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Conference Preliminary Program Highlights 2008

Alveolar Avengers —
*Winners of the Great Ventilator Race*

The journal for respiratory health professionals in Canada

La revue des professionnels de la santé respiratoire au Canada
The Canadian Society of Respiratory Therapists announces its Annual Conference and Trade Show

National Respiratory Therapy Conference and Trade Show 2008
Saskatoon, May 22-25

Join us in Saskatoon as we explore high-quality local healthcare initiatives. Quality shines in Saskatoon and it is reflected in the vibrant lifestyle, landscape and culture of the people of Saskatchewan. Comprehensive information on the largest respiratory therapy conference in Canada is available at www.csrt.com
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The CJRT acknowledges the financial support of the Government of Canada, through the Publications Assistance Program (PAP), toward our mailing costs.

Cover Photo — RT Week 2007

Winners of the Great Ventilator Relay are members of the Alveolar Avengers team, L-R: Tricia Zwarich, Dave Reid, Cheryl Rogers, Terry Wright, Oommen Thomas, from the University of Alberta Hospital. The race, part of RT Week 2007 activities raised over $5,000 for the Alberta Lung Association.
About This Issue

It is with some degree of hesitation that I compose the introduction to this issue of the CJRT; as it will be my last. I have recently accepted a position with the Canadian Association of Paediatric Health Centres, and will be leaving the CSRT.

As I mention later in this issue, it has been an honour and a privilege to hold this position. I put a lot of heart, soul, blood, sweat and tears, into this organization, but I have received much more in return.

This issue comes at a very important time of year, as membership renewal is just around the corner. This is always a somewhat stressful time for the staff and Board of Directors, as this is the time of year where the membership makes its ultimate judgement of our work through the decision to be a member or not. In the time I’ve spent here, I’ve had the pleasure of seeing that numbers go up every year. The CSRT is more relevant and important to the profession now than it has ever been. Discussions on healthcare reform are happening at every level, and it is very important that your perspective is brought to the table.

The Board of Directors, staff, volunteers, and other contributors work extremely hard to ensure that the CJRT and other offerings from the CSRT help meet the ever-changing needs of respiratory therapists.

This issue also comes at a time where preparation for the National Conference begins to ramp up. We have a great slate of speakers and the folks in Saskatoon are prepared to showcase all that Saskatoon has to offer. There is some preliminary information on the event later in this issue.

This issue has some great articles. Some of our profession’s current challenges are in relation to finding clinical placements for our students, the role of simulation in training students, and the rent challenges are in relation to finding clinical placements for our students, the role of simulation in training students, and the rent challenges are in relation to finding clinical placements for our students, the role of simulation in training students, and the rent challenges. This issue also comes at a time where preparation for the National Conference begins to ramp up. We have a great slate of speakers and the folks in Saskatoon are prepared to showcase all that Saskatoon has to offer. There is some preliminary information on the event later in this issue.

This issue has some great articles. Some of our profession’s current challenges are in relation to finding clinical placements for our students, the role of simulation in training students, and the role of simulation in maintaining/training our current RRTs. This issue includes the final in a series of articles related to issues in simulation, plus an article on the incredibly advanced sim lab at Algonquin College. No more practicing ABGs on oranges! We also have the results from our dedicated members that participated in the RT Week 2007 Contest.

Thank you, again, for giving me the opportunity to be a part of the CJRT and of the CSRT. It has been a fantastic four years.

Sincerely,
Doug Maynard, BSc, RRT, MBA
Executive Director, CSRT

Dans ce numéro

C’est avec une certaine hésitation que je rédige l’introduction du présent numéro de la RCTR puisqu’il s’agit de ma dernière. Ayant récemment accepté un poste à l’Association canadienne des centres de santé pédiatriques, je quitte la SCTR.
Algonquin College State-of-the-Art SIM Lab

Anita Gallant, Coordinator, Respiratory Therapy, Algonquin College

Algonquin College in Ottawa, serves 16,000 full-time and almost 40,000 part-time students. The Faculty of Health, Public Safety and Community Studies provides health care education in several programs. Our Mission Statement is: To be the Canadian leader in delivering innovative simulation opportunities while promoting multidisciplinary learning for students in health and community services.

Algonquin College is committed to providing excellence in health care training programs. To achieve this goal, the College administration, faculty and support staff work together to be leaders in education that meets the highest of standards to provide health care for the public. The programs range from certificate to post diploma levels and include offerings such as Personal Support workers, Polysomnography, Bachelor of Science in Nursing, Respiratory Therapy, Paramedic program, Advanced Care Paramedic program, Critical Care Nursing, and Anesthesia Assisting.

Faculty of Health, Public Safety and Community Studies Mission Statement: To be the Canadian leader in delivering innovative simulation opportunities while promoting multidisciplinary learning for students in health and community services.

To achieve the goals for current and future health education needs, the College initiated a multiphase project: Phase I of these plans was completed in 2004. It focused on the renovation of existing labs and the installation of new equipment to better facilitate clinical simulation. Upon the completion of this Phase, the College had renovated space for the paramedic programs, respiratory therapy program and various nursing related programs. The paramedic space provides facilities to simulate domicile, vehicular and community care access of patients needing first responder care. The respiratory therapy space provides facilities to simulate pulmonary function testing, non-invasive cardiac diagnostics, polysomnography studies, basic care beds and critical care unit beds. The nursing spaces provide facilities to provide care in the home, long term care units, basic hospital care units and critical care units.

Phase II of the College plan was completed in fall 2005. This involved building a new Allied Health Simulation Centre. This centre offers leading edge facilities for health care training. It includes functional hospital care units that include:

Continued on page 9

Le laboratoire de simulation de pointe du collège Algonquin

Le Collège Algonquin à Ottawa dessert 16 000 étudiants à temps plein et près de 40 000 étudiants à temps partiel. La Faculty of Health, Health, Public Safety and Community Studies prodigue une éducation en soins de santé par l’entremise de nombreux programmes. L’énoncé de notre mission est le suivant : Être le leader canadien de la prestation d’occasions novatrices de simulation en favorisant un apprentissage multidisciplinaire chez les étudiants dans le domaine des services de santé et communautaires.

Le Collège Algonquin est voué à assurer l’excellence des programmes de formation en soins de santé. Pour atteindre cet objectif, l’administration du Collège, le corps professoral et le personnel de soutien travaillent ensemble en vue d’être des leaders de la formation qui est conforme aux normes les plus élevées en matière de soins de santé prodigués à la population. Parmi les programmes offerts à divers niveaux, passant du certificat à la formation de cycle supérieur, notons le préposé aux...
Respiratory Therapy Week: The Winners

RT Week 2007 received a great response from the membership. There was lots of participation across the country, with many creative ideas being used to inform the public and our healthcare colleagues of what it is that RTs do.

Again this year, we encouraged people to take pictures of their activities and submit descriptions to the CSRT for entry into a contest. We had a great response from people interested in sharing their stories.

First Prize
The winners of the RT Week 2007 contest are from the University of Alberta Hospital (UAH) in Edmonton, Alberta:

Organizing Team: Julie Mitchell (Team Lead), Samantha Sampson, Carla Keller. Volunteers for Booth: Don Hrycun, Michelle Hathaway, Murray Sampson, Tricia Zwarich, Dan Lee, Tim Wozniak.

The team from UAH had a comprehensive display set up for the full RT Week, including some classic items such as the excised pig lung/ventilator display, the intubation mannequin and general information about the practice of respiratory therapy. The display also had a section focusing on non-invasive ventilation.

Throughout the week the group held social functions, had daily trivia questions and prizes, and a “What is it?” contest.

To cap it off the group held the “Great Ventilator Relay”. This event was a fundraising challenge between UAH/ Stollery and the other sites within the Capital Health Authority, in Edmonton. The event is a ventilator relay and the recipient of the fundraising efforts was the Alberta Lung Association. The sites that have accepted the challenge included the Royal Alexandria Hospital, Grey Nuns Hospital and the NAIT RT student class.

The GREAT VENTILATOR RELAY required each site to assemble a team of RRTs that pushed a “dressed” ventilator over a relay course while completing tasks of daily activity for the RRT.

The goal for each site was to raise a minimum of $1000.00 in pledges and come up with a theme for their team that will help to promote public awareness for the profession of respiratory therapy. Prizes were awarded for the best dressed ventilator and the team that raised the most money.

In total, the event raised over $5,000 for the Alberta Lung Association, with the unofficial winners of the race being the Alveolar Avengers from the University of Alberta Hospital.

Second Prize
Second place goes to a strong entry from the crew from New Brunswick, lead by Janice Langis. Participants included Pam Hayward, Justin Morris, Patrick Dugas, Lise Cormier, Dany Durand, Lynn Lagace, Genevieve Lemieux, Nicole Boudreau, Christine Collin, and Charles Bois.

This group represents the Beausejour and the South-East Regional Health Authorities, as well as the Collège communautaire du Nouveau-Brunswick (C.C.N.B.)/Université de Moncton RT Program.

This group had a very comprehensive one-day display, located in the Highfield Square Shopping Centre in Moncton, NB. The display highlighted asthma, COPD, non-invasive ventilation, including demonstrations of various pieces of equipment. The display included two sets of excised lungs, one appearing to be healthy, and the other appearing to be diseased, possibly as a result of smoking. If those lungs came from a pig, I would strongly suggest a porcine smoking cessation program be established in New Brunswick!

From their photos they obviously were having a great time at their display, enjoying the opportunity to interact with some of the “healthy individuals” in the community, and also having the opportunity to work with people from other regions. Janice reported, “The winning point was the networking between RTs from two different health authorities plus the RT students. We rarely get a chance to work with our neighbors! We’re hoping to start a new tradition.”

We agree that this would be a great tradition to start.

Third Prize
Third place goes to a student group from Fanshawe College, in London, ON. Last year’s contest winners were also from Fanshawe College, so it’s good to see a strong tradition building there.

This group was lead by Amanda Henein, and included Kaley Nelson, Mary Liz Gabra, Stephanie Rotella, Amanda Smith, Amanda Henein, Neena Sandu, Anil Charron, Denis Z, Laura Van Bomel.

This group established a very large display at the college. The group had numerous training tools, a variety of mannequins, excised lungs and much more.

Thank you to all of the RTs that participated in this past RT Week. This is a very important event as we struggle to be recognized for the significant role that we play in the healthcare system. Congratulations to all of the participants in this year’s contest. The winners have certainly pushed the limits for RT Week and have raised the bar for Week 2008 contestants.
La semaine de la thérapie respiratoire : les gagnants

Les membres de la SCTR d’un bout à l’autre du pays ont participé en grand nombre à la Semaine de la TR 2007. Ils ont fait preuve d’une gamme d’idées créatives visant à informer le public, et nos collègues du domaine des soins de santé, du rôle des TR.

Comme par les années passées, nous avons encouragé les gens à prendre des photos et à soumettre une description de leurs activités à la SCTR dans le cadre d’un concours. Plusieurs personnes ont répondu à l’appel et ont partagé leurs expériences.

Premier prix
Les gagnants du concours de la Semaine de la TR 2007 proviennent du University of Alberta Hospital (UAH) à Edmonton, en Alberta :

Équipe d’organisation : Julie Mitchell (chef d’équipe), Samantha Sampson, Carla Keller. Bénévoles au kiosque : Don Hrycun, Michelle Hathaway, Murray Sampson, Tricia Zwarich, Dan Lee, Tim Wozniak

L’équipe du UAH a installé un kiosque bien conçu, pendant la durée de la Semaine de la TR, qui comprenait des objets classiques tels le poumon de porc excisé branché à un ventilateur, le mannequin d’intubation et des renseignements généraux sur la pratique de la thérapie respiratoire. Le kiosque mettait également en vedette la ventilation non-effractive.

Tout au long de la semaine, le groupe a organisé des activités sociales, des questions anecdotiques quotidiennes assorties de prix et un concours « Qu’est-ce que c’est ? »

Pour couronner le tout, le groupe a tenu le « Grand relais de ventilateur ». Il s’agissait d’une activité de financement entre le UAH/Stollery et les autres sites au sein de la Capital Health Authority à Edmonton. L’activité consistait en un relais de ventilateur et les fonds amassés ont été remis à la Alberta Lung Association. Les sites qui ont accepté de relever le défi sont le Royal Alexandra Hospital, le Grey Nuns Hospital et la classe d’étudiants de TR du Northern Alberta Institute of Technology (NAIT).

Le GRAND RELAIS DE VENTILATEUR exigeait que chaque site forme une équipe de TRA qui devait pousser un ventilateur « habillé » sur un parcours de relais tout en effectuant une série de tâches quotidiennes d’un TRA.

L’objectif pour chaque site était d’amasser un minimum de 1 000,00 $ en promesses de dons et de créer un thème qui sensibilise la population vis-à-vis de la profession de la thérapie respiratoire. Des prix ont été décernés à l’équipe ayant le ventilateur le mieux vêtu et à celle qui a amassé le plus d’argent.

Au total, l’activité a amassé au-delà de 5 000 $ au profit de l’Alberta Lung Association. Les gagnants non officiels de la course sont les Alveolar Avengers du University of Alberta Hospital.

Deuxième prix
La deuxième place a été accordée à l’excellente soumission de l’équipe du Nouveau-Brunswick menée par Janice Langis et dont les participants incluaient Pam Hayward, Justin Morris, Patrick Dugas, Lise Cormier, Dany Durand, Lynn Lagace, Genevieve Lemieux, Nicole Boudreau, Christine Collin et Charles Bois.

Ce groupe représente les régions de la santé Beauséjour et South-East Regional Health Authority, ainsi que le Collège communautaire du Nouveau-Brunswick (C.C.N.B.) Program me de TR de l’Université de Moncton.

Le groupe a monté un kiosque très bien conçu au centre d’achats Highfield Square Shopping Centre à Moncton qui traitait d’asthme, de MPOC et de ventilation non-effractive, dont des démonstrations d’équipement divers. Entre autres, le kiosque exposait deux paires de poumons excisés, dont l’une paraissait en santé et l’autre malade, possiblement par suite de tabagisme. Si ces poumons provenaient de porcs, je recommande fortement qu’un programme porcin d’abandon du tabac soit créé au Nouveau-Brunswick!

D’après leurs photos, il est évident que le groupe s’est amusé, profitant de l’occasion d’interagir avec les « personnes en santé » de la communauté et de travailler avec des gens des autres régions. Selon Janice : « Le clou de la journée s’est avéré le réseautage entre les TR de deux différentes régies de la santé et les étudiants de TR. Nous avons rarement la chance de travailler avec nos voisins ! Nous souhaitons établir une nouvelle tradition. » Nous sommes d’accord qu’il s’agirait d’une excellente tradition à créer.

Troisième prix
La troisième place a été remportée par un groupe d’étudiants de Fanshawe College à London, en Ontario. Notons que les gagnants de l’an dernier provenaient également de Fanshawe College. Voilà une belle tradition qui s’installe dans cet établissement.


L’énorme kiosque que l’équipe a installé au collège mettait en vedette une gamme d’outils de formation, de mannequins, de poumons excisés, et plus encore.

Merci à tous les TR qui ont participé à l’édition 2007 de la Semaine de la TR. Il s’agit d’une activité très importante dans le contexte actuel de la lutte que nous menons en vue d’être reconnus pour le rôle critique que nous jouons au sein du système de soins de santé. Félicitations à tous les participants au concours de cette année. Les gagnants ont réussi à repousser les limites de la Semaine de la TR et ont rehaussé les attentes pour les concurrents de 2008.
Respiratory Therapist — a Dream Job

Dan McPhee, RRT, Treasurer, CSRT Board of Directors

Did you ever wish you had the perfect job, that awesome house, a great car or extra cash in the bank? Do you ever find yourself working your fingers “to the bone” to feel like you are getting somewhere? What about talk of cut-backs, people calling in sick, working with too little staff or with out-dated equipment? The reality is that we are always going to be challenged somewhere, sometime. How we react to our work environment and the pressures we put on ourselves has an impact on the quality of care we give and the type of professionals we become.

Someone once said I was “the RT with the dream job”. I had a good laugh when I first heard that. But the more I think about it the more it rings true. I was listening to a fascinating story told by an RT who is now in his fifth decade working in health care. He has done other jobs, but the majority of his health care career has been in respiratory therapy. He started as an “oxygen orderly” and changed titles and roles with the times. His passion for this profession is very evident in the way he tells his stories and relives the events as he relays them. I find this inspiring. To find somebody who has been doing this job twice as long as I have and still has the fire burning in him as he talks about how things have changed over time, makes me a little curious about what lies ahead. Where will this profession take us over the next ten to fifteen years (that’s about when I should be ready to retire)?

I was encouraged to get involved with the CSRT Board of Directors two years ago. Joining this board has been very refreshing and has given me perspective that I would never have gained had I chosen to stay in my own familiar little world.

This past winter I went ice fishing in Northern Ontario with a couple of great guys who I have known for a number of years. This was my first experience at ice fishing. Spending two whole days in the sun and sleeping under a tarp on a rock beach at the edge of a frozen lake at -29°C was an amazing experience. One really appreciates a strong heart and good lungs when he can haul a loaded toboggan four km into the bush from the highway, seemingly uphill all the way. Stress test anyone?

Because we do have the “dream job” — my colleague and I crossed off the outpatient schedule one Friday afternoon in July — writing in “team-building session”. We went sailing with our internist on his boat. For us, getting outdoors, sucking in the fresh air and leaving the hospital, town and marina two hours behind us added much needed perspective in our hectic world. “Breathing life into healthcare” as screened on the back of my shirt has a whole new meaning now.

The included photos are about getting away, stepping back. We are enjoying ourselves with those with whom we meet along the way. The harder we work, the more we need to play. Every choice leads somewhere. I have learned to be much more effective when I have taken the time to explore the positive in the many things that I do. Get out there and enjoy yourself — take some of that advice we are always giving to our patients. I read somewhere recently that “to never fail is to never have tried”. You won’t believe how much difference doing something out of the usual can make in your life, until you try it. Trust me, we all have “dream jobs” when we’re ready to be the dreamer.

Thérapeute respiratoire : un emploi de rêve

Vous arrive-t-il de souhaiter avoir l’emploi parfait, une superbe maison, une magnifique voiture ou davantage d’argent à la banque? Vous arrive-t-il de vous épuiser à une tâche pour avoir l’impression d’avancer? Et qu’en est-il des compressions budgétaires, des gens qui téléphonent se disant malades, de l’obligation de travailler avec trop peu de personnel ou avec de l’équipement périmé? La réalité est telle que nous serons toujours confrontés à des défis dans un milieu donné, à un moment donné. Notre façon de réagir à notre milieu de travail et aux pressions que nous nous créons a une incidence sur la qualité des soins que nous prodiguons et sur le genre de professionnel que nous sommes.

Une personne m’a déjà dit que j’étais « le TR avec l’emploi de rêve ». J’ai bien ri en entendant cela, mais plus j’y pense, plus je me rends compte que c’est vrai. J’écouteais une histoire fascinante racontée par un TR à sa cinquième décennie de travail dans le milieu des soins de santé. Bien qu’il ait occupé d’autres postes, c’est dans le domaine de la thérapie respiratoire qu’il a passé la majorité de sa carrière. À ses débuts, il était « préposé à l’équipement d’oxygène » et avec le temps, il a assumé d’autres titres et fonctions. Sa passion

Suite à la prochaine page
Thérapeute respiratoire : un emploi de rêve

Suite de la dernière page

Pour la profession est très évidente par sa façon de raconter ses anecdotes et de revivre les événements à mesure qu’il les relate. Pour moi, il est édifiant de rencontrer une personne qui occupe ce poste depuis deux fois plus longtemps que moi et qui est encore passionné par les changements qui se sont multipliés avec le temps. Cela nourrit ma curiosité par rapport à ce qui nous attend. Où la profession nous mènera-t-elle d’ici les dix ou quinze prochaines années (soit, le moment ou je serai prêt à envisager ma retraite)?

Il y a deux ans, j’ai été encouragé à m’impliquer au sein du Conseil d’administration de la SCTR. En plus de s’attendre à une expérience gratifiante, mon implication m’a donné une perspective que je n’aurais jamais connue si j’avais choisi de rester dans mon petit monde familier.

L’hiver dernier, je suis allé, pour la première fois, à la pêche sur la glace dans le Nord de l’Ontario avec quelques copains que je connais depuis longtemps. Quelle expérience extraordinaire que de passer deux jours complets au soleil et de dormir sous une toile, à une température de -29°C, sur un lit de roches au bord d’un lac gelé! C’est lorsqu’on traîne un toboggan chargé sur quatre km dans la forêt, ayant l’impression de toujours monter la colline, qu’on apprécie sincèrement un cœur fort et de bons poumons. On passe à l’épreuve d’effort?

Puisque nous avons « l’emploi de rêve », mon collègue et moi avons rayé l’horaire des patients externes par un vendredi après-midi de juillet, pour y inscrire « séance de développement de l’esprit d’équipe ». Nous sommes allés faire de la voile avec notre interniste. Le fait de sortir dehors, de respirer l’air frais, de quitter l’hôpital, et de s’extraire de la ville pendant quelques heures nous a donné une nouvelle perspective, combien nécessaire dans notre monde mouvementé. Le slogan « Les TR insufflent la vie dans les soins de santé », imprimé à l’arrière de mon t-shirt, revêt désormais un tout nouveau sens.


Algonquin College
State-of-the-Art SIM Lab

Continued from page 5

■ An operating room suite with six sink scrub room and a sterile supply area
■ Three critical care/trauma units
■ Nine advanced care beds

All units have piped gas, drop-down power walls and mounted monitors and X-ray viewers.

To complement the facilities, the College made major investments into equipment that would not only reflect standards in related professional skills, but provide realistic patient interaction. This fosters learning and troubleshooting. Equipment has a range for all learners and patient populations, including such things as:
■ Radiant warmers and incubators
■ Fluid administration and monitoring units
■ Mechanical ventilators
■ Anesthesia machine
■ Airway care mannequins for intubation, tracheostomy and bronchoscopy (with video bronchoscopes).
■ Patient mannequins manikins range from neonatal to adult and from basic to Laerdal’s Sim Man models, the Emergency Care Simulator (ECS) and Noel (which can simulate the delivery of a baby)
■ An advanced Human Patient Simulator (HPS) for critical and anesthesia care that “breathes”, using oxygen and “producing” carbon dioxide relative to ventilation. It also recognizes drugs and fluids that are administered. The simulator then alters its’ response according to therapy provided by students and the protocols used by the faculty controller
■ Models that allow intravenous and arterial line insertion, as well as “blood” sampling

The feature that makes the learning experience optimal is that the simulation units are monitored with cameras and sound. They can be monitored from a concealed control room, a debriefing room and may also be monitored by off campus sites with web links. There is the possibility to do video conferencing to all education centres and health care centres that have this capability. This allows real time education to all campus sites. The cameras can zoom in sufficiently to allow visualization of waveforms on ventilators as settings are changed. This allows the professor/technician to monitor student activity indirectly and also record practice and evaluation sessions for review. Students may use this feature to observe and critique team practice sessions, learning not only skill techniques, but how timing affects care and the codependence of team members in the provision of effective care. Students can also review their individual recorded skills performance in an effort to identify strengths.

Continued on page 24
Farewell from the Executive Director

Being a proud RT, it has been a great honour, to hold the position of Executive Director with the Canadian Society of Respiratory Therapists. It is with deep sadness that I announce that I am leaving the CSRT to accept an opening with the Canadian Association of Paediatric Health Centres.

I have learned more about respiratory therapy, about our healthcare colleagues and about the healthcare system in general, than I could possibly have imagined. I’ve had the opportunity to travel to a number of different cities and provinces to meet RTs from coast to coast to coast. I have made some great professional contacts. I have made some great friends. Respiratory therapy is as much a family as it is a profession, and I was always amazed by the camaraderie within the profession that I witnessed as I traveled around.

One thing I never got used to was the way people treated the CSRT Executive Director. RTs, members and non-members alike, treated me with an uncanny level of respect. Members often mistakenly attributed an unwieldy amount of authority and privilege to this position, while non-members would sheepishly admit their non-member status while staring at their shoes. All the while, I just considered myself the guy at head office that signed the paychecks of the staff that did the real work. I guess I did a little more than that, but the CSRT would not be nearly the strong organization that it is without the support of the head office staff. I want to thank Sylvia, Rita, Tracy, Pam, Dana, Sandie, Anne and Andrea, for making it a pleasure to come to the office every day, for doing the great work that made me look good, and for always listening to my wild tales of what it’s really like to be an RT.

I would also like to thank the CSRT Executive Committee of 2003 for taking a chance on an inexperienced, newly-minted MBA graduate, and for giving me this opportunity. Jim Winnick, Daniel Pare, Brent Kitchen and Kevin Dejong were all instrumental in any success that may have been attributed me. Not for just giving me the opportunity, but also for their guidance, mentorship, support, friendship, and for their patience.

In parting, I would like to also thank the CSRT members. I was always surprised when people approached me at conferences or called me on the phone regarding something that I had written in the CJRT or said at a conference. I was mostly surprised by the fact that they were paying attention to me, but also (whether they agreed or disagree with me) by the passion with which they debated and discussed the various issues.

It’s great to see that kind of passion in our profession and that enthusiasm is needed now more than ever. The healthcare human resource environment is becoming increasingly competitive. We compete with other professions to encourage students to go into respiratory therapy. We compete with our colleagues for our proper role on the healthcare team. We compete for public and private money to fund our projects, and to staff and resource our RT departments. We often have the disadvantage of being smaller in numbers than other professions, but we clearly make up for that in pride in what we do and who we are. It is the CSRT that gives us the opportunity to rally our small numbers into a powerful force, and to give you, the individual RT, the stage upon which to express your opinion, share your ideas, and show your pride in being a respiratory therapist.

When I started telling people that I had accepted my new position, many people immediately saw the great opportunity to have a respiratory therapist with a position in an organization such as CAPHC. Others were disappointed that I was “leaving respiratory therapy.” I was initially, sort of offended by that comment, as I at no time considered myself to be leaving respiratory therapy. As I move on, I will not forget that first and foremost, I am a respiratory therapist. My career as an RT is what gave me these opportunities with the CSRT and with CAPHC. I will always be a proud CSRT member. I will take every opportunity to let people know that I am incredibly proud and honoured to, at one time have been, the Executive Director of the Canadian Society of Respiratory Therapists.

Thank you again, for giving me this opportunity!

Sincerely,
Doug Maynard, BSc, RRT, MBA
Message from the President

I’d like to start off this edition of my message by wishing CSRT Executive Director Doug Maynard all the best in his new position. After four years with the CSRT, Doug has decided to move on to the Canadian Association of Pediatric Health Centres. Among his many accomplishments, Doug has been instrumental in assisting the Board with the implementation of its new Strategic Plan.

Moving away from our long-established role as a quasi-regulator has not been easy for many to understand. Doug has helped get our message out effectively as we slowly see more provinces gain licensure. I’m sure that as a respiratory therapist he will continue to speak on behalf of the profession as often as possible in his new capacity. Best of luck to you, Doug.

So here it is the beginning of a new year. With Doug’s news, I have just returned from a quick trip to Ottawa in order to speak to the staff and along with Dan McPhee, our Treasurer, get the ball moving in putting together an interim plan for the office organization and a recruitment strategy.

Getting to Ottawa was a lot more “exciting” than it should have been. Due to the holiday season, it was quite a chore finding a flight out but Dana Taylor, our Administrative Assistant, was able to book a flight out of Moncton. Normally this would not have posed a problem at all. Just over an hour’s drive from Saint John, this was less time than what it would have taken me to travel from Brampton to the airport in Toronto back when I lived in Ontario. I hadn’t counted on the weather though and here in the Maritimes, you always check the weather! When I retired for the night we barely had any snow left from the Christmas thaw, so it was quite a shock to wake up to almost 20 cm of the fluffy white stuff at 0300. Undaunted, I cleared off the car and tried to get out of the driveway only to get stuck twice. Eventually I made it to the road but it was more than obvious that I wasn’t going to get any further. I freed the car one last time, was able to get the car back in the driveway and went back to bed hoping that the morning would be better.

Later it was rather obvious that the weather hadn’t gotten better. In spite of the predictions, the region was getting a major storm. A check with the airline found my 0615 flight was now delayed until 1500. At 1000 the town plow came by and very nicely deposited a four-foot pile of snow at the end of the driveway. At 1130 our “plow guy” finally came by and cleared the way for me to get out. Armed with a fresh mug of coffee and a snack I took off and headed down the Trans-Canada Highway to Moncton. The first part of the trip was a breeze. I’ve been in worse driving conditions in Montreal, Ottawa and London when I lived there. Little did I know just how wrong my optimism would be.

As I approached Moncton it became a little too apparent that the plows had been called off the highway. Crawling along behind an eighteen wheeler, we barely reached 20 km/hr. Eventually I was rewarded by the sight of the airport. Pulling up to the entrance I ran inside to confirm my booking. The flight was still on, but further delayed until 1700. Great, no problem, this would give me time to get the car parked. I had to wait for a plow to clear the area since a small pickup was blocking the entrance. A nice guy with a huge plow offered to clear my way and with that I was able to park and then struggle through the mounting snow drifts back to the terminal building.

As I overcame the last of the drifts and entered the building I had a sense of real accomplishment. I had overcome a storm that made all of my previous storm driving memories to shame. I had made it to the airport and was finally going to get on my way. Fat chance of that! As I made my way to the check-in counter they announced that the flight was cancelled. I was not going anywhere that day. Eventually, after a night in a local hotel, a couple more delayed flights and backed up airports I finally got to Ottawa.

Not that any of this tale will be of any interest to any of you, but if you had any thoughts that the President of this illustrious Society lived in luxury and traveled in style, you’re so wrong! As a volunteer, myself and the rest of the Board do all of this for the simple reason that we care about our profession. There is no grand payout or luxury accommodation, just economy flights with narrow seats. And if you think that traveling to Las Vegas and Orlando to attend the AARC annual meetings sounds exotic, think again. When I went to Las Vegas they lost my bags and other than stepping out of the shuttle bus and taking a five minute walk one evening, I never left the hotel in Orlando or even saw where the theme parks were.

Continued on page 17

Rob Leathley
**Mot du président**

Tout d’abord, j’aimerais souhaiter le meilleur des succès à Doug Maynard, directeur général de la SCTR, dans son nouveau poste. Après quatre ans à la SCTR, Doug a décidé de se joindre à l’Association canadienne des centres de santé pédiatriques. Parmi ses nombreux accomplissements, Doug a prêté une assistance précieuse au Conseil d’administration lors de la mise en œuvre de son nouveau Plan stratégique. L’éloignement de la part de la SCTR, de son rôle de quasi-organisme de réglementation, établi de longue date, n’était pas facile à expliquer. Doug nous a aidé à communiquer notre message avec efficacité à mesure que les provinces prennent en main l’autorisation de l’exercice de la profession. Je suis convaincu qu’en qualité de thérapeute respiratoire, il continuera à parler au nom de la profession aussi souvent que possible dans l’exercice de ses nouvelles fonctions. Bonne chance, Doug.

Nous voici au début d’un nouvel an. Par suite des nouvelles de Doug, j’ai effectué un court voyage à Ottawa pour parler au personnel et élaborer, avec Dan McPhee, notre trésorier, un plan provisoire relatif à l’organisation du bureau ainsi qu’une stratégie administrative, à réussi à réserver notre préposé au déneigement et à London lorsque j’y avais vécu. J’étais loin de me douter que mon optimisme était mal fondé.

Près de Moncton, il m’est devenu très évident que les chasse-neige étaient hors circulation. Je suivais une remorque et nous roulions à 20 km/h. J’ai éventuellement été récompensé par la vue de l’aéroport. En arrivant, je suis tout de suite allé confirmer ma réservation. Bien que le vol ne soit pas annulé, il était maintenant reporté à 1700. Bon, j’aurais donc tout le temps voulu pour gérer ma voiture. J’ai dû attendre qu’un chasse-neige nettoie le stationnement puisqu’un petit camion bloquait la route. Finalement, un gentil homme avec un gros chasse-neige a offert de me frayer un chemin et grâce à lui, j’ai réussi à gérer ma voiture pour ensuite combattre les amoncellements de neige jusqu’à l’entrée de l’aéroport.

En pénétrant dans l’édifice, j’ai ressenti une énorme satisfaction. J’avais combattu une tempête qui me réveillant à 0300. Loin de me décourager, j’ai nettoyé l’auto et tenté de sortir de mon entrée, restant pris à deux reprises. Je me suis éventuellement rendu jusqu’à hauteur de la rue, pour constater que ce n’était pas plus loin. Ayant réussi à ramener l’auto dans l’entrée, je suis retourné me coucher en souhaitant que tout aille mieux dans quelques heures.

Mais plus tard, la météo était loin de s’être améliorée. En dépit des prévisions, la région était en porte à une tempête majeure. Un appel au transporteur aérien a confirmé que mon vol de 0615 était reporté à 1500. À 1000, le chasse-neige de la ville a déposé un banc de neige de quatre pieds au bout de mon entrée en passant, et notre préposé au déneigement est venu tout nettoyer à 1130 afin que je puisse sortir. Armé d’un bon café et d’une collation, j’ai emprunté la Transcanadienne en direction de Moncton. Au début, tout s’est bien passé et je me suis dit que j’avais encouru de pires conditions routières à Montréal, à Ottawa et à London lorsque j’y avais vécu. J’étais loin de me douter que mon optimisme était mal fondé.

Sur la terre qui sont, eux aussi, partout sur la terre qui sont, eux aussi, passionnés par la thérapie respiratoire. J’ai rencontré des centaines de nouvelles connaissances et je me suis lié d’amitié avec des gens de partout sur la terre qui sont, eux aussi, passionnés par la thérapie respiratoire. J’ai beaucoup changé grâce aux personnes autour de moi. Si vous souhaitez vivre une parcelle de cette expérience, impliquez-vous. Portez-vous bénévole pour travailler au

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**President’s message**

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**Suite à page 17**
Managing Your Risk As A Respiratory Therapist

Mary-Ann Hamel, Senior Vice President, Marsh Canada Limited

Thousands of Canadians struggle with breathing everyday for a variety of reasons. Respiratory Therapists play a vital role in caring for these individuals and while doing so, open themselves up to liability. No one enjoys being involved in a lawsuit or being made to account for alleged professional infractions.

It is a stressful time for all parties involved. However, in today’s litigious society, it is a brutal fact that the likelihood that becoming involved in a malpractice suit is no longer a remote possibility. The fact that you can be sued for an alleged action or non action is there — however, you can use some simple risk management techniques to avoid or reduce your liability.

Risk management is a systematic approach to identifying, assessing, understanding, acting on, and communicating risk issues. Following are the steps in Risk Management.
1. Identify and Analyze Loss Exposures (What could happen)
2. Examine Alternative Risk Management Techniques (Purchase an Insurance Policy vs. Risk Your Own Personal Finances Should You Be Sued)
3. Select Risk Management Techniques (Ways to Minimize Your Liability)
4. Implement Techniques (Initiate Your Procedures To Minimize Your Risk and Purchase Your Own Individual Insurance)
5. Monitor Results

What can you do to minimize your risk?

■ Report any incident that may give rise to a suit to your supervisor and your insurance provider
■ Always act professionally and portray a professional image
■ Review your Code of Ethics and Scope of Practice
■ Ensure that you have adequate protection should you be sued — i.e. a professional liability insurance policy through your employer complemented by your own individual professional liability insurance policy

Although employers may cover you for your rendering or failure to render your professional services, you should consider complementing their coverage with your own policy. Consider:

■ Disciplinary actions against you
■ Your own policy looks out for your best interests
■ Your own insurance policy is not employer specific — it “follows” you wherever you provide services in Canada (i.e. contract employee, volunteer work, etc.)
■ The limit of coverage you purchase is your own limit and you are not “sharing” limits with other health care professionals
■ You have an opportunity to have a copy of your policy to ensure coverage is appropriate
■ The deductible you pay for your own insurance is minimal (if at all)

Risk is a fact of life. There is a risk when crossing the street. There is a risk in purchasing a home. There is a risk when providing professional services. You want to ensure that you minimize your risk as much as possible and transfer as much risk as you can to an insurance policy.

CSRT sponsors a professional liability insurance program exclusive to members. For more information, please visit www.csrt.com.

CSRT PROFESSIONAL DEVELOPMENT WORKSHOP
March 20, 2008
12:00 to 1:00 PM EST
Patient Safety: Mark Daly, RRT
The workshop will be accessible via a combination of web-based and teleconferencing services.
For more information contact Pam Hicks, phicks@csrt.com or call 800-267-3422 ex 26 or check the CSRT website at www.csrt.com
La gestion des risques pour le thérapeute respiratoire
Mary-Ann Hamel, Vice-présidente directrice, Marsh Canada Limitée

Chaque jour, pour toutes sortes de raisons, des milliers de Canadiens ont du mal à respirer. Les thérapeutes respiratoires jouent un rôle critique vis-à-vis des soins qu’ils prodiguent à ces personnes, s’exposant par le fait même à la responsabilité civile. Les poursuites et l’obligation de rendre des comptes relatifs à des allégations d’infractions professionnelles ne sont pas une partie de plaisir.

Au contraire, il s’agit d’événements stressants pour toutes les parties impliquées. Compte tenu de l’époque contentieuse actuelle, la probabilité de se voir impliqué dans une poursuite pour faute professionnelle ne constitue pas une possibilité vague. La possibilité d’être actionné pour une action ou une inaction alléguée est très réelle. Par contre, il existe des techniques simples de gestion des risques qui servent à réduire ou à éliminer votre responsabilité civile.

La gestion des risques est une approche systématique qui englobe l’identification, l’évaluation, la compréhension et la communication des enjeux liés aux risques, ainsi que les actions posées pour y palier. Elle comporte les étapes suivantes :
1. Identifier et analyser les expositions à une perte (ce qui pourrait arriver)
2. Étudier les diverses techniques de gestion des risques (souscrire une police d’assurance c. risquer vos finances personnelles dans l’éventualité d’une poursuite)
3. Choisir les techniques de gestion des risques (les façons de réduire votre responsabilité civile)
4. Mettre les techniques en œuvre (initier vos procédures en vue de réduire les risques; souscrire votre propre assurance individuelle)
5. Évaluer les résultats

Qu’est-ce que vous pouvez faire pour réduire les risques?
- Tenir des dossiers bien documentés
- S’assurer de ne prodiguer que les services professionnels qui relèvent de votre champ d’exercice
- Communiquer à votre superviseur et à votre fournisseur d’assurance tout incident qui risque d’entraîner une poursuite
- Toujours se comporter de façon professionnelle et projeter une image professionnelle
- Passer en revue votre Code de déontologie et votre Champ d’exercice
- S’assurer d’avoir une protection adéquate dans l’éventualité d’une poursuite, c.-à-d. une police d’assurance responsabilité professionnelle individuelle

Bien que l’employeur puisse couvrir l’exécution ou l’inexécution de vos services professionnels, il y a lieu de songer à compléter cette couverture à l’aide de votre propre police. Songez à ce qui suit :
- les mesures disciplinaires intentées contre vous
- votre propre police protège vos meilleurs intérêts
- votre propre police d’assurance ne se limite pas à un employeur : elle vous « suit » là où vous prodiguez des services au Canada (employés contractuels, bénévolat, etc.)
- la limite de la couverture que vous souscrivez est votre propre limite : vous ne « partagez » pas les limites avec d’autres professionnels de la santé
- vous avez l’occasion de conserver une copie de votre police afin de vous assurer que la couverture est convenable
- la franchise que vous devez payer est minime (ou inexistante)

Le risque fait partie de la vie. Vous prenez un risque en traversant la rue, en achetant une maison et en prodiguant des services professionnels. Il faut s’assurer de réduire les risques autant que possible et de transférer la plus grande part de risque possible vers une police d’assurance.

La SCTR commande un programme d’assurance responsabilité professionnelle à l’intention exclusive de ses membres. Pour un complément d’information, consultez le www.csrt.com.
Hello everyone. Spring will be arriving shortly and with it comes membership renewal time!

Why renew with CSRT?
At CSRT, our members are our greatest resource. It is extremely important, in this growing world of multidisciplinary healthcare practitioners, that the voice of respiratory therapists is powerful and is at the forefront of the discussions regarding healthcare in Canada. Join or renew with the CSRT and be part of that voice. Please keep your eyes open for your renewal packages and/or an e-mail regarding renewal in the coming weeks.

You will notice in your renewal package, the renewal forms have changed significantly. For the RRT membership renewal form, there is a very in-depth profile that we would greatly appreciate you filling out in its entirety. Although we encourage you to renew your membership online, please download the actual Membership Profile Form from the website or fill out the form that you receive in the mail. Any data collected will adhere to CSRT’s Privacy Policy and will be used for statistical purposes only.

There are significant improvements in our professional liability insurance program for the 2008–2009 membership year. By request, we have worked closely with our insurance broker to receive improved enhancements to the insurance program, including a second option that will provide $5-million coverage and greater coverage for legal defence reimbursement costs. The more members we have enrolled in the program, the better the premiums and policy enhancements that we can offer our members.

Risk management is one of the areas in your career that should remain in strong focus. What better way is there to protect your career, than to be adequately covered by liability insurance in the event that a suit is brought against you?

Our spring educational workshops dealt with risk management in your profession. The workshops that were held are:

- Risk Management — Protecting Yourself and Your Practice — January 30, 2008, Brent Kitchen, RRT
- Liability Insurance — What You Need to Know — February 12, 2008, Mary-Ann Hamel, Senior Vice President, Marsh Canada Limited. Mary-Ann has also written an article on Risk Management for this issue of the Journal.

We are providing a Patient Safety workshop — March 20, 2008 from 12:00 – 1:00 ET, with Mark Daly. Please visit www.csrt.com for more information and how to register.

In December, I attended the Canadian Institute for Health Information (CIHI) conference, entitled “Health Human Resources 2007: Connecting Issues and People”. Over 350 delegates from many areas of the healthcare industry including government agencies, professional and regulatory organizations, hospital administrators and many different types of health care professionals attended. This conference highlighted the importance of collecting very concise and consistent data in order to have a clear picture of many aspects of a profession. CIHI has been collecting data for a very long time for doctors and nurses, but not the different therapy groups. CIHI released results from data collected and created a report entitled “Workforce Trends of Occupational Therapists in Canada, 2006” in December 2007. CIHI is currently working with the Pharmacists, Physiotherapists, Medical Laboratory Technologists and Medical Radiation Technologists to create similar databases and plans to have workforce reports created over the next several years. Although CIHI will not be using our data at this point in time, we have decided to set up our database using similar data sets and methodology used for the other therapy groups in order to collect consistent and more representative data.

It was also very evident while attending this conference that it is extremely important to have the voice of respiratory therapists strongly heard amongst all of those other voices.

Please join the CSRT — help strengthen our voice…

Thank you for your continued support and we look forward to providing you with the best services possible.
Bonjour! Le printemps qui arrive à grands pas signale la période de renouvellement des adhésions!

Pourquoi renouveler votre adhésion à la SCTR?
À la SCTR, les membres constituent notre plus grande ressource. Comptenu de la croissance du nombre de professionnels pluridisciplinaires, il est de toute importance que la voix des thérapeutes respiratoires soit forte et au premier plan des discussions portant sur les soins de santé au Canada. Votre adhésion/renouvellement d’adhésion à la SCTR vous permet de faire partie de cette voix. Surveillez l’arrivée de votre trousse de renouvellement par la poste au cours des prochaines semaines et/ou votre courriel pour une annonce à cet effet.

Parlant de la trousse, vous remarquerez que des changements importants ont été apportés aux formulaires. En particulier, le formulaire de renouvellement d’adhésion à la SCTR comporte un profil détaillé. Nous apprécierons grandement que vous preniez le temps nécessaire à le remplir au complet. Bien que nous vous encouragions à renouveler votre adhésion en ligne, nous vous demandons de télécharger le Formulaire de profil du membre à partir du site Web ou encore de remplir le formulaire que vous recevrez par la poste. Tous les renseignements recueillis se conformeront à la Politique sur la protection de la vie privée de la SCTR et serviront uniquement à des fins statistiques.

D’importantes améliorations ont été apportées à notre programme d’assurance responsabilité professionnelle pour l’année d’adhésion 2008-2009. À la demande populaire, nous avons travaillé de près avec notre courtier d’assurance afin d’améliorer le programme, notamment en ajoutant une deuxième option qui fournit une couverture de 5 millions de dollars et en améliorant la couverture des frais de défense juridique. Plus de membres s’inscrivent au programme, plus les primes sont avantageuses et les améliorations sont nombreuses.

Le domaine de la gestion des risques doit constituer l’un des points de mire de votre carrière. Quelle meilleure façon y a-t-il de protéger votre carrière que de vous assurer d’avoir une couverture adéquate en matière d’assurance responsabilité dans l’éventualité qu’une poursuite soit intentée contre vous?

Les ateliers éducatifs tenus au printemps traitaient de gestion des risques au sein de la profession :
- Risk Management — Protecting Yourself and Your Practice (La gestion des risques : pour votre protection et celle de votre pratique) — le 30 janvier 2008, Brent Kitchen, TRA

Nous offrons un atelier sur la Sécurité du patient (Patient Safety) le 20 mars 2008 de 12 h 00 à 13 h 00 HE, avec Mark Daly. Consultez le www.csrt.com pour un complément d’information ou pour vous inscrire.

En décembre dernier, j’ai participé à la conférence de l’Institut canadien d’information sur la santé (ICIS) intitulée « Ressources humaines de la santé 2007 : Des enjeux et des gens ». Au-delà de 350 délégués de plusieurs domaines de l’industrie des soins de santé y ont participé, y compris des représentants d’agences gouvernementales et d’organismes professionnels et de réglementation, des administrateurs d’hôpitaux et une riche gamme de professionnels de la santé. La conférence soulignait l’importance de recueillir des données très concises et cohérentes afin de dresser une image nette de plusieurs aspects d’une profession. L’ICIS a publié les résultats des données recueillies et a rédigé, en décembre 2007, un rapport intitulé « Tendances de la main d’œuvre chez les ergothérapeutes au Canada, 2006 ». L’Institut travaille présentement avec les pharmaciens, physiothérapeutes, technologues de laboratoire médical et technologues en radiation médicale en vue de créer des bases de données semblables et il prévoit créer des rapports sur la main d’œuvre au cours des quelques prochaines années. Bien que l’ICIS n’utilise pas nos données à l’heure actuelle, nous avons décidé de créer notre base de données en fonction d’ensembles de données et de méthodologies semblables à ceux qui sont utilisés par d’autres groupes de thérapeutes afin de recueillir des données cohérentes et davantage représentatives.

Lors de cette conférence, l’importance de veiller à ce que la voix des thérapeutes respiratoires soit clairement entendue parmi toutes les autres voix m’a paru très évidente.

Renforcez notre voix... adhérez à la SCTR.

Merci de votre soutien continu. Nous nous employons à vous offrir les meilleurs services possibles.
Enhanced CSRT Professional Liability Insurance

There are now two options to choose from.

We have negotiated a decrease in the premiums and an increase in the coverage for Disciplinary Defense costs for Option 1 and Option 2 has been added in order to provide coverage for those members who require $5M coverage in liability.

**Option 1:** Basic Professional Liability Insurance:
$2M/incident — $4M aggregate ($67 + applicable taxes)
- Disciplinary Defense — $25K/Incident — $100K aggregate
- Criminal Defense Reimbursement — $100K/incident — $100K aggregate

**Option 2:** Basic Professional Liability Insurance:
$5M/incident — $5M aggregate ($110 + applicable taxes):
- Disciplinary Defense — $25K/Incident — $50K aggregate
- Criminal Defense Reimbursement — $50K/incident — $100K aggregate

There have been several other additions/enhancements to the program. See your renewal package or visit [www.csrt.com](http://www.csrt.com).

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**President’s message continued from page 10**

Exotic, no; two years as President has meant two trips to Alberta, one to Las Vegas, one to Orlando, two to Toronto, two to Montreal and four to Ottawa. An incredible journey, yes. I would not have changed this for anything. I have had a chance to work with some of the best this country has to offer. I have met hundreds of new people and made new friends with people from around the world who are also passionately interested in respiratory therapy. I have been profoundly changed by those around me. If you want to feel even the smallest bit of this, get involved. Volunteer to work on one of our many committees or put your name forward for one of the elected positions. You have nothing to lose. Even if you don’t obtain the position you seek, other opportunities will present themselves. Just get involved, you too will be profoundly changed.

**Mot du président suite de la page 11**

sex d’un de nos nombreux comités ou soumettez votre candidature pour un des postes élus. Vous n’avez rien à perdre. Même si vous n’obtenez pas le poste convoité, d’autres occasions se présenteront. Mais impliquez-vous et vous serez changé profondément, vous aussi.

Rob Leathley, B.Ed., RRT
CSRT President

Rob Leathley, B.Ed., TRA
Président de la SCTR
Canada’s First Research Practice Council

Tracy Seaman BA, RRT, Instructor, Dalhousie School of Health Sciences, Halifax, NS

“A practice council is a group of professional(s)…who participate in, and are accountable for, making organizational decisions about discipline-specific as well as interdisciplinary practice standards and protocols. The overall goal of a practice council is the delivery of safe, competent and ethical quality care for patients and their families”.

The aim of the Research Practice Council (RPC) is to highlight best practices in clinical research throughout the local research community. Although there are many practice councils at the Capital District Health Authority (CDHA) the RPC is the first council specifically developed to represent research staff. The focus is not on a certain discipline or clinical practice issue, but strictly on the practice of patient-centered research. Within the council, much has already been learned about the scope and diversity of research at CDHA. This has helped to build bridges among the disciplines and also raise awareness about the safe and proper conduct of clinical trials.

The CDHA is the largest health care centre east of Montreal and clinical research trials take place throughout 30 of the centre’s major disciplines in Halifax, Nova Scotia and surrounding areas. The research team lead by principal investigators includes research coordinators, laboratory technicians, diagnostic imaging technologists, pharmacy technicians along with many other hospital personnel.

Due to the diversity and clinical backgrounds of the research staff a council was started in 2005 to support this multidisciplinary group. Current and past council membership includes clinicians with various backgrounds; nursing, occupational therapy, engineering, clinical nutrition, pharmacy and respiratory therapy. Other council members include the research educator and human resources manager for research services.

Although the council has evolved over the past years, the overall goal of the council remains the same; to assist research employees in the resolution of practice issues that may arise during the completion of clinical trials at Capital Health. The hope is to document these issues and to use them as possible educational tools in the future; to learn from the past.

Council Terms of Reference outline the following responsibilities:

- To provide a framework for defining and addressing research practice issues for a multitude of disciplines
- To define and clarify roles of research staff and to collaborate with the Research Education Committee, the Research Policy Advisory Council and the Workplace Safety Team regarding research practice
- To facilitate continuing competence through professional education and development
- To interact and consult as required with other Capital Health councils and committees regarding practice issues
- To serve as a resource for recognizing research excellence
- To establish mechanisms for the evaluation and effectiveness of the Council

The council has successfully completed a framework for resolution of practice issues and a guidance document to accompany it. This framework assists research staff to clarify whether an identified issue is a safety issue, a research practice issue, a professional practice issue or not, and then guide staff to the appropriate personnel to help them further.

The council has also awarded educational scholarships on behalf of Research Services the past 3 years; each year the Research Star Award has been awarded to a deserving research staff member who has been nominated by colleagues or peers due to their commitment to research excellence and dedication to the research community. The council has also shared developments with the research community through Lunch and Learn sessions and through the internet as part of the Research Services web access.

Since this is the first such council (to the author’s knowledge) in Canada it has been a challenging and educational endeavor to be a part of. Recently, council members have put actual practice issues through the framework to help with their resolution. One issue involved safety and the mumps outbreak in Nova Scotia this past year. The use of the framework helped a research staff member decide what was the most appropriate manner to deal with the mumps concern in their area with primary importance on patient (i.e. clinical trial participants) and CDHA staff safety. The framework worked well for this situation which gave
Canada’s First Research Practice Council  Continued

council members positive reinforcement that all the past years work was well worth the time and effort involved to get this council off the ground!

As an inaugural member of the RPC and a registered respiratory therapist (RRT) it was important for the author to be a part of this council in order to represent the RRTs in practice and also to be involved in the framework and development of the council from the ground up. It has also been a rewarding and educational experience to work together on council projects with a diverse group of dedicated and caring health care professionals. Research is just one of the many areas of advancement of RRTs in Canada and councils such as the RPC can ensure that RRTs have a voice in this and other such communities within the health care system.

What are RRTs doing in research at Capital Health?

There are currently over 300 research employees at Capital Health taking part in more than 1300 clinical trials. The majority of these trials involve experimental pharmaceutical products but there are many non-pharmacological trials as well.

Within the Department of Medicine, the Division of Respirology conducts various research projects, including clinical trials, each year. Staff Respirologist Dr. Paul Hernandez is the research director for the division and employs 2 full time RRTs and 1 part-time RRT as research coordinators. Dr. Hernandez is an associate professor of Medicine at Dalhousie University and is a member of the Canadian Thoracic Society including the COPD Guidelines Committee.

Pharmaceutical trials in the areas of chronic obstructive pulmonary disease (COPD), asthma, cystic fibrosis, pulmonary hypertension, pulmonary fibrosis and palliative care are currently taking place in the Division of Respirology. Non-pharmaceutical trials in COPD and asthma include integrative clinical respiratory and exercise physiology and assessment of interventions such as lung surgery and patient education.

The author is a part time research coordinator in the Division of Respirology and full time educator of Respiratory Therapy at the School of Health Sciences (SHS) at Dalhousie University, Halifax, Nova Scotia.

References

Calendar of Events

<table>
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<tr>
<th>Date</th>
<th>Event and Details</th>
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| March 2 – 7, 2008 | Anaesthesiologists, 14th World Congress  
Cape Town, South Africa  
www.wca2008.com/ |
| March 3 – 11, 2008 | American Academy of Allergy Asthma and Immunology  
Philadelphia, PA  
www.aaaai.org/ |
| April 9 – 12, 2008 | International Society for Heart & Lung Transplantation, 28th Annual Meeting & Scientific Sessions  
Boston, MA  
www.ishlt.org/meetings/futureMeetings.asp |
| April 19–22, 2008 | 18th European Congress of Clinical Microbiology and Infectious Diseases  
Barcelona, Spain  
www.akm.ch/veccmid2008/ |
| April 30 – May 4, 2008 | 40th Annual Meeting of the Society for Obstetric Anesthesia and Perinatology  
Chicago, IL  
www.soap.org/default.htm |
| May 16 – 21, 2008 | International Conference of the American Thoracic Society  
Toronto, ON  
www.thoracic.org/ |
| May 22 – 25, 2008 | Canadian Society of Respiratory Therapists  
Annual Respiratory Therapy Conference  
Saskatoon, SK  
www.csrt.com |
| June 13 – 17, 2008 | Canadian Anesthesiologists’ Society, 65th Annual Meeting  
Halifax, NS  
www.siicasalud.com/scripts/congressos.php/cc017845 |
| June 18 – 21, 2008 | 16th World Congress in Cardiology  
Nice, France  
www.cardiostim.fr |
| June 26 – 30, 2008 | CAS 65th Annual Meeting  
Vancouver, BC  
www.cas.ca/ |
| July 13 – 15, 2008 | Pain, 2008 World Congress  
London, England  
www.kenes.com/neuropathic2008 |
| October 2 – 5, 2008 | European Respiratory Society Annual Congress  
Chicago, IL  
www.ers.org/ |
| October 4 – 8, 2008 | American Thyroid Association, 79th Annual Meeting  
Chicago, IL  
www.asahq.org/ |
| October 19 – 22, 2008 | Canadian Association of Paediatric Health Centres, 2008 Annual Meeting  
Ottawa, ON  
www.siicasalud.com/scripts/congressos.php/cc008221 |
| October 25 – 20, 2008 | American College of Chest Physicians, 74th Annual Scientific Assembly  
Miami, FL  
www.siicasalud.com/scripts/congressos.php/cc008221 |
| October 25 – 29, 2008 | Canadian Cardiovascular Society, 2008 Annual Scientific Sessions & Exhibition  
Toronto, ON  
www.siicasalud.com/scripts/congressos.php/cc011836 |
| October 27 – 31, 2008 | American College of Emergency Physicians, 2008 Scientific Assembly  
Chicago, IL  
www.siicasalud.com/scripts/congressos.php/cc017850 |
Please join us in beautiful Saskatoon

THURSDAY, MAY 22, 2008
Leadership Congress
8:00 AM – 5:00 PM

Educator’s Congress
8:00 AM – 5:00 PM

CSRT Complimentary Wine and Cheese Reception
Opening of Exhibits
6:00 AM – 9:00 PM

FRIDAY May 23, 2008
Exhibitor’s Breakfast
7:30 to 8:30 AM

Keynote Speaker: Dr. Richard Heinzl, Doctors Without Borders
9:00 – 10:00 AM

Airway Olympics Sputum Cup Challenge
3:00 PM – 5:00 PM

Fun Night — Saskatoon Social
Multi-Cultural Evening
Plains Indians Pow Wow — Ukrainian Dancers, Ethnic Finger Foods
Sponsored by Roxon and Carestream

SATURDAY, May 24, 2008
Poster and Paper Presentations and Breakfast
7:30 – 8:30 AM

RTs on Trial — Is Your Practice Defendable Under Cross Examination?”
9:00 – 11:00 AM

CSRT AGM
3:30 – 5:30 PM

CSRT President’s Banquet and Awards
6:00 PM

SUNDAY, May 25, 2008
Keynote Speaker: Dr. John Fleetham
“Sleep Disordered Breathing in Adults”
9:00 – 10:00 AM

Keynote Speaker: Libby Groff
“The Gender Lens: Issues in Respiratory Disease”
10:00 – 11:00 AM

Keynote Speaker: Dr. Alana Barmby,
Saskatoon Naturopathic Health and Wellness Centre,
11:00 AM – 12:00 PM

Thank you to our sponsors
THURSDAY, MAY 22, 2008

Leadership Congress — Gallery C
8:00 AM – 4:00 PM

Educator’s Congress — Gallery B
9:00 AM – 5:00 PM

JOIN US!
6:00 – 9:00 PM
CSRT Complimentary
Wine and Cheese Reception
Opening of Exhibits

FRIDAY MAY 23, 2008

EXHIBITORS’ BREAKFAST — Salon A & B
7:30 – 8:30 AM

OPENING REMARKS — Salon C & D
8:30 – 9:00 AM

TRUDELL AWARDS
Presentation of the 2007 Trudell Awards to students who obtained the highest mark as a first-time writer of the CSRT-approved national Certification Examination.

9:00 – 10:00 AM
Keynote Speaker: Dr. Richard Heinzl
Doctors Without Borders

10:00 – 11:00 AM
Keynote Speaker — TBA

LUNCH, EXHIBIT HALL — Salon A & B
11:00 AM – 12:30 PM

BREAKOUT SESSION ONE
A = Neonatal/Pediatrics   B = Anesthesia
C = Sleep Disorders       D = Critical Care
E = Leadership
12:30 – 1:30 PM

MODULE A Gallery A
“Discovering the Earliest Origins of Health and Disease: Pediatric Solutions to Health Care Crises”
Dr. Alan Rosenberg, Professor, Department of Pediatrics, College of Medicine, University of Saskatchewan, Director, Section of Pediatric Rheumatology, University of Saskatchewan Chair, Pediatric Research, University of Saskatchewan, SK

MODULE B Gallery C
“Obstetric Anesthesia Emergencies”
Dr. David C. Campbell, MD, MSc, FRCP, Professor and Chairman Department of Anesthesiology, Perioperative Medicine and Pain Management, University of Saskatchewan and Saskatoon Health Region and Director of Obstetric Anesthesia, Royal University Hospital, Saskatoon, SK

BREAKOUT SESSION TWO
1:30 – 2:30 PM

MODULE A Gallery A
“The Science Behind the NRP 2006 Changes”
Dr. Koravangattu Sankaran, Neonatal-Perinatal Medicine, Department of Pediatrics, Royal University Hospital, Saskatoon, SK

MODULE E Gallery B
“Productivity and Benchmarking”
Dr. Douglas Laher, BSRT, RRT, MBA, Director, Respiratory Care, Fairview, Cleveland, OH

MODULE E Gallery C
“Respiratory Therapy as a Profession — Are We on the Right Path?”
Randy Baker, PhD, RRT Associate Professor, Chair, Department of Respiratory Therapy, Medical College of Georgia, Augusta, GA

BREAK — Salon A & B
2:30 – 3:00 PM

BREAKOUT SESSION THREE
Gallery B
3:00 – 4:00 PM

Airway Olympics Sputum Cup Challenge — Can you Beat Six Seconds? — 3:00 – 5:00 PM
Pre-registration is required — See Registration Desk

MODULE A Gallery A
“Fetal Inflammatory Response Syndrome”
Dr. Thierry Lacaze, MD, PhD, FRCPC, Edmonton to be the Director of the Women and Children’s Health Research Institute after 10 years of neonatal research at the University of Paris

MODULE D Gallery C
“A Code Doesn’t Occur Out of the Blue — A Primer on Rapid Response Teams”
Stuart F. Reynolds, M.D, Assistant Professor of Medicine, Staff Intensivist, Toronto General Hospital; Director, International Critical Care Fellowship Program, University Health Network & Mount Sinai Hospitals, Physician Lead, Critical Care Response Team Project, Ontario Ministry of Health and Long Term Care, Toronto General Hospital, Toronto, ON
BREAKOUT SESSION FOUR
4:00 – 5:00 PM

MODULE A Gallery B
Airway Olympics FINALS

MODULE A Gallery A
“Neonatal & Pediatric Chest X-ray Interpretation”
Dr. Sheldon Wiebe, Department of Medical Imaging,
Royal University Hospital
Saskatoon, SK

MODULE C Gallery C
“NAVA”
Dr. C. Sinderby MSc, PhD

FRIDAY FUN NIGHT
Join us at the Odeon Theatre for a Multi-Cultural Evening. Plains Indians Pow Wow — Ukrainian Dancers
Ethnic Finger Foods
SPONSORED BY ROXON AND CARESTREAM

SATURDAY, May 24, 2008

POSTER AND PAPER PRESENTATIONS & BREAKFAST
Salon A & B
7:30 – 8:30 AM

OPENING REMARKS — Salon C & D
8:30 – 9:00 AM

SUMMIT AWARD
Summit Award presentation recognizes an RT who exemplifies excellence in patient care, education or research.

Salon C & D
9:00 – 11:00 AM

“RTs on Trial”
Reginald Watson, QC, B.A., LL.B.
Twenty-seven years of practice in Civil Litigation,
Insurance, Health, Personal Injury; Balfour Moss Barristers
& Solicitors, Regina, SK

LUNCH — Salon A & B
11:00 – 12:30 PM

BREAKOUT SESSION ONE
12:30 – 1:30 PM

MODULE A Gallery A
“NeoNatal Surfactant Therapy”
Dr. Thierry Lacaze, MD, PhD, FRCPC, Director of the
Women and Children’s Health Research Institute, ten
years neonatal research at the University of Paris

MODULE D Gallery B
“Methamphetamine/Overdose”
Dr. Jon Witt, MD, CCFP(EM), Emergency Department,
Royal University Hospital, Saskatoon, SK

MODULE C Gallery C
“Oral Appliances and/or CPAP: Current Treatment Concepts Including Combination and Alternative Protocols”
Dr. Leslie Dort, Department of Surgery, University of Calgary, Calgary, AB

BREAKOUT SESSION TWO
1:30 – 2:30 PM

MODULE A Gallery A
“How To Avoid Hurting the Baby You Are Trying To Save”
Evan Richards, RT, Clinical Services Director, Salt Lake City, UT

MODULE C Gallery B
“In-line Ventilator Applications”
Linda Dean, RRT, Irvine, CA

MODULE E Gallery C — TBA

BREAK — Salon C & D
2:30 – 3:00 PM

CSRT ANNUAL GENERAL MEETING — Salon C & D
3:30 – 5:30 PM

CSRT President’s Banquet and Awards
Gallery A, B, C and Gallery Ste A
6:30 PM

SUNDAY, May 25, 2008

CONTINENTAL BREAKFAST — Salon A & B
7:30 – 8:30 AM

8:30 – 9:00 AM — Opening Remarks

9:00 – 10:00 AM
“Sleep Disordered Breathing in Adults”
Keynote Speaker: Dr. John Fleetham
Professor of Medicine at the University of British Columbia, Chair, Canadian Thoracic Society Sleep Apnea Committee, Vancouver, B.C.

10:00 – 11:00 AM
“The Gender Lens: Issues in Respiratory Disease”
Keynote Speaker: Libby Groff, R.R.T., B.H.A
Manager Ambulatory Cardio-Pulmonary, WCH
Professional Leader, Respiratory Therapy, Women’s College Hospital & Sunnybrook Health Sciences Centre, Toronto, ON

11:00 AM – 12:00 PM
Keynote Speaker: Dr. Alana Barmby, Saskatoon
Naturopathic Health and Wellness Centre, Saskatoon, SK

12:00 – 12:30 — Closing Remarks
Send in your form with payment by April 15, 2007 the early-bird registration deadline to receive most economical fees. Advance registration and payment is due by May 13, 2007. After this date, please register on-site. On-line registration by MC or Visa is available at www.csrt.com.

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Please note: Sharing of name badges is not permitted.

**Pre-Conference Events**

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**Social Events**

**Friday Night Social** - Celebrating Diversity - Friday May 23, 2008 6:30 pm (no charge - please indicate number of tickets you require) # tickets

**President’s Banquet** - Saturday May 24, 2008 6:30 pm (please indicate number of tickets for each meal type)

- Beef - # tickets
- Chicken - # tickets
- Veg - # tickets

Total Registration # tickets x $55

**Method of Payment**

Please make cheque or money order in CDN funds payable to CSRT ($25 fee for NSF items)

- Cheque / Money Order (CDN funds)
- Visa
- MC

Add 5% GST

**Cancellation Policy:** All cancellation requests must be sent in writing to CSRT Head Office. Requests received by May 13, 2008 will receive an 80% refund. Requests by May 22, 2008 will receive a 50% refund. No refunds will be granted after May 22, 2008.
and weaknesses to improve the care they give in a variety of therapeutic protocols.

The combination of the variety of equipment and patient interaction simulations provides a realistic hospital setting with events that can progress from basic to life threatening. This fosters critical thinking and decision making by students in a “safe” setting. Additionally, students can be offered clinical situations that occur infrequently in their hospital clinical practicum, but exposure to the experience is needed; such as:
- Burn and multiple system trauma
- Tension pneumothorax
- Malignant hyperthermia
- Acute infective respiratory illness protocols
- Mass casualty
- Advanced cardiac care

The health programs are currently looking at scheduling plans that would allow interprofessional training with the students. Students will work in real health care teams to simulate total patient care from first responder through admissions to ward or critical care. Interaction of a variety of health care learners is hoped to build a stronger team for the public. Students will learn not only to provide profession specific therapy, but how to optimize and integrate all aspects of care to best meet patient needs. By working with team members they gain an appreciation of how individual roles complement each other. They learn not only from faculty but each other, just as workers in hospitals learn from colleagues to build their knowledge and skills. The team members that practice together will improve timing, efficiency and reduce error possibilities. Team work improves communication and interpersonal skills. Debriefing as a team promotes critical thinking on a total care basis. Both faculty and students have found simulation an effective and positive way to learn and look forward to role playing within the team approach. Algonquin College is looking forward to the implementation of Phase III of the plan for health education. Planning is underway and may include:
- Simulated emergency care units with mock land and air transport patient receiving areas
- Simulated diagnostic units with possible patient clinics for Polysomnography, Pulmonary Diagnostics, non-invasive Cardiac Diagnostics, as well as Asthma and COPD education
- Simulated X-ray or Echocardiography units
- Integrated training with all aspects of community care, from first responders, home/community care, acute/critical care, rehabilitation care, diagnostics, and emergency/disaster training

Algonquin College has invested more than 2-million dollars for the completion of Phases I and II. It is hoped that funding to start Phase III will be forthcoming soon and building renovations are hoped to start within three to five years. It is an exciting time for everyone and the goal to provide excellence in education to all our students so that they will serve the community with optimal care is the driving force behind this project. It is the hope for everyone involved in this project, from physical resource engineers, administrators and faculty to stay on the cutting edge of health care education for our local, national and global community. It will not only be the entry level students that benefit, but enhanced learning will cascade out to continuing education and/ or retraining for health care workers in regional and distant centres.

Le laboratoire de simulation de pointe du collège Algonquin
Suite de la page 5

services de soutien à la personne, la polysomnographie, le baccalauréat en sciences infirmières, la thérapie respiratoire, le programme d’ambulancier paramédical, le programme avancé d’ambulancier paramédical, les soins infirmiers intensifs et l’assistance en anesthésie.

Énoncé de mission de la Faculty of Health, Health, Public Safety and Community Studies :
Être le leader canadien de la prestation d’occasions novatrices de simulation en favorisant un apprentissage multidisciplinaire chez les étudiants dans le domaine des services de santé et communautaires.

Afin d’atteindre ces buts liés aux besoins éducatifs actuels et futurs, le Collège a initié un projet polyphasé :

La Phase I, complétée en 2004, consistait à rénover les labos existants et à installer de nouveaux équipements afin de rehausser la simulation clinique. Par la suite, le Collège a rénové les espaces réservés aux programmes d’ambulanciers paramédicaux, au programme de thérapie respiratoire et à divers programmes liés aux sciences infirmières. L’espace réservé aux programmes d’ambulanciers paramédicaux renferme des installations qui simulent l’accès à domicile, automobile et communautaire aux patients qui exigent les soins d’un secouriste. L’espace dédié à la thérapie respiratoire renferme des installations qui simulent l’exploration fonctionnelle respiratoire, le diagnostic cardiaque non-effractif, les études en polysomnographie, les soins hospitaliers et les soins intensifs. L’espace dédié aux sciences infirmières prévoit des installations en vue de prodiguer des soins à domicile, de longue durée, de base et intensifs.

La Phase II, soit la construction d’un nouveau Centre de simulation de soins paramédicaux (Allied Health Simulation Centre), a été complétée à l’automne 2005. Ce centre offre des installations de pointe pour la formation en soins de santé. On y retrouve des unités hospitalières fonctionnelles, dont :
- une salle d’opération avec une salle de lavage des mains équipée de six éviers et une aire de fournitures stériles
- trois unités de soins intensifs/traumatologie
- neuf lits de soins avancés

Chaque unité est munie de gaz canalisé, d’étalages muraux déroulants ainsi que...
Le laboratoire de simulation de pointe du collège Algonquin

Suite de la dernière page

de moniteurs et de négatoscopes montés. Pour compléter les installations, le Collège a investi des sommes considérables dans l’équipement afin qu’il reflète les normes liées aux compétences professionnelles connexes et qu’il permette une interaction réelle avec le patient, favorisant ainsi l’apprentissage et le dépannage. Il existe une gamme d’équipement à l’intention de tous les apprenants et de toutes les populations de patients, par exemple :

■ des tables à infrarouges radiantes et des incubateurs
■ des unités d’administration de liquides et de surveillance
■ des ventilateurs mécaniques
■ des appareils d’anesthésie par inhalation
■ des mannequins de soins respiratoires pour les intubations, trachéotomies et bronchoscopies (avec vidéobronchoscopes)
■ une gamme de mannequins-patients de néonatal à adulte à partir du modèle de base jusqu’au SimMan de Laerdal, au Simulateur de soins d’urgence (ECs) et à Noel (qui peut simuler l’accouchement d’un bébé)
■ un Human Patient Simulator (HPS) avancé pour les soins intensifs et anesthésiques qui « respire » à l’aide d’oxygène et qui « produit » du dioxyde de carbone relativement à la ventilation. Il reconnaît également les médicaments et les liquides qui sont administrés et il modifie sa réaction en fonction de la thérapie prodiguée par l’étudiant et du protocole privilégié par le professeur
■ des modèles qui permettent l’insertion d’intraveineuses et de cathéters artériels ainsi que les prélèvements « sanguins »

La surveillance des unités de simulation à l’aide de caméras et de haut-parleurs optimise l’apprentissage. Elle peut être effectuée à partir d’une salle de commande dissimulée, d’une salle d’observation ou encore de sites hors campus à l’aide de liens Internet. Il est possible de tenir des séances de formation en temps réel dans des sites hors campus. La capacité de zoom des caméras permet de visualiser les représentations oscillographiques des ventilateurs lorsque les paramètres sont modifiés. Cela permet au professeur/technologue de surveiller l’activité de l’étudiant indirectement et d’enregistrer les sessions de pratique et d’évaluation aux fins de révision. Grâce à cette caractéristique, l’étudiant peut observer et critiquer les sessions de pratique pour acquérir des compétences et constater l’incidence de la synchronisation des soins. Cela favorise la prise de décisions dans un milieu « sécuritaire ». De plus, l’étudiant peut vivre des situations cliniques qui se produisent rarement lors des stages cliniques en milieu hospitalier, mais dont l’exposition est nécessaire, par exemple :

■ les brûlures et les traumatismes multiviscéraux
■ le pneumothorax suffocant
■ l’hyperthermie maligne
■ les protocoles liés aux atteintes respiratoires infectieuses aiguës
■ les soins à un grand nombre de blessés
■ les soins cardiaques avancés

Les programmes de santé étudiant présentement la planification d’horaires permettant une formation interprofessionnelle. Les étudiants travailleront au sein de véritables équipes de soins de santé afin de simuler l’ensemble des soins aux patients, à partir du secouriste jusqu’à l’arrivée à l’hôpital ou aux soins intensifs. L’interaction d’une gamme d’apprenants de soins de santé est souhaitée en vue de créer des équipes d’uniformité de professionnels mieux rodées. Ainsi, l’étudiant apprendra non seulement à prodiguer la thérapie liée à sa profession, mais également comment optimiser et intégrer tous les aspects des soins afin de combler les besoins du patient. En travaillant avec les membres d’une équipe, il vient à apprécier la complémentarité des rôles individuels. Les étudiants apprennent non seulement de leur professeur, mais entre eux, tout comme les professionnels en milieu hospitalier en apprennent de leurs collègues afin de parfaire leurs connaissances et leurs compétences. Les membres de l’équipe qui pratiquent ensemble améliorent la synchronisation et l’efficacité et réduisent la possibilité d’erreurs. Le travail d’équipe renforce la communication et les habiletés interpersonnelles, alors que l’objectivation en équipe favorise la pensée critique liée aux soins dans leur ensemble. Les professeurs et les étudiants sont d’avis que la simulation constitue un moyen d’apprentissage efficace et positif et ils ont hâte d’incorporer les jeux de rôle au travail en équipe.

Le Collège Algonquin anticipe la mise en œuvre de la Phase III du plan lié à la formation en soins de santé. La planification de cette phase est en cours et pourra comprendre :

■ des unités de soins d’urgence simulées avec des aires de réception de patients qui arrivent par transport terrestre et aérien
■ des unités de diagnostic simulées avec la possibilité de cliniques de polysomnographie, de diagnostic pulmonaire, de diagnostic cardioïaque non-effractif et une composante d’éducation en matière d’asthme et de MPOC
■ des unités de radiographie et d’échocardiographie simulées
■ une formation qui englobe tous les aspects des soins communautaires, y compris les soins de secouristes, les soins à domicile/communautaires, les soins de courte durée/intensifs, les soins de réadaptation, le diagnostic et la formation en matière d’urgences/de désastres.

Le Collège Algonquin a investi au-delà de 2 millions de dollars en vue de terminer les Phases I et II. Il est souhaité que le financement permettant d’entamer la Phase III se matérialise bientôt et que les rénovations aux immeubles commenceront d’ici trois à cinq ans. Il s’agit d’une période stimulante pour tous les intervenants. L’objectif d’assurer l’excellence de la formation à tous nos étudiants afin qu’ils puissent offrir des soins optimaux à la communauté constitue l’élément moteur de ce projet. L’espoir collectif des gens impliqués à ce projet, soit les ingénieurs de ressources matérielles, administrateurs et professeurs, est de demeurer à la fine pointe de la formation en soins de santé pour le bien de notre communauté locale, nationale et globale. Ce ne sont pas que les étudiants débutants qui en bénéficieront : l’amélioration de l’apprentissage se répercutera sur le perfectionnement permanent et/ou le recyclage des professionnels de la santé dans des centres régionaux ou éloignés.
Dans ce numéro Suite de la page 4

Tel que je le mentionne ailleurs dans ce numéro, ce fut à la fois un honneur et un privilège d’occuper ce poste. J’y ai mis beaucoup de cœur, d’âme, de sang, de sueurs et de larmes, mais en retour, j’en ai retiré beaucoup plus.

Ce numéro coïncide avec une importante période de l’année, soit le renouvellement des adhésions. Il s’agit toujours d’une période quelque peu stressante pour le personnel et le Conseil d’administration puisque c’est à ce moment-ci de l’année que les membres rendent le jugement ultime de notre travail en décidant d’adhérer ou non. Pendant mon séjour à la SCTR, j’ai eu le plaisir de constater que nos effectifs augmentent chaque année. La Société est plus pertinente et importante que jamais pour la profession. Des discussions portant sur la réforme des soins de santé ont lieu à tous les niveaux et il est très important que votre perspective soit représentée.

Le Conseil d’administration, le personnel, les bénévoles et les autres collaborateurs travaillent très fort en vue de s’assurer que la RCTR et les autres produits de la SCTR combinent les besoins en évolution des thérapeutes respiratoires.

Ce numéro coïncide également avec le lancement des préparatifs en vue du congrès national. Nous disposons déjà d’une liste impressionnante de conférenciers et les gens de Saskatoon sont prêts à mettre en évidence tout ce dont leur ville a à offrir. Des renseignements préliminaires sur le congrès sont publiés dans ce numéro.

Vous trouverez d’excellents articles dans ces quelques pages. Parmi les défis actuels auxquels notre profession est confrontée, notons l’identification de stages cliniques pour nos étudiants, le rôle de la simulation vis-à-vis de la formation des étudiants et le rôle de la simulation vis-à-vis de la formation et du recyclage des TRA actuels. Le présent numéro contient le premier d’une série d’articles traitant des enjeux liés à la simulation, de même qu’un article sur le labo de simulation à la fine pointe de la technologie du Collège Algonquin. Finie l’époque où il fallait pratiquer la GSA sur des oranges! Nous publions également les résultats des nombreux membres dévoués qui ont participé au Concours de la Semaine de la TR 2007.

Merci encore une fois de m’avoir permis de faire partie de la RCTR et de la SCTR. Ces quatre dernières années ont été superbes.

Doug Maynard, TRA, MBA
Directeur général
Abstracts

Case-crossover study in northern Alberta, Canada.
Paul J Villeneuve, Li Chen, Brian H Rowe and Frances Coates
Published: 24 December 2007

Background: Recent studies have observed positive associations between outdoor air pollution and emergency department (ED) visits for asthma. However, few have examined the possible confounding influence of aeroallergens, or reported findings among very young children.

Methods: A time stratified case-crossover design was used to examine 57,912 ED asthma visits among individuals two years of age and older in the census metropolitan area of Edmonton, Canada between April 1, 1992 and March 31, 2002. Daily air pollution levels for the entire region were estimated from three fixed-site monitoring stations. Similarly, aeroallergen levels on a daily basis were estimated using rotational impaction sampling methods for the period between 1996 and 2002. Odds ratios and their corresponding 95% confidence intervals were estimated using conditional logistic regression with adjustment for temperature, relative humidity and seasonal epidemic of viral related respiratory disease.

Results: Positive associations for asthma visits with outdoor air pollution levels were observed between April and September. Relations were strongest among young children. Namely, an increase in the interquartile range of the 5-day average for NO2 and CO levels between April and September was associated with a 50% and 48% increase, respectively, in the number of ED visits among children 2–4 years of age (p<0.05). Strong associations were also observed with these pollutants among those 75 years of age and older. Ozone and particulate matter were also associated with asthma visits. Air pollution risk estimates were largely unchanged after adjustment for aeroallergen levels.

Conclusions: Our findings, taken together, suggest that exposure to ambient levels of air pollution is an important determinant of ED visits for asthma, particularly among young children and the elderly.

Survival of bronchiectatic patients with respiratory failure in ICU
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Published: 10 December 2007

Background: The outcome of patients with bronchiectasis during and after their stay in the intensive care unit (ICU) has seldom been reported in the literature. Managing these patients in the ICU can be challenging because of the complex nature of their disease. This study aims to identify the in-hospital and long-term outcome of patients with bronchiectasis and respiratory failure (RF) in ICU.

Methods: A retrospective study was carried out by studying all bronchiectatic patients admitted to the medical ICU for RF over a 10-year period (1995-2004).

Results: The mean (+/- standard deviation) age of 35 patients was 63.5 +/- 11.7 years and APACHE score was 22.3 +/- 7.3. The 4-year mortality was 60%. Among the variables observed, age > 65 years (relative risk(RR):4.15; 95% confidence interval(Cl): 3.2-5.1), APACHE II score > 24(2.61, 95%CI 1.7-3.5), intubation(2.81, 95%CI 1.9-3.7), inotropic support (2.86, 95%CI 2.0-3.7), HomeO2(4.0, 95%CI 2.7-5.2) and activity index (4.05, 95%CI 2.8-5.3) were associated with diminished survival in univariate analysis by Cox regression. By long rank test, survival probabilities were significantly low at these strata. Multivariate analysis of Cox proportional hazard model showed that age > 65 years (RR: 5.4, 95% CI 1.88-15.68), activity index (RR: 4.82, 95% CI 1.39-16.64); and inotropic support (RR: 3.84, 95% CI 1.46-10.06) were independently associated with reduced survival.

Conclusion: The decreased survival of ICU patients was associated with age > 65 years, activity index (bedridden or wheelchair-bound) and use of inotropic support.

Withdrawal of inhaled corticosteroids in people with COPD in primary care: a randomised controlled trial
Aklak B Choudhury, Carolyn M Dawson, Hazel E Kilvington, Sandra Eldridge, Wai-Yee James, Jadwiga A Wedzicha, Gene S Feder and Chris J Griffiths
Published: 27 December 2007

Background: Guidelines recommend inhaled corticosteroids (ICS) for patients with severe chronic obstructive pulmonary disease (COPD). Most COPD patients are managed in primary care and receive ICS long-term and irrespective of severity. The effect of withdrawing ICS from COPD patients in primary care is unknown.

Methods: In a pragmatic randomised, double-blind, placebo-controlled trial in 31 practices, 260 COPD patients stopped their usual ICS (median duration of use 8 years) and were allocated to 500mcg fluticasone propionate twice daily (n =128), or placebo (n =132). Follow-up assessments took place at three monthly intervals for a year at the patients’ practice. Our primary outcome was COPD exacerbation frequency. Secondary outcomes were time to first COPD exacerbation, reported symptoms, peak expiratory flow rate and reliever inhaler use, and lung function and health related quality of life.

Results: In patients randomised to placebo, COPD exacerbation risk over one year was RR: 1.11 (CI: 0.91-1.36). Patients taking placebo were more likely to return to their usual ICS following exacerbation (placebo: 61/128 (48%); fluticasone: 34/132 (26%); OR: 2.35 (CI: 1.38-4.05)). Exacerbation risk whilst taking randomised treatment was significantly raised in the placebo group 1.48 (CI: 1.17-1.86). Patients taking placebo exacerbated earlier (median time to first exacerbation: placebo: 44 (CI: 29-59); fluticasone: 63 (CI: 53-74), log rank 3.81, P=0.05) and reported increased wheeze. In a post-hoc analysis, patients with mild COPD taking placebo had increased exacerbation risk RR: 1.94 (CI: 1.20-3.14).

Conclusions: Withdrawal of long-term ICS in COPD patients in primary care increases risk of exacerbation shorter time to exacerbation and causes symptom deterioration. Patients with mild COPD may be at increased risk of exacerbation after withdrawal. Trial Registration: ClinicalTrials.gov NCT00440687
Description of Filtering Exhaled Gases with a Flow Inflating Bag-Valve Device: For Pediatric and Neonatal Applications

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In recent years, the filtration of expired gases has become a standard of care for ventilated patients as a means of infection control. Manual ventilation bags have also been identified as a source of colonization.1,2 Therefore, as part of an effective personnel and environmental protection strategy from respiratory aerosols, our institution filters the exhaled gases of the bag-valve device. However, this does raise an interesting point when referring to the pediatric and neonatal patient populations. This equipment set up description assumes that the most appropriate bacterial and viral filter has been chosen, knowing that there are hazards associated with use. A few of these hazards are addressed by EG Lawes (2003), and there are many citations available that address product specific properties to aid in decision making.

The point of most clinical significance in these patient populations is the degree of mechanical deadspace the filter would impose,3 as standard application of the HMEF (heat and moisture exchanger filter) is between the endotracheal tube (ETT) and the manual resuscitator. This is even noted as being clinically significant in adult patient populations, as it increases minute volume demands.4 The compressible volume of the HMEF available in our institution is 49 milliliters.5 (DAR, Hygrobac S, Tyco). Alternately available is a bacterial-viral filter with no humidification properties (DAR, Barrierbac S, Tyco), which adds 35 milliliters of dead space.5 To a clinician well versed in pediatric and neonatal critical care, these volumes are concerning, as they can be larger than the tidal breath of a small patient, and cause re-breathing of carbon dioxide. In choosing a filter, low dead-space is an important factor.6 We describe a set up that eliminates this mechanical dead space entirely.

Both neonatal and pediatric intensive care units in our institution use a flow inflating bag-valve device of the Jackson Rees type, which is: patient connection-fresh gas source-pressure monitoring-body-reservoir of 500 or 1000 mL, depending on patient weight. (Figure A.). The bacterial-viral filter (DAR, Barrierbac “S”, Tyco) is placed distal to the fresh gas source, and proximal from the pressure monitoring port. (Figure B.). In this way the fresh gas source remains closest to the patient connection, ensuring that no re-breathing of carbon dioxide occurs.

We selected a bacterial-viral filter that has no humidification properties for use on pediatric/neonatal manual resuscitators in our institution. The rationale for this is three-fold. Firstly, adequately humidifying the small pediatric/neonatal patient’s inspired gases with an HMEF is difficult, given that an HMEF functions by adding moisture and warmth to inspired gases by collecting humidity from expired gases. This is a volume and time dependent process, i.e.) the smaller a patient’s tidal volumes, the longer the HMEF will need to become fully saturated. It has been cited that this warm up time can take 12 minutes.5 Secondly, the placement of the HMEF in line with the bag-valve device is downstream from the fresh gas supply. This means that throughout the expiratory phase, fresh, dry gas flows over the HMEF, causing cooling and evaporation of the moisture and heat that has been collected from exhaled gases. Thirdly, the use of the bag-valve device is limited to short time periods, i.e.) emergent situations, as department protocols dictate the ventilator circuit be broken as infrequently as possible.

References
Part Three: Medical Simulation

What Medical Simulation Programs are Available.

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Introduction

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Acknowledgements: To the Respiratory Therapists of the Capital Health Region, Alberta for your dedication and caring.

Key words: Medical education • medical simulation • communication skills • crisis resource management

Conflicts of interest: None. Dr Brindley is the Medical Lead for Patient Simulation for Capital Health, Alberta and Vice-president for the non-profit Canadian Resuscitation Institute.

The Future of Simulation

This is an exciting time for Medical Simulation! As we outlined, in part-one of this series, there are many arguments in favour of Simulation, and numerous educators, clinicians and administrators have become strong advocates. A number of centres have subsequently developed sustainable simulation programs by applying many of the principles that we outlined in part-two. The cutting-edge of simulation now appears to be evidence-based simulation, collaborative simulation and developing the science of simulation. This will be the focus of this third and final manuscript.

Growing Infrastructure

Local simulation initiatives remain very important, but widespread collaborations can now promote the development of national standards, national advocacy, and multi-centre trials - in addition to the straightforward exchange of ideas. To facilitate collaboration, national organizations now exist such as the Society for Simulation in Healthcare (SSIH), the Critical Care Education Network (formerly the Canadian Resuscitation Institute (CRI), and the Society in Europe for Simulation Applied to Medicine (SESAM).

Background: This manuscript is part-three of a three-part series on Medical Simulation. Part-one addressed the “why” of Simulation, namely, why Medical Simulation offers novel opportunities to improve education, continuing-competency, and patient safety. Part-two focused on the “how” of simulation, namely, how to design, implement, and maintain a viable program. Part-three will now cover the “what”, namely what the future directions are likely to be, what sort of programs are currently available, and what evidence supports their implementation.

Definitions: Our definition of “Medical Simulation” means any technique, “low-tech” or “high tech”, that attempts to realistically recreate clinical situations and allow training with minimum patient risk. In this way it resembles the “war-games” of the military or “flight simulators” of aviation. Medical training has always involved graduated acceptance of decision-making and supervised practice. Equally, examinations have long included actors. As such, medical training has always incorporated a degree of simulation of real practice. What has changed is the explosion of available technology; the principles of adult education, the focus on patient safety, and the expectation of proof via research. Simulation is therefore a huge topic. We hope to offer a concise introduction.

The SSIH hosts the annual “International Meeting on Simulation in Healthcare” and now administers a peer-reviewed journal, called “Simulation in Healthcare”. This has significantly raised the expectations for authors to undertake evidence-based simulation research. This is in stark contrast to erstwhile manuscripts that were typically merely descriptive: describing what had been tried and how it had been conceived.

Instead of each simulation centre creating its own scenarios locally, efforts have been made by groups, such as the CRI, to develop
marketable courses. This centralized effort should raise the quality of Simulation as it usually involves an in-depth needs-assessments (e.g. studying what areas ought to be addressed; what are the deficiencies in the current curriculum; what are the needs of learners), taking pains to incorporate principles of adult education and psychology (e.g. encouraging self-directed learning, bilateral exchange of ideas between facilitator and trainee; courses that are easily modifiable based upon feedback), and developing metrics to analyze participant satisfaction. Evidence-based programs now exist. A few of these are outlined in order to provide practical examples of what is possible. What follows is far from exhaustive, but may help those eager to see how they too can provide unique opportunities for education, patient safety, healthcare-worker safety, and meaningful research.

**Acute Critical Events Simulation**

The Acute Critical Events Simulation (ACES) program was designed by the CRI. ACES originated with the goal of improving patient safety following the identification of recurrent errors during resuscitation. This two day course was designed by faculty from across Canada to aid with the acquisition of knowledge and procedural skills, but especially behaviors and communication. It has been delivered to hundreds of candidates in both urban and regional settings, and successfully modified for MDs, RNs, and RTs.

Evaluations have consistently been very favorable. Analysis of a Likert-scale questionnaire (0 to 5, with 5 representing strongly agree) issued to the first 50 participants found an overall rating of 4.38 (95% CI, 4.12-4.65) in 2002 and 4.44 (95% CI, 4.3-4.59) in 2003. Participants also felt ACES was very useful, with scores of 4.33 (95% CI 4.01-4.67) for 2002 and 4.37 (95% CI 4.19-4.55) for 2003. Comparing evaluations from one year to the next also demonstrated how the course could be easily modified using a needs-assessment beforehand and feedback afterwards. ACES is one of the first courses to focus on Crisis Resource Management (CRM) skills and as such offers a unique and important supplement to other excellent life support courses.

**Simulating Telephone Calls**

In Canada, large distances and low population density means frequent transport of acutely-ill patients to a single urban centre. A great deal of care is coordinated by telephone, but communication skills are rarely addressed. As such, acute-care teleconference calls have been simulated to help participants develop the “verbal-dexterity” and problem-solving abilities required to care for the acutely-ill. Of note, very little research has been done regarding how best to transition care from one group to another (for example from pre-hospital to the emergency room) or how to safely transport unstable patients across enormous distances. In addition, this strategy provides many of the putative benefits of High-Fidelity Simulation but with minimal cost or logistics. While largely descriptive in nature, qualitative evaluation suggested the exercise was extremely well received, the exercise was deemed realistic.
and that mistakes mirrored those in real-practice. All participants felt this strategy was superior to didactic sessions, and complementary to clinical experience. Simulated calls within the same hospital could be performed just as easily, and plans are under way to train both referring and receiving staff using this method. Simulating Transportation of the Acutely Ill

Wright et al. performed a unique study assessing the feasibility of providing high fidelity simulation in an air ambulance helicopter. Due to cost limitations, the simulation was performed while the helicopter was running at flight idle, rather than in full flight. Despite this limitation, they were able to simulate the noise and vibration present during flight which has profound implications when trying to resuscitate patients. As they described in detail, alarms can be missed and monitors can be blurred, making the helicopter environment particularly difficult to work in.

Twelve residents completed the simulations and all reported an improved awareness of the challenges faced in such environments. All residents agreed that the simulation was educational and should be used for future training. One can easily imagine other difficult scenarios that healthcare workers might find themselves working in, such as in the back of an ambulance, or confined spaces such as elevators. Optimizing transportation remains a poorly studied area, but one with enormous potential.

Simulating Disaster Response

High-fidelity simulation has been used as a method of developing (and refining) complex hospital protocols and disaster plans. These recommendations are often extensively discussed beforehand, but then filed away in policy binders, and rarely practiced. Without testing and refinement, experience suggests they will not be properly applied during the chaos of an evolving crisis. Equally, it is not appropriate to learn through “trial-and-error” when the consequence of “error” could be to worsen an already desperate situation. Furthermore, while patient-safety is finally receiving long overdue attention, similar attention is needed for “healthcare worker safety”. Overall, a good example of these challenges, and opportunities, was the outbreak of severe acute respiratory syndrome (SARS) in 2002–3.

Abrahamson, Canzian and Brunet used Simulation to develop and teach the resuscitation of cardiac arrest patients with SARS. This syndrome presented new paradigms in care delivery and, as such, previously entrenched treatment methods were not applicable. For example, hospital workers needed to re-train not to vigorously bag ventilate patients or risk dispersing the SARS virus. Furthermore, workers needed to learn how to put on a personal protective suit (PPS) before they could start.

Intubation of the SARS patient required a PPS in order to mitigate exposure and transmission. However, this seriously hampered communication and procedural dexterity. As Abrahamson et al. note, simulation “provided insights that had not been considered in earlier phases of development”. Expressed another way, if you plan in a boardroom, you will typically come up with boardroom solutions! They had initially timed individuals at 1½ to 2½ minutes to don the suits and designed their protocols around this assumption. However, during simulation, when an entire team had to gown up, the time to don the suits increased dramatically to 3½ to 5½ minutes. Using results from the actual simulation, they revised their protocol and corrected unanticipated errors in infection control. Impressively, these authors were able to train 275 healthcare workers within two weeks in this new protocol: a feat that would have been difficult without using Simulation. SARS therefore represents an excellent example of how Simulation offers opportunities for patient safety. These same opportunities exist whether for training in mass casualty, avian flu, or just another “disastrous day” in an overcrowded emergency room.

Use of Simulation in Clinical Trials

Simulation offers unique opportunities to improve the development of clinical trial protocols. Furthermore,
once developed, researchers need to be confident that bedside staff will duplicate these complex protocols precisely. If a protocol is violated it may mean that a patient’s data cannot be used. This decreases the statistical power of the study, delays its completion, and wastes resources and money. Experience has also suggested that study outcomes can be significantly different based upon whether the first few patients are included or excluded (likely because of early mistakes adhering to the study protocol). Significantly, this also raises ethical concerns regarding how appropriate it is to perform trials if the first few candidates are exposed to risks. In fact, minimizing harm and striving for equipoise (the belief that benefit and harm are equal for all study participants) is a fundamental requirement for study approval. Overall, Simulation offers a way to protect the rights of study participants, at the same time as optimizing the study’s statistical power, and protecting the investigators’ scarce resources.

Wright et al. describe using a high fidelity simulator when designing a complex clinical trial in which multiple medications were given at precise times for patients undergoing coronary bypass surgery. As with the SARS resuscitation study, Wright found unanticipated problems with their protocol during simulation, that likely would not have been found otherwise. They were able to train 48 research coordinators and further refine their protocol before any patients were actually subjected to experimentation.

Rapid Response Team Training

Busy medical staff often fail to recognize when inpatients show early clinical deterioration. Equally concerning, even when deterioration is recognized, healthcare workers often fail to initiate treatment or access help. There is little doubt that, for many acute illnesses, outcome is far better with early intervention compared to waiting for full cardiovascular collapse. However, there is equally still considerable debate as to the best way to institutionalize rapid response. Different jurisdictions have implemented different rapid response teams. These teams differ based upon their composition (e.g., whether an MD or RT is the first responder) and its activation triggers. In Canada, by far the most common model is the Medical Emergency Team (MET).

In theory, MET is activated when hospital inpatients display predetermined aberrant vital signs. MET often consists of a physician, respiratory therapist, and nurse. These professionals must be able to work together in an efficient and collegial way despite varied and stressful situations and disparate training. Equally, despite numerous patients competing for their attention, ward nurses are expected to remember to activate MET in a timely manner. Medical Simulation has therefore been recommended as a way to train all of the personnel involved in these calls.

DeVita et al. designed a curriculum utilizing High Fidelity Simulation which focused on developing multidisciplinary team skills.
during medical crises. A total of 138 individuals were trained including 21 respiratory therapists, 48 physicians, and 69 critical care nurses. Following this training, simulated survival (following predetermined criteria for death) increased from 0% to 89%. A similar Medical Outreach Program has been developed by the CRI, and has trained healthcare workers throughout the Province of Ontario (following generous government support). These initiatives suggest that Simulation has enormous potential to help in both triage and resuscitation.

While few would argue with the idea of responding rapidly, the current research has not shown an unequivocal benefit following MET implementation. Simulation research may offer insights as to why not. It may also be invaluable regarding how best to introduce initiatives such as MET, and in understanding the complexities of hospital culture within which the MET must function. Overtime, Simulation may help to finesse rapid response, individualize programs for different hospitals, or even suggest alternative strategies. Simulation has a vital, and currently underutilized, role in this topical debate.

**Barriers to Simulation (and how to overcome them)**

Dr. David Gaba, a renown champion for Medical Simulation has emphasized that, despite many putative benefits, widespread Simulation is currently the exception in healthcare. Furthermore, due to cost and time constraints, most training programs that do use Simulation expose trainees only a few times per year. For Simulation to be truly accepted and effective, sessions must happen routinely and be “fully integrated into the routine fabric of health care delivery”. In fact, the more that Simulation becomes integrated into everyday practice, the greater the support it is likely to garner. In this way participants will increasingly regard Simulation as a normal (non-punitive) part of working in healthcare.

Those already in clinical practice (as opposed to trainees) are currently even less likely to be required to participate in Simulation. This is in stark contrast to other professions such as the airline industry which mandates regular Simulation from the newest employee through to seasoned veterans. As such, senior clinicians need to lead by example. In the current voluntary system, this means requesting simulation experience. Otherwise quality-improvement, and patient-safety, is unlikely to be seen as a system-wide imperative. Equally, for those re-entering clinical practice or changing roles for example from trainee to independent practitioner Simulation offers a way to smooth the transition and offer reassurance.

Numerous comparisons exist between healthcare and other professions that long-ago mandated Simulation. Therefore, it is quite reasonable to mandate Simulation training in healthcare. In fact, increasingly, this appears to be a necessary step towards promoting its acceptance. For example, courses such as Advanced Cardiac Life Support (ACLS®) and Advanced Trauma Life Support (ATLS®) have been mandated for years. Few healthcare workers appear to object to these courses. Similarly, hospitals have been performing mock fire-drills for decades. As such, it seems no different to perform “mock-codes” and “mock traumas”, and to do so using the hospital’s overhead announcement system. Overall, healthcare’s inertia is increasingly difficult to defend. Understanding its causes is another important step forward.

**Simulation Research**

Lord Kelvin stated that if knowledge could not be expressed “in numbers” then it was “meagre and unsatisfactory”. This “Kelvin’s Curse” complicates quantitative-research of qualitative-skills such as communication and teamwork. Of note, whether didactic lecturing is beneficial has never been held to similar scrutiny, nor have other professions demanded proof before mandating widespread simulation. The skills addressed through Simulation are not “meagre” or unimportant, as we know that...
communication and teamwork to be one of the greatest causes of preventable medical error (see Part One). However, advocates need to accept that traditional research methods and expectations may not apply. Simulation proponents should accept that applications for research grants may compete poorly against traditional research. Strategies therefore include ensuring multidisciplinary input and approaching novel funding agencies, as well as dogged persistence.

Simulation outcomes tend to be qualitative in nature (e.g., is a student able to run a resuscitation more efficiently; can a coworker function better within a multidisciplinary team). These outcomes, while vital, are difficult to express in numerically. Furthermore, following the “scientific method” means accepting that research may or may not ultimately demonstrate a benefit. In short, it may never be conclusively proven that simulators significantly improve clinical outcome.

An intriguing question is that, given all of the potential benefits of Medical Simulation (and the lack of any obvious downside), just what level of proof is needed. Regardless most simulation research does not reach the level expected of traditional research. For example, in a review of over 670 articles covering 34 years, McGaghie et al. identified that only 5% of simulation research publications met or exceeded minimum quality standards. Instead, many proponents have focused upon arguments such as the aviation industry mandates regular simulation training for pilots entrusted with passenger’s lives, and therefore medical staff, entrusted with a patient’s lives, should be no different. Equally if simulation was instead a pharmaceutical agent, with this much potential to improve outcome and no clear side effects, practitioners would demand widespread access. These common sense arguments are worth making, but cannot be confused with definitive data or proof.

We may indeed be approaching a state where Medical Simulation will become accepted based upon its widespread acceptance and its “face validity”. However, it must be appreciated that data is a very powerful ally whenever we are looking to mandate change or redirect funding. Competition for resources is fierce, and without research it will be harder for administrators to secure funds for Simulation, or for educators to demand its widespread application.

In short, Simulation is almost certainly here to stay, but how rapidly accepted or widely integrated it becomes will be influenced upon how well it grows into a scientific discipline. The challenge ahead is clear; whether we will rise to it will represent the next chapter in the evolving story of Medical Simulation.

Summary
The number of simulation programs is increasing rapidly. Furthermore, there is an increased emphasis upon collaboration, incorporating principles of adult education, and demanding simulation research. High quality Medical Simulation now covers the gamut from programs designed to improve acute resuscitation and triage, to improving communication, to improving pandemic planning, and improving clinical trials. There is a need for higher quality evidence-based research if Medical Simulation is to reach its potential. However, significant research challenges have yet to be systematically addressed. Obstacles remain but the opportunities are simply too great not to persevere.

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