



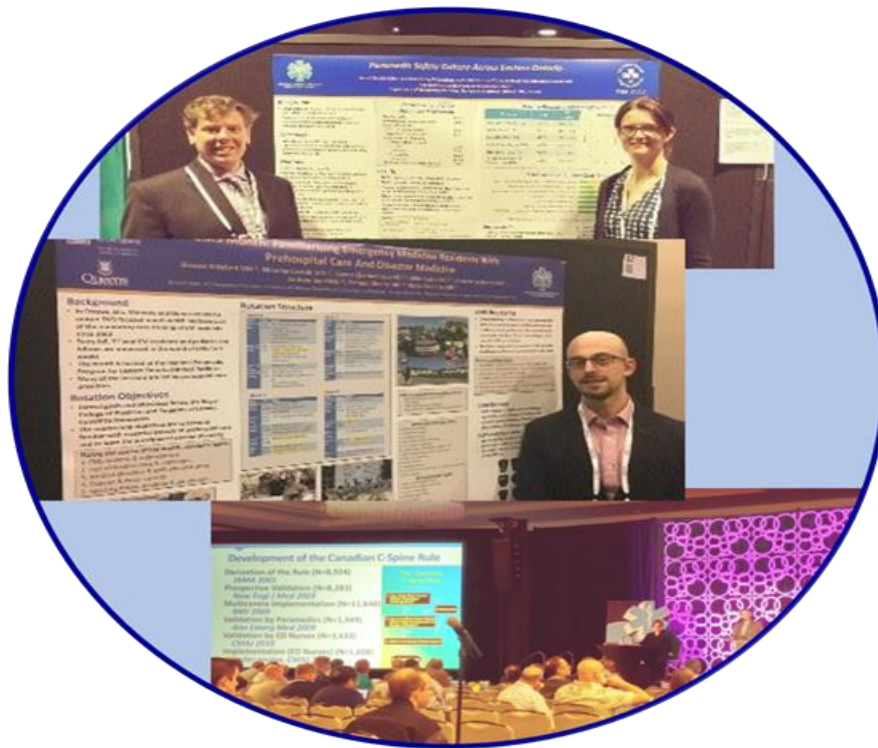
REGIONAL
PARAMEDIC
PROGRAM
FOR EASTERN
ONTARIO



The Ottawa
Hospital | L'Hôpital
d'Ottawa

RPPEO ANNUAL DISSEMINATION ACTIVITIES REPORT: RESEARCH, QUALITY & EDUCATION

April 1, 2016
to March 31, 2017



Report created by Jane Marchand, Administrative Assistant at RPPEO

Inspired by research.
Driven by compassion.

Inspiré par la recherche.
Guidé par la compassion.

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Regional Paramedic Program for Eastern Ontario

Department: Clinical Programs

Vice-President: Renate Ilse

Director: Penny Price

Purpose

The purpose of the Regional Paramedic Program for Eastern Ontario (RPPEO) Knowledge Translation (KT) Annual Report: Research, Quality and Education is to inform the senior management team, the paramedic community and paramedic stakeholders of the RPPEO's research, education and quality projects and KT activities in paramedicine that have been conducted and disseminated over the fiscal year.

Inclusion Criteria

All RPPEO personnel and regional paramedics working in collaboration with RPPEO personnel, who are either primary investigator or a co-investigator on a prehospital study or project, including current EMS residents and RPPEO volunteers.

Primary & Co-Investigators

Michael Austin, MD, FRCPC, *Associate Medical Director*

Zachary Cantor, PCP, *Paramedic Researcher*

Nicholas Costain, MD, (RCPSC-EM), *Resident*

Catherine Cox, ACP, *Data Analyst, Ottawa Paramedic Service*

Valerie Charbonneau, MD/MSc, FRCPC, *Resident*

Richard Dionne, MD, CCFP-EM, *Medical Director*

Susan Duncan, PCP, *Quality Coordinator*

Ivanette Hargreaves, BHSc, RRT, AA, *Manager, Special Projects*

Peter Kelly, *Deputy Chief with Ottawa Paramedic Service*

Shannon Leduc, MSc(C), ACP, *Paramedic Researcher*

Jason Lewis, *Manager, Manager, CEC & Quality*

Justin Maloney, MD, FRCPC, CCFP-EM, FCFP, *Medical Director (past)*

Simeon Mitchell, PGY5 (RCPSC-EM), *Resident*

Penny Price, MMgt, ACP, *Program Director*

Andrew Reed, BSc, EMCA, BPE, MSc, MD, FRCPC, *Associate Medical Director*

Julie Sinclair, MScN, A-EMCA, RN, *Research Coordinator, Paramedic Researcher*

Christian Vaillancourt, MD, MSc, FRCPC, CSPQ, *Associate Medical Director*

Andrew Willmore, MD, FRCPC, *Associate Medical Director*

Ayesha, Zia, MD, *Resident*

Summary of Productivity

Number of current grants held: **1**
Total amount of research grants currently held: **\$5,024.00**
Number of books or book chapters: **0**
Number of abstracts published in the current year: **11**
Number of journal articles published in the current year: **8**
Number of journal articles under review: **1**
Number of internal oral presentations: **0**
Number of external oral presentations: **2**
Number of internal poster presentations: **5**
Number of external poster presentations: **7**
Number of clinical investigator appointments: **2**

EXTERNAL GRANTS

None

INTERNAL GRANTS

Sinclair J, Dionne R, Leduc S, Austin M, Froats M, Reed Andrew, Maloney J, Vaillancourt C. **Retrospective validation of a prehospital patient disposition tool for hypoglycemia patients.** DEM Academic Grants and Special Projects Grant. (\$5,024.00).

ORAL PRESENTATIONS (INTERNAL)

None

ORAL PRESENTATIONS (EXTERNAL)

June

Charbonneau V, Costain N, Austin M, Willmore A, Reed A, Maloney J, Lewis J, Vaillancourt C, Dionne R. (June 2016). **Review of Prehospital Naloxone Use in Ontario: Is a Mandatory Patch Point Necessary?** Canadian Association of Emergency Physicians (CAEP) Annual Conference, Quebec City, Quebec. (EDUCATION)

Willmore A, Maloney J, Dionne R, Jarvis C, Kolleck D. **Preparing for Disaster.** (June 2016). Canadian Association of Emergency Physicians (CAEP) Annual Conference, Quebec City, Quebec. (EDUCATION)

POSTER PRESENTATIONS (INTERNAL)

October

Thomas L, Verdon J, Sinclair J, Labelle N, Price P, St-Jean F, Dionne R. **Prehospital TeamSTEPPS® education & a measure of paramedics' change in attitude.** (October 2016). The Ottawa Hospital Patient Safety Conference 2016. Ottawa, Ontario. (EDUCATION)

May

Costain N, Charbonneau V, Austin M, Willmore A, Reed A, Maloney J, Lewis J, Vaillancourt C, Dionne R. (May 2016). **Review of Prehospital Naloxone Use in Ontario: Is a Mandatory Patch Point Necessary?** The University of Ottawa Department of Emergency Medicine Day, Ottawa, Ontario. (QUALITY)

Mitchell S, Dionne R, Maloney J, Austin M, Mok G, Sinclair J, Cox C, LeMay M, Vaillancourt C. (May 2016) **Safety and Clinically Important Events for PCP-Initiated STEMI Bypass in Ottawa.** The University of Ottawa Department of Emergency Medicine Day, Ottawa, Ontario. (RESEARCH).

Zia A, Macdonald R, Moore S, Ducharme J, Vaillancourt C. (May 2016). **Assessment of Pain Management During Transport of Intubated Patients in Prehospital Setting.** The University of Ottawa Department of Emergency Medicine Day, Ottawa, Ontario. (RESEARCH)

Vaillancourt C. (May 2016). **Evaluation of the Safety of C-Spine Clearance of Paramedics.** The University of Ottawa Department of Emergency Medicine Day, Ottawa, Ontario. (RESEARCH)

POSTER PRESENTATIONS (EXTERNAL)

January

Vaillancourt C, Charette M, Sinclair J, Maloney J, Dionne R, Kelly P, Wells GA, Stiell IG. (January 2017). **Implementation of the Canadian C-Spine Rule by Paramedics: A Safety Evaluation.** National Association of EMS Physicians (NAEMSP) Annual Conference, New Orleans, Louisiana. (RESEARCH)

Vaillancourt C, Kasaboski A, Charette M, Calder LA, Boyle L, Shunichiro N, Crete D, Kline M, Souchuk R, Kristensen N, Wells GA, Stiell IG. (January 2017). **Implementation of An Educational Program To Improve The Cardiac Arrest Diagnostic Accuracy Of Ambulance Communication Officers: A Concurrent Control Before-After Study.** National Association of EMS Physicians (NAEMSP) Annual Conference, New Orleans, Louisiana. (RESEARCH)

Zia A, Macdonald R, Moore S, Ducharme J, Vaillancourt C. (January 2017). **Assessment of Pain Management During Transport of Intubated Patients in a Prehospital Setting.** National Association of EMS Physicians (NAEMSP) Annual Conference, New Orleans, Louisiana. (RESEARCH)

Sinclair J, Price P, Austin M, Reed A, Kwok E. (January 2017). **Paramedic Safety Culture Across Eastern Ontario.** National Association of EMS Physicians (NAEMSP) Annual Conference, New Orleans, Louisiana. (RESEARCH - *PARAMEDIC LED)

Sinclair J, Thomas L, Duncan S, Austin M. (January 2017). **Does the introduction of a prehospital sepsis screening tool result in better identification of sepsis by paramedics?** National Association of EMS Physicians (NAEMSP) Annual Conference. New Orleans, Louisiana. (RESEARCH - *PARAMEDIC LED)

Mitchell S, Dionne R, Maloney J, Austin M, Mok G, Sinclair J, Cox C, LeMay M, Vaillancourt C. (January 2017). **Safety and Clinically Important Events in PCP-Initiated STEMI Bypass in Ottawa: A Health Record Review.** National Association of EMS Physicians (NAEMSP) Annual Conference. New Orleans, Louisiana. (RESEARCH)

Costain N, Charbonneau V, Mitchell S, Austin M, Willmore A, Reed A, Dionne R, Maloney J. (January 2017). **EMS Month: Familiarizing Emergency Medicine Residents with Prehospital care and Disaster Medicine.** National Association of EMS Physicians (NAEMSP) Annual Conference, New Orleans, Louisiana. (EDUCATION)

PUBLISHED ABSTRACTS

RPPEO ABSTRACTS

Sinclair JE, Price P, Reed A, Austin M, & Kwok ESH. #73. **Paramedic Safety Culture across Eastern Ontario.** *Preshosp Emerg Care.* 2017;21(1):106-107.

Sinclair JE, Thomas L, Duncan S, Austin M. #50. **Does the introduction of a prehospital sepsis screening tool result in better identification of sepsis by paramedics?** *Preshosp Emerg Care.* 2017;21(1):101.

Charbonneau V, Costain N, Austin M, Willmore A, Reed A, Maloney J, Lewis J, Vaillancourt C, Dionne R. **LO017: Review of prehospital naloxone use in Ontario: Is a mandatory patch point necessary?** *Can J Emerg Med.* 2016;18(S1):S36-S36.

Costain N, Choi, S, Vaillancourt C. **LO099: Colchicine in acute and recurrent pericarditis: a meta-analysis.** *Can J Emerg Med.* 2016;18(S1):S64-S64.

ROC ABSTRACTS

Kudenchuk PJ, Daya M, Leroux B, Rea T, Nichol G, Morrison LJ, [Vaillancourt C](#), Wittwer L, Callaway CW, Christenson J, Egan D, Ornate JP, Weisfeldt ML, Stiell IG, Idris AG, Aufderheide TP, Dunford JV, Colella MR, Vilke GA, Brienza AM, Desvigne-Nickens P, Gray P, Gray R, Seals N, Strait R, Dorian P.

Antiarrhythmic drugs for shock refractory secondary ventricular fibrillation following initial nonshockable out-of-hospital cardiac arrest: the resuscitation outcomes. *Circulation*. 2016;134(25):E718-E718.

Pollack RA, Brown S, Rea T, Aufderheide T, Buick J, Christenson J, Idris A, Jasti J, Kampp M, Kudenchuk P, May S, Morrison L, Muhr M, Nichol J, Ornate JP, Sopke G, [Vaillancourt C](#), Weisfeldt M. **Impact of bystander AED use on survival and functional outcomes in shockable observed public cardiac arrest.** *Circulation*. 2016;134(25):E716-E716.

Cheskes S, Schmicker R, Morrison L, Rea T, Grunau B, Drennan I, Leroux B, [Vaillancourt C](#), Schmidt T, Koller A, Kudenchuk P, Aufderheide T, Herren H, Vilke G, Flickinger K, Charleston M, Straight R, Jasti J, Christenson J. **Does compliance with a global CPR quality benchmark predict survival from out-of-hospital cardiac arrest?** *Circulation*. 2016;134(Suppl 1):A13871-A13871.

OTHER ABSTRACTS

Khan F, [Vaillancourt C](#). **Cardiopulmonary resuscitation.** *CMAJ*; 2017;189(1):E25.

Adjemian R, Zirkohi AM, Coombs R, Mickan S, [Vaillancourt C](#). **Validation of descriptive clinical pathway criteria in the systematic identification of publications in emergency medicine.** *Int J Care Coordination*. 2017;2053434517707971.

Ho M, Gatién M, [Vaillancourt C](#), Whitham V, Stiell IG. **LO018: The utility of ECG characteristics as prognostic markers in pulseless electrical activity arrests: a retrospective observational cohort study.** *Can J Emerg Med*. 2016;18(S1):S36-S36.

Kopsaftis S, [Austin M](#), Wood-Baker R, Smith B. **Oxygen therapy in the pre-hospital setting for acute exacerbations of copd: a cochrane systematic review.** *Respirology*. 2016;21:47.

JOURNAL ARTICLES

PUBLISHED RPPEO JOURNAL ARTICLES

Stiell IG, Clement CM, Campbell K, Sharma M, Socha D, Sivilotti M, Jin A, Perry JJ, Lumsden J, Martin C, Froats M, Dionne R, Trickett J. **Impact of expanding the prehospital stroke bypass time window in a large geographic region.** *J Am Heart Assoc.* 2017;48(3):624-630.

PUBLISHED ROC JOURNAL ARTICLES

Drennan IR, Case E, Verbeek PR, Reynolds JC, Goldberger ZD, Jasti J, Charleston M, Herren H, Idris AH, Leslie PR, Austin MA, Xiong Y, Schmicker RH, Morrison LJ. Resuscitation Outcomes Consortium Investigators. **A comparison of the universal TOR guideline to the absence of prehospital ROSC and duration of resuscitation in predicting futility from out-of-hospital cardiac arrest.** *Resuscitation.* 2017;111:96-102.

Fink L, Prince DK, Kaltman JR, Atkins DL, Austin M, Warden C, Hutchison J, Daya M, Goldberg S, Herren., Tijssen JA, Christenson J, Vaillancourt C, Miller R, Schmicker RH, Callaway CW. **Unchanged pediatric out-of-hospital cardiac arrest incidence and survival rates with regional variation in North America.** *Resuscitation Outcomes Consortium.* 2016;107:121-128.

Evans C, Petersen A, Meier EN, Buick, JE, Schreiber M, Kannas D, Austin MA. Resuscitation Outcomes Consortium Investigators. **Prehospital traumatic cardiac arrest: Management and outcomes from the resuscitation outcomes consortium epistry-trauma and PROPHET registries.** *J Trauma Acute Care Sur.* 2016;81(2):285-293.

Kudenchuk PJ, Brown SP, Daya M, Rea T, Nichol G, Morrison LJ, Leroux B, Vaillancourt C, Wittwer I, Callaway CW, Christenson J, Egan D, Ornato JP, Weisfeldt ML, Stiell LG, Idris AH, Aufderheide TP, Dunford JD, Colella R, Vilke GM, Brienza AM, Desvigne-Nickens P, Gray PC, Gray R, Seals N, Straight R, Dorian P. **Amiodarone, Lidocaine, or placebo in out-of-hospital cardiac arrest.** *N Engl J Med.* 2016;374(18):1711-1722.

Elmer J, Torres J, Aufderheide TP, Austin M, Callaway CW, Gola, E, Herren H, Jasti J, Kudenchuk PJ, Scales DC, Stub D, Richardson DK, Zive DM, Resuscitation Outcomes Consortium. **Association of early withdrawal of life-sustaining therapy for perceived neurological prognosis with mortality after cardiac arrest.** *Resuscitation.* 2016;102:127-135.

Morrison, LJ, de Caen A, Bhanji F, L Bigham B, Blanchard I, Brooks SC, Guerguerian A, Jensen JL, Travers AH, Vaillancourt C, Welsford M, Woolfrey K. **What is new in the 2015 American Heart Association guidelines, what is recycled from 2010, and what is relevant for emergency medicine in Canada.** *Can J of Emerg Med.* 2016;18(3):223-229.

OTHER PUBLISHED JOURNAL ARTICLES

Liu S, Vaillancourt C, Kasaboski A, Taljaard M. **Bystander fatigue and CPR quality by older bystanders: a randomized crossover trial comparing continuous chest compressions and 30:2 compressions to ventilations.** *Canadian J of Emerg Med.* 2016;18(6):461-468.

SUBMITTED RPPEO JOURNAL ARTICLES

Sinclair J, Bourque C, Calder L, Austin M, Reed A, Kortko J, Maloney J. **Barriers to self-reporting patient safety events by paramedics.** Submitted to *PEC.* (Under Review).

CLINICAL INVESTIGATOR APPOINTMENTS

Richard Dionne, MD, CCFP-EM

Medical Director Regional Paramedic Program for Eastern Ontario
Associate Professor Emergency Medicine

Austin, Michael MD, FRCPC

Emergency Physician, Department of Emergency Medicine
Assistant Professor, Department of Emergency Medicine
Clinical Investigator, Ottawa Hospital Research Institute
Associate Medical Director, Regional Paramedic Program for Eastern Ontario