



Centre for Paramedic Education and Research



Patch Point

newsletter

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SPRING ISSUE

Ontario Base Hospital Group Annual General Meeting 2017

Each year the Ontario Base Hospital group holds an Annual General Meeting (AGM) for all its members. CPER was fortunate to be the host for 2017's AGM. Preliminary feedback has been positive. One of the topics discussed included the next steps of Just Culture. This included how to continue infusing the principles into day to day practices, and promoting collaboration between the Base Hospital, Paramedic and Paramedic Service. The goal being continuous focus on patient care, safety and system improvement.

We also heard from Walter Tavares who spoke about assessing continued competency in a Paramedic practice. Important to note he presented evidence, that experience and competency were not directly related to time on the road, or time in years practiced! We also heard a great deal of tips and tricks to assist organizations with simulation. Interestingly the cost was not always the limiting factor, Simulation can truly be created on any budget with innovation and creativity.

The new BLS PCS was debriefed in a panel discussion. How the changes

were decided, and the evidence to drive these changes were shared. Also included was the process to allow this overwhelming project to come to fruition.

CPER's own Dr. Welsford spoke about the new evidence in sepsis care and the important role Paramedics have in the care of these challenging and dynamic patients. We also heard from Dr. Cheskes regarding his study around double sequential defibrillation. He would like to differentiate between more energy, and/or different vectors for the patient in refractory VF.

The meeting concluded with a live broadcast of our CPER's own AskMED. This demo was both a lot of fun, and very relevant to other base hospitals. CPER's fun and casual approach was refreshing to the audience. The initiative's value was clearly demonstrated, and our great connection to our Paramedics!



The ABC's of Autonomic dysreflexia

A big thank you to Paramedics from Hamilton Paramedic Service, along with Paramedics in BC and Manitoba who volunteered their time and participated in the ABC's of Autonomic Dysreflexia (AD) study.

AD is an acute, life-threatening condition that can occur in individuals with a chronic spinal cord injury above the 6th thoracic segment (T6). It is something not well known or understood by some health care professionals, despite its importance. The condition is uncomfortable and can lead to complications. It is often caused by activation of pain or other sympathetic fibers below the level of injury (eg: bladder distention, abdominal problems, pressure sores, constricting clothing). Symptoms/signs may include; flushing, diaphoresis, confusion, and hypertension. AD can lead to retinal hemorrhage, stroke, myocardial infarction, and cardiac arrest.

Each enrolled Paramedic completed a questionnaire designed to measure their knowledge about AD. Next they completed the online ABC's of Autonomic Dysreflexia education module. Approximately one week, 3 months and 6 months later, each participant was asked to complete an online post-test. This measured AD knowledge and beliefs about AD-Clinical Practice Guidelines (AD-CPG).

Results indicate that AD knowledge increased following the ABC's of AD training and persisted at the 6-month follow-up. The results of this study were published in Spinal Cord in 2016: KA Martin Ginis et al. Online training improves Paramedics' knowledge of autonomic dysreflexia management guidelines. Spinal Cord. 2016 Sep 13: 1-7.

Want to learn more? You can complete the on-line educational module ABCs of AD designed for

Provision of Care

On January 17, 2017 CPER launched an exciting new e-learning module and guideline regarding the Provision of Care. This module highlights and supports the guiding principle of on-going collaboration and communication between crew members of any designation, in order to provide the best care to our patients.

This unique module offers the learner an ability to select and review multiple 'answers' as each case does not have an absolute path. The intention of this module is to get Paramedics thinking of all the skills, procedures, assessments, and care which is required for the patient; and most importantly how to work together, collaborate and communicate.

All Paramedics have been enrolled in this module on eMedic and we are excited to report that of 65% of all Paramedics have completed this module. Two other modules will be available shortly so please take the opportunity to complete these when available. Please see our Provision of Care infographic on the next page.

ACP or PCP

PARAMEDIC 1



PROVISION OF CARE

COMMUNICATION

Communicate with the patient & each other
What is needed?

PROCEDURES

Complete skills and procedures
Share the task load
Both crew members can treat

COMMUNICATION

Continued communication
& collaboration as a team

DECISIONS

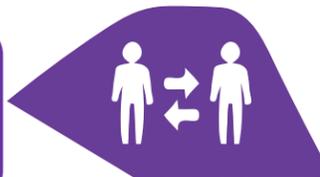
Who will continue with the call?
What care has been given what will be required?

CONTINUED CARE

Continued care during transport
Ensure to communicate of any changes

ACP or PCP

PARAMEDIC 2



PART 3

(Find part 1 in the Fall 2015 edition and part 2 in the Spring 2016 edition on www.cper.ca)

With the last installment, it was in 1997 that the Emergency Health Services Branch of the Ministry of Health agreed to a major \$15 Million dollar expansion of Advanced Care Paramedic (ACP) care in Ontario, under the research umbrella of OPALS (the Ontario Prehospital Advanced Life Support Study). This brought land ambulance based ACP's to; Niagara, Ottawa, Waterloo, London, Thunder Bay, Sarnia, Sudbury, Windsor and Kingston. It was also a requirement these communities had an "optimized defibrillation program" meaning there was expansion of Firefighter Defib programs in these areas.

Thus began the OPALS era in Ontario, with the first of hundreds of new Advanced Care Paramedics hitting the streets beginning in 1997. The original training was complete and coordinated through the Toronto Institute of Medical Technology (TIMT). Clinical experience was gained at the local OPALS hospitals, and preceptorships through the existing "pilot" programs in Toronto and Hamilton. The program kept the original centralized structure when it was moved to the Michener Institute after a period of time. Over the next 3 years training became decentralized using the existing Community College system. Precepting was completed locally as more experienced ACP Paramedics were available. Over 500 ACP's were trained and funded by the EHS Branch in the OPALS expansion.

One central premise of the \$15 million in funding was that research would be done by the OPALS group. To study the effect of Paramedics on an existing firmly based BLS system. The research was led by the Dr Ian Stiell, Dr. George Wells Dr. Dan Speight (of Tucson AZ) and the Ottawa OHRI team. The OPALS group published many important papers in top tier medical journals. Some

showing a patient benefit with ACP care and some showing little benefit with ACP treatment. In 2004, "Advanced Cardiac Life Support in out-of-hospital Cardiac Arrest" was published in the New England Journal of Medicine, 351(7), 647-656. It did not show a benefit to ACP care in cardiac arrest treatment, but did show the importance of CPR in cardiac arrest survival. Also the fact that ACP's time to arrive on scene was 11 minutes was seen as a weakness.

In 2007, Advanced Cardiac Life Support for out-of-hospital Respiratory Distress was published by the OPALS group also in the New England Journal of Medicine, 356(21), 56-2164. This showed a profound benefit to patient survival of 50% when a patient in severe respiratory distress received ACP care. Similar findings were also found with chest pain patients. In 2008, The OPALS Major Trauma Study: impact of advanced life-support on survival and morbidity was published in the Canadian Medical Association Journal, 178(9), 1141-52. This study was important as it helped set a standard for avoiding the use of intubation in major trauma, as it adversely effects survival.

The EHS Branch of the Ministry continued to set Standards and to do investigation and licensing of EMS Services and of Paramedics. The Branch also funds the Base Hospital Program.

The Medical Advisory Committee (MAC) of the Ontario Base Hospital Group (OBHG) was the body that looked at the medical evidence set and revised medical directives for PCP's and ACP's. With Municipalities taking on more leadership and funding role in Paramedic services, there was development of ACP programs in many non-OPALS communities.

Expansion on the original number of Paramedics in the OPALS communities. York, Ottawa, Toronto, Niagara, and northern Ontario all saw significant expansion to ACP and PCP services. And what a variety of challenges Ontario's Paramedics have faced!

Sept 11, 2001 ... "9/11". 345 New York Fire Department personnel killed including many Paramedics. This ushered in a new reality for disaster management, and mutual aid for Emergency Services. 2003 began the SARS epidemic in Ontario. Very frightening times for all front line health care workers, and the population of Ontario. Of the 44 deaths in Ontario, one half was health care workers.

From 2007 - 2009 the Base Hospital Program in Ontario consolidated from 26 programs into 7 land programs plus air. Although to the front line Paramedic, the changes may not have been all that obvious. It did usher in an era of greater consistency in Base Hospital programs and services, and greater ease of mobility of certification/authorization. Allowing Paramedics to move around the Province through cross certification.

Beginning in about 2006 Regional Stroke programs began to be designated across the province. Paramedics' role in this program was to screen for possible stroke, and then get the patient to a designated stroke centre. The patient could be evaluated for possible thrombolysis of embolic strokes with the drug TPA. This initiative enabled by EMS, has saved many lives and many brain cells. In 2016 we are seeing the evolution of that Regional Stroke program to use endovascular, (catheter techniques) to treat certain selected stroke patients.

EMS care for Acute ST Elevation MI (STEMI) has also seen major changes in the past decade. As hospital cardiac catheter labs ramped up with increasing resources and capacity many patients who could be transferred to a cath lab within 1 hour now go direct, from "the street" to the lab for

assessment and often balloon angioplasty. Paramedics are often in the angioplasty suite, to see their patient's heart re-vascularized and life saved. The EMS research roots of OPALS continued under the North American collaboration of the Resuscitation Outcomes Consortium (ROC) group. ROC researchers continued to collaborate in Ontario, BC, Washington State, Pittsburg, Dallas, San Diego and others. Along with 300 EMS organizations, involving more than 30,000 fire and emergency medical service (EMS) providers, who serve a combined population of nearly 25 million people from diverse urban, suburban and rural regions.

Between 2009 and 2015 the ROC group, which included many Ontario Paramedics, looked at various EMS questions and published studies looking at: Continuous Cardiac Compression (CCC) CPR, amiodarone vs lidocaine in ventricular arrhythmias (ALPS), comparing trauma IV solutions, IPV valves in CPR and others in major peer reviewed medical journals. All this would not have been possible without the help of Ontario's Paramedics. EMS in Ontario is an ever evolving entity. This is the third of my series on the History of EMS in Ontario and gives some perspective as to how far the practice of Paramedicine and the management of the EMS system, have come over the last 50 years. The next chapters will be written by the Paramedics, Paramedic Service Operators and EMS Physicians, who serve the most critically ill and injured people in our health care system.

Dr. Doug Munkley

Colleen Shortt

Research Coordinator



Colleen comes to us from McMaster University, where she recently completed her PhD in Medical Science. Colleen has 5 years research experience at the bed side and in acute care. She has over 15 co-authored publications and has presented her research both Nationally and Internationally. Colleen's research interests include acute coronary syndrome, cardiovascular biomarkers, early decision-making tools and diabetes. In her spare time Colleen enjoys running, and playing soccer.



Shane Eickmann

Outreach Coordinator

Shane's passion for Paramedicine is palpable - he is an Advanced Care Paramedic and Operations Superintendent for Niagara EMS. Shane has been a Paramedic Instructor with CPER for several years and a part time instructor at Niagara College. Shane has also competed and won several Paramedic Simulation Competitions throughout the world, and hopes to expand the role of simulation here at CPER. As a volunteer for GlobalMedic, he trained land mine clearance personnel in Cambodia, and deployed to field hospitals in Haiti and Turkey following earthquakes. Shane is the current Director of Public Relations for the Niagara Paramedic Association, and is a long-time volunteer with the Canadian Red Cross. He was awarded the Queen Elizabeth II Diamond Jubilee medal for his exemplary contributions to Canada. He is looking forward to his new role as the Outreach Coordinator for CPER.

Quality Award Recipients

The CPER Quality Award is given to a selection of Paramedics, on a quarterly basis, who have provided exemplary patient care, advocated for their patients and / or completed excellent documentation.

Lindsay Currie, PCP

Hamilton Paramedic Service

Mike Webster, PCP

Hamilton Paramedic Service

Tara Dawdy, PCP

Hamilton Paramedic Service

Pamela Brennan, PCP

Hamilton Paramedic Service

Alain Vaillant, ACP

Dufferin County Paramedic Service

Clay Kavelaars, PCP

Dufferin County Paramedic Service

Adam Brown, PCP

Region of Waterloo Paramedic Service

Lindsay Veilleux, PCP

Region of Waterloo Paramedic Service

Brennan Clarkson, ACP

Region of Waterloo Paramedic Service

Evan Coppaway, ACP

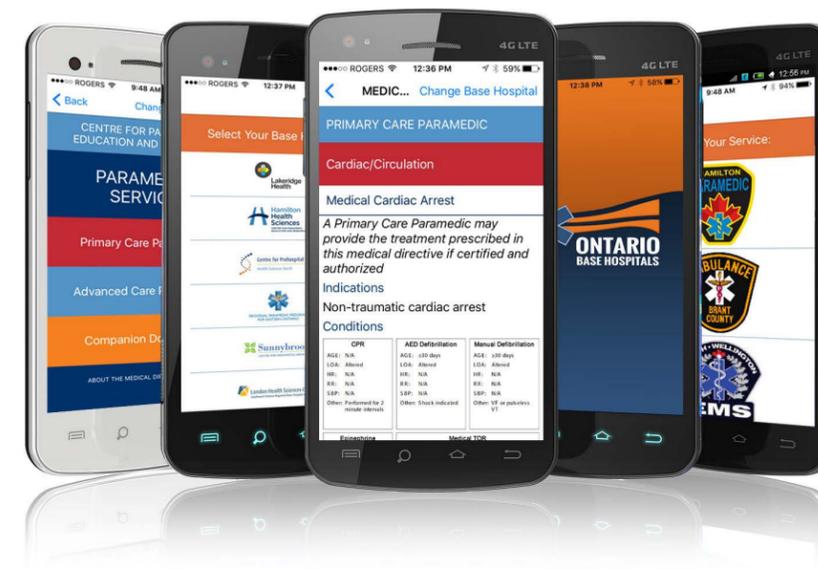
Six Nations Paramedic Services

Mike Winnie, PCP

Six Nations Paramedics Services

INTRODUCING THE Ontario Paramedic Clinical Guide

MEDICAL DIRECTIVES APP



The Ontario Paramedic Clinical Guide (OPCG) App, produced by the Ontario Base Hospital Group, has been designed to provide the medical directive content to Ontario Paramedics in the palm of their hands.

The App includes customized Base Hospital content.



CONTACT US

If you have any questions, comments or have a suggestion for a Patch Point article submission, please contact:

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