Michael G. DeGroote Pain Clinic
Research Newsletter - September 2021

Below is a list of research studies that are ongoing at the clinic:

1. DATACANN (SPOR and IPRC)
2. CUDIT-R (CMCR)
3. Waiting Room Survey (CIHR)
4. iCanCope (SPOR)
5. ROCCR (HHS)
6. Clinic Review (HHS)
7. Pain Management Program Research Database (HHS)
8. Intensive Program Research Database (HHS)
9. Pelvic Pain Program Research Database (HHS)
10. Fibromyalgia Program Research Database (HHS)
11. Young Adult Program Research Database (HHS)
12. Intensive Follow-Up Study (HHS)
13. Intensive 6 Month Follow-Up Study (HHS and Chronic Pain Centre of Excellence)
14. VECTOR (Chronic Pain Centre of Excellence and HHS)
15. RECOUP (HHS and UHN/TGH)* NEW
16. Intensive Program Patient Assessments and Comments on the Impact of COVID-19 (HHS)* NEW

Upcoming Research:

1. Genicular Nerve Ablation Study (HHS)
2. Lumbar Transforaminal Epidural Steroid Injections Retrospective and Prospective Study (HHS)
3. Pain Self Efficacy: Discriminant Validity and Clinically Significant Cutoffs (HHS)

The research we do was made possible thanks to all our sponsors!

Inside This Issue:

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www.hamiltonhealthsciences.ca/areas-of-care/medicine-and-complex-care/clinics/pain-clinic/

We're part of the CPN! To learn more, visit: cpn.mcmaster.ca/

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Clinical Research Network

The Clinical Research Network (CRN) consists of 15 university-affiliated pain centres across Canada. These sites support and generate both pediatric and adult research.

To learn more about the CPN and the CRN visit https://cpn.mcmaster.ca/what-we-do/clinical-research-network.

University of British Columbia

Local PI: Aaron McInnes
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Kingston Health Sciences Centre

Local PI: Scott Duggan
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Hamilton Health Sciences

Local PI: Ramesh Zacharias
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Université Laval

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University of Manitoba

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Ottawa Health Research Institute

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Université Sherbrooke

Local PI: Yannick Tousignant-Laflamme
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University of Saskatchewan

Local PI: Krista Baerg
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Sick Kids Hospital

Local PI: Jennifer Stinson
Coordinator: Lauren Harris

Alberta Children's Health Research Institute

Local PIs: Melanie Noel, Nivez Rasic & Tiffany Rice
Coordinator: Kendra Mueri

Adult & Pediatric Sites

University of Alberta

Local PIs: Saifee Rashiq & Bruce Dick
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Dalhousie University

Local PIs: Allen Finley & Mary Lynch
Coordinators: Jillian Banfield & Stephanie Blackman

Research Databases

On the first page of this research newsletter, you will note we have the following 5 program research databases currently ongoing.

1. Pain Management Program Research Database (HHS)
2. Intensive Program Research Database (HHS)
3. Pelvic Pain Program Research Database (HHS)
4. Fibromyalgia Program Research Database (HHS)
5. Young Adult Program Research Database (HHS)

Each of our research databases comprise of outcome data collected on REDCap from the following pain programs respectively:

- Intensive Program
- Pain Management Program
- Pelvic Pain Program
- Fibromyalgia Program
- Young Adult Pain Program

REDCap
Research Electronic Data Capture

Self-reported outcome measures are collected at up to 4 timepoints (initial assessment, admission, discharge, and follow-ups) and allow us to increase our understanding of patient response to treatment and assist with ongoing program development, quality improvement, patient assessment, and research.

While we ask that several questionnaires be completed as part of patient participation in our pain management programs, the use of this data for research purposes is optional!

Chronic Pain Research

Along with the research databases described above, we actively conduct research on various aspects of chronic pain. The next 2 pages of this research newsletter provides an overview of the research we currently have ongoing as well as upcoming research.

Current Research

- **DATACANN** - This is a cohort database project which provides an opportunity to collect data over time on patients who are living with CNCP and prescribed medical cannabinoids for the purpose of research. This resource will allow researchers to conduct valuable research such as: determining characteristics of CNCP using cannabinoids, monitoring, evaluation and reporting on CNCP patients using cannabinoids, identifying benefits, harms and unintended consequences, health care utilization, identifying factors associated with higher risk of poor outcome following prescription of medical cannabis, and help inform avoidance of prescribing cannabis among patients at high risk for adverse events.

  Checkout datacann.mcmaster.ca to learn more about DATACANN.

- **CUDIT-R** - This research aims to determine whether the Cannabis Use Disorder Identification Test-Revised (CUDIT-R) and the Marijuana Consequences Questionnaire (MACQ) accurately screen for cannabis use disorder compared to a structured clinical interview in a sample of patients with chronic pain who are using cannabis for medical purposes.

  Visit the Michael G. DeGroote Pain Clinic website to learn more about this study!
  https://www.hamiltonhealthsciences.ca/areas-of-care/medicine-and-complex-care/clinics/pain-clinic/

- **Waiting Room Survey** - We're conducting research looking at chronic pain patients' needs from a patient perspective. These patient waiting room surveys provide us with regional, real-time snapshots into access problems and wait times being experienced by patients with chronic pain. They will be critical in informing the creation of tailored chronic pain eConsult service in each region.

Site	Status
Manitoba – Winnipeg	9 surveys
Newfoundland and Labrador – St. John's	Not started
Ontario – Hamilton	69 surveys
Ontario – London	57 surveys
Ontario – Ottawa	33 surveys
Quebec – Montreal Pediatric Clinic	Paused, 96 surveys
Quebec – Montreal	Paused, 16 surveys

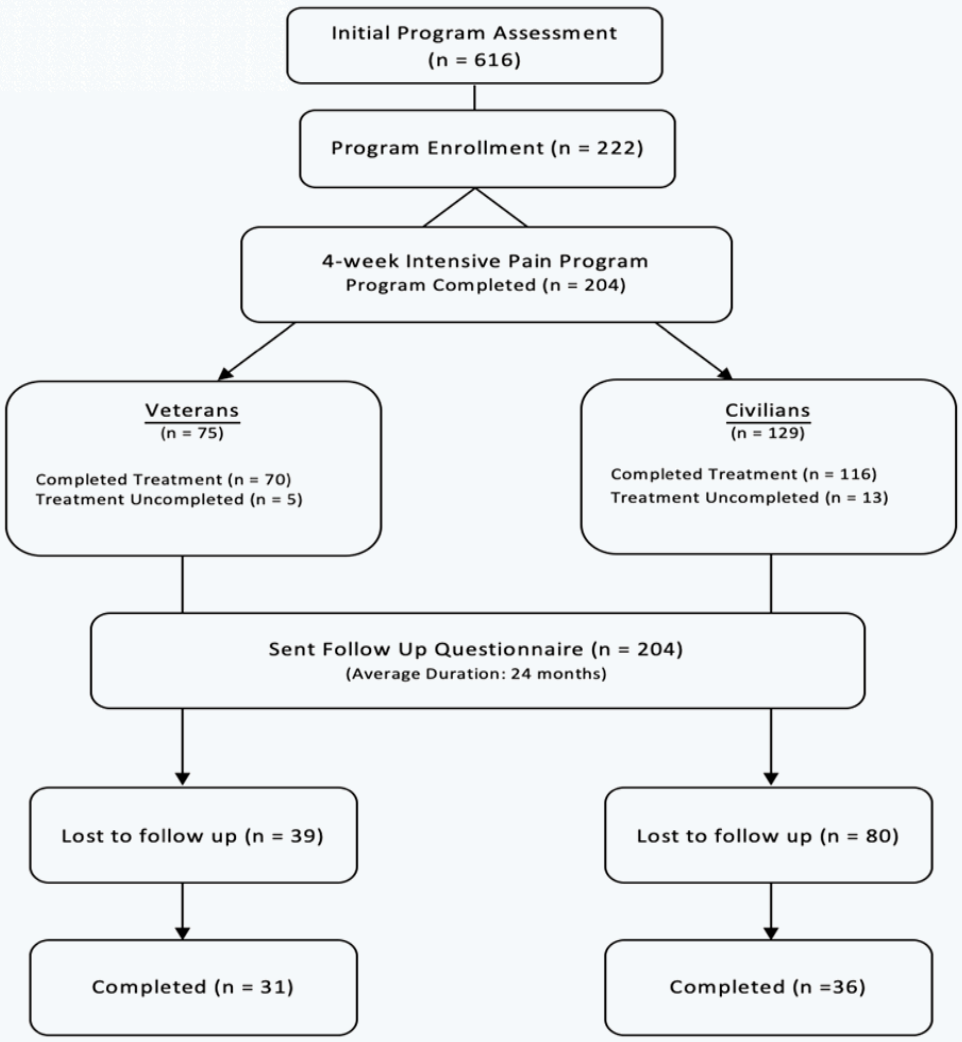
- **iCanCope -** The aim of this research is to evaluate the effectiveness of iCanCope with Pain, the first integrated smartphone and web-based program for AYA aged 15-25 years with chronic pain.

- **Retrospective Opioid Cannabis Chart Review (ROCCR) -** High usage of opioids has led to suboptimal pain outcomes, dependence and addiction/diversion, alternative medication therapy is routinely suggested and utilized. Many individuals suffering from chronic pain have either attempted a cannabis trial or are interested in supplementing with medical cannabis. The primary objective of this study is to determine the degree to which cannabis has modulated opioid consumption at 6 months after the initiation of medical cannabis in chronic non-cancer pain patients.

- **Clinic Retrospective Review -** The retrospective chart review aims to describe the sociodemographic characteristics of the clinic's patients, medical data, and clinic information (e.g., programs and treatments available, number of participants who have been involved in programs, staff compliment). The benefit of this review will be to provide knowledge to assess the socio-demographic population attending the clinic since 2015 to inform decision making about future program development at the clinic aimed at meeting the needs of the patient socio-demographic seen.

Current Research Continued

- **Intensive Follow-Up Study -** This is a follow-up outcomes study for patients who have attended the program in the last 5 years. Data have already been collected and analyzed by Dr. Hapidou and her students.



- **Intensive 6 Month Follow-Up Study -** As of last June, we have established a Virtual Chronic Pain Management Program. We are now evaluating its outcomes at both Discharge and Follow-up. Participants are invited to complete a 6 month follow-up survey and are offered $20 gift cards for their participation.

- **VECTOR** - We're doing a longitudinal database study, similar to DATACANN, on veterans who are using cannabis for medical purposes and monitoring the benefits and risks associated with usage as it pertains to their pain and mental health comorbidities. This research will help identify the primary indication for cannabis use amongst veterans, identify the types, forms, and quantities of cannabis used for funded/non-funded indication, and identify which drugs/doses, non-pharmaceutical treatments change with cannabis use.

NEW Current Research

- **RECOUP** - Patients with chronic pain are often prescribed long-term opioid therapy. Considering the growing concerns on the risks of opioid use, The Toronto General Hospital (TGH) created the world's first multidisciplinary perioperative Transitional Pain Service Program (TPSP). The TPSP enables targeted, mechanism-based, treatment innovations aimed at safe weaning of opioids for patients on opioids after major surgery. Adults aged 18 and older who are taking 20 - 200 mg of preoperative oral morphine equivalents daily and undergoing any type of surgical procedure (except palliative care procedures and organ transplantation) will be recruited. Participants will be randomized into either the control or intervention group. Both groups consist of follow-ups at various timepoints for 1 year. Participants in the control group will complete follow-up questionnaires on pain intensity, BPI, PHQ-9, PCS, and patient satisfaction. Participants in the intervention group will get access to visits with a pain specialist who will help with the weaning of opioids and pain psychologist who will provide pain education as well as completing follow-up questionnaires.

- **Intensive Program Patient Assessments and Comments on the Impact of COVID-19 -** This is a qualitative study where comments collected as part of patient assessments for the Intensive Program are being analyzed so we can identify any emerging themes.

Upcoming Research

- **Genicular Nerve Ablation -** We will be starting a prospective study on patients with persistent ipsilateral post-operative knee pain for 3 months or longer after a total knee arthroplasty and are considered for genicular nerve ablation. This is a 2-step procedure where the patient is given a diagnostic block under fluoroscopy or ultrasound guidance where 1 mL of lidocaine is injected and if the patient reports a ≥50% reduction in baseline pain for a minimum of 24 hours following the injection, the patient can undergo a genicular nerve ablation. Genicular nerve ablation heats up and disrupts the 3 sensory nerves primarily responsible for transmitting knee pain from an arthritic joint to the central nervous system by using a fluoroscope. The primary objective of this study is to determine if radiofrequency ablation of the genicular nerves will reduce the pain score on Visual Analog Scale (VAS) at 3, 6 and 12 months following the procedure. This study also evaluates the patient's functional mobility, gait, activities of daily living, general health, pain, quality of life, and mood along with prescription medication (e.g., opioids Morphine Equivalent, anti-inflammatories used) used by the patient. These outcomes are measured through the VAS, WOMAC, and PHQ-9 surveys which are administered at 3, 6, and 12 months following the genicular nerve ablation.

- **Lumbar Transforaminal Epidural Steroid Injections Chart Review and Prospective Study** - We will also be doing a chart review and prospective study on patients who had received and will be receiving lumbar transforaminal epidural steroid injections. This injection is commonly given to patients with spinal stenosis. The aim of the study is to identify predictive factors that may improve the management of patients with spinal stenosis. Some of the objectives of the study are to examine whether corticosteroid injections are beneficial for patients with spinal stenosis and whether the degree of stenosis is associated with benefits seen from the procedure.

- **Pain Self Efficacy: Discriminant Validity and Clinically Significant Cutoffs** - A retrospective analysis of previously completed PSEQ questionnaires will be used to establish clinically significant cutoffs of the PSEQ.

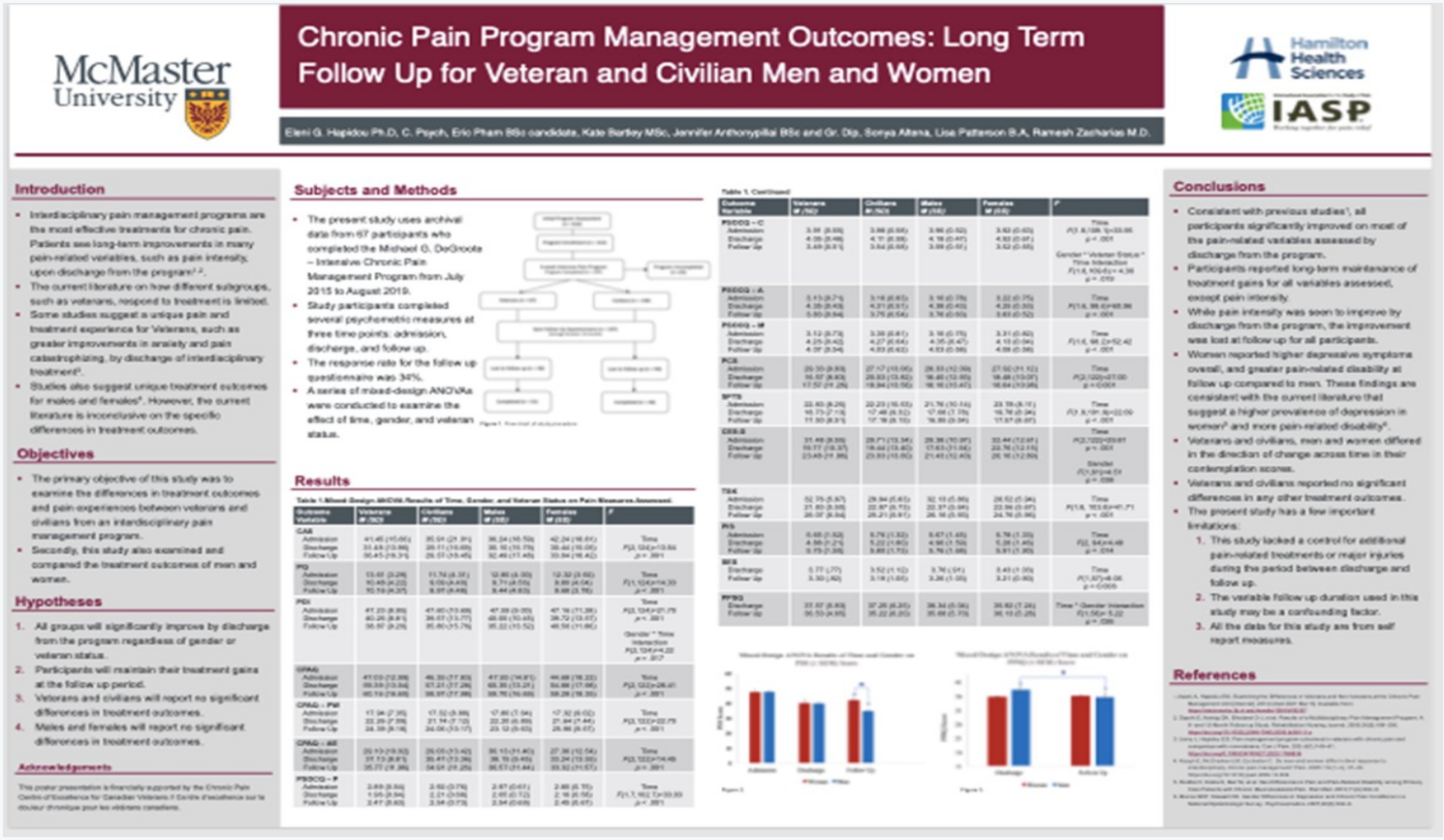
CPS Presentations and Recent Submissions:

Posters presented at the Annual Conference of the Canadian Pain Society (Virtual), April 28-30 by Hapidou et al.

1. Rocha-Martinez, M., Hapidou, EG, Fransson, A. & Pham, E. Kinesiophobia and its relation to activity limitation after multidisciplinary rehabilitation in patients with chronic pain.
2. Hapidou, EG, Pham, E., Bartley, K., Anthonypillai, J. Altena, S., Patterson, L., & Zacharias, R. CHRONIC PAIN PROGRAM MANAGEMENT OUTCOMES: LONG TERM FOLLOW-UP FOR VETERANS AND CIVILIANS.
3. Hanna, C., Hapidou, EG, Pham, E., Bord debono, V., Anthonypillai, J., Altena, S., Patterson, L., & Zacharias, R. QUALITATIVE ANALYSIS OF LONG-TERM CHRONIC PAIN PROGRAM MANAGEMENT OUTCOMES: VETERANS AND CIVILIANS.
4. Huang, T (A) & Hapidou, EG. Therapeutic uses of Yoga in Chronic Pain.

All abstracts are also published in the Canadian Journal of Pain, CPS 2021 Conference Issue.

Poster #2 (depicted below) was also presented at the IASP Virtual World Congress (2021).



Poster available at: https://iaspvirtualcongress.evareg.com/poster/836319-long-term-follow-up-outcomes-study-in-an-intensive-chronic-pain-program

New Publications/Posters:

- **Hapidou, E. G., Pham, E., Bartley, K., Anthonypillai, J., Altena, S., Patterson, L., & Zacharias, R. (2021). Chronic pain program management outcomes: Long-term follow-up for Veterans and civilians. Journal of Military, Veteran and Family Health, e20210054. https://doi.org/10.3138/jmvfh-2021-0054**
- **Kithulegoda, N., Strachan, P. H., Zacharias, R., Buckley, N., & Busse, J. W. (2021). Exploring Canadian Veterans' priorities regarding chronic pain research: A qualitative study. Journal of Military, Veteran and Family Health, e20210045. https://doi.org/10.3138/jmvfh-2021-0045**
- **Pollock M., Villabroza P., De Azevedo J., Groenestege D., Anthonypillai J., Maida E., and Djuric V. Predicting the Effectiveness of Lumbar Transforaminal Epidural Steroid Injections (LTESI) for Spinal Stenosis: An Exploratory Retrospective and Prospective Study. Poster presented at the Spine Intervention Society's Annual Scientific Meeting on August 18-21, 2021.**

Accepted:

- **Hapidou, EG and Huang, TQ. "East meets West in Therapeutic Approaches to the Management of Chronic Pain". Accepted. International Journal of Yoga.**

Accepted and Under the Final Revision Process:

- **Hapidou, EG, Hanna, C., Bord deBono, Anthonypillai, J., Pham, E., Altena, S., Patterson, L. & Zacharias, R."Qualitative Analysis of Long-Term Chronic Pain Program Management Outcomes: Veterans and Civilians". Under review. Journal of Military, Veteran and Family Health.**

Publications in 2020:

- **Mailis, A., Tepperman, P.S. & Hapidou, E.G. Chronic Pain: Evolution of Clinical Definitions and Implications for Practice. Psychol. Inj. and Law (2020). https://doi.org/10.1007/s12207-020-09391-w**
- **Katz, L., Fransson, A., & Patterson, L. (2020). The development and efficacy of an interdisciplinary chronic pelvic pain program . Canadian Urological Association Journal, 15(6). https://doi.org/10.5489/cuaj.6842**
- **James M. Thompson, Alexandra Heber, Ramesh Zacharias, Markus Besemann, Gaurav Gupta, Eleni Hapidou, Norm Buckley, MWO Daniel Lamoureux & Kimberly Begley (2020) Out of the Shadows: Chronic Pain in Canadian Armed Forces Veterans – Proceedings of a Workshop at the 2019 Forum of the Canadian Institute for Military and Veteran Health Research, Canadian Journal of Pain, DOI: 10.1080/24740527.2020.1796479**
- **Jane Jomy & Eleni G. Hapidou (2020) Pain Management Program Outcomes in Veterans with Chronic Pain & Comparison with Nonveterans, Canadian Journal of Pain, DOI: 10.1080/24740527.2020.1768836**
- **Rocha M, Hapidou E.G. Letter to the Editor RE: "Further examination of the pain stages of change questionnaires among chronic low back pain patients: long-term predictive validity of pretreatment and posttreatment change scores and stability of posttreatment scores". Clin J Pain. 2020; 36:142.**
- **Parihar V., Katz L., Siyam M.A., Rogers A., Patterson L. & R. Zacharias. Mandatory pharmacist-led education session for patients seeking medical cannabis. Pharmacy Practice. November 2020. https://doi.org/10.18549/PharmPract.2020.4.2088**
- **Parihar V., Rogers A., Blain A.M., Zacharias R., Patterson L. & M.A. Siyam. Reduction in Tamoxifen Metabolites Endoxifen and N-desmethyltamoxifen With Chronic Administration of Low Dose Cannabidiol: A CYP3A4 and CYP2D6 Drug Interaction. November 2020. https://doi.org/10.1177/0897190020972208**
- **Young, G., Foote, W.E., Kerig, P.K. et al. Introducing Psychological Injury and Law. Psychol. Inj. and Law 13, 452–463 (2020). https://doi.org/10.1007/s12207-020-09396-5.**

Contact Us

If you are interested in participating in research or if you have any questions please contact our Research Coordinator, Jennifer Anthonypillai via email anthonypij@hhsc.ca or telephone 905-521-2100 ext. 74279.