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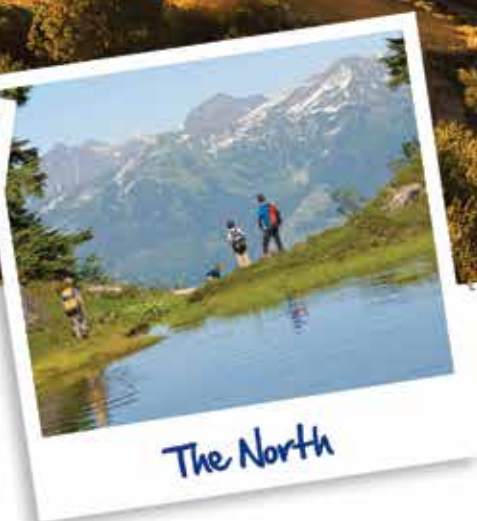
DYNAMICS

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Journal of the Canadian Association of Critical Care Nurses

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DYNAMICS

Journal of the Canadian Association of Critical Care Nurses

Volume 25, Number 4, Winter 2014

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CANADIAN
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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

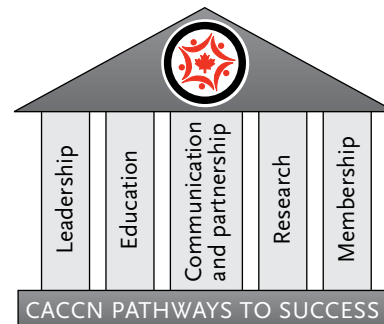
Philosophy statement

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

As the days grow shorter and a chill is in the air, Canadians begin bracing for our celebrated winter season. CACCN heralded in the changing season with yet another successful fall celebration of Canadian critical care nursing in September. More than 380 nurses from coast to coast, and beyond our borders gathered in beautiful Québec City for Dynamics 2014: Speaking from Experience: Integrating Excellence as a Culture, which was set against the splendour and history of Québec City, creating a most fitting venue to share, to learn and for fellowship.

The 2014 conference committee led by Vice-President René Chauvin is congratulated on a job well done. Our thanks go to those who participated in making the event another success; our sponsors, honoured speakers, poster presenters, abstract presenters, the preconference team, the teams at the Québec City Convention Centre and Delta Québec and our amazing delegates.

As part of our conference activities, we asked members and delegates at Dynamics 2014 to reflect on the CACCN theme for 2014–2016: “**Together We Can**”. Delegates posted their thoughts and wishes under the “**Together We Can**” banner throughout the three days of the conference. We heard from every province and territory and even from our international members about the things that are important for critical care nurses right now. Topics where delegates felt *together* critical care nurse *can* make a difference spanned across quality improvement and patient safety, end-of-life care, organ donation, early mobility, mental health care, education and health systems leadership domains. Many messages were inspirational and focused on the provision of safe, evidence-based care to patients and families. The below word cloud was created from these remarkable postings. It is very apparent in these messages that CACCN members are motivated to build better systems of care, are ready to lead change and remain grounded in the shared values and objectives of better patient, provider and system outcomes.

Have a look and see if the words resonate with your hopes and aspirations for your own practice and for our organization.



In the next months, CACCN leadership will be embarking on a journey to refresh and redefine our strategic direction. These thoughts and the continued feedback from you are the materials from which these new directions will be forged.

As part of our new direction, the CACCN BOD will be actively growing our relationships. We will actively look to nurture and fortify existing relationships and expand our reach in order to seek out and build new connections and partnerships. CACCN e-news bulletin, news flashes and website will spread the word about emerging opportunities for members to actively contribute to these objectives at the chapter, regional and national levels. Many opportunities for the integration of frontline expertise of the critical care nurse are expected in the coming months. Do not hesitate to take advantage of these opportunities if they pique your interest. We have found our voice and others are now listening. “**Together We Can**” influences and directly impacts this next chapter of critical care nursing in Canada.

The recent weeks of concern across Canada over the threat of Ebola virus disease is a wonderful example of the important influence critical care nurses can have. CACCN is working directly with the Canadian Critical Care Society (CCCS), the Canadian Association of Emergency Physicians (CAEP) and the Association of Medical Microbiology and Infection Disease (AMMID) to help develop **National Critical Care Nursing Guidelines** for patients diagnosed with the Ebola virus. We have enlisted the perspectives and expertise of bedside experts in adult and pediatric critical care, educators, administrators and critical care infectious disease practitioners to craft a comprehensive set of guidelines reflective of the best practice standards of Canadian Critical Care Nursing. These recommendations are sensitive to the dynamic nature of the information available about the Ebola situation and to the context of practice in Canada. “**Together we can**” be prepared to meet the challenge of Ebola virus disease.

The BOD would like to express our thanks and appreciation for the hard work, advocacy and creative problem solving critical care nurses are doing in preparation for this unique health care concern. We have appreciated hearing from you and applaud the calm, thoughtful, and creative approaches you have demonstrated in informing yourselves and the public about this new disease challenge. The perspective and expertise of critical care nurses have been instrumental in putting together plans to accommodate patients, minimize risk of disease spread, and provide the safest and most supportive environments for providers. We recognize many of you are working hard to overcome the challenges of organizing a comprehensive response within our complex systems. Navigating budgetary restraints, competing perspectives, evolving evidence and, at times, incomplete information is daunting. We have been truly inspired by the stories of collaboration we have seen between nurses, leadership, administrators and our interprofessional partners. As your national voice, CACCN will continue to advocate vigorously for accurate information, appropriate resources, and support for you to take the best care of our potential patients and of each other.

As the holiday season approaches, I wish each of you peace and joy for the coming year. ❁

Sincerely,
Karen Dryden-Palmer, MN, RN
President

Canadian Intensive Care Week 2014

October 26–November 1, 2014

The Montréal Chapter of the CACCN was the **Canadian Intensive Care Week (CICW) Spotlight Challenge Award** recipient. The chapter received \$500.00 to use for their Canadian ICU week events.

The chapter purchased two custom-made health care professional tools—a multi-colour pen and a retractable identification badge holder for sale via unit visits and the chapter's Facebook page.

Educational flyers in both official languages were developed to educate the general public, as well as non-critical care personnel about the roles and responsibilities of members of the critical care team and spotlighting Montréal-area intensive care units.


The chapter organized CACCN unit visits in six of the eight hospitals during Canadian Intensive Care Week. The goal of the visit was to say thank you to all the members of the critical care team, but also to touch base with our membership, to support any planned CICW activities taking place on the unit, discuss the role of the CACCN and the Montréal Chapter, distribute flyers, and advertise future activities (conferences, study groups, and contests). To each visit the executive brought sweets, the chapter merchandise, flyers, upcoming conference agendas, and CACCN membership forms.

The team visited Jewish General Hospital, Montréal Children's Hospital, Lakeshore General Hospital, as well as St. Mary's Hospital ICU and Royal Victoria Hospital. Despina Deroukakis, Head Nurse at St. Mary's Hospital, organized an open house with

two mock patients (a septic patient and a massive transfusion protocol patient) to celebrate CICW. A media relations person was on site and photos were in their hospital-wide newsletter. The chapter executive, together with Hospital Educator René Favre and respiratory therapists at Royal Victoria Hospital, set up a booth outside the ICU showcasing commonly used equipment (including a ventilated mannequin with simulated lungs). The team also visited the NICU to connect with the pediatric team.

In addition to the above, the chapter also ran the “**Team Spirit**” and “**Nominate a Champion**” contests. These contests were advertised in our fall newsletter, at the end of our June 2014 conference, on Facebook, and via “chapter update” e-mails. However, no nominations were submitted and therefore the prizes were not awarded. The team discussed these contests during all the visits in the hope that next year they will receive nominations.

As a result of the Canadian ICU Week activities, the chapter welcomed more than 30 new chapter members!

The Montréal Chapter would like to thank the National Office once more for assisting the chapter in showcasing the hard work, dedication, and pride with which critical care team members provide care on a daily basis. 

(prepared from the Montréal Chapter - Canadian Intensive Care Week Spotlight Challenge Award report submitted November 2014)

The Intensive Care Team—there for YOU in Critical Moments



Left, top: Christine Echegaray-Benites, Karine Allard and Mélanie Gauthier at Jewish General Hospital, Montréal

Left: William Landry and Christine Echegaray-Benites at Royal Victoria Hospital, Montréal

Above: St. Mary's Hospital ICU, Montréal

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Canadian Nurses Association Certification 2014

Congratulations to the following members on successfully attaining or renewing their Certified Nurse in Critical Care—Canada (CNCC(C)) and Certified Nurse in Critical Care—Pediatrics Canada (CNCCP(C)) Designation in April 2014.

CNCC(C) Initial Certification

Robin Donaldson	Calgary, AB	Julianna Ostaszewska	Hamilton, ON
Katherine Kissel	Calgary, AB	Leanne Wakelin	Joyceville, ON
Rachel Lessoway	Calgary, AB	Agnieszka Przywolska	Keswick, ON
Carey Palanca	Calgary, AB	Kelly McDougall	Kitchener, ON
Kimberly Pennell	Calgary, AB	Katherine Milligan	LaSalle, ON
Melanie Poirier	Calgary, AB	Ian Samuda	London, ON
Kimberley Tateson	Calgary, AB	Alphonse Agregado	Mississauga, ON
Patricia Anderson-London	De Winton, AB	Kathleen McCully	Newmarket, ON
Danae Drouin	Edmonton, AB	Eileen Whyte	Ottawa, ON
Candice Hendrickson	Edmonton, AB	Sandra Wong	Ottawa, ON
Ashley Kalinowski	Edmonton, AB	Mat Wenger	Petawawa, ON
Sophia Lepore	Edmonton, AB	Evelina Wolicki	Tecumseh, ON
Twyla Holdal	Lacombe, AB	Margaret Bean	Toronto, ON
Crystal Ritter	Okotoks, AB	Ainat Crouzat	Toronto, ON
Jessica Pillman	Red Deer, AB	Margaret De Sousa	Toronto, ON
Sarah Gleave	Sherwood Park, AB	Katherine Matthews	Toronto, ON
Marguerite Velthuizen	Sherwood Park, AB	Christine Minerva	Toronto, ON
Carole Bindon	St. Albert, AB	Jennifer Pasma	Windsor, ON
Dana Kyba	St. Albert, AB	Linda Hooles	Dorval, QC
Mallory Thomas	St. Albert, AB	Mélanie Gauthier	Lachine, QC
Wendy Holt	Sturgeon County, AB	Rose Carmel Exantus	Laval, QC
Lucia Simonova	Sylvan Lake, AB	Uliana Grebenuk Roy	Laval, QC
Cara Jerrett	Delta, BC	Maria-Fernanda Barrios	Montréal, QC
Sherly Mathew	Delta, BC	Talina Derisca	Montréal, QC
Krystyna Mitchell	Mission, BC	Anna Tsyba	Montréal, QC
Mariam Salih	North Vancouver, BC	Julie Asselin	Sainte-Brigitte-de-Laval, QC
Ashleigh Vankoughnett	North Vancouver, BC	Natasha Dupuis	St-Constant, QC
Ludmila Krapchan	Port Coquitlam, BC	Cassandra Ehr	Lanigan, SK
Andrea Ford	Port Moody, BC		
Lara Parker	Port Moody, BC	CNCC(C) Recertification	
Rob Kruger	Surrey, BC	Pamela Hruska	Calgary, AB
Fiona McLeod	Surrey, BC	Gwen Thompson	Edmonton, AB
Petra Davis	Vancouver, BC	Eugene Mondor	Edmonton, AB
Michelle House-Kokan	Vancouver, BC	Heather Brown	Red Deer, AB
Simmie Kalan	Vancouver, BC	Jenny Jordan	St Albert, AB
Erika Kirkpatrick	West Kelowna, BC	Katherine Tan	Kelowna, BC
Joanne Browning	Winnipeg, MB	Sarah McLeod	Rossland, BC
Patricia Taylorson	Winnipeg, MB	Lissa Currie	Ile des Chenes, MB
Vanessa Trecartin	Gardner Creek, NB	Tannis Sidloski	Winnipeg, MB
Colleen Reinsborough	Miramichi, NB	Sophie Jacob	Grand-Barachois, NB
Laura Walker	Saint John, NB	Rhonda Porter	Beaver Bank, NS
Erika Kinney	St. George, NB	Tanya Tupper	Canning, NS
Ciara Stevens	Berwick, NS	Jane Berlemont	Coldbrook, NS
Jana Wilson	Kentville, NS	Erin Starr Sarrazin	Lower Sackville, NS
Bethany Stewart	Sydney Mines, NS	Barbara Ann Fagan	Middle Sackville, NS
Laura Dekker	Beeton, ON	Karen Rafuse	Windsor, NS
Robert Prebble	Burlington, ON	Shurnet Clarke	Maple, ON
Jennifer McLaren	Cambridge, ON	Crystal Jones	Ottawa, ON
Danielle Chaput	Courtice, ON	Maria-Victoria Iwanow	Richmond Hill, ON
Kristie Dick	Fonthill, ON	Michelle Cleland	Toronto, ON
		Linda Gandy	Waterdown, ON
		Luc-Etienne Boudrias	Saint-Constant, QC

CNCCP(C) Initial Certification

Holly Rechenmacher Vancouver, BC
Susan Launder Winnipeg, MB
Sarah Shea Montréal, QC

CNCCP(C) Certification Renewal

Raandi Nesbitt Prince George, BC
Catherine Whitelaw Bedford, NS
Pieternella Dewit Dorchester, ON

Colleen Breen London, ON
Habiba Desai Toronto, ON
Isabelle Morency Montréal, QC

Active members of CACCN who provided permission to CNA to release their contact information to CACCN are included on this listing. If you have certified and you are not noted on the list, contact CACCN National Office at caccn@caccn.ca so we may update our records.

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.

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CACCN National Board of Directors

Nominees 2015–2017

On behalf of the Board of Directors of the Canadian Association of Critical Care Nurses, we congratulate the following members who were elected to the National Board of Directors for the term April 1, 2015 to March 31, 2017 at the 30th Annual General Meeting held on September 21, 2014, in Québec City, QC:



Carla MacDonald
BSc, RN
New Glasgow, NS
Director, Eastern Region



Kathy Bouwmeester
RN, ACCN
Calgary, AB
Director, Western Region



Lara Parker
MSN, RN, CNCC(C)
Port Moody, BC
Director, Western Region

We wish to thank nominees Amber Eason, BSc, RN, Eastern Region, and Virginia Vandall-Walker, PhD, RN, Western Region, for putting their names forward for election. Thank you, as well, to the CACCN members who participated at the Annual General Meeting.

Your Voice Matters!

Sincerely,

Karen Dryden-Palmer
President

Renée Chauvin
Vice-President/Nomination Committee Chair

Future sites of Dynamics conferences

Dynamics 2015: September 27–29, 2015, Winnipeg, MB

Dynamics 2016: September 25–27, 2016, Charlottetown, PE

Dynamics 2017: September 24–26, 2017, Toronto, ON

Dynamics 2018: September 23–25, 2018, Saskatoon, SK

Dynamics 2016 Conference Planning Committee—Call for participation

Dynamics 2016 will be held September 25–27, 2016, at the Delta Prince Edward in Charlottetown, PEI. CACCN members from the New Brunswick Chapter/Eastern Region interested in working on the conference planning committee should **submit a completed application form, together with a resume/CV to the CACCN National Office by March 1, 2015.**

Please note, while any member may apply for the committee, consideration will be given to those who are New Brunswick Chapter (NB and PE) or Eastern Region (NB, NL, NS and PE) members. Planning Committee selection will take place in March 2015.

For further information on this exciting opportunity, please visit: http://www.caccn.ca/en/events/dynamics_2016_charlottetown_pe/index.html for the Planning Committee Application submission and FAQs information.

DYNAMICS 2014

Speaking from Experience: Integrating Excellence as a Culture

Créer une culture d'excellence : à partir de l'expérience pratique

The 2014 Dynamics of Critical Care national conference of the Canadian Association of Critical Care Nurses, held at the Québec Convention Centre in Québec City September 21-23, welcomed close to 400 critical care nurses from across Canada, the United States, and from as far away as Australia.

On Saturday, September 20, a preconference day was held at the Delta Québec offering two sessions—Emergency Response and 12 Lead ECG sponsored by Physio-Control, and Advance Practice-Based Learning in CRRT: The Science or the Art? sponsored by Baxter Corporation. Both sessions were well attended and the delegates appreciated the in-depth full-day education.

The conference opened with a rousing rendition of the Canadian national anthem followed by a roving reporter segment highlighting delegates attending the conference and offering behind-the-scenes views of Chapter Connections Day and conference preparation.

Karen Dryden-Palmer, CACCN President, welcomed everyone to the national conference and spoke to the association theme of “Together We Can”. Karen asked delegates to share their “Together We Can” thoughts on the message board at the registration desk. By the end of the conference, the message board was full of wonderful ideas and accolades for colleagues and critical care nurses in general.

Keynote speaker Dr. Franco Carnevale challenged us to reflect on how moral distress impedes critical care nurses to practise in accordance to their ethical standards. He shared how strengthening our role as moral agents will lead to a stronger structure for understanding the moral dimensions of critical care nursing practice.

Nurse Leader Michael Villeneuve opened the conference on Monday with a Global Call for Transformative Change. It was a compelling speech founded on facts about the number of preventable deaths from adverse events in health care, the impact of our aging Canadian population, and the evidence of greater patient satisfaction when hospitals have higher ratios of nurses to patient days, just to name a few. I agree with Michael—courage, imagination and evidence are the basis for practice excellence in critical care.

Over the three days of the conference, there were 49 concurrent sessions from which delegates could choose. Sessions were offered on pediatric, adult and all ages topics, with one presentation per session offered in French for our francophone colleagues. Baxter Corporation sponsored a replacement session on Renal Replacement Therapy Modality and Survival in Acute Kidney Injury presented by Frans Richter.

The luncheon plenary presentations were very well received with Nicole Kupchik speaking about improving outcomes from cardiac arrest. She highlighted how nurses play a key role in resuscitation efforts and are key stakeholders to successful implementation of practices that result in improved patient

survival. The presentation was sponsored by Physio-Control. I still can't get that Saturday Night Fever song out of my head!

3M Canada sponsored a session on evidence-based wound care for critical care nurses presented by Kevin Woo. Dr. Woo spoke about the key principles of wound management and offered a toolkit for nurses to use in practice that addressed a variety of needs in patients with difficult-to-heal wounds.

Dr. Pierre Marsolais spoke of the challenges of an organ donor program and guided participants through a pilot project that highlighted a new organizational structure to optimize organ donation. Dr. Marsolais' session was supported by Canadian Blood Services.

Patient- and family-centred care has been in place for more than 15 years, yet acute and critical care health care providers continue to struggle with family presence and the determination of the role the family plays on the health care team. Kathryn Roberts, Past President of the American Association of Critical-Care Nurses, provided an overview of the key concerns of health care providers regarding the role of the family and the families' perspectives on their role with the team for optimal integration of families into the health care team.

Lifelong learning and skilled knowledge of clinical practice and leadership are essential for critical care nurses to enhance professional competencies and advance their nursing practice. By sharing their experiential knowledge, the nursing panel comprised of Marie Edwards, Barbara Fagan, Linda Massé and Teddie Tanguay offered valuable insight and information for nurses in all phases of their careers.

Karen Kinnear spoke of the need for authentic leadership, engaged team members and a clear vision being essential to the delivery of quality pediatric critical care services. Karen detailed the five-year improvement plan and leadership interventions that successfully achieved the high-performance team vision at the Hospital for Sick Children in Toronto, ON.

Dr. Franco Carnevale and Jane Chambers Evans discussed the array of ethical challenges for the critical care nurse. This session sparked a lot of stories and questions from the delegates.

The poster reception was a wonderful evening for socializing and viewing the 27 poster presentations. These presentations provided delegates with the opportunity to read and see the innovative projects and research nurses are engaged in across Canada and the United States to improve practice in critical care. Thank you to the Canadian Intensive Care Foundation for sponsoring the reception and 3M Canada for the poster reception door prizes.

Graham Chittenden, a comedian known for his work on the Debaters and the Just for Laughs circuit, left everyone smiling. Some like to say “laughter is the best medicine” and our closing speaker proved just that.

Delegates also took time to enjoy the beauty and hospitality of Québec City, one of the oldest cities in North America. With the conference's proximity to the ramparts surrounding the Historic District of Old Québec, delegates enjoyed sight-seeing, horse drawn carriage rides and amazing food.

As usual, there was a fabulous turnout of approximately 200 delegates attending the Masquerade Ball. An evening of mystery with creative masks and some very elaborate costumes did not stop anyone from swarming onto the dance floor as soon as the "Singing Pianos" hit the first note. Delegates danced on the floor, the stage, and just about anywhere possible! Between the dancing, delegates were treated to a wonderful four-course Québécois menu, "très bon." At the annual dinner, CACCN and Dynamics 2014 acknowledged the generous educational support and ongoing commitment of GE Healthcare to the Dynamics Conference.

The Conference Committee put this excellent conference together on a volunteer basis, supported by Christine Halfkenny-Zellas, Chief Operating Officer of CACCN, who coordinates the exhibit hall and the many conference details with the Conference Chair. I would like to acknowledge the hard work by my very enthusiastic Planning Committee:

Natasha Dupuis, MSc(A), RN
Christine Echegaray-Benites, MScA, RN
Marie-Andrée Gauthier, BScN, RN
Mélanie Gauthier, M Int. Care N, RN, CNCC(C)
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This planning committee hit the ground running and never looked back. Each member of the team willingly took on tasks that were unfamiliar without blinking an eye. Awesome job, team!

I would also like to acknowledge the support received from the National Board of Directors and, specifically, the support and guidance of Karen Dryden-Palmer, MN, RN, CACCN President/Dynamics Liaison.

We are grateful to 3M Canada, Baxter Corporation, Canadian Blood Services, Canadian Intensive Care Foundation, GE Healthcare and Physio-Control for their support of our educational program. We also appreciate the support of the exhibitors who showcased their products/services for the delegates. The exhibit hall stage was offered during lunches, and delegates enjoyed presentations from Sage Products, Hospira and Philips Healthcare. Delegates were also offered the opportunity to win door prizes donated by 3M Canada, Canadian Nurses Association, Scrubs for You, Room 217 Music Care, and Dan Renaud from Wolters Kluwer Lippincott. Thank you to our industry partners for your generosity and financial support.

Dynamics is the national conference of the CACCN. Due to the commitment, support and guidance of the Board of Directors, the direct input of Karen Dryden-Palmer, MN, RN, Board of Directors Dynamics Liaison, and our industry partners, the conference remains the premier critical care nursing conference in Canada each year.

I look forward to seeing you at Dynamics 2015: "*Bridging the Nation with Compassion, Imagination and Innovation*" when we gather once again with CACCN colleagues in Winnipeg September 27–29, chaired by Marie Edwards. 🌸

Respectfully submitted,
Renée Chauvin
CACCN Vice President
Dynamics 2014 Conference Chair

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*The CACCN Board of Directors and the Dynamics 2014 Planning Committee wish to sincerely thank the following for their contributions to Dynamics 2014. The ability to provide quality programming during the **Dynamics of Critical Care Conference** depends upon the support of our sponsoring and exhibiting companies:*

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On Monday, September 22, 2014, at the Dynamics of Critical Care Conference, our CACCN colleagues were honoured for their achievements in Critical Care Nursing.

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Karen Dryden-Palmer, CACCN President, and Natalia Lavrencic

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René Favre, Montréal, QC
Nominated by: Mélanie Gauthier and
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Andrea Ford, Port Moody, BC

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Pamela Hruska, Calgary, AB

Pediatric Initial Certification

Holly Rechenmacher, Vancouver, BC
Sarah, Shea, Montréal, QC

Pediatric Certification Renewal

Pieterella Dewit, London, ON



Andrea Ford, Karen Dryden-Palmer, CACCN President, Sarah Shea, and Pieterella Dewit

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Karen Dryden-Palmer, CACCN President, and Delegates' Choice Poster Award recipients

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Karine Allard and Karen Dryden-Palmer, CACCN President



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Dominique Beaulieu, Québec, QC

*Congratulations to all award recipients!
Thank you for the continued support of our sponsors BBraun Medical Canada, Cardinal Health Canada, Draeger Medical Canada, Smiths Medical Canada and Spacelabs Healthcare!*



Left: The Dynamics 2014 exhibit floor

Above: 2014 CACCN Board of Directors: Karen Dryden-Palmer, President, Ruth Trinier, Treasurer, Rob Mazur, Director, Christine Halfkenny-Zellas, Chief Operating Officer, Marie Edwards, Director, Renée Chauvin, Vice President and Barbara Fagan, Director

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December 1: CNA CNCC(C) and CNCCP(C) Renewal Applications deadline

December 31: Chapter Q3 Financial Reports deadline

January 31: Dynamics 2015 Call for Abstracts deadline

January 31: Smiths Medical Canada Ltd. Educational Award deadline

February 15: CACCN Research Grant Application Deadline

March 1: Dynamics Planning Committee 2016 Application deadline

March 3-5: BOD F2F Meeting, Toronto, ON

April 18: CNA Certification Examination

June 1: Dynamics 2015 Conference Brochure/Online Registration available

June 1: Brenda Morgan Leadership Excellence Award deadline

June 1: Spacelabs Healthcare Innovative Project Award deadline

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June 1: B Braun "Sharing Expertise" Award deadline

July 5: Board of Directors Nominations deadline

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Criteria for awards available to members of the Canadian Association of Critical Care Nurses are published on pages 35-44 of this issue of Dynamics.

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Submission of an abstract constitutes a commitment by the author(s) to present the abstract as accepted.

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Submission Deadline: January 31, 2015 by 23:59 ET

Silent witnesses: Student nurses' perspectives of advocacy and end-of-life care in the intensive care unit

BY ELAINE DOUCETTE, MSc(N), RN, TIEGHAN KILLACKEY, MN (STUDENT), RN, DANIELLE BRANDYS, MN (STUDENT), RN, ANNIE COULTER, BScN, GPL, MEGHAN DAoust, BScN, GPL, JOANNA LYNSDALE, BScN, GPL, EMMA MILLSON TAYLOR, BScN, GPL, FANNIE PINSONNEAULT, BScN, GPL, ERIC SHAMY-SMITH, MSc(A) (STUDENT)

Abstract

As future health care providers, students are taught to promote health and preserve life, and when the prognosis is grim, it can be difficult to shift from a curative focus to a palliative care focus. The intensive care unit (ICU) provides a challenging learning environment, as the patients are critically ill and possess complicated diagnoses with uncertain outcomes. Students faced with death in the ICU may not feel confident to act as patient advocates. Feelings of fear and uncertainty may ensue, rendering them silent witnesses to care.

When fear and uncertainty arise, students frequently turn to their preceptors for guidance, as they witness their expertise as advocates during end-of-life care situations. This encourages students

to apply theoretical knowledge and empowers them to advocate and define their role within the health care team. Learning to deal with death increases nursing students' ability to cope, and allows them to better understand the nurse's role in end-of-life care. In turn, students provide nurses with an opportunity to reflect on their professional experiences with death, leading to improvements in clinical practice and critical thinking in these settings.

The authors of this paper explore student experiences with end-of-life nursing care and highlight the importance of mentorship by ICU nurses in teaching students to advocate for patients and their families, and its importance in shaping their practice as future clinicians.

Doucette, E., Killackey, T., Brandys, D., Coulter, A., Daoust, M., Lynsdale, J., Millson Taylor, E., Pinsonneault, F., Shamy-Smith, E. (2014). Silent witnesses: Student nurses' perspectives of advocacy and end-of-life care in the intensive care unit. *Dynamics*, 25(4), 17–21.

Background

Patients in the intensive care unit (ICU) are critically ill with complicated diagnoses and uncertain outcomes. Approximately 20% of patients admitted to ICUs will die (Angus et al., 2004). In fact, critical care nurses are providing end-of-life care more often than ever before, contrary to the original purpose of the ICU to promote recovery and healing. Nurses spend more time with patients and their families at the end of life than any other health care professional. As a result, critical care nurses are often confronted with the challenging role of supporting patients and families through painful transitions, complicated ethical dilemmas, and agonizing decisions surrounding withdrawal of care (Ferrell & Coyle, 2006).

Nursing students at the Ingram School of Nursing at McGill University have their medical-surgical rotations during the second year of their program. Some of the students are placed in ICU settings during this time. Authors have strongly supported placing students in a critical care environment during the early stages of their clinical education (Doucette et al., 2011), because this unique experience has been shown to strengthen the links between theory and practice, while providing ample opportunity to observe and perform a variety of skills. However, these placements also provide a challenging learning environment. Students often face difficult situations, such as experiencing the death of a patient for the first time. As a result, they may lose confidence in their abilities to advocate for their patients and families (Beck, 1997). Feelings of fear and uncertainty may ensue, thus rendering them silent witnesses to care (Bradbury-Jones et al., 2011).

In these challenging situations, students often turn to their preceptors for guidance. The one-on-one mentoring provided by the ICU nurse preceptor facilitates a supportive learning environment. The relationship among preceptor, student, and patient allows students to witness their preceptor's role as an advocate for their patients and families. This encourages students to apply theoretical knowledge, as well as empowering them to advocate and define their role within the health care team. Learning to deal with death increases the nursing student's ability to cope (Beck, 1997) and places any uncertainty that may arise into perspective (Allchin, 2006). In turn, students provide the nurse with an opportunity to reflect on his or her own professional experiences with death and dying and how they have evolved with time, which leads to improvements in both clinical practice and critical thinking (Swinny & Brady, 2010).

The acute care experience

It is important to note that although only a few students are placed in critical care settings during clinical rotations, the majority of students rotate to highly acute medical and surgical units, which frequently bring forth the challenge of providing end-of-life care. Through discussions with students in a peer support group, it became clear that many students were dealing with first death experiences and having difficulty accepting the prospect of death (Fazio, Doucette, & Malcius, 2013).

In order to better understand the feelings surrounding end-of-life care in these clinical settings, a survey was distributed to all

second-year undergraduate students of the Ingram School of Nursing. A list of possible feelings was provided and students were asked to select those most representative of their experience. Greater than 50% of students indicated feeling one or more of the following: compassion, sadness, uncertainty, empathy, and unpreparedness. To further investigate methods of supporting students through these feelings, the CINAHL and MEDLINE databases were used to complete a comprehensive literature review. The following are the themes that emerged from these investigations.

Silent witnesses

End-of-life care has become increasingly common in the ICU due to the critical nature of the illnesses in this patient population. Students placed in these settings are often confronted with these difficult situations for the first time; they struggle with thoughts of their own mortality, as well as face the challenge of remaining professional despite feeling uncertain or unprepared. In the midst of their internal confusion, students may be unable to clearly define their roles, and may not feel confident in their ability to provide support for families in crisis. As a result, students are rendered silent witnesses to care.

Ouimet-Perrin, Sheehan, Potter, and Kazanowski (2012) define a witness as someone who recognizes individual uniqueness, dignity, lived experiences, and truths. In defining the meaning of silent witness, one student expressed that “to be a silent witness is to see, to watch and to acknowledge, but to feel unable, incapable or too scared to effectively engage with clients who are at the end of life”. This definition of a silent witness is embodied by another student’s experience involving a mother and her baby, who was receiving palliative care services:

When my preceptor explained the situation to me, I was completely speechless. I experienced a flood of thoughts and emotions. There is something very difficult about knowing someone’s baby is dying. There’s a heaviness that surrounds that person. When the mother walked by me, she smiled. I wanted to say something, but I didn’t know what. I felt terrible for her, and I was frustrated that in a situation as serious as that, I had nothing to say. So I just smiled back.

Coping and preceptorship

Many different avenues of support exist when it comes to coping with feelings of uncertainty and inexperience in new professional situations (Allchin, 2006; Cooper & Barnett, 2005; Huang, Chang, Sun, & Ma, 2010). The relationship between the preceptor and the student is an invaluable resource for nursing students. In critical care placements, students often adopt the role of an observer, allowing them to identify specific behaviours they hope to emulate in their future practice. The preceptor acts as a clinical role model and thus has a tremendous impact on the learning process (Carlson, Pilhammar, & Wann-Hansson, 2010). When guiding students through an end of life care experience, preceptors demonstrate interventions that can be used when caring for patients and families during a difficult time. Carlson, Wann-Hansson and Pilhammar (2008) highlight that it is useful for preceptors to establish a

trustful relationship with students, to encourage students to think freely and outside the box, and to give situational feedback to enhance the students’ feeling of security.

The following reflection is from a student who had just learned that her patient had passed away.

The nurse offered me the opportunity to help her prepare the body for the morgue. I was very nervous about it, but also felt grateful that the nurse reached out to me. As a student, it was difficult to approach a nurse in an end of life situation. The privacy of the moment and the emotions involved made it intimidating. The family was present in the room, and my nurse guided them through the process. While she explained the procedures to the family, she also verified my understanding and highlighted the nursing interventions I could do. After we left the room, my nurse asked me how it went. It was good to have someone prompting me to take time to reflect on what had happened. I remember thinking about the essence of what being human means; someone’s life was gone but to me she was still as human as anybody else. By asking and listening, the nurse allowed me to share some of my feelings and to understand myself better. When I thought about it later that day, I had a different perspective on death, life and myself.

This reflection stresses the importance of the relationship between the preceptor and student. The preceptor invited the student to participate in an end-of-life care situation, engaged her in the patient care, explained the protocol for post-mortem care and cued her as to how she could contribute. Finally, the preceptor debriefed with the student, encouraging the student to reflect on the experience and share her emotions. These aspects of the relationship are paramount in allowing the student and preceptor to grow in synergy (Wallace et al., 2009).

Advocacy

Critical care nurses are well suited for the role of advocate, as they spend a significant amount of time with patients and their families at the bedside (Carlet et al., 2004; Thacker, 2008). The McGill Model of Nursing defines the relationship among nurses, patients, and patients’ families as a collaborative partnership (Gottlieb & Feeley, 2005). Drawing on patients’ strengths is a vital aspect of nursing practice, and understanding patient and family needs allows nurses to advocate for families in complicated and emotionally challenging situations.

There is controversy within the nursing profession about whether or not advocacy can be taught (Hanks, 2008). Unlike technical skills, one cannot simply guide a student through advocacy, as if it were a procedure such as packing a wound or inserting an intravenous catheter. This poses the question—how do nurses learn to advocate? Foley, Minick and Kee (2002) reported that the single most important strategy noted by nurses was the opportunity to observe a preceptor approach the seemingly daunting task of advocating for patients and families in crises.

The importance of this approach can be seen in the following reflection. Earlier in the week, the patient’s wife expressed

feelings of hopelessness to the nursing staff. The preceptor communicated this to the physician and arranged a family meeting to discuss changing the level of care.

What really stands out to me was my preceptor's initiative in facilitating the transition to end-of-life care. He actively advocated for the wife and patient during report to the physician. He highlighted the decline of the patient's health status and expressed the wife's preparedness to let go, as well as the burden she felt as the middleman in making this decision. The nurse's relationship with the family was key in being able to effectively advocate for them; inherently, he knew that it was time to support them in moving forward during this difficult time. I learned so much from my preceptor. He told me, based on previous conversations with the wife, that she was ready to let go, and was holding on for the sake of her sons. In the patient room, he spoke to her with ease, asking her about how she felt about moving forward. As a student learner, having never participated in the transition from active treatment to end-of-life care, I was amazed by his intuition about the family's wishes, and his ability to put a plan into action to meet the family's needs.

Implications for practice

Thus far, we have generated several important implications for practice, which are pertinent to students starting their careers. Despite increasing emphasis on end-of-life care education, studies show that nurses believe the current curriculum does not adequately prepare students for this experience (Cavaye & Watts, 2010; Schlairet, 2009).

Classroom lectures that address the specific context of end-of-life care and decision-making are valuable in preparing students for these experiences that they will inevitably face in their practice (Brajtman, Higuchi, & Murray, 2009). However, it has been found that palliative care and death education are not sufficiently addressed in either classroom settings or in textbooks (Barrere, Durkin, & LaCoursiere, 2008). Learning outcomes are greatly improved through a multimodal approach, when theoretical concepts are linked with experiential learning (Hegedus, Zana, & Szabo, 2008).

Clinical experience is a profound source of learning for all students. Unfortunately, students are rarely assigned to palliative patients, as these learning experiences are not often viewed as positive. Intentionally assigning students to these patients with a preceptor would enable students to learn how to provide care for patients and their families who are actively entering the end-of-life trajectory (Cavaye & Watts, 2010; Schlairet, 2009).

Peer support groups are valuable and aid in learning by creating a space where students can learn from discussion with classmates. These groups can reassure students that their feelings are normal and they are not alone in experiencing challenging situations (Fazio et al., 2013). Techniques such as journal writing and role-playing are also helpful in combining critical thinking and self-questioning to promote understanding of student experiences (Brien, Legault, & Tremblay, 2008). These learning strategies positively influence the development

of clinical expertise and compassionate nursing techniques, and allow students to gain new insights into their own, as well as their patient's attitudes and anxieties. Transformative learning is the ultimate goal, allowing students to incorporate the new beliefs and knowledge into their practice (Barrere et al., 2008).

Workshops and other continuing educational activities have shown to positively influence nurses in practice by increasing their comfort in coping with end-of-life care situations (Brajtman et al., 2009). In considering curriculum changes, which often take a longer time to implement, additional continuing education workshops may be beneficial by enhancing nursing proficiency in end-of-life care.

It is important to distinguish between the care given at the end of life, and the care given at the time of death. Despite the strong curative focus of most health care disciplines, students should graduate with a better understanding of when and how to facilitate the transition from active treatment to end-of-life care. Nurses believe effective communication is a strong determinant of the quality of care at the end of life, and that patients value non-verbal communication such as sensitivity, presence, and warmth (Cavaye & Watts, 2010). Therefore, students also need to have the opportunity to further develop these attributes, which help in facilitating students to approach the family about end-of-life decision-making with sensitivity and compassion.

Statistics Canada (2011) predicts a large increase in Canadian death rates by 2026, as Canada's aging population continues to grow. With increasing technology and longer lifespans, palliative care will become an ever-increasing component of nursing practice, sounding the alarm that all students must be educated on these issues to be able to cope with what is coming in the future.

In considering nursing care at the time of death, further focus should be placed on the dying process and post-mortem care skills. This knowledge and preparation encourages communication between the family and the nurse or nursing student about what is occurring with their family member. This education should include stress management skills to prevent caregiver burnout for both nurse and family. It is important to stress that suffering at the end of life is not the only option and, as nurses and students, we have the power to significantly improve quality of life for our patients, including into the bereavement phase where family support is essential (Cavaye & Watts, 2010).


Reflection emerged as an important implication for practice. Reflective practice is valuable because of three core features: it identifies strengths and weaknesses in current practice, it facilitates critical thinking, and it provides an opportunity to discuss issues that otherwise would not be addressed (Braine, 2008; Shields, 1995). By using reflective practice, students are afforded the opportunity to impact future decision making, rather than remaining silent. When students discuss their reflections, they are speaking about the process of making sense, being critical, and developing self-awareness of and about an experience. A

formal opportunity to reflect on clinical experiences promotes trust and insight within the preceptor-student relationship.

Reflective practice undermines silence by creating a formal opportunity to share anxieties and concerns, thus enabling “crucial conversations” to take place (Maxfield, Grenny, McMillan, Patterson, & Switzler, 2005). It can be a tool for mitigating burnout and human error (Ouimet-Perrin et al., 2012), and it fosters a culture of safety rather than a culture of shame and blame.

Through these clinical experiences, improved education of palliative care, and formal reflection opportunities, students will be better prepared to transition to professional practice with increased skills and confidence to care for patients and families in future end-of-life situations (Halcom, Salamonson, Raymond, & Knox, 2011; Peterson, Johnson, Scherr & Halverson, 2013).

Conclusion

The preceptor is one of the most significant forces shaping future nurses’ practices. Further, engaging students in end-of-life care through education and clinical experience is essential. Although it is emotionally challenging, students need to learn about this aspect of health care. Preceptors can help to facilitate students’ growth and transition from a silent witness to a skilled and influential advocate for their patients at the end of life. In this way, nursing students develop both confidence and competence to provide holistic care at the beginning, middle, and end of life. 

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Exploring the effectiveness of the Oxygen Supply and Demand Framework in nursing education

By MARY GILLESPIE, MSN, RN, CNCC(C), AND EILEEN SHACKELL, MSN, RN, CNCC(C)

Abstract

Background: Traditionally, physiological concepts are learned within a body 'systems' framework. However, students are often challenged applying physiological knowledge in the integrated, holistic, and functional manner needed for effective clinical decision-making and patient care. To address this challenge, faculty in the BCIT Critical Care Nursing program developed a concept map that makes explicit the links among physiological concepts, physiological function, and patient presentation and guides nurses in making clinical decisions: the Oxygen Supply and Demand Framework.

Study purpose and design: A mixed methods research study was used to explore the effectiveness of the Oxygen Supply and

Demand Framework as an educational tool for registered nurses learning to provide nursing care for acutely ill patients. A pre-test/post-test assessment was used to assess knowledge and decision-making and reflective journals were used to gather qualitative data on students' perceptions.

Conclusions: Findings revealed the framework is a useful tool in supporting development of nurses' knowledge, understanding patients' clinical presentations, thinking processes and clinical decision-making. In addition, the framework emerged as a positive influence on nurses' engagement in patient advocacy and their communication within the health care team, highlighting its potential to enhance nursing practice and quality of patient care.

Gillespie, M., & Shackell, E. (2014). Exploring the effectiveness of the Oxygen Supply and Demand Framework in nursing education. *Dynamics*, 25(4), 22–26.

Key words: nursing education, concept maps, patient safety, knowledge translation, clinical decision-making, physiology

Background

In nursing education, physiological concepts are typically learned within a body systems framework. Students in specialty nursing programs at the British Columbia Institute of Technology (BCIT) were often challenged applying physiological knowledge in the integrated, holistic, and functional manner needed for effective clinical decision-making. To address this challenge, BCIT critical care nursing faculty developed a concept map that makes explicit the links among physiological concepts, function and patient presentation and guides nurses in making clinical decisions: the Oxygen Supply and Demand Framework (Shackell & Gillespie, 2009).

Educators have expressed concerns about the effects of fragmentation of knowledge on learning (Dikieson, Carter, & Walsh, 2008; Huber, Hutchings, Gale, Miller, & Breen, 2007; Tanner, 2007). Integrative teaching and learning, with its central premise of "developing the [learners'] ability to make, recognize and evaluate connections among disparate concepts, fields or contexts," helps learners "tie things together" (Huber et al., 2007, p. 46). Integrative teaching and learning curricula have been advocated for undergraduate nursing education (Benner, Sutphen, Leonard, & Day, 2010).

Concept mapping is an educational strategy that reflects the central premise of integrative learning: learners organize and analyze data, validate existing knowledge, make connections between ideas, and integrate new knowledge (Beitz, 1998; Canas et al., 2003; Conceição & Taylor, 2007; Kinchin, 2000; Novak 1991). Concept maps support the process of synthesizing large amounts of information into a coherent whole (Beitz, 1998; Canas et al., 2003). Further, it is suggested that the

use of concept maps as advanced organizers supports meaningful learning. Advanced organizers build from familiar foundational concepts, make explicit the relationships between concepts, and provide learners with a structure into which newer, progressively more differentiated concepts can be integrated (Atomatofa, 2013; Canas et al., 2003; Cutrer, Castro, Roy, & Turner, 2011; Hall & Strangman, 2002; Kinchin, 2000; Nesbit & Adesope, 2006).

The Oxygen Supply and Demand Framework (the Framework) is an advanced organizer. The Framework is intended to support learners' knowledge development and integration, thinking processes and clinical decision-making in two ways. First, by presenting relevant physiological concepts in an explicit and integrated format, the Framework supports learners in recognizing and understanding the connections among physiological concepts, patient data, cellular oxygenation, and associated interventions in patient cases. Second, as a curriculum construct within a specialty nursing program, the Framework supports students in integrating multiple sources of nursing knowledge across theory courses and clinical practice. While anecdotal evidence suggests the Framework supports its intended purposes, research is required to substantiate these claims.

Purpose

The purpose of this study was to explore the Oxygen Supply and Demand Framework as an educational tool for registered nurses (RNs) learning to provide nursing care for acutely ill patients. Research questions included:

1. Does the Framework increase students' understanding of physiological concepts and their interrelationships?
2. Does the Framework increase students' understanding of the influence of various pathophysiological processes on oxygen supply and demand balance in acutely ill patients?

3. How does the Framework guide students' clinical decision-making with patients in a simulated (case) setting?
4. What are students' perceptions of the influence of the Framework on their ability to make clinical decisions with patients in a simulated (case) setting?
5. What are students' perceptions of the influence of the Framework on their thinking processes and application of theory within their clinical decision-making processes?

Method

Study design

The researchers used a mixed methods design. The quantitative design (quasi-experimental, pre/post-test, one group) facilitated assessment of the effect of the Framework on students' knowledge development and clinical decision-making (research questions 1, 2 and 3), while the qualitative component (reflective journals) permitted insight into students' perceptions of the influence of the Framework on their thinking processes, understanding of patient situations, and clinical decision-making (research questions 4 and 5). A mixed methods approach is recognized as valuable when research questions cannot be answered using a single method (Doyle, Brady, & Byrne, 2009). In this study, it enabled the researchers to link students' perceptions of their learning process to changes in scores related to knowledge and decision-making.

Participants

Participants were RNs enrolled in a specialty nursing (SN) program, who had not had any prior education related to the Framework. The researchers provided information sessions and an invitation to participate to three cohorts of RN students (total 97). Thirty-seven RNs were enrolled in the study, with 18 participants completing all study requirements. It is assumed that attrition from the study was related to the heavy workload in the SN program, but this was not confirmed with participants. All participants received an honorarium of \$50.

Data collection

In the pre-test study component, participants completed a case study in which they responded to four short-answer questions exploring knowledge of oxygen supply and demand, cellular oxygenation (research questions 1 & 2) and priority interventions (research question 3) for a patient experiencing heart failure. The pre-test was completed prior to participants being introduced to the Framework within the SN program. At completion of the SN program (nine weeks duration; three theory courses and one clinical course), participants completed the same case study. They were unaware that the post-test case study would be the same as the pre-test case study. Case study responses were submitted via an online learning management system (LMS). Study consent included agreement to complete case studies without consulting any program resources or people.

Participants also completed one reflective journal entry in which they responded to prompting questions (Table 1). The journal was completed after finishing all courses in the SN program and submitted via the LMS.

Ethics

The research study received approval from the ethics review board. To ensure anonymity, each participant used a unique

identifier for all documents submitted during the research study, and all used the same ID and password to access the LMS site. A master list of participants, signed consent forms, and all collected data were kept in a researcher's office in a locked filing cabinet.

Data analysis

Quantitative. A marking rubric was established to guide scoring of the case study responses. Subject matter experts identified the critical content points for each case study question and allocated marks. The rubric was tested on pre-test case study responses received from three randomly selected participants who did not complete the study (and therefore could not be included in final analysis) and refined. The researchers marked case study responses together; this allowed any unusual content to be discussed, and built consistency in marks assignment.

Statistical analysis was completed. Mean scores for each research question and case study total scores, including standard deviation, were calculated. A paired T-test examined the distribution of differences in the pre and post-test total scores, as well as pre- and post-test scores for each research question.

Table 1: Prompting questions for reflective journal

1. Please comment on the influence of the Oxygen Supply and Demand Framework on
 - how you think about patient assessment data
 - your understanding of patient cases included in theory courses
 - your ability to make sense of your patient's clinical presentation and data in your clinical course.
2. Please comment on the influence of the Oxygen Supply and Demand Framework on your ability to make patient care decisions (in theory and clinical courses).

Table 2: Case study scores: All participants

n=18	mean	E	p value
Overall	11.9	4.9	0.000004
Question 1	4.7	2.4	0.00038
Question 2	4.6	1.3	0.00000007
Question 3	2.4	2.4	0.02201

Table 3: Case study scores: Less than 2 years of nursing experience

n=10	mean	E	p value
Overall	12.4	8.1	0.00352
Question 1	4.9	3.4	0.00501
Question 2	4.5	2	0.00033
Question 3	2.8	4.0	0.07585

Table 4: Case study scores: More than 2 years of nursing experience

n=8	mean	E	p value
Overall	11.3	6.8	0.00297
Question 1	4.5	4.2	0.01897
Question 2	4.6	2.1	0.00061
Question 3	2	3.1	0.08523

This analysis was completed for all participants, participants with fewer than two years of clinical nursing experience, and participants with more than two years of clinical nursing experience, with 95% confidence intervals determined (Tables 2, 3 and 4). This benchmark (two years) was chosen to correspond with “competent” level of proficiency within the novice to expert continuum of skill development (Benner, 1982).

Qualitative. Reflective journal responses were downloaded from the LMS, printed, and read by each researcher to get a sense of the whole. Constant comparative analysis was used to analyze data. Each researcher coded the transcripts independently and then conclusions were shared. Points of difference were discussed, consensus achieved and coding adjusted by both researchers working together. Analysis continued until themes were identified and described.

Methodological rigour

Methodological rigour was supported in several ways. Case study making was standardized by use of a rubric. The rubric was tested and refined using completed pre-test cases excluded from study data. Co-marking enhanced reliability. Notes related to marking decisions were kept and guided subsequent decisions supporting consistent scoring between cases.

Member checking was undertaken to confirm themes identified in qualitative data analysis. Themes were shared with participants by email and feedback invited. Feedback was received from only one participant. The low response may have been related to the time elapsed since data collection (one year).

An audit trail (including reflective journals, notes related to qualitative analysis, marked case studies and notes related to marking) was maintained to support dependability and confirmability (Lincoln & Guba, 1985).

Age	
Average	26.4 years
Range	22–40 years
Gender	
Female	16
Male	1
Not available	1
Years as RN	
Average	3.83 years
Range	1–21 years
Clinical Nursing Experience	
Less than 2 years	10
More than 2 years	8
Credential	
BSN (in Canada/US)	17
RN (outside Canada/US)	1

Findings

Sample

Participants in the study were predominantly female, aged 22–40 years. Seventeen participants had been RNs for one to six years, and one participant had been an RN for 21 years. Demographic data are included in Table 5.

Quantitative data

Overall mean scores for all participants increased by 11.9 ± 4.9 points with a 95% confidence level (Tables 2, 3, 4). Research questions one and two both showed statistically significant improvement, while scores for question three showed minimal change.

Qualitative data

Analysis of qualitative data revealed four themes about the participants’ perceptions of the influence of the Framework on their nursing knowledge, thinking processes and clinical decision-making: understanding the breadth and depth of patient data, decision-making process and thinking, quality of patient care, and learning with the Framework.

Understanding the breadth and depth of patient data. Participants reported that the Framework assisted them to see the ‘overall patient picture’: “Prior to the course, I may have recognized concerns within each individual system, but not necessarily tied them together in a bigger picture context. With the Framework I have a way to do that now.” The Framework also helped participants see relationships among pathophysiology, assessment data and clinical presentation, and to make sense of what was ‘happening with a patient.’ One participant commented: “Using oxygen supply and demand, as well as all the theory in class, I think I have a better method of integrating my understanding of my patients. When I reflect on my understanding before this course, I feel like it was very broken up and unrelated. Now I realize everything is related!”

Decision-making process and thinking. Participants described the Framework as a positive influence on phases of clinical decision-making, noting that it supported their thinking, enhanced assessment and ease of data collection, and helped them make sense of data, identify patient issues, and plan and evaluate care. One participant noted, “I am now able to better prioritize interventions, plan for potential interventions, know what to ask the doctor for and know better what to watch for to assess if the interventions are working adequately.” Another participant commented, “It made me think in a different way and aided in anticipating what problems may occur and what to monitor for”.

Further, participants’ stories reflected their increased capacity to understand and make meaning of complex patient data, supporting their clinical judgment and care. For example, “The Framework gave me a new set of eyes to guide my assessment, analyze the findings, and evaluate interventions. I was amazed at myself connecting the dots and asking different kinds of questions... I have a new level of understanding in regards to the goals of treatments and nursing care.”

Quality of patient care. Participants’ stories indicated that the Framework positively influenced specific areas of nurses’ practice and, consequently, enhanced the quality of patient care they provided. These included increased confidence, enhanced interdisciplinary communication and advocacy, and teaching ability.

Many participants indicated that the Framework supported increased confidence in, and improved the quality of, their decision-making: *“The Framework gave me more confidence to make clinical decisions and judgments upon assessment because it helped me to make sense of why, how, and which data are important.”* Further, they linked this change to improved patient care: *“I believe that I can now intervene quicker when I notice a change in patient status. This will definitely benefit me when providing patient care, as they will receive appropriate medical attention in a timely manner.”*

Several participants perceived that the Framework enhanced their communication within the health care team, noting *“It ... helped me to speak the same ‘language’ as the physicians who were working with the patients.”* For many participants, the Framework also enhanced their capacity in a patient advocacy role within the health care team: *“I now know when I really need to advocate for my patients’ needs and get help early, before a patient codes.”*

Finally, some participants believed the Framework improved their ability to provide patient and family education: *“Now that I ‘get it’ in this very systematic way, I can help my patients and their families get it too.”*

Learning with the Framework. Participants commented specifically on the effects of the Framework on their learning processes. They noted that the Framework fostered new ways of seeing and being. One participant described it this way: *“Learning the oxygen supply and demand Framework is like turning on your windshield wipers while driving in a rain storm—not only am I able to see so much clearer, but I also have a better understanding of where I’m going.”*

For many participants, the Framework also provided a shared language that supported consistency in learning and teaching: *“It was definitely helpful ... everybody in the class and the instructors were explaining things in the same way making it feel more cohesive ... we had various instructors and without a common Framework, I think they would have chosen to teach things in very different ways, which may have been confusing or not have come together as well.”*

Discussion

While the study findings are in themselves positive, they are more so because they are reported from RNs with significant patient care experience. The participants attributed use of the Framework to improving their nursing practice and enhancing the quality of patient care they provided. Further, the lack of significant difference in case study scores related to participants’ clinical nursing experience suggests that the Framework may benefit all learners (Tables 3 and 4).

The improvement from pre-test to post-test case study scores suggests that the Framework supported participants to develop a comprehensive understanding of physiological and pathophysiological processes, and their interrelationships within a patient’s clinical presentation (research questions 1 and 2; Table 2, 3 and 4). This is consistent with the qualitative theme of “understanding the breadth and depth of patient data.” There is a growing body of literature that supports the use of advanced organizers to improve learning, understanding and recalling of complex concepts in a variety of learning contexts (Atomatofa,

2013; Hall & Strangman, 2002; Nesbit & Adesope, 2006), including undergraduate medical education (Cutrer et al., 2011). Previous researchers have noted a lack of investigation into the role of advanced organizers in supporting the higher learning goals of application and problem solving (Nesbit & Adesope, 2006). Qualitative findings from this study suggest that the Framework is effective in these areas.

Overall, it is difficult to draw clear conclusions related to the influence of the Framework on participants’ clinical decision-making (research question 3). The lack of statistically significant improvement in mean scores related to clinical decision-making suggests that the Framework does not assist this aspect of nursing practice (Tables 2, 3 and 4). However, participants’ stories present the Framework as a positive influence on their thinking, clinical decision-making, and understanding of patients’ clinical presentation. It is possible that these apparently incongruent findings represent changes in *how* participants made clinical decisions—rather than the actual decision itself. Nurses are likely to be familiar with the patient case focus (e.g., heart failure), making it possible that participants’ pre-test case decisions were guided by pattern recognition (Buckingham & Adams, 2000; Thompson, 2003). While participants made similar decisions in the post-test case, their perception of the Framework as supporting their understanding, thinking and decision-making suggests their post-test decision-making *processes* may have changed. Their increased understanding of clinical presentation and pathophysiology, as well as an ability to recognize salient data, may represent both improved knowledge translation and clinical judgment (Benner et al., 2010; Tanner, 2006).

The positive influence of the Framework on participants’ thinking and decision-making, has important implications for patient safety and quality of patient care. In research exploring adverse events and near misses, Ebright, Urden, Patterson, and Chalko (2004) identified “the ability of the novice to identify relationships among and/or implications of specific patient clinical data” (p. 534) as critical to avoiding adverse patient events. They also note that “losing the big picture [of the patient]” (p. 536) is associated with adverse events.

Although not prompted to, participants also commented on the positive influence of Framework on other aspects of patient care related to patient safety, including increased confidence in decision-making, patient advocacy and interprofessional communication. In previous research, Lyndon (2008) identified confidence as a strong driver for patient safety, noting that nurses’ clarity about a patient situation will influence their confidence. Nurses’ ability to engage in patient advocacy has been previously linked to increased education (Hanks, 2008). Finally, communication and collaboration are suggested to be stronger contributors to improvement in critical illness outcomes than pharmacological and technological interventions (Papathanassoglou & Karanikola, 2013), with lack of interdisciplinary team communication emerging as a potential source of adverse patient events (Ebright et al., 2004). The emergence of these attributes in participants’ descriptions of using the Framework is consistent with the process of “formation” as part of the development of a nurses’ professional identity (Benner et al., 2010).

Finally, the participants' description of the Framework as supporting consistency in teaching and learning processes, in spite of multiple teachers in the educational program, is a noteworthy finding. The influence of consistent teaching and learning practices has not been well described in current literature, making this a point for further investigation.

Limitations


Limitations related to sample size and methodology are acknowledged. Attrition of 50% of participants reduced the strength of the findings, particularly the statistical analysis of the quantitative data. The inconsistency between qualitative and quantitative findings related to the influence of the Framework on clinical decision-making raises a methodological question: is it possible to quantify the complex process of clinical decision-making?

Implications

This study's findings support a decade of positive anecdotal evidence collected from students using the Framework in four specialty nursing programs. The positive influence of the Framework on students' learning and nursing practice calls for educators to consider this approach in nursing curricula. In addition, the influence of the Framework on nurses' assessment, recognition of salient data, increased confidence in decision-making, patient advocacy and communication within the health care team, highlights the potential for improvement of nursing practice and quality of patient care. Finally, the limitations of this study point to a need for more research.

Specifically, the effectiveness of the Framework on nursing practice and clinical decision-making needs to be explored in a variety of populations of learners, including undergraduate nursing students.

Conclusion

In this study, the researchers explored the Oxygen Supply and Demand Framework as an educational tool for RNs learning to provide nursing care for acutely ill patients. Findings support the Framework's usefulness in the development of nurses' thinking, clinical decision-making, and understanding of patients' clinical presentation. Its positive influence on patient advocacy and nurses' communication within the health care team highlights the potential for improvement of nursing practice and quality of patient care. 

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Barriers to achieving a time-to-target temperature goal in post-cardiac arrest patients treated with mild therapeutic hypothermia

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Abstract

Background: Out-of-hospital cardiac arrest (OHCA) is associated with substantial morbidity and mortality. Mild therapeutic hypothermia (MTH) (core temperature of 32°C to 34°C) for patients post-OHCA has been demonstrated to improve neurological outcomes and mortality in comparison to usual care. At our institution, a protocol was created to manage post-OHCA patients requiring MTH, who were admitted to the intensive care unit (ICU). The protocol's time-to-target temperature (TTT) goal, defined as the time from a return of spontaneous circulation to achieving MTH, was four hours or less. However, anecdotal feedback from critical care staff indicated that the TTT goal was achieved infrequently.

Purpose: The purpose of this study was to determine: (a) the proportion of patients achieving the TTT goal, and (b) the barriers to achieving the target temperature goal. We also sought to determine the proportion of patients achieving our TTT goal in the direct and non-direct transfer groups, as well as to identify inefficient processes within the clinical pathway that were contributing to prolonged TTTs, and whether time of day and day of week were associated with longer TTT durations.

Methods: We performed a comprehensive chart review of all post-OHCA patients treated with MTH between 2007 and 2011. The primary outcome was the proportion of patients who achieved our four-hour TTT goal. We also analyzed direct and non-direct transfers from the emergency department (ED) to the

ICU (patients who left the ED for procedures or imaging, but did not return to the ED, and patients who left the ED for procedures or imaging and then returned to the ED), and compared those TTT times.

Results: We identified 32 patients who met the criteria; only four patients (12.5%) achieved our TTT goal (mean 190 minutes; range 155–230 minutes). The mean TTT was 461 minutes for the overall group (range 211–865 minutes). The TTT of the direct transfer group was significantly less than the non-direct transfer group (mean of 420 minutes versus 550 minutes, $p=0.017$), but even in the direct transfer group, the TTT goal was still rarely achieved (18%). We identified several steps in the clinical pathway that were contributing to delays in TTT including time taken for a patient to be assessed by an ICU physician, time to initiate MTH, and the time from MTH initiation to target temperature. In addition, we found that the technology used for MTH induction played a large factor in failing to achieve our target.

Conclusion: At our institution we were unable to achieve the target TTT for the majority of our patients, using our protocol. Several potentially modifiable factors contributed to the delay in achieving hypothermia. The development of a more structured and prioritized pathway between ED, interventional cardiology, and the ICU may reduce the TTT. Adoption of an alternate means of MTH induction appears to be required to achieve our TTT goal.

Carriere, S.A.L., Carriere, K., Ayas, N., Hirsch-Allen, A.J., & Grunau, B.E. (2014). Barriers to achieving a time-to-target temperature goal in post-cardiac arrest patients treated with mild therapeutic hypothermia. *Dynamics*, 25(4), 27–32.

Background

Out-of-hospital cardiac arrest (OHCA) is associated with poor neurological outcomes and low survival rates to hospital discharge (Heart and Stroke Foundation, 2011; Nichol et al., 2008). In 2002, two randomized controlled clinical trials found that the use of mild therapeutic hypothermia (MTH), a targeted core temperature of 32°C to 34°C, in patients post-OHCA with initial rhythms of ventricular fibrillation and pulseless ventricular tachycardia, resulted in improved neurological outcomes when compared to usual care (Bernard et al., 2002; The Hypothermia After Cardiac Arrest Study Group, 2002). This led to widespread adoption of MTH for patients resuscitated from OHCA (Collins & Samworth, 2008; Holzer et al., 2005; Sunde et al., 2007).

At our hospital, the “Critical Care Mild Therapeutic Hypothermia Protocol” was created in 2003 and was used for all patients deemed appropriate for this therapy until December 2013. A four-hour time-to-target temperature (TTT) goal (defined as the time from a return of spontaneous circulation to achieving MTH) was implemented based on data reporting the benefits of prompt hypothermia induction (Chiota, Freeman, & Barrett, 2011; Holzer, 2010; Mooney et al., 2011; Scirica, 2013; Sendelbach, Hearst, Johnson, Unger, & Mooney, 2012; Wolff, Machill, Schumacher, Schulzki, & Werner, 2009). Anecdotal feedback from critical care staff indicated that the TTT typically extended past the four-hour goal. A major contributor was thought to be delays in treatment that occurred after the patient's arrival to hospital.

The care of a patient treated with MTH is an incredibly complex, task-driven protocol, which requires intense management and regulation of the patient's hemodynamic status. This also includes managing psychological aspects that require constant family support and education, which continues past the cooling and re-warming phases. Critical care nurses play a pivotal role in detecting, preventing, and treating complications associated with MTH (Koziet, 2007).

The MTH protocol is heavily nurse-driven, from the moment a patient arrives in the trauma bay, to assisting with central line insertions, coordinating transfers from unit to unit, to setting up the cooling apparatus. A critical care nurse can also translate current information into practice to their co-workers, as well as educate new physicians in the emergency department (ED) and intensive care unit (ICU) (Kupchik, 2009).

Toma et al. (2010) examined perceived barriers to MTH initiation for patients resuscitated after a cardiac arrest with a qualitative study of ED and critical care health care professionals. Frequent barriers included lack of protocol familiarity, lack of interdisciplinary collaboration between the ICU and ED, lack of inter-professional education between nurses and physicians, and general challenges associated with applying an intervention infrequently. A lack of clinician engagement as a frequent barrier in knowledge translation and protocol implementation was documented by Brooks and Morrison (2008) who also indicated the importance of understanding and addressing these barriers for improved transition of care. We noted that despite there being anecdotal evidence on perceived barriers, there was very little literature to support this. The potential of a more structured and universal pathway by installing a quality improvement initiative can facilitate improved communication, co-ordination, and efficiency for this patient population.

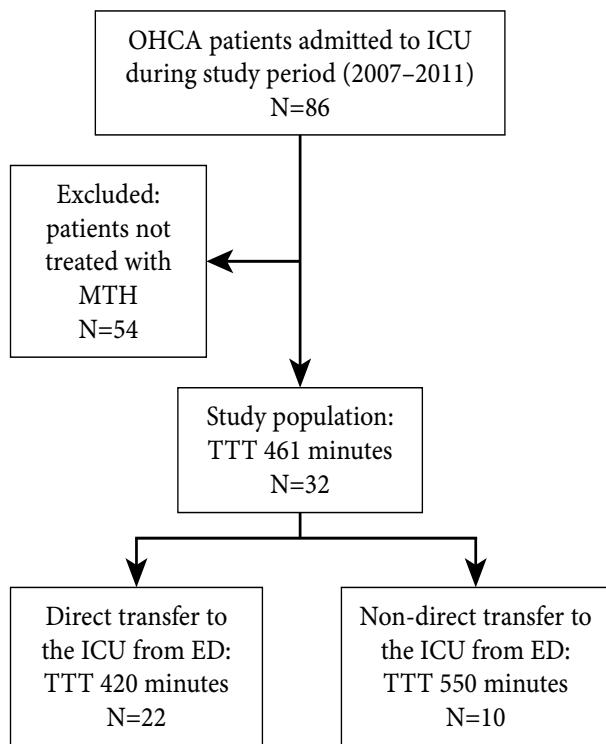


Figure 1: Consort Diagram

Purpose

The purpose of this study was to determine: (a) the proportion of patients achieving the goal time-to-target temperature, and (b) the barriers to achieving the target temperature goal. We also sought to determine the proportion of patients achieving our TTT goal in the direct and non-direct transfer groups, as well as identify inefficient processes within the clinical pathway that were contributing to prolonged TTT's, and whether time of day and day of week were associated with longer TTT durations.

Methods

Study design and setting

This retrospective cohort, chart review took place at an academic teaching hospital affiliated with the University of British Columbia, within the Vancouver Coastal Health Region in Vancouver, British Columbia. The hospital is an inner-city tertiary care provincial referral centre with 15 funded ICU beds. The review board and ethics committees of both this academic teaching hospital and the affiliated university approved this study.

Selection of participants

The regional Vancouver Coast Health ICU Database contains data on all patients treated in the ICU, including diagnoses and procedures. We interrogated the database to identify all cases of OHCA treated in the ICU between 2007 and 2011. Patients treated with MTH were then identified and included in the study (see Figure 1).

The Critical Care MTH Protocol

The MTH protocol was initiated at the discretion of the treating ICU physician. Resuscitated OHCA patients were excluded from MTH if they were hemodynamically unstable, had a core temperature on arrival of 30°C or less, or had a Glasgow Coma Scale of more than 6. The retrospective chart review noted that ED physicians did not initiate MTH, and cooling was not initiated until the patient was physically located in the ICU. Arterial and central venous access was to be achieved prior to MTH initiation. A CT scan of the head was also performed prior to MTH. However, this was ordered at the discretion of the treating ICU physician and, at times, did not occur until after the initiation of MTH. Convection water surface cooling wraps were used for hypothermia induction and maintenance, and morphine and midazolam infusions were used for sedation. Paralysis was used for induction and, if necessary, during maintenance of hypothermia.

Study measurements

The primary outcome of the study was to examine the proportion of study patients who met our TTT goal. Secondary outcomes were the proportion of patients achieving our TTT goal in the direct and non-direct transfer groups. In addition, we sought to identify inefficient processes within the clinical pathway that were contributing to prolonged TTTs, and whether time of day and day of week were associated with longer TTT durations.

Data collection and analysis

Two investigators (S.C., K.C.) systematically and comprehensively reviewed all study charts with guidance from chart

review recommendations (Gilbert, Lowenstein, Koziol-McLain, Barta, & Steiner, 1996) once a month for six months. At the end of the six-month period one investigator conducted a random chart audit to check reliability. Investigators (S.C., K.C.) abstracted data onto a standardized Microsoft Excel spreadsheet, and SPSS software (Version 18) was used for analysis.

Data included demographics, initial arrest rhythm, age, and the time of return of spontaneous circulation (ROSC). The day of week and time of day the event occurred were also collected. Methods of MTH induction and maintenance were recorded, as well as the reasons for premature cessation of MTH, if applicable. In addition, each subject's clinical pathway was mapped from ROSC to target temperature reached. Timing of pertinent sentinel events and interventions were recorded on a study-specific tool to build timelines for later comparison. Specific time periods of interest included time from ROSC to initiation of MTH, time spent in the ED before a patient was assessed by an ICU physician, time spent in the ED post ICU assessment prior to being transferred to the ICU, the amount of time between leaving the ED and arriving in the ICU, time until target temperature reached once MTH was initiated, and the amount of time taken to perform procedures such as inserting arterial and central venous catheter lines.

Patients were divided into categories of "direct" and "non-direct" transfer pathways. The term "direct" pathway was used for patients who did not transfer back to an area in which they had previously been located, prior to their eventual arrival in the ICU. For example, if a patient was transported from the ED to the cardiac catheterization suite, to radiology for an imaging study, and then to the ICU, this was considered a "direct" pathway. A "non-direct" pathway was defined as a patient who did transfer back to an area he or she had been previously, or was transferred to an interim holding location not associated with frequent MTH treatment (such as the cardiac care unit) prior to arrival in the ICU. For example, if a patient was transferred from the ED to the cardiac catheterization suite, then to the cardiac care unit or back to the ED, and finally to the ICU, this was noted as "indirect"

To determine whether there was a difference in TTT between direct and non-direct transfer patients, the log-rank test was used. The log-rank test was used to compare the survival distributions of two samples, with survival defined as the time taken until MTH was complete.

The Kruskal-Wallis test was used for comparisons of TTT among three different time periods of the day (0800–1600, 1600–2400, 2400–0800). Descriptive statistics were used to compare day of week by summarizing and describing a sample of days MTH treatment was used. Differences between direct and non-direct transfers for time of day and day of week were not tested.

Results

Sample

Between 2007 and 2011, 86 post-OHCA ICU patients were identified, yielding 32 OHCA patients who were treated with MTH. The cohort was 75% men with a mean age of 61 years (range 33–85 years). The initial cardiac arrest rhythm was pulseless ventricular tachycardia or ventricular fibrillation (78%). Five patients underwent coronary angiography en route to the ICU. For more information on patient demographics please refer to Table 1.

Primary and secondary results

Overall, the mean time from ROSC to target temperature was 461 minutes (range 211–865 minutes; see Table 2). There were four patients (12.5%) who met the TTT four-hour goal, all of whom were in the direct transfer group (mean time 190 minutes, range 155–230 minutes).

For the whole group of 32 patients, we noted a mean time of 215 minutes to initiate MTH from ROSC, with a further mean time of 205 minutes from initiation of MTH to target temperature (Table 2).

The direct transfer group consisted of 22 patients (66%) and had a mean TTT of 420 minutes (range 211–710 minutes). In the non-direct transfer group (10 patients), the mean TTT was significantly greater, 550 minutes ($p=0.017$) (range 233–865 minutes). The time of day ($p=0.167$) and the day of the week ($p=0.453$) were not significantly associated with TTT.

Demographics	Sample No. (%)	Mean	Range
Age	32 (100)	61 years	33-85 years
Female	8 (25)	NA	NA
Male	24 (75)	NA	NA
Types of arrest			
pVT/VF	25 (78)	NA	NA
PEA	4 (12.5)		
Asystole	3 (9.5)		
Patients who met institution TTT goal	4 (12.5)	190 min	155-230 minutes
Direct transfer route to ICU	22 (66)	420 min	211-710 minutes
Non-direct transfer route to ICU	10 (30)	550 min	233-865 minutes

Key: pVT = pulseless ventricular tachycardia; VF = ventricular fibrillation; PEA = pulseless electrical activity; NA= not applicable

Delays in the decision to initiate MTH were largely due to delays in ICU assessment. The mean time for an ICU consultation request after hospital arrival was 57 minutes, with a total mean time until ICU assessment of 83 minutes. Also, while in the ED waiting for an ICU assessment and then waiting for transport to the ICU (mean time from ED arrival to departure of 113 minutes), only five of the 32 patients received an arterial line, and only six received a central line, both of which were required for MTH initiation.

The overall mean time (direct and non-direct transfer combined) between the initial ICU physician assessment in the ED to the arrival of the patient in the ICU was 103 minutes. The time between departing the ED to arriving in the ICU was 65 minutes, which excluded time spent in either CT scan (30 minutes), or the catheterization lab (44 minutes). Significant hold times were noted, such as the total time spent in the ED (mean time 113 minutes).

Discussion

We identified 32 post-OHCA patients treated with our MTH protocol and found a mean TTT of 461 minutes with only four patients meeting our institutional four-hour goal. It is difficult to hypothesize why the four patients met the TTT goal since the circumstances for each patient were very different. It was also difficult to find commonalities from a limited sample size.

Those with direct transfer of care to the ICU led to lower TTT times; however, we still only met our goal 18% of the time. The total time spent in hospital before actual cooling techniques were applied was long (mean 215 minutes). When examining timing intervals of various events in the clinical pathways, we found that the following processes each made large contributions to the prolonged TTT durations: time to decide if MTH was to be pursued (i.e., time to ICU assessment and decision regarding MTH), time to initiate MTH, and time of induction to target temperature.

We identified several areas for improvement in our current practice that have the potential to increase the success of achieving our TTT goal. The time to decide if MTH is to be used could be decreased by several methods: a) decreasing the time to ICU assessment, b) transferring the decision of MTH treatment to the ED physicians, and c) implementing a shared decision strategy by telephone communication early after patient arrival.

Regardless of who made the decision to initiate MTH, restricting the initiation of MTH in the ICU setting became a primary cause of the failure to make the TTT goal. We found that there were large amounts of time between the decision to initiate MTH and arrival in ICU, during which time MTH was not initiated. Initiating MTH in the ED could decrease this time significantly. Further, as bleeding complications have not been found to be higher in post-OHCA patients treated with MTH, as previously assumed (Nielsen et al., 2013), the current requirement to have central venous and arterial access prior to MTH initiation could be removed.

We documented long transport times between the ED to the ICU (mean 65 minutes), which excluded time spent in the CT scan or catheterization lab. In a review of charts, we found that preparations for transport, including collecting transport equipment, drawing up emergency medication, delays in waiting for transport assistance from hospital porters, and waiting for physician and respiratory technician attendance appeared to take place after the recorded “departure time” and, thereby, inflated the true transport time. In addition, elevator delays and the physical distance between the two units also contributed to the overall slow progression from one department to another. Improved pre-transport planning and coordination between various care team members could be improved to streamline this process. Further, we found that patients with

Time periods (minutes)	No.	Missing (%)	Mean (min)	Range (min)
ROSC to ED arrival	31	1 (3)	25	-5-42
ROSC to TTT achieved	32	0	461	211-865
ED arrival to ICU consult request	25	7 (21)	57	-25-250
ED arrival to ICU assessment	30	2 (6)	83	5-427
ED arrival to initiation of MTH	32	0	215	23-360
ICU assessment to patient arrival in the ICU	30	2 (6)	97	25-166
ED assessment to ICU arrival	30	2 (6)	103	-21-360
ED arrival to ED depart	30	2 (6)	113	12-348
ICU assessment to MTH initiation	32	0	37	0-112
Arterial line insert to completion	15	17 (53)	70	15-105
MTH initiation to TTT	32	0	205	131-285
Depart ED to ICU arrival	30	2 (6)	65	-5-225
Radiology arrival to departure	30	2 (6)	41	7-140
Time spent in radiology	12	20 (62)	30	15-30
Time spent in catheterization lab	5	27 (84)	44	13-105

* Negative times are due to no or inaccurate documented times recorded but the patient was documented to have been in an area.

a direct transfer of care led to lower TTT. When discussing logistical barriers to transferring patients, one main reason as to why a patient was not directly transferred to the ICU was due to lack of communication between the ED physician and the ICU charge nurse. Although an ICU physician may be aware of a pending transfer, there was no mention to the charge nurse. This is a crucial piece to the patient's pathway, as without informing a charge nurse, there is a delay in securing an ICU bed and nurse for patient care. Processes could be developed to ensure direct transportation patterns of patients to avoid unnecessary delays. Charge nurses are a source of knowledge and their expertise in hospital policies and protocols could be enhanced by providing education to other frontline health care professionals in the ICU, ED, and interventional cardiology on the importance of safely but swiftly moving a patient through this journey.

Our current method of inducing MTH led to prolonged initiation-to-target-temperature durations. Alternative methods of cooling are required to have a reasonable chance of success of our TTT goal. Potential options could include iced saline infusions or intravascular devices (Flemming et al., 2006; Kamarainen, Virkkunen, Tenhunen, Yli-Hankal, & Silfvast, 2009; Kim et al., 2007).

Following the release of our results, the ICU and ED developed the "Post OHCA Comatose Pathway" that mandated ED initiation of MTH (an early telephone conversation took place between the ED and ICU physicians regarding the decision to initiate MTH) and facilitated rapid awareness of all post-OHCA patients, with the aim to improve patient transition of care. A Quality Improvement team that included physicians, nurses and respiratory technicians working within the ED, ICU, and interventional cardiology collaborated to ensure inter-professional education, awareness of the MTH protocol, and reduced barriers to achieving TTT. Nurses in both the ICU and ED setting were regularly educated on the importance and complexity of MTH in order to safely and efficiently care for these patients and their families. Applying education to real-time cases scenarios allowed the nurses and physicians to see that the care of an MTH patient is complex, but can produce amazing patient outcomes. Nurse-to-nurse education allows sustainability of a new initiative and can be incredibly powerful in the continuing process of improving patient care.

With the implementation of this new protocol, we were able to reduce the time taken for a patient to be assessed by an ICU physician (72 minutes to 10 minutes), and we reduced TTT from seven hours to five hours. Comparing our baseline data of 32 patients we prospectively collected data on 20 patients treated with the new protocol in real time, using Statistical Process Charts to analyze data. As further data to guide the management of the post-OHCA patients have become available (Nielsen et al., 2013), we have continued to adjust our protocol to improve evidence-based care. Currently we are treating all OHCA patients to a target temperature management of 36°C for 28 hours post cardiac arrest, and maintain a core temperature below 37.5 for a total of 72 hours post time of cardiac arrest.


Similar quality improvement research for post-OHCA patients treated by MTH is sparse. A successful initiative, the "Cool-It" protocol (Rooney et al., 2011), was a combined effort among paramedics, ED staff, cardiology staff and ICU staff, which involved the activation of a post-OHCA team to enable rapid, coordinated, and consistent MTH delivery, combined with comprehensive post-OHCA care. By initiating an emergent response team, the program was able to show significant reductions in median times from ROSC to target temperature (345 minutes versus 258 minutes), and median times from ROSC to initiation of MTH (161 minutes versus 35 minutes). As the initiative continued, ongoing education and experience led to improved results. The Cool-It protocol authors advocate for continuous processes of quality improvement and small change tests, which are paramount for sustained success. Further, prospective data collection, analysis, and monitoring are essential for monitoring program success and quality of care.

Limitations

This was a retrospective medical record review and is subject to several limitations. The study took place at a single Canadian urban hospital. The protocols may vary in different settings. It is possible that unidentified factors played significant roles in the patient transition delays. The study size was small. Despite five years of retrospective data collection, only 32 patients were treated with MTH. It is possible that cases of patients treated with MTH were missed, as other OHCA patients treated with MTH were cared for in the hospital's coronary care unit. Although the ICU was deemed the most appropriate location to treat MTH patients, this did not mean the coronary care unit could not treat a post cardiac arrest patient with MTH. These patients' data are not collected and stored in the ICU database.

Conclusions

Using our previous MTH protocol we were rarely successful at achieving our institution's four-hour time-to-target temperature goal. We identified several areas for improvement that had the potential to lead to improved patient outcomes. The development of a more structured and universal pathway between ED, interventional cardiology, and ICU could facilitate improved communication, co-ordination, and efficiency and lead to improved outcomes in this patient population.

Since the adjustment of our protocol that is focused on targeted temperature management to 36°C and avoiding a fever in the first 72 hours post OHCA (Nielsen et al., 2013), future research and quality improvement projects on how well we are managing a patient's temperature could be completed. Critical care nurses primarily drive the management of these patients. Therefore, future research into nurses' perceptions and practice on best practice with our current tools to manage a patient's temperature could also be completed. 

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RESEARCH REVIEW

Meert, K.L., Eggly, S., Berg, R.A., Wessel, D.L., Newth, C.J.L., Shanley, T.P., ... Nicholson, C.E., for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Collaborative Pediatric Critical Care Research Network. (2014). Feasibility and perceived benefits of a framework for physician-parent follow-up meetings after a child's death in the PICU. *Critical Care Medicine*, 42, 148–157. <http://dx.doi.org/10.1097/CCM.0b013e3182a26ff3>

Research objective

To assess the feasibility and perceived benefits of conducting follow-up meetings between parents and physicians after a child's death in the PICU according to the Collaborative Pediatric Critical Care Research Network (CPCCRN) Follow-up Meeting Framework.

Research design

Prospective observational study

Setting

Seven American CPCCRN-affiliated children's hospitals

Sample size and participants

A total of 36 follow-up meetings were conducted that included 54 English- or Spanish-speaking parents whose child's death had occurred in the preceding month [n = 39 families (20%); 33 (61%) mothers and 21 (39%) fathers], 17 parent support persons (at request of parent), 23 critical care English- and Spanish-speaking physicians, and 47 other health professionals (at request of parent or physician).

Intervention

Forty-six critical care physicians across the participating sites were trained to use the CPCCRN Follow-up Meeting Framework. Training included a lecture, viewing three simulated follow-up meetings, interactive discussion, and a question-and-answer period.

Data collection

Video-recordings of follow-up meetings and a post-meeting survey distributed to participating parents (administered by a research coordinator via telephone) and critical care physicians and other health professionals (self-written for each meeting in which they participated), which were completed within one week of the meeting.

Data analysis and outcome measures

Two trained research assistants independently analyzed each video and transcript of each video by rating the presence (score of 1) or absence (score of 0) of physician behaviours using a 20-item checklist and scoring the quality of performance of each present behaviour using a five-point scale (1 = low quality, 5 = high quality). The extent to which physicians performed each behaviour was summarized by items as the absolute count and percentage of all meetings in which the item was performed. The quality of performance of each present behaviour was summarized by item

as the mean and standard deviation of all quality scores obtained for the time. Likert-scale survey responses were summarized by item as the absolute count and percentage in each response category, excluding missing data. Responses to open-ended survey questions were analyzed inductively.

Main findings

Rating of the video recordings and accompanying transcripts showed that critical care physicians performed 12 of the 20 behaviours consistent with the framework in $\geq 89\%$ of the meetings with a mean quality of ≥ 4 for 17 of the 20 behaviours (4.3 ± 0.2). Behaviours that were found to have poor adherence were associated with "opening the meeting" behaviours (i.e., asking parents how they were doing and making the transition to meeting content) and "during the meeting" behaviours (i.e., making transitions between topics). The aspects of the framework that physicians found most helpful included having a system for inviting parents, arranging the meeting and having a structure to guide the meeting. The least helpful aspects of the framework included the need for even greater meeting structure for physicians with limited experience with follow-up meetings.

The aspects of the meeting that parents found most helpful included the opportunity to gain information, receive emotional support, and provide feedback, as well as the honest, unhurried and nonthreatening style of communication. The least helpful aspects of the meeting included the need for additional information that was not available or communicated clearly and the desire for different support staff at the meeting than those who attended.

Other health professionals' open-ended responses mirrored the comments of the physicians and the parents. Table 1 reports a few additional findings for all three respondent groups.

Conclusions

A parent-physician follow-up meeting after a child's death in the PICU using the CPCCRN Follow-up Meeting Framework appears to be feasible to conduct and is perceived to be

Table 1: Summary of Survey Item Responses by Respondent Groups

Survey Item (agreed or strongly agreed)	Physicians (N = 36*)	Parents (N = 50*)	Other Health Professionals (N = 50*)
Meeting helpful to self	31 (89%)	46 (92%)	39 (85%)
Meeting helpful to others	33 (92%)	40 (89%)	40 (89%)
Meeting will help them to cope in the future	NA	39 (78%)	NA
Adhered to framework	27 (75%)	NA	NA
Framework easy to apply	33 (92%)	NA	NA

*completed surveys


beneficial by parents, physicians, and other health professionals. The framework provides a flexible structure that, with training, is easily applied and adhered to. Future studies are needed to determine whether a single meeting affects bereaved parents' short- and long-term emotional and physical well-being.

Commentary

It has been reported that approximately 90% of inpatient pediatric deaths occur in the PICU (Carter et al., 2004), often after withdrawal of life-prolonging medical therapy (Sands, Manning, Vyas, & Rashid, 2009). It has also been reported that following the child's death in a PICU, some degree of moral distress for caregivers and families is normally experienced (Shudy et al., 2006; Truog, Meyer, & Burns, 2006). Pediatric critical care nurses have long understood that, although critical care's *raison d'être* is stabilization and cure through the use of life-sustaining measures, palliative care also needs to be an essential focus of care in many situations. PICU nurses have engaged in a variety of grief and bereavement care activities for over 20 years including, but not limited to such acts of kindness as attending the child's funeral, sending sympathy cards, sending cards on the day of the child's birth and death, reaching out with phone calls and visits to the family's home and attending annual memorial services, which parents have reported as being appreciated and highly valued (Macdonald et al., 2005). This study reveals that a substantial minority of parents value structured follow-up meetings with members of the PICU interdisciplinary team after a child's death, further enhancing the grief and bereavement support they receive from the critical care interprofessional health care team.

There are limitations to this study that caution against the generalizability of these findings. First, only those PICUs that were part of the CPCCRN participated in this study and may represent a population of critical physicians that are different from those PICUs not involved with the network. Further research is needed that seeks to expand on the type of participating PICUs. Second, of the 194 families who were mailed invitations to

participate in this study, only 20% agreed to a follow-up meeting. We need to better understand why 41% of families declined participation (the other 39% were unable to be contacted). Perhaps more parents would be willing to attend a follow-up meeting if it is not associated with research. The timing of the meeting post the child's death (i.e., one month following the child's death) and/or the location of the meeting (at the hospital where the child died or at another on-campus location) may also have been difficult for many parents. Macdonald and colleagues (2005) reported that a return to the hospital to attend a memorial service is often fraught with difficult feelings and memories; thus, some parents are unable to attend. Researchers who examine the feasibility of offering these follow-up meetings at a time and location that is determined by the family are needed. Finally, the finding that some parents expressed dissatisfaction with the selection of health professionals in attendance warrants further study. Prior research has revealed that, in addition to the physician, parents often desire the presence of their child's bedside nurse at follow-up meetings (Macdonald et al., 2005).

Despite these limitations, the CPCCRN Framework for physician-parent follow-up meetings after a child's death in the PICU has been the product of an impressive, extensive program of research focused on the families' grief and bereavement needs, led by a team of researchers within the CPCCRN. The framework was developed on the perspectives and experiences of bereaved parents and its construction appears consistent with the tenets of both family-centred care and palliative care (Meert, Briller, Schim, Thurston, & Kabel, 2009). Critical care nurses and other team members of the critical care team are encouraged to obtain more detailed information about the framework from the authors' earlier publications (e.g., Eggly et al., 2011; Meert, Thurston, & Briller, 2005). 

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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 is founded on the CACCN Mission Statement and recognizes the activities of the Chapter with specific emphasis on service to members and promotion of the specialty of Critical Care Nursing including, but not limited to publications, presentations, and certification activities.

Note: this award application process is complementary to the Annual Chapter Report. We recommend completion of the Annual Chapter Report prior to proceeding with calculating the Chapter of the Year score.

Award funds available: \$500.00
Recognition plaque

Submission deadline: May 31 annually

Application process: Mandatory submission for all Chapters

Criteria for the award program

- Eligible chapter activities for the period of April 1 to March 31 each year
- The chapter awarded the most points will be the successful recipient of the Chapter of the Year Award
- In the case of a tie, CACCN BOD will determine the final recipient of the award
- The successful chapter will be announced at Chapter Connections Day
- Plaque and cheque will be presented at the annual awards ceremony at Dynamics by the Chapter of the Year recipients for the previous year.

Conditions for the award program

- All chapters of CACCN are eligible for Chapter of the Year Award
- Chapters who have not submitted their annual report and quarterly financials by the required deadline quarterly/annually to National Office will not be eligible for the award
- Chapters will be responsible for ensuring that National Office receives all required documentation to be considered for the award
- Points will be awarded for only chapter activities that have been validated with supporting documentation
- The successful Chapter will be announced at the annual CACCN Awards Ceremony and in CACCN publications
- *All Chapter reports/and individual chapter scores will be available for review at Chapter Connections Day/Dynamics.*

Points system

Points are accumulated in each of six activity categories:

Section	Category
1	Member education
2	Promotion of critical care specialty
3	New member recruitment
4	Sustained membership
5	Academic activity
6	Certification activity

Instructions:

1. Complete the Chapter Annual Report
2. Gather validation documents for each of the categories of activities in the past year
3. Calculate scores for sections 1 thru 6
4. Add section scores for total Chapter of the Year score
5. Submit the application with documentation to CACCN National Office by May 31 annually

Section instructions

Section 1: Member education

- Any educational event coordinated and hosted by the local chapter is eligible
- The total number of hours for an educational session are considered (excluding meals breaks and social events)
- Concurrent sessions are not cumulatively totaled. It is presumed that the session participants would be split between the concurrent session, therefore hours of education for participant is not altered
 - For example: an eight-hour educational day that includes six concurrent sessions would be counted as eight hours for a total of 6 CL hours
- Please contact CACCN head office if your delivery model is different than reflected in this section
- **Suggested validation documents:**
 - Brochure, advertising or pamphlet
 - Copy of agenda (including hours of education)
 - Attendee numbers
 - Evaluation forms or report from each event

Formula:

- *To create the member education score, the total number of hours of education hours provided in the year is divided by the total number of Chapter members, this number is then multiplied by 1,000 in order to establish a score that is not dependent on the size of the individual chapter.*

Total hours of education offered in the year

Total number of Chapter members x 1000 = member education

Example:

Chapter A

- Donation after Cardiac Death educational meeting – 3 hours
- Total Chapter Membership number 26
- 3 hours divided by 26 members = 0.115 multiplied by 1000 = 115
- therefore the membership education innovation score is 115

Chapter B

- Neuro education and bioethics education session offered
- Total education hours – 28 hours
- Membership number 310
- Formula: 28 hours divided by 310 members = 0.090 multiplied by 1000 = 90
- Therefore, the member membership education score is 90

Section 2: Promotion of critical care specialty

Total hours of any public or community service event coordinated and hosted by the local chapter is eligible.

- Concurrent sessions are calculated as per member education hours. For example: an eight-hour event that includes six concurrent sessions would be counted as eight hours.
- Eligible event must be clearly indicated as sponsored/hosted by CACCN. Event examples: participating in blood pressure clinics, teaching CPR to the public, participation in health fairs.

Validation documents:

- Documents to identify event as CACCN sponsored
 - For example, submitting a letter from the receiving group or a picture of the event, etc.

Formula:

To create the Promotion of Critical Care Specialty score, the total number of hours of promotional event hours provided in the year is divided by the total number of Chapter members. This number is then multiplied by 1,000 in order to establish a score that is not dependent on the size of the individual chapter.

Total hours of events offered

Total number of chapter members x 1000 = Promotion of Critical Care Specialty

Chapter A

- Total specialty promotion hours – 4 hours
- Membership number 38
- Formula: 4 hours divided by 38 members = 0.105 multiplied by 1000 = 105
- Therefore the **Promotion of Critical Care Specialty** score is 105

Chapter B

- Total specialty promotion hours – 2 hours
- Membership number 110
- Formula: 2 hours divided by 110 members = 0.018 multiplied by 1000 = 18
- Therefore the **Promotion of Critical Care Specialty** score is 18

Section 3: New Member Recruitment

- Calculated based on the percentage of new members recruited up to March 31 of the award 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, as 10 months has passed since the membership expired

- 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 14 months
- Use the Membership Recruitment/Retention spreadsheet from the CACCN National Office to obtain the number of new members.

Formula:

To create the recruitment score, the total number of recruited members is divided by the total number of chapter members as of March 31 of the award year. This number is then multiplied by 100 to give you the percentage of new members. The points awarded are noted on the chart based on the percentage of new members.

Total new members

Total number of chapter members x 100 = percentage of new members

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

Chapter A

- Total number of new members 23
- Total number of chapter members 110
- Formula: 23 new members divided by 110 members = 0.209 multiplied by 100 = 20.9 % - rounded up to 21%
- 21% corresponds with the 21-30% level on the chart therefore 30 points will be awarded.

Chapter B

- Total number of new members – 12
- Total number of chapter members 38
- Formula: 12 new members divided by 38 members = 0.315 multiplied by 100 = 31.5 % - rounded up to 32%
- 32% corresponds with the 31-40% level therefore 40 points will be awarded.

Section 4: Sustained members

- Calculated based on the percentage of renewing members up to March 31 of the award year
- Any member with a membership lapse of less than 12 months or more will be considered a renewed member
 - i.e., a membership expired April 2013 and is renewed February 2014. This member would be considered a **renewing** member as the renewal is within 12 months of the expiry
 - i.e., a membership expires April 2013 and is renewed June 2014. This member would be considered a new member as the “renewal” is over 12 months of the expiry
- Use the Membership Recruitment/Retention spreadsheet from the CACCN national office to obtain the number of new members

Formula:

To create the sustained members score, the total number of renewed members is divided by the total number of chapter members as of March 31 of the award year. This number is then multiplied by 100 to give you the percentage of sustained members. The points awarded are noted on the chart based on the percentage of new members.

Total new members

Total number of chapter members x 100 = percentage of new members

Percentage	Points	Percentage	Points
01–10%	5	51–60%	30
11–20%	10	61–70%	35
21–30%	15	71–80%	40
31–40%	20	81–90%	45
41–50%	25	91–100%	50

Example:*Chapter A*

- Chapter A renewed 47 members this past year
- They have 250 total chapter members
- 70 divided by 250 = 0.28 multiplied by 100 = 28%
- 28% corresponds with the 21–30% category therefore 15 points are awarded

Section 5: Academic activity

- This section accounts for the activity of each chapter related to contribution to the science and specialty of critical care nursing. This can include publications and presentations in local, national and international journals, and presentation delivered by chapter members.
- Participation in national position statements, standards work and other committees is also scored.

Formula**Publications**

- Points will be calculated for chapter members who have contributed articles to:
 - The chapter newsletter
 - Dynamics, Journal of the Canadian Association of Critical Care Nurses (excluding the Summer Abstract Journal)
 - Any other peer reviewed journal where the author is affiliated with CACCN
- Chapters are responsible for providing:
 - list of member contributions, together with a copy of the chapter newsletter
 - list of member contributions to the journal or publication (full reference)

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 the 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 listing the chapter member as a presenter.

Each Presentation = 25 points**Committee work**

- Points will be calculated for chapter members who have contributed to committee work on behalf of CACCN at the local, provincial and national CACCN activities
- Points will be awarded only once for each member on each committee, regardless of the number of meetings or level of participation of the member
- Chapters are responsible for providing: list of member contributions.

Total points from all three areas:**Example***Chapter A*

- An article was published by a member in the chapter's newsletter = 25 points
- One article from a chapter member was published in Dynamics = 25 points
- One chapter member presented at the local education day = 25 points
- Three members presented separate presentations at a Dynamics conference = 75 points

Total points = 150**Section 6: Critical care certification—CNCC(C) and CNCC(P)**

- Points will be calculated for chapter members who have successfully completed and/or renewed the CNA Certification Examination in the award year
- Validation of certification status of submitted members will be obtained via the Canadian Nurses Association

Formula initial certification

To create the certification score, the total number of certified members of the chapter in the award year is divided by the total number of chapter members. This number is then multiplied by 100 to give you the percentage of certified members. Multiply this number by 10 to give you the number of points awarded.

Number of members certified/renewed

Total number of chapter members x 100 = Percentage

10 points for each percentage of the total number of chapter members who are new certifications in the award year.

Percentage x 10 = certification points**Example***Chapter A*

- Initial certification = 3 members
- 250 chapter members
- 3 divided by 250 = 0.012 multiplied by 100 = 1.2%
- multiplied by 10 = 12 points

Formula renewal certification

To create the renewal certification score, the total number of renewed certifications of the chapter in the award year is divided by the total number of chapter members. This number is then multiplied by 100 to give you the percentage of certified members. Multiply this number by 5 to give you the number of points awarded.

Number of members renewed

Total number of chapter members x 100 = Percentage

5 points for each percentage of the total number of chapter members who are new certifications in the award year.

Percentage x 5 = certification points

Example

Chapter A

- Renewed certification = 11 members
- 250 chapter members
- 11 divided by 250 = 0.044 multiplied by 100 = 4.4%
- multiplied by 5 = 22 points
- Add initial certification total with renewal total for points awarded in certification category
- Initial certification points + renewal certification points = total certification score for chapter
- Example Chapter A: 12 + 22 = 34 certification points

Submission: Tally the points from all categories on the calculation form, complete the application form and forward all to National Office with supporting documentation.

Draeger Medical Canada and the CACCN Board of Directors look forward to receiving your application. Good luck in your endeavours!

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

Criteria Revisions: October 2014

CACCN Document: Award Criteria Revised March 2011

Form Design Revision Date: January 2011

The Draeger Medical Canada Inc. Chapter of the Year Award

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.

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 be used only 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 candidate's 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 candidate's 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) year
- 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 Pediatrics 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

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