



SWORBHP LINKS

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Up and Coming: Emergency Child Birth

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I had the pleasure of joining the Ontario Base Hospital Regional and Local Medical Directors in Niagara a couple of months ago as we participated in the Association of Ontario Midwives Paramedic Emergency Skills Program (AOM PESP); the very program YOU will be attending this Fall at your Mandatory CME (aka – recert). It is an absolute understatement to say that we thoroughly enjoyed the course. The course focused on the following topics and really honed in on what Paramedics might see when attending an out-of-hospital birth:

- Uncomplicated child birth
- Denied or hidden pregnancies and other at-risk populations with limited prenatal care
- Shoulder dystocia
- Breech birth
- Twin birth and multiple gestation
- Malpresentation and cord prolapse
- Postpartum hemorrhage
- Complications and special considerations

The eight-hour day began with a brief lecture overview of the above topics followed quickly by a series of skill stations. At the skill stations, each learner participated in various roles related to the case presented by the Midwife. We practiced maneuvers, techniques and communication repetitively until we were comfortable with the topic. As you know, this is a skill that we, as Paramedics, don't use very often; it was paramount that I walk out comfortable at the end of the day; and I did.

Over the next few months, all of our PreHospital Care Specialists and Associate Instructors will participate in the AOM PESP. We will then use what we learned during these Train-the-Trainer sessions to teach the program to a number of 'test groups' across the region, followed by a Mandatory CME Go-Live date of September 7th, 2017. All 2017 Mandatory CMEs will be completed prior to December 11th, 2017 in order to comply with the in-force date that accompanies the release of the ALS PCS 4.1.

We have no doubt that you'll enjoy the program! If at any time you have questions about it, please don't hesitate to contact us.

Stephanie Romano MScEd., HSc., AEMCA
Education Coordinator



BREAKING NEWS

SOUTHWEST ONTARIO REGIONAL BASE HOSPITAL PROGRAM CAPTURES MEDICAL DIRECTORS



Following a province wide posting and interview process that included both Paramedic and Paramedic Chief representation, we are very pleased to announce that Dr. Matt Davis has moved into the role of Regional Medical Director effective April 1st, 2017.

Dr. Davis was the Local Medical Director for SWORBHP's Central Paramedic Services and the Medical Director of Education with SWORBHP. These roles have provided him with the experience and leadership opportunities to further develop and facilitate the delivery of excellent prehospital care in the Southwest. Dr. Davis holds a Bachelor of Nursing Degree from Queen's University, a Master of Science Degree from Queen's University and a Medical Doctorate Degree from McMaster University. In addition, he has completed a Royal College of Physicians and Surgeons Emergency Medicine Residency at the University of Western Ontario which included a Fellowship year in prehospital care. In addition to his work at SWORBHP since 2013, Dr. Davis is the Associate Program Director for the Royal College Emergency Medicine Program at Western.



Dr. Sean Doran recently joined SWORBHP in April 2017 as the Local Medical Director for Oxford County, Medavie EMS Elgin Ontario and Oneida Nation of the Thames Paramedic Services.

Dr. Doran is also responsible for training and certification as the Medical Director of Education and as Medical Director to Fanshawe and Lambton College Paramedic Programs.

Dr. Doran completed a Royal College of Physicians and Surgeons Emergency Medicine Residency at the University of Western Ontario. He received his Medical Doctorate Degree from Western University. In addition to this, he obtained a Bachelor of Education and a Bachelor of Science in Biology from Western University. He also holds a Bachelor of Arts in Law and Psychology at Carleton University.

Welcome to the team Dr. Doran!

With Time Comes Change...and More Change

As I clear out the drawers in one office and organize my file folders in a new one, the ongoing joke has been that it is my continuing goal to be in every office at Base Hospital during my career. On one hand I joke about it but also reflect upon the broad experiences I have gained over the years by holding multiple roles within SWORBHP. It is an honour to play a small role in our prehospital system.

My journey began in 2010 as SWORBHP's first EMS fellow. I was exposed to prehospital care in Ontario and began the process of understanding how all the cogs in the wheel work together to make our system function. Since that time, I've been fortunate to have worked in various capacities as a Medical Director within SWORBHP; hence the multiple office changes. As Medical Director of Education, I've come to gain a deeper understanding of education development and delivery for Paramedics, participating in innovative ways of providing knowledge through social media, online webinars, recertification classes and simulation. Being the Ontario Base Hospital Group physician advisor on the Education Subcommittee has allowed me to assist in provincial education initiatives and, at the same time, understand the barriers faced when developing standardized education packages for Paramedics across Ontario. I've also had the opportunity to act as Medical Director to both PCP and ACP college programs within our region allowing me to learn and participate in these training streams.

As a Local Medical Director I became more familiar with, and participated in the Professional Standards aspects of Base Hospital. I've gained a greater appreciation for the challenges of prehospital care through our auditing process. As part of the investigation process I hope that I've been able exemplify the "Just Culture" that SWORBHP has been adopting. This is a process by which we investigate to learn not just about the human factors that lead to variance, but also the system factors so that we can learn from these cases and improve the system as we move forward. In addition to my local role, I have been fortunate enough to be a member of the Ontario Base Hospital Group Medical Advisory Committee as the SWORBHP representative over the last two years. So despite some of the new roles and responsibilities I will now hold as the Regional Medical Director, I have a bit of a head start on some of the Provincial endeavours that are underway.

The road to the position of Regional Medical Director has occurred over a short time, however I believe that the journey has been a well-rounded one (as exemplified by moving between 5 offices!). I am ready for this next challenge. It is an honour and a privilege to have been selected for this role. I look at our Base Hospital team and continue to see the positive changes, opportunities and growth that will take place in the upcoming years. I am optimistic that SWORBHP will continue to facilitate the delivery of excellent prehospital care while advancing safe practice and preparedness in our communities through collaborative partnerships and innovation. With time comes change, and more change. And I am excited for it.

Matthew Davis, M.D., M.Sc., FRCP(C)
Regional Medical Director

S E R V I C E S T A T I O N



Who Let the Dogs Out?



Last year Medavie Elgin EMS Paramedics welcomed their new four-legged team members. Medavie EMS Elgin Ontario (MEMSEO) partnered with The Phoenix K9 Initiative to deliver canine therapy to on duty Paramedics in Elgin County. There is evidence to support that interaction with animals has a positive influence on cortisol, epinephrine and norepinephrine; the three major stress hormones. Even a twelve minute interaction with an animal that you have never met before can (self-reported) reduce anxiety. We have certainly seen Maggie (a certified therapy dog) and Penny's (puppy in training) impact on our staff.



Currently Maggie and her friends visit one morning per week. We were able to have them attend a few Road to Mental Readiness classes last year as well. It was very inspiring to see the smiles and positivity in that setting. It helped to solidify, for me that we might be on to something really good.

Sara and Brad Dodd are the amazing people who own and train these wonderful dogs. Sara reached out to me in January with an idea to have an actual puppy day. Through the volunteers at Animal Rescue Foundation, they were able to bring rescued puppies to our headquarters for a visit. The medics, and some of our police friends spent lunch time playing and getting snuggles from these precious puppies.

Dogs have been used for therapy and support for many years. Thanks to the good work being done by The Phoenix K9 Initiative, we had the opportunity to provide additional support for the Paramedics in a way that is not being done in Ontario. Although we have just over six months experience with this program, we are already looking for ways to expand the interaction with the therapy dogs. The positive feelings that the dogs create is evident in the smiles that the Paramedics are left with. That's something we need to pay attention to.



Pauline Meunier
General Manager / Chief
Medavie EMS Elgin Ontario

JUST CULTURE

PAUL LESAGE'S WORKSHOP SERIES

In early April, SWORBHP had the privilege of hosting a Collaborative Culture Workshop led by Paul LeSage. Over 100 participants were in attendance including all of SWORBHP's staff and physicians, front line Paramedics and Paramedic Service Leaders from eight of our eleven Services. We also had several attendees from York Region, the Region of Waterloo Paramedic Services and Ornge.

We were also pleased to have EHSB staff and leaders from the Investigations Branch, Field Office, CACC and Paramedic Standards and Certification office and representation from three other Base Hospital Programs. In addition, representatives from London Health Sciences Centre Nursing Professional Practice and Accreditation and Patient Safety programs were in attendance.

We look forward to working with our partners to plan for and move towards a more collaborative approach to patient care.

Susan Kriening, RN, BScN, MHS, ENC(C)
Regional Program Manager

Emergency Cricothyrotomy

Essex Windsor Paramedics iron out human factors in Emergency cricothyrotomy training in Schulich School of Medicine - Windsor Campus Anatomy Lab Workshop.

Windsor ACPs recently had the opportunity to complete combined training with medical students and nurse practitioner students in the Windsor Anatomy lab. They had the opportunity to benefit from a practical surgical anatomy program developed by Dr. Anna Farias, Anatomy Specialist at the Windsor Campus of Schulich, a pilot project where basic science anatomy meets practical surgical and medical assessment. This was a fantastic opportunity to do refresher course on the local service's cricothyrotomy kits, and also give some practical demonstrations and hands on practice for the medical and nurse practitioner students utilizing different types of kits.

The original kits utilized a Seldinger technique with the wire through the needle. This was a familiar central line technique for physicians, and it was well received due to the familiarity of use. However, there were issues with many parts for field use in prehospital care including longer time for procedure and the kits were several hundred dollars. The most recent kits involved a low cost innovation of putting an IV angiocath, syringe and ET tube together to make a

very small temporary airway. This was very inexpensive and was successfully used. Unfortunately, it was of limited use due to poor ventilation and was determined not to be the best method for securing a critical airway. The new technique involved a bougie and a scalpel blade. It was low cost and could be rapidly performed. There were fewer parts within the kit and fewer steps were required to perform the procedure. From both a systems and human factors perspective, it is hoped that this kit will allow for a safer and more effective means of performing an emergency cricothyrotomy. It was the tested favourite of our paramedics and student clinicians. The service will be rolling out the new kit in the spring.

The information exchange, in-depth review of the anatomy, and joint training was extremely valued by all and will give a lasting community impact.

Paul Bradford, B.Sc., M.D.S., CCFP(EM), FCFP
Medical Director of Quality Assurance
Local Medical Director
Essex-Windsor, Chatham-Kent, Lambton

“Reversible Cause of Cardiac Arrest” - What does this mean in ALS PCS v.4.0

Traditionally, the Medical Directives divide cardiac arrest into “Medical” and “Traumatic”. There are two ‘special case’ cardiac arrest Medical Directives; “severe hypothermia” and “foreign body airway obstruction”. To keep it simple, SWORBHP has always considered asphyxial causes of cardiac arrest to be ‘medical’. The only exception is a foreign body in the airway that leads to cardiac arrest.

However, the new ALS PCS v.4.0 (pages 28 and 85) contains the following paragraph:

“Consider very early transport after the 1st analysis (and defibrillation if indicated): in the following settings pregnancy presumed to be ≥ 20 weeks gestation (fundus above umbilicus, ensure manual displacement of uterus to left), hypothermia, airway obstruction, suspected pulmonary embolus, medication overdose/toxicology, or other known reversible cause of arrest not addressed.”

What does “known reversible cause of arrest” mean? Turning to the Companion Document will not help anyone understand this.

Normal cardiac function is dependent on 3 things a) the muscle that pumps b) the electrical system that stimulates the muscle to pump and c) blood that the pump circulates. A simple way of thinking about cardiac arrest is to realize that all cardiac arrests are caused by problems of one or more of the 3 things; the pump itself, the electrical system, or the volume available to be pumped. Restoration of spontaneous circulation depends on why and how long one or more of the components has not been working.

What is reversible? It depends... the electrical system, when it malfunctions, might be restored to normal by defibrillation, cardioversion, or pacing. The blood volume might be restored by transfusion and temporarily improved with IV fluid and drugs (pressors). The pump, if it is asphyxiated, might be helped by increasing oxygen (CPR and O₂ supplementation) or release of mechanical obstruction (cardiac tamponade, tension pneumothorax, massive hemothorax, pulmonary embolus). Most of these conditions are difficult to diagnose and even harder to determine if they are reversible when the person is already in cardiac arrest.

There is great reluctance to consider the termination of resuscitation of children, pregnant women, and people who have asphyxiated (e.g. hangings, drownings). These patients are often young. There is a stronger emotional response to the death of young people than older people. There is also a belief that younger hearts (the pump) are more resilient than an older person’s heart. Reluctance also occurs because there is a lack of resuscitation outcome knowledge in these types of patients. Despite this, clinical experience indicates that these patients often do not survive once they are in cardiac arrest.

The real issue is; in what circumstances is it appropriate to stop trying to resuscitate someone? There is no easy answer. It is hard to capture what to do in a rule. It is always appropriate to seek advice from the on-line Base Hospital Physician in these cases.

Don Eby, M.D., Ph.D., CCFP(EM), FCFP
Medical Director of Preparedness
Local Medical Director
Grey, Bruce, Huron, Perth



EMS Fellow Highlights

As my fellowship at SWORBHP winds down, I want to take this opportunity to reflect on some of the highlights of my year as the EMS fellow.

Joining SWORBHP in July, things were quickly getting underway for recertification season. While I didn't make it to all of the recerts I wanted to, I was fortunate to be able to attend many in and around the London and Windsor areas. From the outset, I was continually impressed by the hard work and dedication of the education team and prehospital care specialists for their development of educational materials as well as their enthusiasm in delivering this material. During recert days, it was personally gratifying for me to be able to meet many Paramedics for the first time, as well as re-establish connections with those I've met previously. One thing that stood out in particular throughout the entire recert 'season' was everyone's commitment to learning and eagerness to participate, especially with simulation.



Another big part of my year was getting involved with research. I had a great mentor in Dr. Matt Davis, and we kept busy with a number of prehospital research topics. In particular, Dr. Davis and I focused on out of hospital cardiac arrest and refractory ventricular fibrillation. SWORBHP as a whole had a tremendous showing at the National Association of EMS Physicians conference in New Orleans in January, and included in that was a poster on local refractory ventricular fibrillation. We are continuing to work on a few manuscripts, and I can't thank Dr. Davis enough for his research mentorship.

The other highlight of my year has been the opportunity to witness all of the behind-the-scenes work that goes on at SWORBHP on both the regional and provincial levels in order to continually advance the practice of Paramedicine in the Southwest. Paramedicine has been and always will be a vital component of effective health care delivery. I am reminded of that every day I work in the Emergency Department. To that end, it was encouraging to know that SWORBHP works tirelessly to advance the practice and improve patient outcomes.

Although I'm officially done in July, I hope to stay involved in the prehospital world going forward as it is truly a pleasure to work in the environment created by the people at SWORBHP.

Andrew Schappert, BSc., M.D
SWORBHP EMS Fellow



<p>London Emergency Preparedness Open House</p> <p>May 13, 2017 10:00 am - 4:00 pm</p> <p>Byron Fire Hall #12 275 Boler Rd, London</p>	<p>Fun and educational for the whole family! Tour London's Emergency Operations Centre. Check out emergency displays and vehicles. Learn how to prepare your family for the first 72 hours.</p>
<p>SWORBHP 12-Lead ECG Acquisition Rounds</p> <p>May 25, 2017</p> <p>https://apps.lhsc.on.ca/?q=forms/sworbhp-registration-form</p>	<p>Join us for an interactive face-to-face rounds presentation on 12 lead ECGs. Has it been a while since you have had a 12 lead ECG refresher? Well if so, there is no better time than now! (8 CME)</p>
<p>SWORBHP 2017 Paramedic Services Week</p> <p>May 28 - June 03, 2017</p>	<p>SWORBHP will be having daily giveaways throughout Paramedic Services Week! Stay tuned for more information and follow us on Facebook and Twitter!</p>
<p>First Responder Connections For Mental Health</p> <p>June 8, 2017 10:00 am - 4:00 pm</p> <p>311 Oakland Avenue Victory Legion Branch # 317 London, ON</p>	<p>Learn which components are necessary for a medical professional to make a diagnosis involving an operational stress injury, including post-traumatic stress, depression and anxiety, along with suicide ideation. (5 CME)</p>

SWORBHP CME Opportunities

For a detailed list of all upcoming events view our event calendar:

http://www.lhsc.on.ca/About_Us/Base_Hospital_Program/Upcoming%20Events/index.htm

IQEMS Update

SWORBHP has partnered with Health Sciences North Centre for Prehospital Care and Sunnybrook Centre for Prehospital Medicine to implement a centralized data quality management solution using the Intelligent Quality Evaluation & Management Suite (IQEMS).

The three participating Base Hospitals have been working diligently through the implementation process and anticipate a June 2017 go-live. Three committees (Technical, Clinical [Operational Working Group] and Policy and Privacy) have been established to oversee, support and implement the application. Membership consists of representation from all three Base Hospitals and includes a variety of disciplines. The groups have done a tremendous amount of work in procuring and implementing the necessary hardware; working through the Privacy Impact (PIA) and Threat Risk Assessments (TRA) and reviewing filters and audit forms to ensure all aspects of each medical directive are captured. Additionally, there has been an extensive amount of work with Interdev to streamline and test the data to ensure accuracy and integrity.

We are very excited to be implementing an electronic QA process!

Please don't hesitate to contact me if you have any questions or would like additional information.

Debbie Janssen, BMOS
Coordinator, Quality Assurance & Business Functions

STAY CONNECTED WITH US:



Comments or suggestions?

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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