



REGIONAL
PARAMEDIC
PROGRAM
FOR EASTERN
ONTARIO



The Ottawa
Hospital | L'Hôpital
d'Ottawa

**RPPEO ANNUAL DISSEMINATION
ACTIVITIES REPORT:
RESEARCH, LEADERSHIP, QUALITY AND
EDUCATION**

April 1, 2022 to March 31, 2023

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

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Regional Paramedic Program for Eastern Ontario

Department: Clinical Operations

Executive Vice-President: Suzanne Madore

Director: Penny Price

Purpose

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



Inclusion Criteria

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

Primary & Co-Investigators

Michael Austin, MD, FRCPC, DRCPSC (PTM) Associate Medical Director

Zachary Cantor, PCP, EMS Coordinator, Paramedic Researcher

Richard Dionne, MD, CCFP-EM, Medical Director

Mark Froats, MD, FRCPC

Shannon Leduc, MSc, ACP, Paramedic Researcher

Jane Marchand, HRT, Research Assistant

Ben de Mendonca, P.Eng., MHA, Manager, Quality and Patient Safety

Penny Price, MMngt, Program Director

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

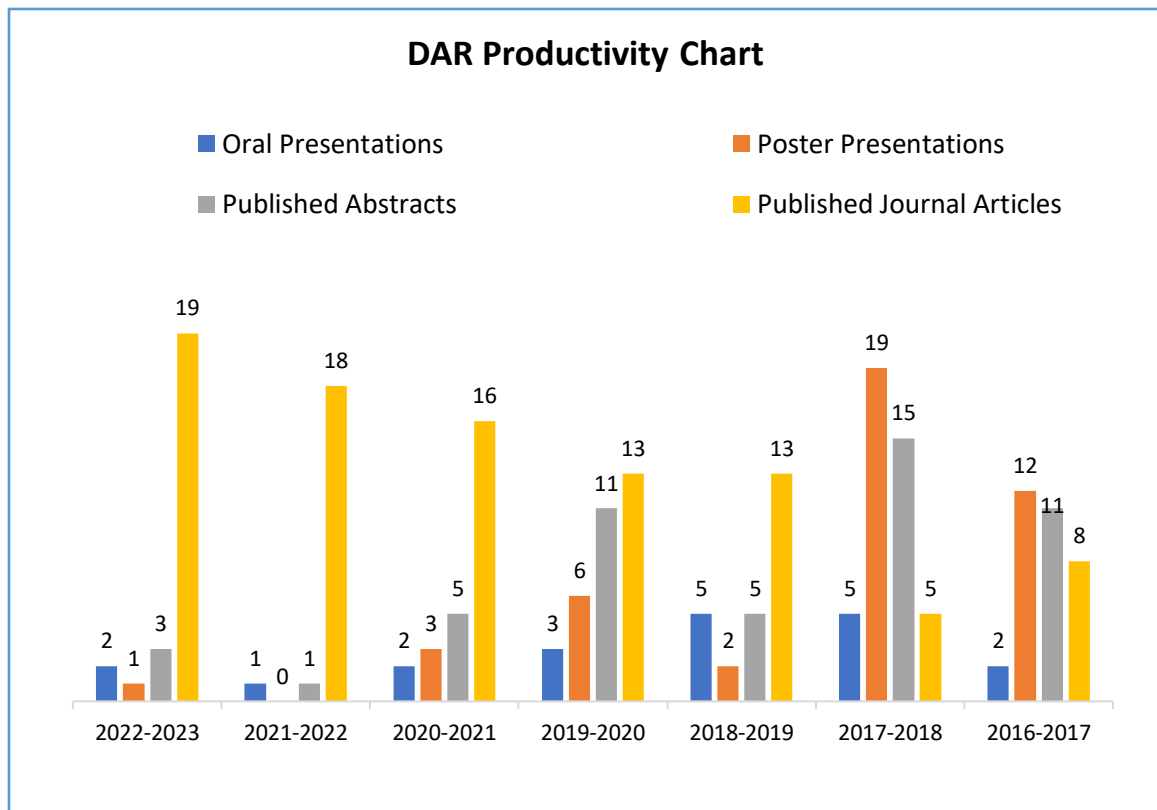
Julie Sinclair, MScN, A-EMCA, RN, Research Coordinator, Paramedic Researcher

Charlene Vacon, PhD, PCP, Coordinator

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

SUMMARY OF DISSEMINATION ACTIVITIES (7 years)

YEAR	TOTAL PRESENTATIONS	ORAL PRESENTATIONS	POSTER PRESENTATIONS	PARAMEDIC/ ALLIED HEALTH CARE PROVIDER PRESENTER	PUBLISHED ABSTRACTS	PUBLISHED JOURNAL ARTICLES	PARAMEDIC/ ALLIED HEALTH CARE PROVIDER PRIMARY AUTHOR
2022-2023	3	2	1	2	3	19	3
2021-2022	1	1	0	1	1	17	1
2020-2021	5	2	3	2	5	16	3
2019-2020	9	3	6	6	11	13	5
2018-2019	7	5	2	3	5	13	4
2017-2018	24	5	19	18	15	5	3
2016-2017	14	2	12	3	11	8	2



EXTERNAL GRANTS

Austin MA. Management of traumatic pain by paramedics in the prehospital setting. MAYDAY FUND (\$249,803.19 US)

INTERNAL GRANTS

N/A

ORAL PRESENTATIONS (INTERNAL)

N/A

ORAL PRESENTATIONS (EXTERNAL)



de Mendonca B, Price P, Greenall, J (September 2022) **Improving the safety of medication use: Medication safety self-assessment.** Paramedic Chiefs of Canada Leadership Summit. (Quality)

Mitchell S, Godbout J, Froats M, Costain N, de Mendonca B, St-Jean F, Dionne R, Austin M. (May 2022). **Physician peer patch review: A quality program for paramedic online medical consultation.** Canadian Association of Emergency Physicians (CAEP) Annual Conference. Quebec City, Canada. (Quality)

POSTER PRESENTATIONS (INTERNAL)

N/A

POSTER PRESENTATIONS (EXTERNAL)

Mitchell S, Perry J, Pinnell R, McMahon E, Nemnom M, de Mendonca B, Stotts G, Austin MA. (May 2022) **Evaluation of a prehospital endovascular therapy (EVT) bypass program.** Canadian Association of Emergency Physicians (CAEP) Annual Conference. Quebec City, Canada. (Research)

INVITED PRESENTATIONS

N/A

OTHER PUBLISHED JOURNAL ARTICLES

McGahern C, Cantor Z, de Mendonca B, Dawson J, Boisvert L, Dalgleish D, Reddy D, Bresee N, Alnaji F. **Closing the Loop: The value of outcome letters for prehospital pediatric care.** *Published electronically, Pediatr Emerg Care.* 2023; 0:0:1-4.

Leduc S*, Wells G.A, Thiruganasambandamoorthy V, Cantor Z, Kelly P, Rietschlin M, Vaillancourt C. **The hospital care and outcomes of long-term care patients treated by paramedics during an emergency call: Exploring the potential impact of community paramedicine.** *Accepted, CJEM.* 2023

Heidet M, Grunau B, Vaillancourt C, Baert V, on behalf of CanROC, Re CanROC investigators. **Trends in out-of-hospital cardiac arrest across the world: what CanROC and RéAC national registries could have added to the second report from the International Liaison Committee on Resuscitation (ILCOR).** *Published electronically, Resuscitation.* 2023;187:1-2.

Zitkyte G, Roy DC, Tran A, Fernando SM, Rosenberg E, Kanji S, Engels PT, Wells GA, Vaillancourt C. **Pharmacologic interventions to prevent delirium in trauma patients: A systematic review and network meta-analysis of randomized controlled trials.** *Published electronically, Crit Care Explor.* 2023;5(3):e0875.

Leduc S*, Wells G, Thiruganasambandamoorthy V, Kelly P, Vaillancourt C. **Alternate care models for paramedic patients from long-term care centres: A national survey of Canadian paramedic services.** *CJEM.* 2023; 25(4):344-352.

Fernando S.M, Mathew R, Sadeghirad B, Rochweg B, Hibbert B, Munshi L, Fan E, Brodie D, Di Santo P, Tran A, McLeod S.L, Vaillancourt C, Cheskes S, Ferguson N.D, Scales D.C, Lin S, Sandroni C, Soar J, Dorian P, Perkins G.D, Nolan J.P. **Epinephrine in out-of-hospital cardiac arrest – A systematic review and network meta-analysis.** *Published electronically, Chest.* 2023:1-13.

Cournoyer A, Grunau B, Cheskes S, Vaillancourt C, Segal E, De Montigny L, De Champlain F, Cavayas YA, Albert M, Potter B, Paquet J, Lessard J, Chauny JM, Morris J, Lamarche Y, Marquis M, Cossette S, Castonguay V, Daoust R. **Clinical outcomes following out-of-hospital cardiac arrest: the minute-by-minute impact of bystander cardiopulmonary resuscitation.** *Resuscitation.* 2023;185:1-9.

McCallum J, Eagles D, Ouyang Y, Vander Ende J, Vaillancourt C, Fehlmann C, Shorr R, Taljaard M, Stiell IG: **Cervical spine injuries in adults >65 years after low-level falls – A systematic review and meta-analysis.** *Ann J Emerg Med.* 2023;67:144-155.

Vaillancourt C, Charette M, Sinclair J, Dionne R, Kelly P, Maloney J, Nemnom M.J, Wells GA, Stiell IG **Implementation of the modified Canadian C-Spine rule by paramedics.** *Ann J Emerg Med.* 2023;81(2):187-196.

Davies D, McKnight B, Meier E, Drennan I, Newgard C, Wang HE, Bulger E, Scheiber M, Austin M, Vaillancourt C, and the ROC investigators. **Higher oxygenation is associated with improved survival in severe traumatic brain injury but not traumatic shock.** *Neurotrauma Reports.* 2023:4(1):51-63.

* denotes paramedic/allied health care provider primary author

Cheskes S, Verbeek P.R, Drennan I.R, McLeod S.L, Turner L, Pinto R, Feldman Michael, Matthew D, [Vaillancourt C](#), Morrison L.J, Dorian P, Scales DC. **Defibrillation strategies for refractory ventricular fibrillation.** *N Engl J Med.* 2022;387(21):1947-1956.

Idris AH, Aramendi E, Leroux B, Jaureguibeitia X, Shaver S. Kudenchuk PJ, [Vaillancourt C](#) et al. **Lung inflation occurs infrequently in most patients during 30: 2 CPR with bag-valve-mask ventilation.** *Circ. J.* 2022;146(Suppl_1):A163-A163.

Cheskes S, Verbeek R, Drennan I.R, McLeod S.L, Turner L, Pinto R, Feldman M, Davis M, [Vaillancourt C](#), Morrison L.J, Scales D.C, Dorian P. **DOuble sequential external defibrillation for refractory ventricular fibrillation: The DOSE VF cluster randomized controlled trial.** *N Engl J Med.* 2022;387(21):1947-1956.

Lane D.J, Grunau B, Kudenchuk P, Dorian P, Wang HE, Daya MR, Lupton J, [Vaillancourt C](#), Okubo M, Davis D, Rea T, Yannopoulos D, Christenson J, Scheuemeyer F. **Amiodarone, lidocaine, or placebo in out-of-hospital cardiac arrest: A post hoc Bayesian analysis of a randomized clinical trial.** *BMJ Heart.* 2022;108(22):1777-1783.

Charette M, Sabri E, McLeod B, Leduc S, Macarthur C, Osmond M, Cheskes S, Thavorn K, Fergusson D, Stiell I, MD, Plint A, Taljaard M. [Vaillancourt C](#). **Paramedic assessment of low-risk pediatric trauma patients using the Canadian c-spine rule: A pragmatic cluster randomized stepped wedge patient-informed multi-center trial (May 2022)** *Can J Emerg Med.* 2022; 24 (Suppl 1):S1-S100.

Heidet M, Hubert H, Grunau BE, Cheskes S, Baert V, Fraticelli L, Freyssenge J, Lecarpentier E, Stitt A, Tallon JM, Tazarourte K, Truong C, [Vaillancourt C](#), Vilhelm C, Wysocki K, Christenson J, El Khoury C. **Rationale, development, and implementation of the ReACanROC registry for out-of-hospital cardiac arrests in France and Canada.** *Emerg. Med.* 2022;39(7):547-553.

Tran U. E, Yadav K, Ali Mohamed, [Austin M](#), Nemnom M.J, Eagles, D. **An evaluation of emergency pain management practices in fragility fractures of the pelvis.** 2022; 24:273–277.

Stiell IG, Maloney J, Dreyer J, Munkley D, Spaite D.W, Lyver M.B, [Sinclair JE](#), Wells G. A, OPALS Study Group. **Advanced life support for out-of-hospital chest pain: The OPALS study.** *Prehosp Emerg Care.* 2023;26(3):428-436.

* denotes paramedic/allied health care provider primary author

AWARDS ACHIEVED / SPECIAL MENTION

Paramedics Providing Palliative Care Project Service Award

RPPEO received a service award for assisting with the Palliative Care Project.

Journal Review on NAEMSP BLOG Article Bites #45:

Julie Sinclair's published Characteristics, Prehospital Management, and Outcomes in Patients Assessed for Hypoglycemia: Repeat Access to Prehospital or Emergency Care.

Second place, Plenary Presentation, Top Pediatric Research Abstract Award (CAEP 2022)

Dr. Christian Vaillancourt PL02 Paramedic assessment of low-risk pediatric trauma patients using the Canadian c-spine rule: a pragmatic cluster randomized stepped wedge patient-informed multi-center trial.

Selected as the PAN-U.S CME article of the month by the Academic College of Emergency Physicians for Feb. 2023:

Dr. Christian Vaillancourt's Implementation of the Modified Canadian C-Spine Rule by Paramedics.

C-Spine paper published in Ann Emerg Med continues to get more traction:

The original Journal submission, together with its published version, will be used to teach a course (ACEP's "Emergency Medicine Basic Research Skills"). This course also serves to train future potential Journal reviewers.



RPPEO CLINICAL OHRI INVESTIGATORS

Michael Austin MD, FRCPC, DRCPC (PTM)

Emergency Physician, The Ottawa Hospital

Director, Prehospital and Transport Medicine & AFC Fellowship Program, Ottawa Hospital

Clinician Investigator, Ottawa Hospital Research Institute

Associate Professor, University of Ottawa

Associate Medical Director, Regional Paramedic Program for Eastern Ontario

Richard Dionne MD, CCFP-EM

Medical Director, Regional Paramedic Program for Eastern Ontario

Emergency Physician, Ottawa Hospital

Clinician Investigator, Ottawa Hospital Research Institute

Program Director, Prehospital and Transport Medicine Month, Emergency Medicine, University of

Ottawa

Shannon Leduc MSc, ACP

Commander Clinical Programs, Ottawa Paramedic Service

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Christian Vaillancourt MD, MSc, FRCPC, CSPQ

Full Professor, Department of Emergency Medicine

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