccn.ca/JOINUS

Continuous
Innovation in
Fecal
Management
Systems



**WE
LISTEN**
to your
clinical needs

OUR RESPONSE: Nurse Inspired Improvements

Sampling Port for your safety

Provides access to catheter for safe and easy stool collection

Medication Delivery for your convenience

Deliver medication rectally via the irrigation port

Extended Catheter for flexibility for your patients

Adapts to a range of patient heights and weights

FlexiSeal *SIGNAL*

Contact ConvaTec Today • 1-800-465-6302

TM indicates trademarks of ConvaTec Inc.

© 2014 ConvaTec Canada Ltd.

AP-012554-MM

Confidence is in the air.

**Provide an extra measure of protection—
with confidence.**

The new AnchorFast Guard oral endotracheal tube fastener features an integrated tube protection sleeve to help prevent tube occlusion.

See how we're helping you put patients first—
with confidence. Call 1.800.263.7400 or visit
www.anchorfast1.com

AnchorFast Guard
Oral Endotracheal Tube Fastener

Now with tube protection



Caution: Prior to using the AnchorFast Guard oral endotracheal tube fastener, be sure to read the entire product Instructions for Use package insert that accompanies the product.

Hollister and logo and AnchorFast Guard are trademarks of Hollister Incorporated.
© 2013 Hollister Incorporated