



REGIONAL
PARAMEDIC
PROGRAM
FOR EASTERN
ONTARIO



The Ottawa
Hospital | L'Hôpital
d'Ottawa

RPPEO ANNUAL DISSEMINATION ACTIVITIES REPORT: RESEARCH, QUALITY AND EDUCATION

April 1, 2018 to March 31, 2019



Report created by Jane Marchand, Administrative Assistant at RPPEO

Inspired by research. **Inspiré** par la recherche.
Driven by compassion. **Guidé** par la compassion.

Contents

PURPOSE	3
INCLUSION CRITERIA	3
PRIMARY & CO-INVESTIGATORS	3
SUMMARY OF DISSEMINATION ACTIVITIES.....	4
EXTERNAL GRANTS.....	4
INTERNAL GRANTS	5
ORAL PRESENTATIONS (INTERNAL)	5
ORAL PRESENTATIONS (EXTERNAL).....	5
POSTER PRESENTATIONS (INTERNAL).....	5
POSTER PRESENTATIONS (EXTERNAL)	6
INVITED PRESENTATIONS.....	6
PUBLISHED ABSTRACTS.....	6
RPPEO ABSTRACTS	6
RESUSCITATION OUTCOMES CONSORTIUM (ROC) ABSTRACTS.....	7
OTHER ABSTRACTS.....	7
JOURNAL ARTICLES	7
PUBLISHED RPPEO JOURNAL ARTICLES.....	7
PUBLISHED ROC JOURNAL ARTICLES	8
OTHER PUBLISHED JOURNAL ARTICLES	8
SUBMITTED RPPEO JOURNAL ARTICLES.....	8
AWARDS ACHIEVED	9
RPPEO CLINICAL OHRI INVESTIGATORS.....	9
NEW RPPEO CLINICAL OHRI INVESTIGATOR APPOINTMENTS.....	9

Regional Paramedic Program for Eastern Ontario

Department: Planning and Support Services

Vice-President: Joanne Read

Director: Penny Price

Purpose

The purpose of the Regional Paramedic Program for Eastern Ontario (RPPEO) Annual Dissemination Activities Report: Research, Quality and Education is to inform the senior management team, the paramedic community and paramedic stakeholders, of the RPPEO's research, quality and education projects and dissemination activities in paramedicine that have been conducted over the last 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*

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

Valerie Charbonneau, MD, MSc, FRCPC

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

Susan Duncan, PCP, *Quality Coordinator*

Mark Froats, BScH, MD, FRCPC

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

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

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

Simeon Mitchell, MDCM, FRCPC

Kerry Morris, ACP, *Education and Certification Coordinator*

Jen Price, CCP, MSc (HQ), *Data and Quality Coordinator*

Penny Price, MMngt, *Program Director*

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

Jason Rouleau, PCP, *Paramedic Researcher*

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

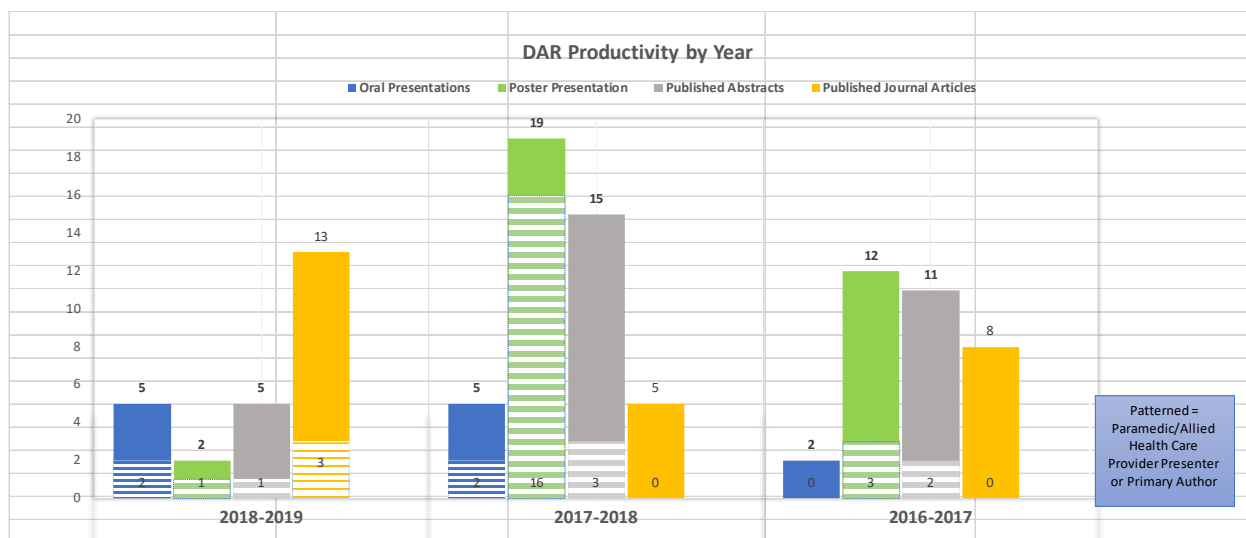
Frank St-Jean, CCP, *Manager, Education, Certification and BHITS*

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

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

SUMMARY OF DISSEMINATION ACTIVITIES

YEAR	ORAL PRESENTATIONS	POSTER PRESENTATIONS	TOTAL PRESENTATIONS	PARAMEDIC/ ALLIED HEALTH CARE PROVIDER PRESENTER	PUBLISHED ABSTRACTS	PUBLISHED JOURNAL ARTICLES	PARAMEDIC/ ALLIED HEALTH CARE PROVIDER PRIMARY AUTHOR
2018-2019	5	2	7	3	5	13	4
2017-2018	5	19	24	18	15	5	3
2016-2017	2	12	14	3	11	8	2



EXTERNAL GRANTS

Cheskes S, Vaillancourt C. **AED on the fly: An AED drone delivery feasibility program.** Canadian Arrhythmia Network (CANet). (\$150,000.00)

Vaillancourt C. **Improving the care and survival for prehospital SCD victims via transformative changes to 9-1-1 ambulance communication-assisted CPR instructions and the development of innovative technology: A CANet-CanROC-industry partnership.** Canadian Arrhythmia Network (CANet). (\$718,600.00 Plus \$281,041.00 Contingent on NCE renewal)

INTERNAL GRANTS

Austin M. **Prehospital analgesia in adults using inhaled methoxyflurane a feasibility study.** Department of Emergency Medicine. Department of Emergency Medicine, uOttawa. (\$9,901.00)

ORAL PRESENTATIONS (INTERNAL)

Sinclair J *, St Jean F*, Morris K, Lindsay E, Price J, Price P. (March 2019) **Identifying the training needs of paramedics using a customized assessment tool.** Department of Innovation and Medical Education uOttawa (DIME) Annual Conference, Ottawa, Ontario. (QUALITY)

Vaillancourt C. (May 2018) **National survey of 9-1-1 Ambulance Communication Centers' resources related to prehospital recognition of agonal breathing and cardiac arrest.** Department of Emergency Medicine (DEM) Annual Conference, Ottawa, Ontario. (RESEARCH)

ORAL PRESENTATIONS (EXTERNAL)

Sinclair J, Rouleau J, Marchand J, Price P, Austin M. (February 2019). **Online Medical Control, Consultation and collaboration in paramedicine: Why are paramedics Calling?** Ontario Base Hospital Annual Conference. (QUALITY)

Carmichael H, Vaillancourt C, Stiell I.G, Shrier I, Hobden E, Charrette M. (January 2019) **Evaluating the Application of the Prehospital Canadian C-Spine Rule By Paramedics in Sport-Related Injuries.** National Association of EMS Physicians (NAEMSP) Conference, Austin, Texas. (RESEARCH)

Fernando SM, Vaillancourt C, Morrow S, Stiell IG. (June 2018) **Analysis of bystander CPR quality during out-of-hospital cardiac arrest using data derived from automated external defibrillators.** Canadian Association of Emergency Physicians (CAEP) Conference, Calgary, Alberta. (RESEARCH) – Plenary presentation.

POSTER PRESENTATIONS (INTERNAL)

Sinclair JE*, Duncan S, Price P, Thomas L, Willmore A, Dionne R, Austin M. (May 2018). **Predictive validity of the Regional Paramedic Program for Eastern Ontario (RPPEO) prehospital sepsis notification tool.** Department of Emergency Medicine (DEM) Annual Conference, Ottawa, Ontario. (RESEARCH)

* Denotes Paramedic/Allied Health Care Provider Presenter

POSTER PRESENTATIONS (EXTERNAL)

Sinclair JE, Duncan S, Price P, Thomas L, Willmore A, Dionne R, Austin M. (May 2018). **Predictive validity of the Regional Paramedic Program for Eastern Ontario (RPPEO) prehospital sepsis notification tool.** Canadian Association of Emergency Physicians (CAEP) Annual Conference, Calgary, Alberta. (RESEARCH)

INVITED PRESENTATIONS

Leduc S. **'Who Needs Evidence Anyways? Paramedics, Research and Professionalization'**. Algonquin College Primary Care Paramedic Program, Professionalism Course, Ottawa, Ontario, March 2019.

Austin M. **Oxygen: Kill or Cure?** County of Renfrew Paramedic Research Symposium, Burnstown, Ontario, June 2018.

Price J. **The real value of documenting.** County of Renfrew Paramedic Research Symposium, Burnstown, Ontario, June 2018.

Leduc S. **Health Technology Assessments, What They Are, How They're Used and Why Paramedics Should Care.** County of Renfrew Paramedic Research Symposium, Burnstown, Ontario, June 2018.

Hargreaves, I. **Extension of the FTTG from 30-60 min time radius; evaluating the safety of a system change.** County of Renfrew Paramedic Research Symposium, Burnstown, Ontario, June 2018.

PUBLISHED ABSTRACTS

RPPEO ABSTRACTS

Austin MA, Willis K, Kilpatrick D, Walters EH. **Continuous positive airway pressure plus low flow oxygen versus usual care of severe acute cardiogenic pulmonary edema in the pre-hospital setting: A randomized controlled trial [version 1; referees: awaiting peer review].** *F1000Research*. 2018;7.

Sinclair JE*, Duncan S, Price P, Thomas L, Willmore A, Dionne R, Austin M. **P141: Predictive validity of the Regional Paramedic Program for Eastern Ontario (RPPEO) prehospital sepsis notification tool.** *Can J Emerg Med*. 2018;20(S1):S107-S107.

Kwok ESH, Clapham G, White S, Austin M, Calder L. **LO25: The development and implementation of a standardized emergency department handover tool.** *Can J Emerg Med*. 2018;20(S1):S15-S15.

* Denotes Paramedic/Allied Health Care Provider Primary Author

RESUSCITATION OUTCOMES CONSORTIUM(ROC) ABSTRACTS

Fernando SM, Vaillancourt C, Morrow S, Stiell IG. **LO01 Analysis of bystander CPR quality during out-of-hospital cardiac arrest using data derived from automated external defibrillators.** *Can J Emerg Med.* 2018;20(S1):S6-S6.

OTHER ABSTRACTS

Carmichael H., Vaillancourt C., Stiell I.G., Shrier I., Hobden E., Charrette M. **Evaluating the Application of the Prehospital Canadian C-Spine Rule By Paramedics in Sport-Related Injuries.** *PEC 2019;23(1):103-14.*

JOURNAL ARTICLES

PUBLISHED RPPEO JOURNAL ARTICLES

Leduc S*, Kelly P, Thiruganasambandamoorthy V, Wells G, Vaillancourt C. **The safety and efficacy of on-site paramedic and allied health treatment interventions targeting the reduction of emergency department visits by long-term patients.** *Systematic Review.* 2018;7(1):206.

Mitchell S, Dionne R, Maloney J, Austin M, Mok G, Sinclair J, Cox C, LeMay M, Vaillancourt C. **Safety and clinically important events for PCP-initiated STEMI bypass in Ottawa.** *Can J Emerg Med.* 2018;20(6):865-873.

Froats M, Reed A, Dionne R, Maloney J, Duncan S, Burns R, Sinclair J, Austin M. **The safety of bypass to percutaneous coronary intervention facility by basic life support providers in patients with st-elevation myocardial infarction in prehospital setting.** *Can J Emerg Med.* 2018;55(6):792-798.

Austin Ma, Wills K, Kilpatrick D, Walters EH. **In the pre-hospital setting: A randomized controlled trial.** *F1000Research* 2018.

Sinclair J*, Austin M, Bourque C, Kortko J, Maloney J, Dionne R, Reed A, Price P, Calder L. **Barriers to self-reporting patient safety incidents by paramedics: A mixed method study.** *PEC* 2018;22(6):762-772.

Sinclair JE*, Austin M, Froats M, Leduc S, Maloney J, Dionne R, Reed A, Vaillancourt C. **Characteristics, prehospital management, and outcomes in patients assessed for hypoglycemia: Repeat access to prehospital or emergency care (1a).** *PEC* 2018;22:379-384.

* Denotes Paramedic/Allied Health Care Provider Primary Author

PUBLISHED ROC JOURNAL ARTICLES

Allan K., Dorian P., Lin S., on behalf of the C-SCAN Investigators: **Developing a pan-canadian registry of sudden cardiac arrest: Challenges and opportunities.** *CJC Open* 2019;1(2):53-61.

Fernando SM, Vaillancourt C, Morrow S, Stiell IG. **Analysis of bystander CPR quality during out-of-hospital cardiac arrest using data derived from automated external defibrillators.** *Resuscitation* 2018;128:138-143.

Pollack RA, Brown SP, Rea T, Aufderheide T, Barbic D, Buick JE, Christenson J, Idris AH, Jasti J, Kampp M, Kudenchuk P, May S, Muhr M, Nichol G, Ornato JP, Sopko G, Vaillancourt C, Morrison L, Weisfeldt M, ROC Investigators. **Impact of bystander automated external defibrillator use on survival and functional outcomes in shockable observed public cardiac arrests.** *Circulation.* 2018;137(20):2104-2113.

OTHER PUBLISHED JOURNAL ARTICLES

Nikolaou N, Dainty KN, Couper K, Morley P, Tijssen J, Vaillancourt C, International Liaison Committee on Resuscitation. **A systematic review and meta-analysis of the effect of dispatcher-assisted CPR on outcomes from sudden cardiac arrest in adults and children.** *Resuscitation.* 2019;138:82-105.

Vaillancourt C, Charette M, Hall E, McLeod B. **Patient and paramedic engagement in prehospital emergency medicine research.** *CMAJ.* 2018;190(Suppl):S48-S49.

Okubo M, Schmicker RH, Wallace DJ, Idris AH, Nichol G, Vaillancourt C, Austin MA. Et Al. **Variation in survival after out-of-hospital cardiac arrest between emergency medical services agencies.** *JAMA Cardiology.* 2018;3(10):989-999.

Archambault PM, McGavin C, Dainty KN, McLeod SL, Vaillancourt C, Lee JS, Perry JJ, Gauvin FP, Boivin A. **Recommendations for Patient Engagement in Patient-Oriented Emergency Medicine Research.** *CJEM.* 2018; 20(3):435-442.

SUBMITTED RPPEO JOURNAL ARTICLES

None

AWARDS ACHIEVED

Kerry Morris, and Gregor Moffat, received the prestigious **EMS Medal for Exemplary Service** at the annual OAPC Leadership Summit, London, Ontario, September 2018.

Shannon Leduc, Ottawa Advanced Care Paramedic and Research Fellow received **CanROC's Research Trainee Excellence Award** at the annual CanROC and CERN conference, Toronto, Ontario, May 2018.

Christian Vaillancourt, Associate Medical Director (MD MSc FRCPC CSPQ), received the **Canadian EMS Research Mentorship Award** (CERN-RCRSP) at the annual CERN conference, Toronto, Ontario, May 2018. This award by the Canadian EMS Research Network-Réseau Canadien de Recherche en Soins Préhospitaliers acknowledges excellence in mentoring as well as time and energy spent in the pursuit of EMS and paramedic research mentorship in Canada.

Michael Austin, Associate Medical Director (MD FRCPC), received **Exemplary Service Award**, at the annual OPAC Leadership Summit, London, Ontario, February 2018.

RPPEO CLINICAL OHRI INVESTIGATORS

Richard Dionne, MD, CCFP-EM

Medical Director Regional Paramedic Program for Eastern Ontario
Emergency Physician, The Ottawa Hospital
Director of EMS Fellowship and Associate Professor, Emergency Medicine, University of Ottawa

Michael Austin, MD, FRCPC

Associate Medical Director, Regional Paramedic Program for Eastern Ontario
Emergency Physician, The Ottawa Hospital
Director, Prehospital and Transport Medicine Diploma Program, The Ottawa Hospital
Assistant Professor, Emergency Medicine, University of Ottawa

Christian Vaillancourt, MD, MSc, FRCPC, CSPQ

Associate Medical Director, Regional Paramedic Program for Eastern Ontario
Senior Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute
Full Professor, Emergency Medicine, University of Ottawa
Research Chair, Emergency Cardiac Resuscitation, Emergency Medicine, University of Ottawa

NEW RPPEO CLINICAL OHRI INVESTIGATOR APPOINTMENTS

None