London Health Sciences Centre
Southwest Ontario Regional Base Hospital Program

SWORBHP LINKS

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Inside this issue:

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Relax and Drive

After nearly three years of work, the release of the updated medical directives is finally upon us. I realize that paramedics throughout Ontario have some anxiety surrounding the impact that these new directives will have on your practice. At first look, they may appear daunting with their new format, the preamble through which new conventions are explained, and some of the new updates that have been incorporated.

I would like to take this opportunity to reassure you. For the most part, what you are seeing is a format change. Yes, there are new protocols for some of you. Yes, some of the medicine has changed. However, the majority of the changes will have a minor impact upon your day to day patient care.

Think of these new medical directives like buying the latest model of a car you currently own. The color may have changed, there may be a few new options (like a sweet new stereo) that take a few moments to figure out, but for the basic day to day operation, most procedures remain the same. Like any new model, there will be kinks that need to be worked out. We would like to hear from you in this regard. Although these directives have been created with input from all of the Base Hospital Programs and approved by your representatives, AMEMSO, and EHS, there will be areas that need to be revised.

To further ease any apprehension you may have, professional standards and the SWORBHP medical directors have a plan. For the coming year, if you deviate from the new medical directives and instead revert to the old directives (and they were applied correctly), we will draw your attention to where the new change should have occurred and classify this as a minor error only. There will not be mass deactivations. By the way, there were only 11 in the region last year. Think of this plan like the warranty on that new car that allows you to relax and focus on driving.

So for now, relax, and continue to focus on providing excellence in patient care. That's what the new directives were engineered to do.

Michael Lewell, B.Sc., M.D., FRCP(C)
Regional Medical Director

Three Years Old and Growing

On October 1, 2011 the Southwest Ontario Regional Base Hospital Program (SWORBHP) turned three years old. Since our start in 2008 the program has grown in every aspect and function, outpacing the expectations of supporters and critics. SWORBHP remains the only Base Hospital in Canada that is nationally accredited by CECBEMS, and whose educational staff are Nationally Certified EMS Educators (NCEE). Additionally, SWORBHP is the only Base Hospital in which all medical directors have completed the NAEMSP basic program, and who annually complete the advanced topics in medical direction. Happy Birthday SWORBHP! It has been a great three years with the prospect of many more to come.

Severo Rodriguez, B.A., M.Sc., NR-LP, AEMCA
Regional Program Manager

CBRNe Response Teams Come to LHSC

"What the heck is CBRNe?"
CBRNe stands for Chemical, Biological, Radiological, Nuclear and explosives. It is part of LHSC's Disaster Management Preparedness Plan. Although you may be wondering what the chances are of such an event happening in London, the possibility is not out of the question. A CBRNe event does not need to occur on a large scale in order to trigger a response. It could be as simple as a few farmers who get sprayed by a pesticide. It could also be as large as an explosion at a local chemical plant. Regardless of the magnitude, it is important that the receiving hospital be prepared.

What is the CBRNe Response Team?
Presently, the team is comprised of three members; myself, Paul Robinson (Professional Standards Specialist, SWORBHP), and Dr. Mike Peddle (Assistant Medical Director, SWORBHP). The teams will be comprised of approximately 17 members. The team's goal is to effectively and efficiently triage and decontaminate all patients prior to them entering the hospital facility, even if they have already been decontaminated at the scene.

How does this affect you?
As paramedics you will be the front line responders to any CBRNe event (provided patients don't drive themselves to the hospital!). It is important that you know that a CBRNe team exists and what the process will be should the team be dispatched. On arrival to the scene of a CBRNe incident you will follow your CBRNe/HazMat protocols. When patching through to the ED triage nurse, provide as much information as possible. Potential CBRNe/HazMat event. How many victims? Symptoms? ETA to the receiving hospital? The usual. It is quite possible that you will not know the agent involved.

What will it look like?
When you arrive at the hospital the CBRNe Response Team will be in the process of, if not finished, setting up the decontamination tent. The tent will be erected outside of the ED. At Victoria Hospital it will be in the ambulance bay. The location at UH has yet to be determined. Hospital security will be directing you to the assigned off-load area. You will transfer your patient to the Primary Triage Nurse (who will be in full PPE). They will receive the patient, triage them according to Disaster Triage codes and direct them to either the ambulatory or non-ambulatory area of the decontamination tent. After thorough decontamination the patient will be transported inside the ED.

So what was the point of you reading this?
You need to be aware that:

- CBRNe Response Teams are being developed
- the decon tent will be located in your usual off-load area
- a new off-load area will be assigned and clearly marked
- your first point of contact will be the Primary Triage Nurse
- once you have transferred care to the triage nurse you do not need to stay at the hospital
- as initial responders you are critical to the activation and implementation of the response plan

Kelly Davis, B.Sc.N., R.N.
CBRN Response Team Specialist
London Health Sciences Centre

Upcoming Continuing Education Opportunities

Remember to check our website regularly for information on upcoming Webinars and Rounds.
Click here to visit our website and view the page dedicated to Continuing Education.

Is This Arrest of "Cardiac Origin"? A Way Out of the Confusion

The terminology used to describe cardiac arrest in the medical directives has always been confusing to me, and it seems to a lot of paramedics as well. When a person dies, the heart stops beating and the electrical activity of the heart ceases. Technically, the term 'cardiac arrest' is used anytime the heart stops moving blood around the circulatory system.

There are many causes of cardiac arrest. However, these can be divided into three categories, disruption of the heart's electrical system, loss of the circulating blood volume, or failure of the mechanical pump (heart muscle itself).

"...is this primarily a failure of the pump, the tank or the electrical system?"

When the electrical system is disrupted, arrhythmias occur. Examples are ventricular fibrillation, pulseless ventricular tachycardia or severe bradycardia. These are considered "cardiac causes" of arrest although they can be triggered by hypoxia.

Other cardiac arrests are from causes that result in a critical loss of circulating blood volume. Bleeding from trauma or shifts in fluid and blood vessel tone from septic shock are examples. The tank is empty! These arrests are not classified as of "cardiac origin".

The last group of causes result in a failure of the heart muscle to pump. This might happen if a large portion of the myocardium dies from myocardial infarction (a cardiac cause), or hypoxia from any cause or poisoning.

The 'non-cardiac' hypoxic group include asphyxia from strangulation (hanging), drowning or pulmonary embolus. The heart muscle may also be poisoned by a drug overdose. These later causes are not considered "cardiac causes" because the problem originates outside of the heart and affects it secondarily. Thus, pump failure can be considered to have cardiac and non-cardiac causes.

I don't find it very helpful to ask the question, is this arrest of "cardiac origin"? To keep causes of cardiac arrest organized, I ask myself, is this primarily a failure of the pump, the tank, or the electrical system? Each group of causes result in one type of problem. Each type of problem requires different treatment. Electrical failure generally requires electrical therapy. Inadequate blood volume requires the tank to be topped up with fluid. Failure of the pump requires oxygen and medications.

While this is a simplistic construction, I have found it helpful to answer the question, is this arrest of cardiac origin?

Don Eby, M.D., M.Sc., CCFP(EM) FCFP
Local Medical Director
Grey, Bruce, Huron and Perth

Self Reporting. Does it Really Make a Difference?

It's hard to believe a year has passed since we implemented the self report hotline. Our goal was to give paramedics an easy way to report potential errors, which the self report hotline has succeeded in doing. So has it really made a difference?

Over the past year we received more than ninety calls from paramedics who identified concerns with their professional practice. Although calling doesn't guarantee your certification won't be affected, the majority of errors were addressed simply by the paramedic calling. Identifying these issues or concerns early not only reduces the process time for auditing, but can reduce the potential for further remediation. The majority of self reports were processed in less than five days.

So when should you call? Call anytime (day or night) you feel you made an error in judgement or an explanation is required. Please remember to leave your name, a contact number, and a brief description of what the concern is or the error might be. Every call is important, however, giving us just your name with no details, leaves our minds to wonder and hearts to race!

Thank you to everyone who utilized the hotline this past year…it does make a difference!

Tracy Gaunt, B.A., NCEE, CQIA
Professional Standards Specialist

Look for us on the Web
www.lhsc.on.ca/bhp

Residents and Ride-outs

Over the last few years, many paramedics have probably noticed the increasing volume of medical students and Emergency Medicine residents participating on ride-outs. This trend is most prominent in the London and Middlesex region, which is home to the Schulich School of Medicine, but as its satellite campuses develop in other cities, paramedics in all regions may soon have the experience of having medical observers ride along in their vehicles. As valuable as the experience has been for all parties alike, aspects of confusion have come about with regards to online medical control from these well-but-only-partially-trained physicians. Hopefully I can shed some light on how to maximize this working relationship while still safely caring for your patients!

The interplay between paramedics and emergency physicians is crucial, and as such, Emergency Medical Services (EMS) training is mandatory in Emergency Medicine Programs across the country. Residents at Western are required to complete 2-3 ride-outs per year to gain an understanding of the paramedics' scope of practice, offline medical control, and appreciate the vastly different conditions that exist outside of the ED. Additionally, residents complete a structured, four-week rotation with the Base Hospital Program, usually in their third year where they participate in activities such as paramedic education, quality assurance, clinical work (ride-outs), and research.

Ride-outs are primarily 'observation only' for the medical students and residents. However, senior residents (years 3 to 5) who have completed their EMS rotation, can provide some online medical control. With that being said, online medical control does not equate to on-the-fly creation of new directives, so please stay within your limitations, regardless of resident instruction.

Remember, while they are there for their education, make use of their knowledge and ask them questions to enhance yours. It is our hope this program continues to be a success and provides valuable learning opportunities for both paramedics and Emergency Medicine residents. This fall look for several 4th year medical students as well as some Pediatric Emergency Medicine Fellows to be joining you on the trucks.

If you have any questions or comments about your experiences, please do not hesitate to contact Dr. Michael Peddle, Program Coordinator, or myself.

Sameer Mal, B.Sc., M.D.
PGY-4 Emergency Medicine
SWORBHP EMS Resident
University of Western Ontario

Paramedic Recognition Awards

Prehospital Save

Congratulations to the following paramedics:
Essex-Windsor - Craig Beaudette, Kim Boismier, Paul Stromme, Tricia Fischer (May 14, 2011)
Perth County - Shannon Fyfe, Andrew Lucas, Mike Grosz (July 11, 2011)
Grey County - Nick Maus, Paul Sollors (September 19, 2011)

Prehospital Newborn Delivery

Congratulations to the following paramedics:
Grey County - Jeff Thomas, Paul Sollors (August 11, 2011)
Essex-Windsor - Aaron Parent, Brian Fuerth, Nisreen Karkanawi, Nicole Lecoq (August 15, 2011)

If you have been on a call that you feel meets the criteria to be considered for a Prehospital Save or Prehospital Newborn Delivery, please complete a submission form and forward to the Base Hospital for verification of the call. Click here to access online forms.

Cathy Prowd, CQIA
Operations & Logistics Specialist

Look for us on the Web
www.lhsc.on.ca/bhp

Essex-Windsor EMS Survivor's Day - A Celebration of our Successes

As an Emergency Physician I see these paramedics every day. The ones that ask me questions when I'm up to my elbows treating patients in the middle of the night. They'll ask, "Well, how did she do?" Maybe it's because of the vacant (caffeine powered) stare, that I relive them telling me over again (it's been four hours). "Well the family was doing CPR when we got there; we jumped on her right away and got her back on the second shock…" Then like an old VHS tape (showing my age), I rewind my mind and remember that they were the paramedics who brought in the VSA patient. I reply, "Well, we lined her and got her on some amio, she's off pressers and is up in the unit. RT said she's breathing on her own. We'll have to see".

So many things have to go well in order for a VSA patient to be resuscitated, stabilized, and walk out of the hospital. From an incredible short response time to impeccable CPR and seamless patient assessment, everything has to be perfect. How often have you asked, whatever happened to the patient we worked so hard to resuscitate and care for? Too often you are responding to your next call and treating another patient, that you never have the opportunity to find out what you've shared in accomplishing. Survivor days are about reflecting on those accomplishments.

Essex Windsor EMS and SWORBHP co-hosted a survivor day recognizing the 2010 recipients of the Prehospital Save Award. Sixty-five Prehospital Save certificates and pins were presented to paramedics and students. Twenty-one surviving patients were recognized. The honor of calling a person's name and asking them to come forward while we share their individual stories, then watching them shake the hands of the paramedics who saved them, was truly moving. Their personal messages of gratitude were overwhelming. Each and every one appreciated the opportunity to meet the paramedics who responded to their call for help.

Essex Windsor EMS hosted a very professional, not to mention, inspirational day. They not only recognized the paramedics and survivors, they recognized the dispatchers and firefighters who responded to some of the calls. The event was very well received by the politicians, the press, and other allied agencies, but most of all, the paramedics themselves. As a Medical Director, it was a very proud day for me to be associated with such an amazing and dedicated group of people.

Paul Bradford, B.Sc., M.D., CCFP(EM), FCFP, CD
Local Medical Director
Essex-Windsor, Chatham-Kent

A few photos from the Essex-Windsor EMS Survivor's Day Celebration

Back Row L to R: Rick Bonneau, Tom Bonneau (Essex Firefighters), Front Row L to R: Kristy Yorke (CACC), Cheryl Smith, Mechelle Murphy

Back Row L to R: Michelle Wilkinson, Gerry Hedges, Front Row L to R: Michella Mollicone, Yvon Dubois

L to R: Jeff Borghi, Robert Oldridge, JP Bacon, Kristin Adams (CACC)

Back Row L to R: Prentice Scott, Doug Litster
Front Row L to R: Amy Vancowenberg, Thom Racovitis, Beth Krauter (CACC)

Back Row L to R: Isidor Cusumano, Kristy Yorke (CACC), Doug Litster,
Front Row L to R: Mona Hansen, Agnes Cinat, Dawn Newman

Publication of photos is with the written consent of each survivor.

Discussion as a Way of Teaching

Several years ago, I had the pleasure of doing monthly ride-outs with Dr. Lewell, visiting stations to meet with paramedics. Often, Mike would ask a simple question "Have you done any good calls lately?" In the short discussion that followed, the paramedics and I developed a much deeper understanding about the patient's condition and appropriate treatment than we previously had.

Whether Mike knew it or not, he was following the basic principles found in Brookfield and Preskill's (2005) book *Discussion as a way of Teaching*. The authors list fifteen ways participating in discussion helps learning, including the exploration of a diversity of perspectives, the recognition and investigation of our own assumptions, the increase of intellectual agility, and the development of our capacity for clear communication of ideas and meaning.

"We all bring knowledge and past experience to class that act as a foundation to shared learning…"

Discussion "shows respect for students' voices and experiences" (Brookfield & Preskill, 2005, p. 29). We all bring knowledge and past experience to class that act as a foundation to shared learning, and discussion creates "a collaborative and respectful adult educational process" where the learners' "experiences are recognized and valued". Myles Horton (as cited in Brookfield & Preskill, 2005) noted, "You can't say you respect people and not respect their experiences" (p. 30).

However, we can not stop at just our experience; learners "need to go further than that, and you can, by asking questions and getting them stimulated, coax them to move, in discussion, beyond their experience".

Discussion also develops habits of collaborative learning, where we "learn to listen respectfully and attentively to each person's contribution to the group" (Brookfield & Preskill, 2005, p. 33). If we truly value and respect each other and the critical analysis of ideas, we "learn to create spaces in which everyone's efforts are recognized", and "to value silence and reflective speculation".

We all have opportunity to engage in discussion in annual recertification classes, during paramedic rounds or webinars, with our peers at work, even in the hospital hallways. Take the opportunity to truly benefit from discussion by sharing, by listening, and by reflecting on everyone's input.

David Vusich, ACP, A-EMCA, AdEd, NCEE
Coordinator, Training

Reference

Brookfield, S. D., & Preskill, S. (2005). *Discussion as a way of teaching: Tools and Techniques for democratic classrooms (Second edition).* San Francisco, CA: Jossey-Bass

Canadian Best Practice Recommendations Stroke Care 2010

Telestroke is now a best practice recommendation, and paramedics play an integral role to ensure that the right patients get to the right place at the right time. Telestroke is the use of telecommunication technology linking referring and consulting healthcare sites for real-time assessment and management of stroke patients.

In January 2011 the Alexandra Marine and General Hospital in Goderich became a Telestroke site. Since "go live" they have administered the clot buster tPA to six patients in their emergency department under the direction of a provincial on-call stroke neurologist, and over 20 patients have been assessed for this treatment. The short therapeutic time window (4.5 hours from onset of symptoms) does not allow for all patients to be transported long distances to stroke centres, therefore Telestroke is a method that improves communication and networking to increase access to optimal stroke care. Way to go Goderich!

Janet Liefso
Acute Stroke Coordinator
SWO Stroke Network

Did You Know?

Feedback on stroke protocol cases assessed by neurologists at LHSC reveals that one of the most common reasons for non-eligibility for stroke protocol is a time of onset that is beyond the current window of 4.5 hours. It would be very helpful if the exact/accurate time of onset could be determined at the site, as this information is not always available to neurologists assessing the patient in the ED when family has not yet arrived. Remember that the time used to determine whether or not the patient meets the stroke by-pass criteria is the time 'last seen normal', and not when the deficits were first noticed. Thus, a patient who went to bed at 2200 hours and awoke with a deficit at 0300 hours has a time of onset of 2200 hours.

M.W. Nicolle, MD, FRCPC, D. Phil
Chief, Division of Neurology
Director, EMG laboratory and Neuromuscular Group
Dep't of Clinical Neurological Sciences, University of Western Ontario

Delegation – Oppress or Enable?

The Ontario Base Hospital (BH) structure facilitates delegation by medical directors to paramedics. This system enables paramedics to perform health acts they would not legally be able to perform otherwise. SWORBHP Professional Standards and ongoing educational activities are key elements to the delegation relationship between the medical directors and individual paramedics within the region (College of Physicians and Surgeons of Ontario, 2010). Some paramedics believe that delegation through the BH system limits their ability to care for patients. Commonly perceived downsides of delegation include constant oversight, frequent recertification, medical directives that cannot predict every scenario, and lack of flexibility to adopt new evidence.

This debate requires consideration of the advantages of delegation over independent practice. Ontario legislation dictates that to perform a Regulated Health Act independently, you must be part of a Regulated Health Profession (RHP). Examples of RHPs include Doctors, Dentists, Nurses and Dietitians (Government of Ontario, 2010). The minimum length of post-secondary education of any of the RHPs is four years (e.g., RNs). RNs in Ontario can perform three of the thirteen regulated health acts (College of Nurses of Ontario, 2009). Doctors can perform twelve (College of Physicians and Surgeons of Ontario, 2010). For an RN to perform an act they are not licensed for, it must be delegated to them. The minimum length of post-secondary education to become a physician is nine years. Once licensed, all RHPs must be a member of a "College" (e.g., College of Dietitians). Colleges provide oversight through random audits, investigation of complaints by patients or colleagues, and yearly Continuing Education (CE) requirements. Individuals commonly pay for their own CE. In addition to initial licensing fees, members must pay a yearly fee to their College. For example, the College of Dietitians is $500 (College of Dietitians of Ontario, 2011).

The adoption of new evidence into practice for RHPs depends on the environment the RHP works in. I would argue that the Medical Directors who create the ALS Standards (i.e., the provincial Medical Advisory Committee (MAC)) are resuscitation experts and are up to date on the most recent literature and guidelines. As resuscitation experts, the MAC is able to incorporate new evidence into paramedic practice as quickly, or quicker than most other RHPs. Medical Directives that cannot predict every scenario can be overcome via a patch to your local BH Physician.

Although no system is ideal, one can see that shorter post-graduate education, free continuing education (at least 8 hours of it), no membership fees, and relatively early adoption of new evidence, are advantages of our current system of delegation.

Adam Dukelow, M.D., FRCP(C), MHSC, CHE
Local Medical Director
Middlesex, Elgin, Lambton, Oxford and Oneida

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Up Close and Personal

In this edition of LINKS, we take you up close and personal with Dr. Michael Lewell, Noelia Teixeira, and Severo Rodriguez. We hope this allows you the opportunity to get to know each of them a little better.

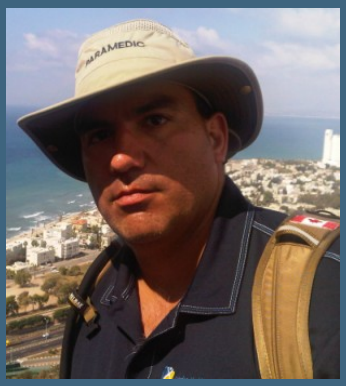
Michael Lewell, B.Sc., M.D., FRCP(c)
Regional Medical Director

Dr. Michael Lewell, a native of New Brunswick, graduated from medical school at the University of Western Ontario (UWO) in 1995, and from the Royal College Emergency Medicine Training Program in 2000. He is an Emergency Physician at LHSC and holds the position of Associate Professor at UWO. Michael was the Assistant Medical Director of the former London Base Hospital Program until 2008, when with regionalization he was appointed the Regional Medical Director of the Southwest Ontario Regional Base Hospital Program. Michael's other career interests include being a Trauma Team Leader at LHSC as well as a Transport Medicine Physician and Medical Director with ORNGE. Michael's true passion is medical education. For the past 14 years, he has been actively involved with educating paramedics of all levels from the college student through to the Critical Care Paramedic as well as medical students through to emergency physicians. Michael has received awards for his involvement in education from UWO and from the Residency Program in Emergency Medicine. On a personal level, Michael and his wife Julie are proud parents to their one year old daughter Grace, and live on the north shore of Lake Erie in Port Stanley Ontario. He is an avid recreational cyclist. Michael is very proud to serve as the Regional Medical Director for the paramedics of Southwest Ontario.

Noelia Teixeira
Administrative Assistant

Noelia joined SWORBHP in October 2008 as Administrative Assistant to the Regional Program Manager and Regional Medical Director. Prior to joining the SWORBHP team, Noelia spent 30 years working in the automotive industry. In July 2009 Noelia was seconded as Administrative Assistant to LHSC's Integrated Vice President, Medicine Services. She returned to SWORBHP in September 2010 and everyone was happy to have her back. Noelia's professionalism and dedication has awarded her yet another secondment to LHSC's Integrated Vice President, Medicine Services. Noelia will be taking a ten month leave from SWORBHP starting this month. We wish her well in her new role and look forward to her return. Noelia and her husband Liberto live in London. They have two married sons Victor and Tyler. In her spare time, Noelia enjoys reading, gardening and spending time with family and friends. She especially enjoys dog-sitting her son's deaf English Bulldog Hercules (Herc).

Severo Rodriguez, B.A., M.Sc., NR-LP, AEMCA
Regional Program Manager



Severo (Tre) joined SWORBHP in August 2008 as the Regional Program Manager. He completed his undergraduate studies at St. Mary's University at San Antonio, his Masters in Science at The University of Texas, and is near completion of a PhD at Walden University. Tre received his paramedic training (Basic and Advanced) at the University of Texas Health Science Centre at San Antonio. Prior to leading the SWORBHP team he was appointed as an Assistant Professor at the University of Texas, going on to serve as Manager of Education at SOCPC, then Associate Dean at Broward College. Tre is on the Board of Directors for the National Registry of EMT's. He has a passion for education and measurement of performance. When he's not working, Tre loves to cook and is an enthusiastic football fan. He volunteers his time and knowledge of the game as coach of his son's football team. Tre and his wife Meg and their family live in St. Thomas.

The Canadian C-Spine Rule (CCR) Implementation at the Adult ED, Victoria Hospital

The Emergency Department (ED) staff and leaders at Victoria Hospital are very excited about the commencement of a new project that will affect how we triage and treat low-acute traumatic injuries. Based on a four year study done in Ottawa that involved over 30,000 participants, the Council of Academic Hospitals of Ontario (CAHO) has adopted the research and implemented it into nine academic hospitals in Ontario.

Starting in mid October, the triage nurses at Victoria Hospital will begin a certification process that will enable them to "clear" low acute neck injuries at triage without radiography, by following the Canadian C-Spine Rule (CCR). This rule has been widely adopted by ED physicians for years, and has recently completed testing for accuracy, reliability and safety amongst ED triage nurses. (CAHO, 2010). The certification process will take six months to a year to complete. During this process, triage nurses will not be removing the c-spine collars, but will indicate they would if their certification was complete. The physician group at Victoria Hospital are in support of the project and are working with our leadership to formulate a medical directive. Once the triage nurse has completed the certification process, the triage nurse will be able to clinically clear the c-spine and remove the stiff neck collar.

Canadian Emergency Departments treat 1.3 million patients annually who have suffered blunt trauma from falls or motor vehicle collisions, and who are at risk for c-spine injuries (CAHO, 2010). Studies have shown that less than 1% of these patients actually have a c-spine fracture. Most of these patients are transported to hospital on a backboard and in a stiff neck collar and made to wait hours until physician assessment. This prolonged immobilization is often unnecessary and adds significantly to patient discomfort, while adding to the already over burdened and overcrowded ED. By adopting this project, the ED will be able to improve the patients' experience, become more efficient, and demonstrate our community's commitment and ability to drive quality improvement through the application of innovative research. (CAHO, 2010)

We look forward to your support through this process and thank you for your understanding and interest.

Alison Armstrong RN, ENC(C)
Nurse Champion – LHSC Victoria Hospital Emergency Department

Reference

C.A.H.O. (2010) Adopting Research to Improve Care (ARTIC) Project. *The Application of the Canadian C-Spine Rule (CCR) by Emergency Department Triage Nurses.* October; Toronto, Ontario. Pg 1-10.

Healthcare Associated Infection: What is the Cost?

Would it surprise you to know that in 2007, it was estimated that Methicillin-Resistant Staphyloccoccus Aureus (MRSA) was costing Canada's healthcare system $42 - 59 million per year. Did you know that the incremental treatment cost for a patient with a severe Healthcare Associated Infection (HAI) is $12,000 - $35,000 per patient (Public Health Canada, 2010). These numbers are significantly high, but do they represent the full cost of a HAI? The answer is no.

Most often the cost analysis is completed from the hospital perspective. The main reason for this is that it provides the evidence for the organization to determine the economic impact of their infection control program (Douglas Scott II, 2009). There is nothing wrong with this type of analysis as this information is required to allow for effective planning of budget resources.

So what costs are missing? The economic and human costs experienced by the patient are not included in the numbers reported above. Some of these costs are; lost wages, hospital visit expenses, and time lost with family and friends. In addition, there is the impact to the person's well-being, such as a loss of trust in our healthcare system resulting from the increased length of stay and the social isolation (Public Health Canada, 2010). It is difficult to put a cost to these experiences, and to the patient they are significant.

...continued on page 11

SWORBHP Summary of Activity Reports (SOARs) – What is Different This Fall?

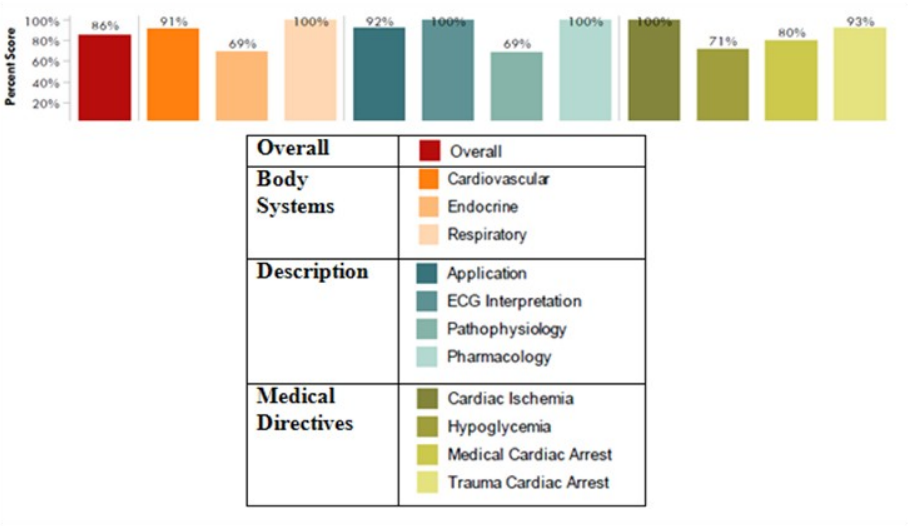
This year, paramedics will once again receive a SOAR at their annual recertification. The reporting cycle is April 1, 2010 to March 31, 2011. Interventions listed on this year's report include IV, CPAP, King LT and 12-Lead Acquisition for all PCPs (if certified in the skill). ACP report cards include data from the reporting cycle April 1, 2010 to March 31, 2011 and the fall 2010 report card.

The structure of this report is significantly different from last year. This year's report includes three separate tables. The first table compares a paramedic's performance with the overall EMS average in each of the listed categories. All numbers in green reflect service statistics and all numbers in black reflect paramedic statistics.

The second table, "Deviation from Protocol Description", includes four columns listing the call number, call date, protocol and the final outcome of the ACR audit performed by SWORBHP. For paramedics who had zero errors during the reporting cycle, this table will be blank.

Page two of the report contains the third table where paramedics will find the results of their certification exam from fall 2010 (displayed in graphical format). Each category is shown in a different color with a corresponding legend. For example, the illustration below indicates:

From left to right, the first red bar reflects the paramedic's overall test score. The next three bars (2 to 4) reflect cognitive performance on body systems, sub-grouped in cardiovascular, endocrine and respiratory. The cluster of bars (5 to 8) report on application, ECG interpretation, pathophysiology and pharmacology. The last four bars (9 to 12) indicate knowledge of the medical directives shown in the legend.



I hope this explanation is helpful in understanding your new SOAR. If you have any questions regarding the data shown in your report, please feel free to contact your SWORBHP Professional Standards Specialist.

Adeel Ahmed, M.Eng, CQM/OE
Coordinator, Professional Standards & Performance Improvement

Trivia…fast facts!

An ear of corn averages 800 kernels in 16 rows.
A Holstein's spots are like a fingerprint or snowflake. No two cows have exactly the same pattern or spots.
The bubbles in Guiness beer sink to the bottom rather than float to the top as in other beers.
About one-tenth of the earth's surface is permanently covered with ice.
More water flows over Niagara Falls every year than over any other falls on earth.
Dueling is legal in Paraguay as long as both parties are registered blood donors.

Reference:
www.corsinet.com/trivia

...cont'd from page 9

Healthcare Associated Infection: What is the Cost?

Here is something to consider. Did you know that 1 in 9 Canadians admitted to a hospital will acquire a HAI? Or that the rate of infection could be reduced 30% if established proper infection control practices were followed (Public Health Canada, 2010). These are the numbers we should be thinking about when we see the signs telling us to "Wash our Hands", or when you put on personal protective equipment, or clean your medical equipment.

Changing these numbers has a direct impact to the patient first, followed by the trickle-down effect to overall associated healthcare costs. We can then ask the question "how can we re-invest the savings into our healthcare system to make it a better experience for the patient?"

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Douglas Scott II, R. (2009). The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention. Retrieved September 12, 2011 from http://www.cdc.gov/ncidod/dhqp/pdf/scott_costpaper.pdf

Medavie EMS Ontario to Provide Ambulance Services to Chatham-Kent

As of January 1, 2012, Medavie EMS Ontario (MEMSO) will be providing land ambulance services to the residents of the Municipality of Chatham-Kent.

MEMSO is a subsidiary of Medavie EMS Inc. who is a member of the Medavie Blue Cross group of companies, offering a variety of health service products in Ontario, Quebec, and the Atlantic Provinces in Canada. Medavie EMS currently operates EMS systems in several provinces in Canada, including the District Municipality of Muskoka, Ontario providing world-class pre-hospital care. Medavie EMS is excited to take on this new endeavour and proud to be expanding its business in Ontario.

MEMSO plans to hire and work closely with the existing qualified paramedics in the region as they will play a key role in helping the organization achieve a world-class ambulance system.

The transition planning process necessary for MEMSO to assume the management of EMS services for the municipality of Chatham-Kent has already begun. The organization is working closely with the current Chatham-Kent ambulance operator Sun Parlour, the municipality, and the Southwest Ontario Regional Base Hospital Program at London Health Sciences Centre, to ensure a seamless transition of services.

We are delighted to have the opportunity to work in partnership with the emergency medical services professionals from Chatham-Kent. This joint venture will continue to maintain a high level of service for the community and will continue looking at ways to further enhance land ambulance services for the area.

MEMSO is committed to working closely with the current paramedic workforce and the Municipality of Chatham-Kent to address questions and concerns that the future employees and public might have. To learn more about Medavie EMS or if you have any questions, visit us at www.medavieems.com.

George McLellan
President and Chief Executive Officer
Medavie EMS

Deactivation - A Regional Review

In our communication with paramedics, there seems to be a fear of 'getting into trouble' with the Base Hospital, or worse, being deactivated. Concern over doing your best is appropriate, but fear of doing something wrong can adversely impact your practice. To help you put that fear into context, the chance of a paramedic having to provide a written response is very small, approximately 3 times per 1,000 calls. Very few of these are determined to be errors. Most of the errors are minor, and are related to documentation.

Some cases require deactivation from patient care. These deactivations are all (by definition) temporary, and give everyone an opportunity to evaluate all the information before making a decision. Deactivations are rare (see Fig. 1) and often last only a couple of days. In the past year, SWORBHP deactivated 11 medics involved in 9 calls (in the entire region). While we acknowledge there is a certain stigma associated with deactivation, medics who have gone through the experience speak highly of the process. Deactivations are often associated with complicated calls, and are not reflective of complacency. In contrast, decertification (permanent loss of certification), is rarely associated with a clinical event.

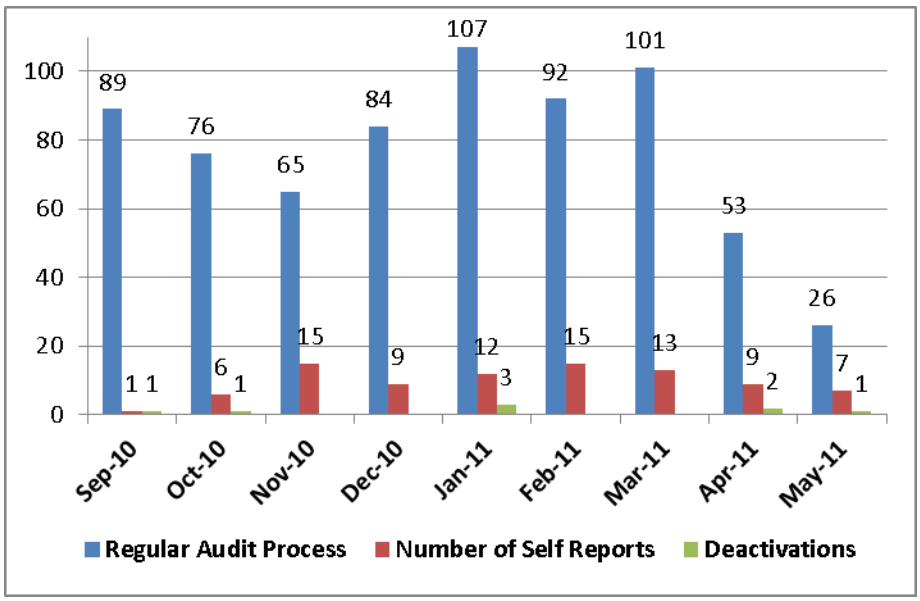

Fig 1 - Number of Incidents Found via Regular Audit Process vs Self Reports, Number of Deactivations by Month

In summary:

- Requests for written response are rare events, and result from critical review of care
- Most clinical deactivations are short in duration and need not be feared

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Comments?

If you have comments or feedback on the newsletter, or have an article you would like to have considered for publication in a future edition of LINKS, please send to:

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