



SWORBHP LINKS

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A Message From The Regional Program Manager



Since beginning my new role October 28th, I have had the opportunity to meet or correspond with many of you. I would like to thank each of you for the warm welcome and your patience while I transition and learn. I have very quickly been brought in to some of the many initiatives currently underway to improve prehospital practice. I am very impressed with the dedication and commitment of the ambulance services, individual paramedics, the Colleges, and of course the SWORBHP staff and physicians. There is a lot of collaborative work going on throughout the region and the province that will position us well as we move forward.

I am in awe of the resources the SWORBHP team provides to ensure that the best and most up to date clinical information is available to all of our paramedics; from annual recertification, to webinars, Ask MAC, Tip of the Week, our website resources, Facebook and Twitter.

I welcome anyone who wishes to contact me or any of the Base Hospital staff to discuss how we can better serve you.

Regards,

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

Outstanding Achievement !

The entire SWORBHP team would like to take this opportunity to congratulate Dr. Don Eby, Local Medical Director, on the recent completion of his PhD. After six years of part-time study, Don completed his PhD in September at Queen Mary, University of London in the UK. His thesis title was "The Nature of the Relationship Between Comprehensive Primary Care Nurse Practitioners and Physicians - A Case Study in Ontario". The research looked at the emergence of the new occupation of nurse practitioner from the existing health system and how nurse practitioners became incorporated into the health system. Specifically it looked at how legislated scope of practice restricted nurse practitioners' ability to practice independently and how this affected the relationship they had to develop with family physicians in order to practice. There is a strong parallel with the case of paramedics in Ontario as they struggle to become recognized as a profession and their relationship with physicians.

Congratulations Don!



Ahh...Winter
In Ontario!

Paramedic Recognition Awards

In 2013 SWORBHP recognized 181 paramedics for their role in helping to save a life, and 43 paramedics for assisting to bring a new life into the world. A total of 66 Prehospital Saves and 14 Newborn Deliveries (as of publication date) were recognized throughout our region. In addition, two paramedics were honored with the Medical Directors Award of Excellence and eight paramedics received the Medical Director's Commendation Award. Truly an outstanding accomplishment. SWORBHP is pleased to have the opportunity to recognize each of you for the vital role you play in serving your communities.

Medical Directors Award of Excellence

Recipients of the 2013 Medical Directors Award of Excellence were:

Thomas LeClair - Essex-Windsor EMS | January 7, 2013
 Thomas received the award in recognition of outstanding clinical judgment and actions during a difficult clinical scenario, combined with demonstrated leadership in a complicated multiple agency scenario.

Todd Douglas - Middlesex London EMS | April 19, 2013
 Todd received the award in recognition of demonstrated leadership through outstanding clinical judgment and actions.



L to R - Dr. Paul Bradford, Dr. Michael Lewell, Thomas LeClair, Chief Randy Mellow

Medical Director's Commendation Award

Essex-Windsor EMS

Thomas LeClair, Sarah Bezaire, Aaron T. Campeau, Aaron Thompson | January 13, 2013

Scott Wilkinson, Jill Riediger | February 2, 2013

Ashley Lemay, Rob Injic | June 22, 2013



Dr. Paul Bradford, Dr. Michael Lewell, Thomas LeClair, Sarah Bezaire, Chief Randy Mellow



Dr. Paul Bradford, Dr. Michael Lewell, Scott Wilkinson, Chief Randy Mellow



Dr. Paul Bradford, Ashley Lemay

Prehospital Save

Bruce County EMS

Daniel McCracken, Jeremy Kostal | Jul 21/12
Laura McDonald, Derek Elmes, Josh Allen | Sep 17/13

Essex-Windsor EMS

Kim Schroeder, Garry Long | Jan 31/12
Gerry Hedges, Dawn Hodges, Nick Jovanovic, Michael Yeboah, Trevor Lee | Feb 18/12
Robin Smallwood, Darrin Haskell | Feb 26/12
Ljubisa Apostolovski, Hannah Chevalier | Apr 13/12
Robin Smallwood, Shaun Rivard | Jun 26/12
Tyson Brohman, Daina Fields, William Jaques, Kimberley Bolton, Courtney Jovanovic | Jul 1/12
Kevin DeMarco, Victoria Laframboise, Lori Poole | Jul 10/12
Kevin DeMarco, Wendy Willis, Giselle Bacon | Jul 29/12
Shannon Ingall, Jamielynn Bushnell | Aug 21/12
Gerry Hedges, Che-Lynn Marier, Ashley Bigelow, Michael Jacobs | Oct 3/12
Shawnee Hiller, John Conlon | Oct 20/12
Sarah Fox, Chris Lizotte, Leonard Tetreault, Amanda Rizzo, John Jacobs | Nov 4/12
Donna Moss, Tricia Rousseau, Crystal Folliott | Nov 26/12
Tim Branch, Marc Kobrosli, Jennifer Titus, Crystal Folliott | Dec 10/12
Kevin DeMarco, Michael Yeboah, Che-Lynn Marier, Carley Newman | Dec 15/12
Kevin DeMarco, Victoria Laframboise, Kimberley Myers, Stephanie Simetic | Dec 29/12
Carley Newman, Christopher Nugent | Feb 6/13
Shannon Johnston, James Jovanovic | May 12/13
Jamielynn Bushnell, Tim Souilliere | Jun 17/13
Richard St-Pierre, Isidor Cusumano, Sara Cincurak, Shawn Arrand | Jul 1/13
Kevin Cornwall, Rodney Hetherington | Jul 13/13
Gerry Hedges, Ashley Lemay, Mike Yeboah | Jul 19/13
Kristen Hamilton, Andre Mongeau | Sep 23/13
Mike Purdy, James Pukay, Don Theriault, Corey Nelson | Oct 13/13
Kevin DeMarco, James Jovanovic | Oct 14/13
Crystal Folliott, Nicole LeCoq, Michele Taylor, Shawn Arrand | Dec 4/13
Peter Morassutti, Matthew Titus | Dec 6/13
Gerry Hedges, Trevor Lee, Mike LaCroix | Dec 12/13
Chris Udvari, Andrew Bridgen | Dec 25/13
Thomas LeClair, Shaun Rivard | Dec 28/13

Grey County EMS

Jay Williamson, Rob Isbester, Kyle Stewart | Oct 28/13

Huron County EMS

Joel Paakkunainen, Denise Richard, Bill Lewis | Jun 27/13

Lambton County EMS

Kim Browne, Dan Nelles | May 17/13

Medavie EMS Elgin

Dave Wilson, Gerri-Lynn Brandies, Mike Corriveau | Mar 13/13
Tarah Gurski, Chris Reed | Apr 14/13

Middlesex-London EMS

John Booth, Jordan Marshall, Matt Close, Kelly Fletcher | Aug 16/13
Lori Aldington, Ernie Kerr, Matt Hall, Josh Denning | Sep 7/13
Melissa Schyff, Andrew Hewson | Sep 12/13
Robert Gee, Jessica Goncalves | Sep 27/13
Tim Zettel, Jennifer Woodiwiss, Shawn Hunsberger, David Jeffries | Oct 3/13
Pete DesJardines, Ashlee Crux | Oct 4/13
Dustin Sutherland, Jason Schinbein | Nov 11/13
Cynthia Natvik, Phil Adams | Nov 23/13
David Jeffries, Jennifer Fitz-Henry, Daniel Aitken, Vanessa Zietsma | Nov 29/13
Scott Johnson, Matthew Girotti, Paul Keane, John Blaauw | Dec 4/13

Prehospital Newborn Delivery

Essex-Windsor EMS

Matthew Dowhan, John Mitrevski, April Roberts, John Dollar | Oct 7/13
Peter Morassutti, Darrin Haskell, Christopher Nugent, Kathryn Pohlman | Dec 7/13
Christopher Nugent, Tricia Fischer, Timothy McDonald, Renee Mitchell | Jan 4/14

Huron County EMS

James Janssen, Tharon Riley | Jan 7/14

Lambton County EMS

Mike Heaman, Jennifer Woodiwiss | Sep 7/13

Medavie EMS Elgin

Matthew Gleeson, Chris Reed | Sep 17/13

Middlesex-London EMS

John Blaauw, Paul Keane, L.T. Jimson, Vanessa Zietsma, Kelly Dolbear | Oct 17/13
Cindy Critchley, George Bembich, Shawn Pranger, Josh Denning | Dec 11/13
Melissa Schyff, Shawn Peck, Jennifer Fitz-Henry, Dominic Palys | Jan 12/14

[Click here to access Recognition Awards forms online.](#)

EMS Services Exemplary Service Medal

At the Ontario Association of Paramedic Chiefs (OAPC) annual conference held in September 2013, six SWORBHP paramedics received the EMS Services Exemplary Service Medal at the 13th Annual Awards Gala. In addition, eight paramedics received their first or second bar. Congratulations to all award recipients.

EMS Services Exemplary Service Medal—20 years

Robert Bell—Grey County EMS
 Gary Cookman—Grey County EMS
 Gerald Smith—Essex-Windsor EMS
 Todd Martin—Oxford County EMS
 Ian Steadman—Oxford County EMS
 Gary Cassidy—Lambton County EMS

First Bar—30 years

Gary Cookman—Grey County EMS
 Tracy Gaunt—Bruce County EMS
 Diane Clark—Essex-Windsor EMS
 Gerald Smith—Essex-Windsor EMS
 Neal Roberts—Middlesex-London EMS

Second Bar—40 years

Ed Chrysler—Grey County EMS
 Glen Roher—Oxford County EMS
 Chris Skelton—Middlesex-London EMS

The Emergency Medical Services Exemplary Service Medal was created in 1994 by the late Governor General Romeo LeBlanc, as a component of the Canadian Honours System. The Award is more than a long service medal, rather an exemplary service award presented to those eligible members of the prehospital emergency medical service who have served for at least twenty years in a meritorious manner, characterized by the highest standards of good conduct, industry and efficiency. To qualify, at least ten of these years of service must have been street (or air) level duty involving potential risk to the individual. Nominees must have been employees on or after October 31, 1991, but may now be active, retired or deceased.

ORNGE Activations

You and your partner are dispatched to an MVC on a rural highway. Multiple patients apparently require your attention. Dispatch has assigned another land ambulance, air ambulance has also been triaged and will be responding.

You arrive and find only two patients injured. One is a 55 year old male: hypotensive, tachycardic with a decreased level of consciousness. The second patient is a CTAS III with minor injuries that the second ambulance crew attends to. You and your partner do an excellent job extricating and immobilizing your very unwell patient and are quickly transporting to the local hospital. Dispatch radios asking for an update for the air ambulance. You are now five minutes away from the local hospital, not the lead trauma hospital (LTH) for the region. What do you do? Do you cancel the air ambulance as no doubt you will be in the ED long before the air ambulance arrives? Is there a role to keep the air ambulance responding now that you are literally pulling in to the closest ED? Is your patient unwell enough to meet the current Field Trauma Triage Guidelines (FTTG)?

You just want to do the right thing. You don't want to keep the air ambulance coming if they aren't required. At the same time, you remember two months ago you transported

a similar trauma patient twice: once from the scene to this same ED, then two hours later from the ED to the LTH.

The key here is the Air Ambulance Utilization Standard (AAUS) in the Basic Life Support Patient Care Standards. If the patient meets the FTTG, most likely they will ultimately require a LTH. If the air ambulance cannot reach the scene by the time you are prepared to transport, keep them coming. The air ambulance paramedics can perform a "Modified Scene" at the non LTH ED if this patient meets the FTTG. Meaning, the air ambulance can land at the local ED, rapidly assess the patient, assume care, and ideally within 20 minutes, transport your critically injured trauma patient to the LTH.



It is all about the system of care and knowing your role. Your familiarity with the AAUS and FTTG prevents you from a second high risk transport, shortens the time to definitive care for your critical trauma patient, and saves lives.

Please take a moment to review the AAUS: a new revised standard is coming soon!

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

New Field Trauma Triage Guidelines Coming Soon!

The Field Trauma Triage Guidelines (FTTG) were developed as a patient destination strategy nationally in the US by the Centers for Disease Control (Centers for Disease Control and Prevention [CDC], 2012). This has been rolled out through the US since 2009, and they are now on their second update from 2011. The concept is based on years of excellent research, culminating in “A National Evaluation of the Effect of Trauma-Center Care on Mortality” published in the *New England Journal* in 2006. This work demonstrated that there was a 25% decrease in mortality for moderate and severely injured trauma patients if treated in a timely fashion at a higher level trauma center (MacKenzie et al., 2006). From this work, a National Expert panel concluded in 2009, that ambulances should bypass smaller hospitals to take badly injured trauma patients to the lead trauma hospital. (Centers for Disease Control and Prevention [CDC], 2009). The challenge is how far is it safe to bypass, and which patients.

When this rolls out provincially, distances will be determined locally. Many of the lead trauma hospitals in Ontario have had trauma destination policies for a decade. This new patient criteria will be more of an update. In some areas paramedics have been asking for this for years. They have picked up badly injured patients at the scene, transported them to the local hospital, then rapidly transported them again to the trauma center several hours later for definitive care. Now they will be empowered to use sound paramedic judgement and go straight to the trauma center. The criteria include initial vitals, injuries, mechanism of injury, and age.

For a sneak peak at the Essex-Windsor destination flash cards on our SWORBHP website, click on the link below.
http://www.lhsc.on.ca/About_Us/Base_Hospital_Program/OpsLogistics/DestinationDecisionsUnitFlashcards.pdf

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

References

Centers for Disease Control and Prevention. (2012). Field Triage section. Retrieved from: <http://www.cdc.gov/fieldtriage>

MacKenzie E.J., Rivara F.P., Jurkovich G.J., et al. (2006). A national evaluation of the effect of trauma-center care on mortality. *New England Journal of Medicine*, 354, 366–378.

Centers for Disease Control and Prevention. (2009, January 29). 2006 Guidelines for Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage. Retrieved from: <http://www.cdc.gov/mmwr/PDF/rr/rr5801.pdf>

SWORBHP Abstracts Presented at NAEMSP 2014

On January 16, 2014 five research posters were presented by SWORBHP staff and physicians at the National Association of EMS Physicians annual conference. The abstract titles and authors are listed below. The actual posters can be found on our website: http://www.lhsc.on.ca/About_Us/Base_Hospital_Program/Research/index.htm. Thank you to all the paramedics and EMS services for their ongoing participation and support of prehospital research.

- First responder accuracy using SALT after brief initial training. (Chris Lee, Shelley McLeod, Michael Peddle)
- Factors that predict prehospital paramedic IV cannulation success: A retrospective analysis. (Tristan Walker, Michelle Klingel, Shelley McLeod, Adeel Ahmed, Stephanie Romano, Adam Dukelow)
- A prospective evaluation of the utility of the ambulance call record to change the management of patient care in the Emergency Department. (Natalie Cram, Michelle Klingel, Matthew Davis, Shelley McLeod, Michael Lewell, Adam Dukelow)
- Frequency of the performance of delegated medical acts by Primary Care Paramedics in a regional Base Hospital Program. (Don Eby, Tracy Gaunt, Shelley McLeod, Alan Rice)
- Frequency of the performance of potentially life threatening delegated medical acts by Advanced Care Paramedics in a regional Base Hospital Program. (Don Eby, Tracy Gaunt, Shelley McLeod, Alan Rice)

Adam Dukelow, M.D., FRCP(C), MHSC, CHE
Medical Director of Innovation & Research

Optimal Prehospital Care System: A Paramedic Perspective

Optimal prehospital care starts from the time the 911 call is made. Sadly, I can recount a VSA where the family tried to squirt Nitroglycerin into the patient's mouth thinking it would help the situation, instead of just calling 911 and performing CPR. While certainly out of our scope, education from the discharging hospital of this patient's prior MI months ago, or a BLS CPR course, certainly has a degree of impact on our prehospital care system. Perhaps with the strong advent of community paramedicine, this side of things may change for the positive, and a visit from a community paramedic when a patient first comes home to give them some tips and things to look out for, would have changed the above scenario. While some would argue, "that's not our job", maybe they're right. But there's no debate about whether or not it has an *impact* on our job. In the patient focused environment of modern day EMS, what's best for the patient is always a part of our job.

Individual EMS systems are responsible for their citizens getting the best possible service they demand and need, especially in our aging population. While it's not entirely about response times (as we know saving 1 or 2 minutes impacts only a small fraction of severe trauma and cardiac arrest situations) we certainly have it within our power to tweak our service delivery for staffing hours, trucks on the road, placement of stations or mobile standby posts, etc. This becomes easier with new technology and data collection - a once disregarded component of EMS, but now certainly very important in delivering an optimal prehospital care system.

Training, along with equipping our paramedics to be able to deliver the most up to date care, is vital to optimal prehospital care. A difficult step as we must follow the BLS/ALS patient care standards from the MOH, which we know are not updated as frequently as most paramedics would like. We can work within our current scope as we trust the training and education of paramedics at all levels. An excellent example is the STEMI bypass program in Waterloo Region where both PCPs and ACPs are able to conduct their own 12-lead interpretation for the bypass

program, and if need be, override the Zoll machine interpretation and still conduct a STEMI bypass even if there is not a [5*, 9*, ACUTE MI, etc.] on the machine.

Finally, streamlining access to the best and most efficient care for the patient in hospital is the key to success. Bypass programs are (in my opinion) a huge slice of the optimal prehospital care system pie. Obviously a ROSC may need to stop in the ED first, however, being able to bypass the ED in cases of STEMI and stroke is valuable. We've known for decades that time is muscle, and time is brain. We are finally putting these simple facts into an operational system that is saving lives. We know skipping the ED decreases reperfusion time and that can obviously have a huge impact on mortality rates (Bagai, et al., 2013). In many regions they are seeing times of first medical contact to balloon time in as little as 60 minutes! (60-80 on the average). The same occurs in stroke bypass where the patient remains on the EMS stretcher, is briefly assessed in the ED, and is quickly moved to CT by EMS. *[Editor's note: Please note that minor variations exist in every STEMI and Stroke EMS protocol. Please review your local policies and Base Hospital direction in this regard.]*

"...equipping our paramedics to be able to deliver the most up to date care, is vital to optimal prehospital care."

All of these vital components create what I would call the "Optimal Prehospital Care System". We require help and a team approach from community partners, EMS, hospitals, and the general public. We all want the same goal: to increase the chance of survival for each and every patient in our community.

The views expressed in this article are my own and are not a representation of the views of my employer(s).

Jeffrey J. Bilyk, A-EMCA, PCP(f)
Primary Care Flight Paramedic, Northern Ontario
Primary Care Paramedic, SW Ontario

Reference

Bagai, A., Jollis, J.G., Dauerman, H.L., Peng, S.A., Rokos, I.C., Bates, E.R.,...Roe, M.T. (2013). Emergency Department Bypass for ST-Segment Elevation Myocardial Infarction Patients Identified with a Pre-Hospital ECG. *Circulation*, 128, 352-359.

Did You Know...?

- There are only four words in the English language which end in "-dous", tremendous, horrendous, stupendous, and hazardous.
- A cat has 32 muscles in each ear.
- Almonds are a member of the peach family.
- An ostrich's eye is bigger than it's brain.

Source: <http://triviaoftheday.wordpress.com/2013/09/>

Don't Worry - Nothing Will Go Wrong On This Transfer!

Paramedics are frequently called upon to transfer sick patients from one hospital to another. Recently a PCP crew was asked to transfer a patient from a rural hospital to a referral centre using their EMS CPAP apparatus. The sending hospital felt the patient did not need to be accompanied by a nurse or physician because the rural hospital didn't have a CPAP machine and their staff did not know how to use the paramedic's equipment. This suggestion was entirely inappropriate. The patient was unstable and was at risk of requiring further interventions.

Often there is a disconnection between the paramedics' scope of practice and what the hospital staff or physicians think it is. This leads to paramedics being put into uncomfortable situations when they are told "Don't worry, the patient is 'stable' - nothing will go wrong on this transfer!"

Paramedics need to gather a history and perform a patient assessment prior to leaving a hospital. They must make their own determination of whether or not the patient is stable, what the likelihood is of the patient remaining stable and whether there is any chance the paramedics will have to administer a medication or perform a procedure during the transfer that might fall outside of their scope of practice. If the patient is unstable, likely to become unstable, or require interventions outside of the crew's scope of practice, the patient should have an escort capable of intervening if required. Too often the sending hospital or physician does not want to send an escort and occasionally gets very assertive that everything will be alright. Paramedics must perform their own patient assessment and resist the insistence that they transfer the patient without an escort when they feel an escort is necessary.

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

Effective Communication in a Culturally Diverse Workplace

At its core, cultural diversity is about accepting and respecting people's differences and understanding that everyone is unique. The same can be said for communication. To do it well, you need to understand your audience and craft your message in a way that will make the most sense to them. When the audience is culturally diverse, the challenge is to understand their differences and be sensitive to how our message will be received.

Four ways to communicate better in today's diverse workplace

- 1. Use clear language.** When you are communicating with a culturally diverse audience, keep your language clear, concise and straightforward. Avoid jargon, slang terms, euphemisms and colloquial expressions. For example, you could say: *That sales report was fantastic!* Instead of: *That sales report was a slam dunk!*
- 2. Understand differences in body language.** You may be surprised to learn that different cultures have very different practices when it comes to non-verbal forms of communication. For instance, in most countries, people do not greet each other by shaking hands, and some cultures find it disrespectful to engage in direct eye contact. Additionally, some cultures have different comfort levels when it comes to personal space and touching. When in doubt, leave at least one arm's length between you and your colleagues, and keep your hands to yourself.
- 3. Practice reflective listening or paraphrasing.** When in conversation, paraphrasing or repeating the message back is a good habit to get into. This will help clarify meaning and eliminate issues that may surface as a result of misunderstanding. The same is true of written communication - paraphrase to clarify any doubts you may have.
- 4. Be open and inclusive of other cultures.** Although it is natural to gravitate towards others who share our preferences and traditions, getting to know your fellow co-workers from culturally diverse backgrounds can help build relations, and open up your world to new experiences. Bear in mind that they may be new to this country and have challenges of their own, as they try to navigate a different language, customs and way of life.

Communicating effectively in a culturally diverse environment requires tact and sensitivity - valuable life skills to have.

Cathy Prowd, CQIA
Operations & Logistics Specialist

Reference

Digital Communications in the Workplace. (2013, June). Shepell.fgi. Retrieved from:

<http://www.shepellfgi.com/EN-CA/Employees%20and%20Families/Wellness%20Articles/Balancing%20Act/DigitalCommunications.asp>

SWORBHP MEDList - Tricyclic Antidepressants

Tricyclic Antidepressants (TCAs) are used in the treatment of depression, anxiety and panic disorder, attention deficit disorder, pediatric enuresis, obsessive compulsive disorder and chronic pain disorders. Patients with a TCA overdose can present with CNS effects including sedation, confusion, delirium, or hallucinations. Arrhythmias, hypotension, and anticholinergic toxicity (hyperthermia, flushing, dilated pupils, intestinal ileus, urinary retention, and sinus tachycardia) are common. Patients who present with a TCA overdose have the potential to deteriorate rapidly despite their initial well appearance.

An overdose of TCAs is a contraindication for diphenhydramate (Gravol) administration. The list below contains TCAs that are approved for use in Canada.

Brand Name	Generic/Chemical Name
Elavil, Levate, Triptyn	Amitriptyline
Anafranil	Clomipramine
Desipramine	Desipramine
Sinequan, Silenor	Doxepin
Pramine, Impril, Tripamine	Imapramine
Maprotiline	Maprotiline
Aventyl, Norventyl	Nortriptyline
Tripramine	Trimipramine

SWORBHP MEDList - Oral Hypoglycemics/Oral Antihyperglycemics

There are multiple classes of oral hypoglycemic agents (also known as oral antihyperglycemic agents) used in the treatment of type 2 diabetes. These agents act by lowering the glucose level in the blood through the enhancement of insulin production, decreasing glucose production, or increasing the cells ability to uptake glucose.

Biguanides

These are the first line pharmacological treatment for type 2 diabetes. Also used in gestational diabetes and polycystic ovarian syndrome. Causes few adverse effects (mainly GI symptoms upon initiation) and are associated with a very low risk of hypoglycemia. Metformin works by suppressing liver glucose production.

Brand Name	Generic/Chemical Name
Glucophage, Glumetza, Glycon	Metformin

Sulfonylureas

These agents work by stimulating the pancreas to release more insulin. Sulfonylureas block ATP sensitive potassium channels in the Beta-cells of the pancreatic islets. This results in cell depolarization, leading to an influx of calcium into the cell, resulting in increased insulin secretion from the Beta-cells. Patients on sulfonylureas are at higher risk for having hypoglycemic events.

Brand Name	Generic/Chemical Name
Diabeta, Euglucon	Glyburide
Diamicron	Gliclazide
Amaryl	Glimepiride
Diabinese	Chlorpropamide

...continued on next page

SWORBHP MEDList - cont'd**Meglitinides**

These medications have a quick onset of action and have a short duration of effect. They are structurally different than sulfonylureas and exert their effects via different receptors, but act similarly by regulating ATP dependent potassium channels in pancreatic beta cells, resulting in increased insulin secretion.

Brand Name	Generic/Chemical Name
GlucNorm	Repaglinide
Starlix	Nateglinide

Thiazolidinediones

This class of medications increases insulin sensitivity by acting on adipose, muscle and liver to increase glucose utilization and decrease glucose production. It is thought they may also improve blood glucose levels by preserving pancreatic Beta-cell function.

Brand Name	Generic/Chemical Name
Avandia	Rosiglitazone
Actos	Pioglitazone
Avandamet	Rosiglitazone and Metformin

DPP-4 Inhibitors

These agents are not considered as initial therapy in treatment of type 2 diabetes. They help achieve glucose control through several mechanisms including enhancement of glucose dependent insulin secretion, delayed gastric emptying, regulation of postprandial glucagon and decreased appetite. These agents do not cause hypoglycemia.

Brand Name	Generic/Chemical Name
Januvia	Sitagliptin
Onglyza	Saxagliptin
Janumet	Sitagliptin and Metformin

Alpha-Glucosidase Inhibitors

These medications inhibit gastrointestinal enzymes (alpha-glucosidases) that convert complex polysaccharide carbohydrates into monosaccharides in a dose dependent fashion. They act by slowing the absorption of glucose from the GI tract.

Brand Name	Generic/Chemical Name
Glucobay	Acarbose

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

Link: www.lhsc.on.ca/About_Us/Base_Hospital_Program/Education/medlist.htm

Clicker Technology – A Love Hate Relationship

This year's recerts have seen the introduction of the "Clicker", both as a means to engage medics during discussions via polling, and as a means to complete the end of day written evaluation. As recerts have been completed in the majority of our regions, we have been getting a lot of feedback regarding the use of the clickers during the recert day. The clickers seem to have generated either a love or hate relationship amongst our medics.

There were some minor challenges with the introduction of this technology, but overall, the feedback received indicated there were no major problems with the use of the clickers. It was a bit of a learning curve for our instructors to learn how to use and troubleshoot this newly implemented technology and some of it was on the spot learning for some unexpected glitches. And with the introduction of new technology, there are those who immediately embrace it, those who gradually gain comfort and see the merits, and of course those who remain steadfast in their stance.

So why did we incorporate Clickers into this year's recerts? First off, the use of the clickers during the case scenarios was designed as a means to engage medics and help assimilate course content during the day. Also, the use of clickers was used as an aid to generate discussion amongst participants to gain different insight and perspective into the proposed questions. By having instantaneous feedback during the polling, instructors were able to determine if key content was understood. This information allowed instructors to address any misunderstandings immediately.

In addition, by having medics complete their written evaluation on the clicker, we now have data on how medics performed on each question and on various topics, both at the individual level, service level and regional level. By collecting it with the Clicker technology, we are able to analyze this information in many different ways. This information will help determine where the knowledge deficits are, so that we can tailor future recerts to address these gaps.

As always, we value your feedback and will take all of it into consideration as we begin our planning for the 2014-2015 recert season.

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

Upcoming CE Opportunities

- Taser Removal Review Webinar - February/March
- Recert Recap Webinar - March
- Anaphylaxis Webinar - April
- SWORBHP EMS Research - Past and Present Webinar - May
- Summer Time Illness Webinar - June
- Bleeds and Herniation Syndrome Webinar - July

[Click here](#) to visit our website and view the page dedicated to Continuing Education.

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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