

# Resident Project Day

Abstract Collection

Department of  
Family Medicine

June 21<sup>st</sup>, 2023



DEPARTMENT OF  
FAMILY MEDICINE



## Overall Learning Objectives:

By the end of this program and within each session, participants will be able to:

1. Identify research and scholarly work in Family Medicine.
2. Acquire primary care knowledge through research.
3. Support public recognition of resident projects.
4. Assess resident projects through feedback evaluations.
5. Participate in discussions about resident projects.

## CFPC (Mainpro+ Certification)

This one-credit-per-hour Group Learning program meets the certification criteria of the College of Family Physicians of Canada and has been certified by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University for up to 3.25 Mainpro+ credits. Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

## Non-Financial Sponsorship Statement

This program has received no financial support.

25% of this program is dedicated to participant interaction.

## Resident Project Day 2023

June 21<sup>st</sup>, 2023

9:30 a.m. – 3:00 p.m.

Western Center for Public Health and Family Medicine (WCPHFM)

9:00 a.m. – 9:30 a.m.	<b>Registration</b>
9:30 a.m. – 10:00 a.m.	<p><b>Opening Remarks</b></p> <p>Dr. Julie Copeland, Postgraduate Program Director</p> <p>Dr. Scott McKay, Chair</p> <p>Dr. Amanda Terry, Centre for Studies in Family Medicine</p>
10:00 a.m. – 10:50 a.m.	<p><b>Concurrent lightning oral presentations</b> (Session A in Room 1120, Session B in Room 1150)</p>
10:50 a.m. – 11:00 a.m.	<b>Break</b>
11:00 a.m. – 11:50 p.m.	<p><b>Concurrent lightning oral presentations</b> (Session D in Room 1120, Session D in Room 1150)</p>
11:50 p.m. – 12:50 p.m.	<b>Lunch</b>
12:50 p.m. – 1:40 p.m.	<p><b>Concurrent lightning oral presentations</b> (Session E in Room 1120, Session F in Room 1150)</p>
1:40 p.m. – 2:00 p.m.	<b>Break</b>
2:00 p.m. – 2:40 p.m.	<p><b>Concurrent lightning oral presentations</b> (Session G in Room 1120, Session H in Room 1150)</p>
2:40 p.m. – 3:00 p.m.	<b>Closing Remarks</b>

## Lightning Oral Presentations – Concurrent Rooms 1120 and 1150

### Room 1120: Session A

Time	Presenter	Presentation
10:00 am	Dr. Jessie Grewal	Evaluating the efficacy and challenges of an organized mentorship program at the Western University Family Medicine - Emergency Medicine enhanced skills residency program.
10:10 am	Dr. John Cameron	Age over 70 oncology admission study
10:20 am	Dr. Delia Dragomir	Prevalence of renal impairment and appropriate dose adjustment among senior patients at two tertiary centre emergency departments in Southwestern Ontario
10:30 am	Dr. Aleksa Zubic	Effect of virtual simulation based teaching on regional and rural family medicine residents' comfort with acute care scenarios
10:40 am	Dr. Shantelle Reid	Sport Medicine Radiology Case Rounds

### Room 1150: Session B

Time	Presenter	Presentation
10:00 am	Dr. Azeez Akindale, Dr. Kamyah Mahajan, Dr. Marian Mikhael, and Dr. Jillian Ross	Interventions to improve number of patients completing cervical cancer screening at VFMC
10:10 am	Dr. Pamela Czart, Dr. Courtney Francis, Dr. Julie Graham, Dr. Matthew Ladda, and Dr. Jessica Mammoliti	Increasing uptake of recombinant herpes zoster vaccine in adults age 65-70 in a single academic family medicine practice in London, Ontario
10:20 am	Dr. Alan Tan	Appraising the Top Evidence in Emergency Medicine 2 (A-TEEM 2)
10:30 am	Dr. Hasan Baassiri, Dr. Ivana Burcul, Dr. Lisa Klotz, and Dr. Katie McLaughlin	Reduction of polypharmacy in elderly patients
10:40 am	Dr. Vivian Tia, Dr. Timothy Varghese, and Dr. Shifaz Veettil	Increasing bone mineral density screening in men at VFMC



## Session A

Dr. Jessie Grewal – PGY3 Emergency Medicine

**Evaluating the efficacy and challenges of an organized mentorship program at the Western University Family Medicine - Emergency Medicine enhanced skills residency program.**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** It is challenging to establish effective mentorship programs in family medicine enhanced skills training programs due to their short duration. The enhanced skills program in emergency medicine at Western University established a novel mentorship program in 2015 where residents are assigned mentors from three categories: clinical, research and non-clinical.

**METHODS:** We conducted surveys of mentors and mentees who participated in the program from 2015-2022 to report feedback quantitatively and qualitatively on their experiences.

**RESULTS:** Twenty-two (29.7%) mentors and 13 (18%) mentees completed the surveys. Seventy percent of mentors and 44.4% of mentees agreed that the program adds value to resident training. Sixty percent of mentors reported that mentorship adds value to their professional satisfaction. More mentees were satisfied with clinical (44.4%) and research (55.5%) mentorship than non-clinical mentorship (33.4%). Increasing time spent between mentors and mentees and allowing mentees to select their own mentors were identified as areas of improvement.

**CONCLUSIONS:** Our mentorship program adds value to resident training and professional satisfaction of mentors. Implementation of feedback from this study may further improve satisfaction with our program. Similar mentorship programs may be established at other family medicine enhanced skills programs to enhance resident training.

Dr. John Cameron – PGY3 Palliative Care

**Age Over 70 Oncology Admission Study**

Faculty Lead: Dr. Patricia Valcke

Project Type: Research

Palliative Care (PC) has become increasingly accepted as essential in the management of patients with advanced malignancies. In their most recent guidelines, the American Society of Clinical Oncology (ASCO) has placed an emphasis on early involvement of PC in those with advanced malignancy. PC improves quality of life, reduces symptoms, and reduces costs of care. Novel anticancer therapies, such as immunotherapy and targeted therapies pose a challenge to accurate prognostication of cancer patients, resulting in later referrals to PC. Despite the main risk factor for cancer being advanced age, the elderly are under-represented oncology trials. There is conflicting evidence as to whether older individuals are as likely to receive PC as their younger counterparts. Despite ASCO recommendations, only 40% of patients with advanced malignancy are involved with PC prior to death. Triggered referrals have been proposed as one method by which to increase PC consultations. Despite evidence to support PC involvement in cancer patients and interest in development of triggered referrals, there is a paucity of literature surrounding PC referral patterns. By means of a retrospective chart review, we aim to identify which characteristics are associated with PC referral in elderly patients with malignancy admitted to the Victoria Hospital inpatient Oncology unit. This study is currently pending ethics approval, with the goal that it will guide future tailored referral triggers at our institution and beyond to improve care and access to PC in this growing and vulnerable population.

Dr. Delia Dragomir – PGY3 Emergency Medicine

**Prevalence of Renal Impairment and Appropriate Dose Adjustment Among Senior Patients at Two Tertiary Centre Emergency Departments in Southwestern Ontario**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**BACKGROUND AND OBJECTIVES:** Decreased kidney function results in decreased elimination of many medications and active metabolites, which may have adverse effects secondary to accumulation. Thus, it is important to adjust doses of such medications for patients with renal impairment. This is important when considering the prevalence of acute kidney injury (AKI) and chronic kidney disease (CKD) among patients over the age of 65 presenting to urban emergency departments in Southwestern Ontario.

**DESIGN:** We conducted a retrospective chart review of 601 randomly sampled emergency department encounters of patients over 65 years old during the 2021 calendar year from two tertiary centres in Southwestern Ontario. The estimated glomerular filtration rate and creatinine clearance were calculated to determine renal impairment and estimate appropriate dose adjustments. The proportion of encounters with renal impairment and inappropriate dose adjustment of prescribed medications were calculated.

**ANTICIPATED RESULTS:** A similar study conducted in a regional emergency department by Dragomir et al (2022) found that patients in 42.3% (95% CI: 36.2%, 48.3%) of encounters had renal impairment. Of these patients, 25% had  $\geq 1$  medications requiring renal adjustment. Of those, 44% (95% CI: 25.7%, 63.1%) of encounters had  $\geq 1$  medications incorrectly adjusted. Given the higher prevalence of chronic kidney disease among rural populations, we anticipate that the proportion of encounters with renal impairment will be less in this study. Further, while the previous study looked at all medications prescribed during the emergency department visit, this study will only be considering prescribed medications upon discharge home from the emergency department. Anticipating that patients who are not admitted to hospital will have a lower acute illness burden, compared to admitted patients, we anticipate that the prevalence of renal impairment amongst this population will be less. Among encounters in which medications required renal adjustment, we anticipate a similar proportion of encounters in which medications were inappropriately adjusted

The project is currently in the data extraction phase.

Dr. Aleksa Zubic – Mount Brydges

**Effect of Virtual Simulation Based Teaching on Regional and Rural Family Medicine Residents' Comfort with Acute Care Scenarios**

Faculty Lead: Dr. Kyle Carter

Project Type: Research

Family medicine residencies produce almost half of all new physicians entering practice each year. Rural areas continue to struggle to staff their clinics and hospitals, and trainees may be hesitant to undertake care roles in these communities due to the elevated care needs required, especially caring for the critically ill. Residents in the Rural and Regional programs at Western are expected to deliver care in office, inpatient and emergency settings, and thorough preparation to manage critically ill patients is a strong asset. In this study we aim to investigate whether virtually delivered low fidelity simulation can serve as a good medium for bridging knowledge gaps and improving comfort in traditionally high stress high stakes settings. While we are still awaiting results, we believe this study will shed light on the need and feasibility of implementing virtual SIM as an effective teaching adjunct to family medicine residency programs.

Dr. Shantelle Reid – PGY3 Sports Medicine

### **Sport Medicine Radiology Case Rounds**

Faculty Lead: Dr. Graham Briscoe

Project Type: Research

Presentation designed to teach important radiographic findings to future Sport Medicine fellows. The cases are important diagnoses that should not be missed and are meant to help familiarize residents with the associated radiographic findings. Each case includes appropriate x-ray views, further imaging such as CT, MRI, or bone scan where appropriate, and a brief summary of the associated condition. The presentation also includes information regarding appropriate x-ray views for each joint discussed, as well as how the patient should be properly positioned to obtain these views.

## Session B

Dr. Azeez Akindale, Dr. Kamyah Mahajan, Dr. Marian Mikhael, and Dr. Jillian Ross – Victoria Family Medical Centre

### **Interventions to improve number of patients completing cervical cancer screening at VFMC**

Faculty Lead: Dr. Christina Cookson

Project Type: Quality Improvement

In 2022, it is estimated that 1450 people with a cervix in Canada will be diagnosed with cervical cancer; an estimated 380 people will die from it. Incidence rates of cervical cancer have decreased greatly over the past few decades, largely due to the widespread use of screening through Pap smear tests. Pap smears detect abnormal cells in the cervix before they become cancerous. During the COVID-19 pandemic, Cancer Care Ontario suspended all cancer screening programs as they were deemed non-essential. The number of cervical cancer screening tests in Ontario between March and August of 2020 fell by 63.8% when compared to the same time frame in 2019. The aim of our quality improvement project was to reduce the number of patients who are overdue for cervical cancer screening at VFMC. Our interventions included reminder posters in clinic rooms, informational pamphlets about cervical cancer screening and calling patients directly to book appointments for Pap tests. Our results show that we were able to decrease the number of patients overdue for Pap testing at VFMC from 13.5% to 12.1% over the course of four months. The poster in clinic rooms generated the most discussion and was the most time and cost-effective intervention in reducing the number of patients overdue for Pap testing. However, all three interventions led to patients completing Pap tests. The interventions proposed may be useful in ensuring cancer screening remains up to date for all patients, with options for in person and virtual care.

Dr. Pamela Czart, Dr. Courtney Francis, Dr. Julie Graham, Dr. Matthew Ladda, and Dr. Jessica Mammoliti  
– St. Joseph's Family Medical Centre

### **Increasing Uptake of Recombinant Herpes Zoster Vaccine in Adults Age 65-70 in a Single Academic Family Medicine Practice in London, Ontario**

Faculty Lead: Dr. Saadia Jan

Project Type: Quality Improvement

Herpes zoster is an infection caused by reactivation of the varicella zoster virus that typically presents as a painful and blistering rash and can be associated with several complications. Shingrix is a recombinant vaccine approved in Canada and is recommended for the prevention of herpes zoster in adults aged 50 and over. In Ontario, the Ministry of Health publicly funds the two-dose series of Shingrix for adults aged 65-70 who have not previously been immunized against herpes zoster. Given this short window of eligibility for public funding and the benefit immunization provides, we led a quality improvement initiative to increase immunization rates in an academic family physician's roster. A total of 128 patients aged 65-70 were identified, and 21 patients were immunized against herpes zoster. Our goal was to increase the number of immunized patients by 32, the number needed to prevent one episode of herpes zoster over a 3-year period. Our first PDSA cycle involved placing reminders in each eligible patient's chart to prompt clinicians to offer immunization. This cycle ran from November 2022 to January 2023 and resulted in additional 6 patients receiving at least one dose of Shingrix. The second PDSA cycle involved a targeted education presentation to family health team residents. This resulted in an additional 15 patients immunized. Balance measures, as measured qualitatively through interview, were unaffected. Though not at target by our projects conclusion, a longer project duration would likely have resulted in achievement in our target without significantly impacting balance measures.

Dr. Alan Tan – PGY3 Emergency Medicine

### **Appraising the Top Evidence in Emergency Medicine 2 (A-TEEM 2)**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** The competency to appraise and apply evidence in emergency medicine (EM) practice is not only a requirement of EM residency programs based on the CanMEDS Framework, but also important for high quality patient care. Given EM's large scope of knowledge, the challenge is for junior residents to have a starting point in acquiring evidence-based knowledge. We have recently conducted a study where we formulated a list of top papers in EM for junior Canadian EM trainees developed through expert consensus using a modified Delphi approach. This study hopes to revisit and update the list of sentinel papers with the same methodology.

**METHODS:** Participants were recruited from each of the Royal College of Physicians and Surgeons of Canada specialist EM programs and the College of Family Physicians EM programs across the country as experts on the consensus panel. Furthermore, residents and emergency physicians from FRCP-EM and CCFP-EM programs across Canada will be recruited through online techniques. The study will consist of three study rounds conducted through email survey. During the first round, participants will individually list top papers relevant to EM. The subsequent rounds consist of ranking the paper identified in the first round with an opportunity by each respondent to adjust ranking based on group response. We will create a final list of papers that include those that are able to achieve consensus of  $\geq 70\%$ .

**RESULTS:** Round 1 of the data collection phases is currently underway. Due to the nature of the project being a Delphi survey, preliminary data cannot be presented. The result will be presented in the form of a final list of top papers in EM based on expert consensus.

**CONCLUSION:** The conclusion to this study is pending completion of all phases of the Delphi Survey. The conclusion drawn from this study can be used as an educational resource for junior residents as they transition into practice.



Dr. Hasan Baassiri, Dr. Ivana Burcul, Dr. Lisa Klotz, and Dr. Katie McLaughlin – St. Joseph's Family Medical Centre

### **Reduction of Polypharmacy in Elderly Patients**

Faculty Lead: Dr. Eric Wong

Project Type: Quality Improvement

A scenario commonly encountered in the clinical setting is that of elderly patients on numerous medications, leading to potential medication side effects and prescribing cascades. To reduce polypharmacy in elderly outpatients, we designed a Quality Improvement trial in which we referred patients  $\geq 65$  years of age or older and on at least 5 medications for medication review by a Pharmacist. Our outcome measure was a reduction in the number of unnecessary medications in eligible patients referred for review, with a process measure of the percentage of referred patients whose medication reviews were completed. We completed two PDSA cycles, with the following results: In PDSA 1 and 2, an average of 3.5 and 4.5 medications were reduced, respectively, with 75% and 80% of respective patients having their medication reviews completed. We endeavored to improve outcome numbers between PDSA 1 and 2 by including more Pharmacists, expanding the project to all Physicians in our clinic, preparing a template referral letter, and providing verbal and visual project reminders to colleagues. We believe the low number of completed referrals and medication reviews was secondary to time constraints placed on colleagues and Pharmacists by high clinical workloads, as well as lengthy inherent turn-around times to obtain results. These barriers would be difficult to address in future PDSA cycles. While reduction of polypharmacy in the elderly population remains an important endeavor, we do not believe that reflexive referral of such patients for medication review by Pharmacists is feasible in our local clinical environment.

Dr. Vivian Tia, Dr. Timothy Varghese, and Dr. Shifaz Veettil – Victoria Family Medical Centre

### **Increasing Bone Mineral Density Screening in Men at VFMC**

Faculty Lead: Dr. Christina Cookson

Project Type: Quality Improvement

Osteoporosis is prevalent in the elderly and results in increased morbidity and mortality. Clinical guidelines have recommended bone mineral density (BMD) screening in all men and women 65 years of age or greater. Osteoporosis is commonly thought to be a disease that affects postmenopausal women; however, it has been shown to be substantially underdiagnosed and undertreated in men. Early recognition and management of osteoporosis in these elderly men can help prevent significant adverse events. Through chart review, it was found that only 54% of men 65 and over have undergone BMD screening at our primary care clinic. A quality improvement project was implemented with the outcome measure goal of increasing BMD screening referrals rates in men 65 years of age and over by 20% at our clinic. Through several PDSA cycles including information posters around the clinic for patients and educational teaching handouts for residents, our BMD study referral rates increased by about 3%. Overall, the BMD screening rates only increased by a small percentage in our study, some confounding factors, such as resident physicians taking leaves of absences and our older male patients not coming in for visits, could have negatively contributed to this result. Further changes can be considered and implemented to help increase the BMD screening rate of men over 65 at our centre.

Room 1120: Session C

Time	Presenter	Presentation
11:00 am	Dr. Adam Devon and Dr. Ryan Vamos	Developing a National Resident Symposium on sport and exercise medicine in partnership with the Canadian Academy of Sport and Exercise Medicine (CASEM)
11:10 am	Dr. Maryam Zaree	Initiation of suboxone for opioid use disorder in the emergency departments at LHSC
11:20 pm	Dr. Jordon Ho and Dr. Laura McCracken	Improvements in performance of medication reconciliation at Victoria Family Medical Centre
11:30 am	Dr. Brandon Belbeck	Training for Rural Emergency Medicine: is CCFP-EM fellowship benefiting rural emergency medicine departments?
11:40 am	Dr. Jordan Berry, Dr. Laura Caracas, Dr. Jieli Lu, and Dr. Natan Veinberg	Improving residents' comfort with sleep hygiene discussions

Room 1150: Session D

Time	Presenter	Presentation
11:00 am	Dr. Jane Wang	Comparison of two N-acetylcysteine (NAC) protocols at LHSC for duration of hospitalization.
11:10 am	Dr. Jonathon Borg, Dr. Michelle Lepitre, and Dr. Aaron Regis	Utilizing heart failure flowsheets at a rural family medicine clinic in Southwestern Ontario
11:20 am	Dr. Jagpreet Kaler, Dr. Corey Parent, Dr. Hassan Shahzad, Dr. Akash Verma, and Dr. Jarrod Zytner	Increasing the rate of abdominal aortic aneurysm (AAA) screening at Border City FHO
11:30 am	Dr. Marcus Pieterman	Training of Canadian family medicine residents for POCUS screening of AAAs: A Feasibility Study
11:40 am	Dr. Nora Ghallab, Dr. Michelle Liu, Dr. Navreet Ubhi, and Dr. Asma Zia	Improving abdominal aortic aneurysm screening rates at St. Joseph's Family Medical Centre in London, Ontario

## Session C

**Dr. Adam Devon and Dr. Ryan Vamos – PGY3 Sports Medicine**

**Developing a National Resident Symposium on Sport and Exercise Medicine in Partnership with the Canadian Academy of Sport and Exercise Medicine (CASEM)**

Faculty Lead: Dr. Graham Briscoe

Project Type: Academic/Leadership Initiative

Family Medicine Enhanced skills programs provide a route for family physicians to distinguish themselves as specialized experts within the field of family medicine in their local and national communities. Developing and delivering educational events and presentations is a valuable part of this role. We worked with executive members of the Canadian Academy of Sport and Exercise Medicine (CASEM) to develop a resident-led symposium that was delivered as a half day pre-conference event before the annual national CASEM conference March 2023. The symposium was a new initiative aimed at providing learners with an opportunity to develop and deliver academic PowerPoint presentations at a CASEM-endorsed national event. The theme was “Activity Across the Lifespan,” which highlighted age-stratified topics relevant to sport and activity and attempted to highlight the importance of healthy exercise in the context of the entire lifespan. The symposium also provided a platform for collaboration and networking with fellow learners across the country, and with CASEM leadership and board members. The success of the symposium has led to its endorsement by CASEM representatives to run again in future years, hopefully providing future trainees the opportunity to develop presentation skills, and gain skills relevant for planning and implementing educational symposiums. Future symposiums will continue to foster a culture of academic excellence and promote the development of scholarly activities among postgraduate learners within the CASEM community. This resident-led initiative has demonstrated the importance of providing learners with opportunities to engage in academic presentations and leadership opportunities.

**Dr. Maryam Zaree – PGY3 Emergency Medicine**

**Initiation of Suboxone for Opioid Use Disorder in the Emergency Departments at LHSC**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** Opioid use disorders are a frequent presenting complaint to the ED. CAEP guidelines as of 2020 recommend offering buprenorphine/ naloxone (suboxone) in the ED as treatment for those that meet the criteria for opioid use disorder (OUD). This study determines how often suboxone is prescribed to patients with opioid use disorder who present to London Health Sciences Centre (LHSC).

**METHODS:** A retrospective chart review was completed on patients who presented to LHSC EDs from January 1 to December 31, 2021. Inclusion criteria was opioid related ICD diagnostic codes, urine drug testing positive for opioids if available, opioid use disorder as determined from charting, and age over 16 years old. Exclusion criteria was hypersensitivity to buprenorphine or naloxone, current opioid use disorder treatment, acute alcohol or benzodiazepine intoxication/ withdrawal, severe liver disease, critically ill patients, patients admitted to hospital, patients that left prior to assessment, or inability to consent.

**RESULTS:** There were 1392 total charts identified of which 886 met the inclusion and exclusion criteria. There were 35 patients (4.0%) who received a suboxone prescription at discharge. 828 patients (97.3%) had no documented reason for not receiving a prescription at discharge.

**CONCLUSION:** Suboxone is an effective treatment for opioid use disorder; however, it is being prescribed at a very low rate to patients presenting to LHSC. This study can advocate for future prescribing of suboxone for risk mitigation of those with opioid use disorder.

Dr. Jordan Ho and Dr. Laura McCracken – Victoria Family Medical Centre

### **Improvements in Performance of Medication Reconciliation at Victoria Family Medical Centre**

Faculty Lead: Dr. Stacey Valiquet

Project Type: Quality Improvement

Maintaining an accurate medication list is important to both the patient and their care team. The project investigated the Victoria Family Medical Centre's patients electronic records for the accuracy of patient medication lists. An initial survey found that patient-facing staff at the clinic felt that inaccuracies were present and that it negatively affected their medical practice. Baseline data showed that only 38% of patients had an accurate medication list. The project sought to improve upon this. A root cause analysis was completed in the form of a fishbone diagram to generate ideas for change. The strategies implemented in the QI project were a teaching session with the pharmacist on conducting a BPMH, including a check box on the chart note to fill in if a BPMH was conducted, and having reception ask patients to bring their latest medication list to their appointment. The results of our QI project show a significant increase in the number of patients with a BPMH, up to 76% over the course of these 3 PDSA cycles. We found that education on the importance and how to conduct a BPMH was the most effective at encouraging residents to perform medication reviews. Further work should focus on encouraging patients to take ownership of their medication knowledge and how to ensure maintenance of accurate medication lists.

Dr. Brandon Belbeck – PGY3 Emergency Medicine

### **Training for Rural Emergency Medicine: Is CCFP-EM fellowship benefiting rural emergency medicine departments?**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** Majority of emergency medicine (EM) graduates from the Canadian College of Family Physicians program (CCFP-EM) practice full-time EM in urban and suburban emergency departments (ED). The purpose of this study was to determine if rural EDs are experiencing any benefit from EM trained graduates from the CCFP-EM program, and what opinions rural ED physicians have on the CCFP-EM program as it relates to low-resource environments.

**METHODS:** Using a mixed-methods study design, both a cross-sectional survey and individual physician interviews were performed. The survey was distributed to 18 rural EDs. This quantitative data was combined with individual, semi-structured interviews and iterative thematic inquiry involving 5 rural EM physicians.

**RESULTS:** Survey data found that over half of the total respondents (62.5%, n=5) feel that their ED benefits from CCFP-EM physicians and their skills learned during EM training. All respondents (100%, n=8) agree that rural ED skills are different than larger urban hospitals. Themes gathered from individual interviews include necessity for low-resource ED exposure, proficiency in transfer medicine, rural generalist discharges and follow-ups, and higher risk tolerance.

**CONCLUSION:** Majority of rural EM respondents agree that low-resource EDs represent unique challenges that the CCFP-EM program may not train graduates for. Low-resource physicians stress the importance of direct low-resource rural experience to help better train physicians in these environments, and make them more aware of the challenges faced in these EDs. These findings should be considered in order to continue to provide appropriate and comprehensive CCFP-EM training



Dr. Jordan Berry, Dr. Laura Caracas, Dr. Jielin Lu, and Dr. Natan Veinberg – Ilderton  
**Improving Residents' Comfort with Sleep Hygiene Discussions**

Faculty Lead: Dr. Daniella Keren

Project Type: Quality Improvement

Sleep concerns are frequently brought up during primary care visits, either as a separate issue or as a component of other mental health disorders. Untreated sleep disorders are detrimental for work or academic performance as well as overall quality of life. Due to significant time constraints, family physicians often miss out on the opportunity to provide education on non-pharmacologic measures to improve the quality of sleep. Our goal was to improve the resident comfort on this topic by providing written materials and resources for patients to use at home. We arranged educational seminars and handouts for residents currently training at the Middlesex Centre Family Medicine clinic. We assessed their comfort level with managing sleep disorders before and after our interventions. Our results indicate that resident comfort increased by approximately 10% during the initial 2 PDSA cycles. More research on the optimization of resident education and patient resources regarding sleep would be beneficial given the prevalence of sleep disorders in primary care. Our project demonstrated that such an initiative is both sustainable and relatively easy to implement. Additional PDSAs can explore if the sleep handouts can be added as part of the EMR and determine what kind of educational seminars on non-pharmacologic management of sleep would be most effective.

## Session D

Dr. Jane Wang – PGY3 Emergency Medicine

**Comparison of two N-acetylcysteine (NAC) protocols at LHSC for duration of hospitalization.**

**Type of project:**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** N-acetylcysteine (NAC) protocols for the treatment of acetaminophen overdose have evolved over time, with shorter durations becoming more widely accepted. In 2020, London Health Sciences Centre (LHSC) changed from a 21-hour standard protocol to an open-ended protocol, where NAC discontinuation is based on normalization of serum transaminase and acetaminophen levels. Our study aims to determine whether this newly adopted open-ended protocol leads to shorter durations of medical hospitalization compared to the previous 21-hour protocol.

**METHODS:** We conducted a retrospective chart review of patients over the age of 18 who were admitted to LHSC with acetaminophen overdose between January 2018 and July 2022. Analysis was conducted comparing the two study groups, the 21-hour standard protocol and the open-ended protocol. Patients were excluded if they received NAC outside of these two described protocols, or if there was a significant toxic co-ingestion, defined as requiring monitoring or treatment that would impact length of stay.

**RESULTS:** Thirty patients were identified in the 21-hour protocol study group and forty patients in the open-ended group. The mean length of stay was 75.87 hours for the 21-hour protocol group and 80.03 hours for the open-ended protocol group ( $p=0.393$ ). Between the two groups, there was no difference in peak transaminase levels (ALT  $p=0.643$ , AST  $p=0.913$ ) or peak acetaminophen ( $p=0.087$ ) levels.

**CONCLUSION:** At LHSC, there was no difference in duration of medical hospitalization between the current open-ended NAC protocol and the previous 21-hour protocol.

Dr. Jonathon Borg, Dr. Michelle Lepitre, and Dr. Aaron Regis – Mount Brydges

**Utilizing Heart Failure Flowsheets at a Rural Family Medicine Clinic in Southwestern Ontario**

Faculty Lead: Dr. Julie Copeland

Project Type: Quality Improvement

Forty patients (10 from each staff physician) were randomized from a selection of rostered patients with diagnoses of heart failure were selected for the QI project. A total of 27.5% of patients had completion of a heart failure flowsheet in the prior 12 months before the QI project. We measured the percentage of patients who had a heart failure flowsheet completed in the past 12 months. Two PDSA cycles were completed. The first PDSA cycle included an education session led by residents, delivered to our clinic which reviewed the flowsheet and guidelines for heart failure management and global messages in the electronic medical record (EMR) attached to each patient with heart failure. This led to an increase in one flowsheet completion during the first cycle (33% of patients). Our second PDSA cycle was more successful and involved placing physical reminders at workstations as well as tasking our nursing staff to contact patients and book them in for visits to discuss their heart failure which led to increased flowsheet completion (50% of patients). We did achieve significant change throughout our two PDSA cycles, even though we did not reach our target. Short PDSA cycles and short duration of this project were likely a factor. Our data suggests that active interventions including directly contacting patients for dedicated heart failure follow-up visits and flowsheet completion are most impactful when compared to passive interventions including EMR reminders. Overall, a multifaceted approach to schedule routine heart failure care was shown to improve uptake of the standardized heart failure flowsheet in an effort to improve care longitudinally for heart failure patients.

Dr. Jagpreet Kaler, Dr. Corey Parent, Dr. Hassan Shahzad, Dr. Akash Verma, and Dr. Jarrod Zytner

- Windsor

**Increasing the rate of abdominal aortic aneurysm (AAA) screening at Border City FHO**

Faculty Lead: Dr. Paul Ziter

Project Type: Quality Improvement

Abdominal aortic aneurysms (AAA) can be life-threatening conditions that affects a significant portion of the population, with estimates of up to 8% of men aged 65 years or older having an AAA. Screening rates for AAA in family medicine practices are often suboptimal, which reflects the need to have dedicated efforts for AAA screening. Early detection of AAA can potentially prevent complications including rupture, which can be fatal. To increase the rate of AAA screening in the Border City FHO practice of Dr. Ziter, two specific interventions were used. One intervention was the use of posters in the examination room; however, this was ultimately found to be ineffective. An alternative intervention involved emailing the patients that met the screening criteria, and was more effective in patients who would ultimately receive AAA screening. This highlights the importance of utilizing effective communication strategies to increase screening rates in family medicine practices, ultimately leading to improved patient outcomes and reduced morbidity and mortality from this condition.

Dr. Marcus Pieterman – Mount Brydges

**Training of Canadian family medicine residents for POCUS screening of AAAs: a feasibility study**

Faculty Lead: Dr. Kyle Carter

Project Type: Research

Abdominal aortic aneurysm (AAA) results from the pathological dilation of the abdominal aorta to >3 cm in diameter. The major risk of AAA is rupture, which is a catastrophic event with exceedingly high mortality rates. Screening for AAA in males aged 65-80 with abdominal ultrasound (US) is recommended by the Canadian Society of Vascular Surgery (CSVS) and effectively reduces mortality from AAA. Family physicians are in a unique position to improve uptake and efficiency of AAA screening by utilizing POCUS in the primary care setting, however most family medicine (FM) residents are not trained in its use. The implementation of a dedicated curriculum to train FM residents in the use of POCUS for AAA screening would allow FM residents to screen for AAA accurately in the family medicine clinic. We recruited males aged 65-80 as well as FM residents, provided didactic and hands-on POCUS training for FM residents and performed in-clinic AAA screening for patients prior to sending them for a formal US. Preliminary results found that there was no significant difference between aorta measurements obtained via FM resident-operated POCUS and formal US. Implementing formal POCUS training into FM residency curricula could potentially aid the efficacy and uptake of AAA screening by patients, further enhancing prevention of AAA rupture and limiting mortality associated with AAA.

Dr. Nora Ghallab, Dr. Michelle Liu, Dr. Asma Zia, and Dr. Navreet Ubhi – St. Joseph's Family Medical Centre  
**Improving Abdominal Aortic Aneurysm Screening Rates at St. Joseph's Family Medical Centre in London, Ontario**

Faculty Lead: Dr. Nelson Chan

Project Type: Quality Improvement

Abdominal aortic aneurysm (AAA) screening involves a simple, non-invasive, one-time ultrasound (US). It is recommended by the Canadian Task Force on Preventive Health Care to be offered to all men ages 65-80 to reduce morbidity and mortality due to AAA rupture. We implemented two interventions at St. Joseph's Family Medical Centre to increase AAA screening rates with a target increase of 20%; baseline screening rate at our centre was 16%. Our first intervention involved counselling patients using an educational handout on AAA screening. We increased screening rates to 43% (3 out of 7 eligible patients were given an US requisition) after 1 week of utilizing the patient education handout to counsel patients. We extended the intervention for 4 weeks and achieved a screening rate of 100% (13 out of 13 eligible patients were given an US requisition). Our second intervention involved educating residents with a PowerPoint presentation regarding AAA screening. Over the 4 weeks after the resident education session, we achieved a screening rate of 2.6% (1 out of 38 eligible patients was given an US requisition). Overall, AAA screening rates were increased past the target of 20% increase from baseline when implementing patient education handouts and counselling but did not reach the target when resident education was targeted. Patient education for screening is important in increasing screening rates and provider education is also a key factor, but would likely require repeated reminders, such as within the electronic medical record system, in order to increase screening rates.

Room 1120: Session E

Time	Presenter	Presentation
12:50 pm	Dr. Bitia Safaie and Dr. Mary Ann Zokvic	FIT testing in primary care; Impact of opportunistic counselling on screening rates
1:00 pm	Dr. Aamer Somani	Optimizing asthma management in the family practice setting
1:10 pm	Dr. Pablo Garcia, Dr. Fady Nashed, and Dr. Jaclyn Robinson	Improving abdominal aortic aneurysm screening in a rural Ontario residency practice
1:20 pm	Dr. Jason Wong	Improving primary care provider knowledge of common otolaryngology issues with clinical management pathways
1:30 pm	Dr. Alexander Presello	Mentorship status of CCFP-EM graduates from Western University

Room 1150: Session F

Time	Presenter	Presentation
12:50 pm	Dr. Michael Mallender and Dr. Riaz Karmali	Aiming to improve the care of mTBI patients in the clinical setting using an evidence-based approach
1:00 pm	Dr. Nicholas Chandna	Association of Tumor Markers (CEA and CA15-3) and Positive Biopsy in Metastatic Breast Cancer Recurrence
1:10 am	Dr. Jacob McGavin and Dr. Neil Sengupta	Factors associated with family physician follow-up 30 days post-discharge from a Canadian academic emergency department
1:20 pm	Dr. Jacob Bender and Dr. Jeremy Cavers	Assessing and improving primary care practitioners' understanding of and comfort with recommending and prescribing diabetes technology
1:30 pm	Dr. Fady Andraous, Dr. Ali Chesham Khavari, Dr. Sara Vazirian, and Dr. Bolutife Yusuf	Improving the documentation and patient education in prediabetes



## Session E

Dr. Bitu Safaie and Dr. Mary Ann Zokvic – Windsor

### **FIT testing in primary care; Impact of opportunistic counselling on screening rates**

Faculty Lead: Dr. Seema Aggarwal

Project Type: Quality Improvement

Colorectal cancer (CRC) screening has been shown to remarkably reduce the risk of CRC associated mortality. Despite this, screening effectiveness is jeopardized by factors such as test accessibility and patient compliance. With over 4 million Ontarians actively meeting CRC screening criteria, fecal immunochemical testing (FIT) offers a simple, accessible, and non-invasive alternative to traditional CRC screening with colonoscopy. The aim of our project was to increase the rate of FIT screening in a local community family medicine practice by 25% in 1 month compared to baseline. Our intervention saw all patients presenting for a resident physician appointment being opportunistically offered FIT screening regardless of appointment purpose, if deemed appropriate. Variables assessed included: feasibility for providers, impact on patient appointment satisfaction related to screening discussion, number of patients who went on to complete screening, and number of patients already on track for CRC screening. The results of our PSDA cycle showed an increased rate of FIT screening in eligible patients with opportunistic counseling, as measured by number of completed screening requisitions. No significant patient or provider associated barriers were identified. The implementation of this simple intervention does pose a conundrum to providers who are limited by appointment length, given the impracticality of conducting opportunistic counselling for every essential preventative care intervention that a given patient is eligible for. Consideration could be made to conducting opportunistic counselling on a schedule of monthly rotating preventative care topics.

Dr. Aamer Somani – Chatham

### **Optimizing Asthma Management in the Family Practice Setting**

Faculty Lead: Dr. Jaqueline Wolting

Project Type: Quality Improvement

Asthma is a reversible obstructive lung disease that is suspected to afflict hundreds of millions of individuals worldwide. In order to minimize the morbidity associated with asthma, it is imperative for patients to be placed on the most recent evidence-based treatment. According to the 2021 guidelines published by the Canadian Thoracic Society (CTS) and the Global Initiative for Asthma (GINA), there is a clear benefit to using a budesonide/ formoterol (i.e. Symbicort) inhaler for both maintenance and relief. For this reason, this QI project aimed to increase the number of the practice's adult asthmatic patients that had an active prescription for Symbicort. Over a 3-month period, a prompt was included in the "reminder" section of these patients' electronic charts to serve as a cue for us to discuss and prescribe Symbicort when we saw them in office for a visit. At the conclusion of the study, the number of patients that had a prescription for Symbicort increased by 6.7%. In theory, this will translate to a similar proportion of individuals who will see an improvement in their quality of life in the way of decreased school/ workplace absences, increased exercise tolerance and a decreased number of ED visits and hospitalizations.

Dr. Pablo Garcia, Dr. Fady Nashed, and Dr. Jaclyn Robinson – Hanover

### Improving abdominal aortic aneurysm screening in a rural Ontario residency practice

Faculty Lead: Dr. Timothy Heerema

Project Type: Quality Improvement

An abdominal aortic aneurysm (AAA) is an abnormal dilation of the abdominal aorta that is greater than or equal to 3 cm. Two major risk factors for AAA are age and male gender. As the Canadian population aged 65 and over continues to increase, the potential for AAA to negatively impact our population grows. In 2017, the Canadian Task Force for Preventative Health Care set out guidelines suggesting one-time screening for all men ages 65 to 80 years of age using abdominal ultrasound. Despite this guideline, the baseline percentage of men in this age bracket in a rural residency practice screened for AAA was only 21.9% (14/64). This project sought to increase the proportion of men ages 65 to 80 years screened for AAA. The four approaches used include an educational session of AAA screening, implementing a template to facilitate ease of ordering of abdominal ultrasound for AAA, addition of a monitoring tool in the clinic Electronic Medical Record to prompt healthcare providers to discuss screening, and finally, dedicated phone visits to discuss current screening risks and benefits. Ultimately, only the phone visits increased the proportion of men screened for AAA, yielding a final screening percentage of 45.3% (29/64). While our results suggest that intentional visits to discuss screening are the most effective way to increase the proportion of men screened, we suggest this be incorporated into the periodic health review to ensure a balance between offering screening to eligible patients and not adding additional strain to health care practitioners.

Dr. Jason Wong – PGY3 Individualized

### Improving Primary Care Provider Knowledge of Common Otolaryngology Issues with Clinical Management Pathways

Faculty Lead: Dr. Josee Paradis

Project Type: Research

Otolaryngological (ENT) concerns are common in primary care, with multiple studies within the last 50 years showing consistently that 10-25% of adult primary care presentations and up to 50% of pediatric presentations are related to ENT, and one study showing that ENT is the third most referred to specialty by Canadian Primary Care Providers (PCPs). In Canada and Southwestern Ontario, most PCPs are dissatisfied with wait-times for specialist consultation, particularly for non-urgent quality of life issues, and most PCPs agree that they would not want an ENT surgeon to be highly involved once recommendations were given for non-surgical issues. However, there is a paucity of formal ENT training in most medical school and PCP residencies, with most primary care residents and PCPs reporting that their previous training is inadequate and they would be more comfortable managing ENT issues with more education and exposure. Research shows providing ENT guidelines to PCPs can decrease unnecessary referrals, improve wait times, increase patient satisfaction, and increase PCP comfort with ENT issues. The author hypothesized that a Clinical Management Pathway (CMP), a consolidated resource summarizing evidence-based guidelines for first-line investigations and management for common ENT conditions, would be helpful for busy PCPs to quickly increase their knowledge and comfort with managing ENT issues. If this research finds CMPs helpful, similar clinical resources can be attached to referral acknowledgement letters and other notes to improve patient outcomes by prompting PCPs what management to initiate prior to specialist assessment and decrease wait-times by decreasing inappropriate referrals.

Dr. Alexander Presello – PGY3 Emergency Medicine

### **Mentorship Status of CCFP-EM Graduates from Western University**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** Mentorship has been established as an important part of the development of medical practitioners throughout their career. Mentorship may well be even more important in emergency medicine, where a large proportion of the staff tend to be junior. However, the current body of knowledge regarding mentorship in emergency medicine is incomplete. Further exploration of not only the participation of junior staff in mentoring relationships, but also what topics are discussed within them, will help to better understand and design formalized, effective mentorship opportunities in medicine.

**METHODS:** Participants were graduates of the CCFP-EM residency program at Western University from the previous five years. Participants received an email from the investigators inviting them to participate in an online survey through Qualtrics. The survey consisted of approximately 14 questions dependent upon whether the graduate had received mentorship since graduation. Question types included multiple choice, ranking and those requiring free text answers.

**RESULTS:** A total of 78% of respondent graduates from the CCFP-EM program at Western are still receiving mentorship as junior staff. Several suggestions, including improved matching of mentors and mentees and improving communication methods between mentors and mentees were made by multiple respondents.

**CONCLUSION:** While most respondents are still receiving formal mentorship as junior staff, there are several topics and suggestions by previous graduates which could be addressed to improve the subjective efficacy of the CCFP-EM mentorship program at Western University.

## Session F

Dr. Riaz Karmali and Dr. Michael Mallender – Byron Family Medical Centre

### **Aiming to improve the care of mTBI patients in the clinical setting using an evidence-based approach**

Faculty Lead: Dr. Sonny Cejic

Project Type: Quality Improvement

The prevalence of patients presenting to primary care clinics with minor traumatic brain injuries (mTBI) otherwise known as concussion is increasing. Standards of care for treating these conditions involve the utilization of a standard assessment tool (SCAT5), appropriate follow-up, and appropriate return to play guidelines. From May 2021 to May 2022, only 15% of patients at the BFMC presenting with mTBI received this standard of care. Thus, our QI project aimed to improve the care of mTBI patients at BFMC by ensuring increasing the rate that this standard of care was met. This was accomplished through the development and implementation of formal and informal concussion management education sessions given to the residents and staff of BFMC, and the implementation of a head injury management flow sheet into the clinic EMR system. After two PDSA cycles, our data reflects a significant increase in the number of mTBI patients receiving the standard of care with 57% receiving this standard after the completion of our PDSA cycles.

Dr. Nicholas Chandna – PGY3 Oncology

**Association of Tumor Markers (CEA and CA15-3) and Positive Biopsy in Metastatic Breast Cancer Recurrence**

Faculty Lead: Dr. Ana Lohmann

Project Type: Research

**PURPOSE:** Breast cancer is the most commonly diagnosed cancer in females. Furthermore, it is the second most common cause of cancer-related mortality in females. Individuals who complete treatment for breast cancer are still at risk of developing metastatic recurrence in the future, leading to morbidity and mortality. At the current time, there is no recommended surveillance test to monitor for distant recurrence. Previous studies have suggested some utility in the serum-based tumor markers CEA and CA15-3 in the management of breast cancer. In this study, we measured these tumor markers in patients with biopsy-proven distant recurrence. **METHODS:** We collected data from 49 patients with biopsy-proven distant breast cancer recurrence. CEA and CA15-3 were measured in 16 and 30 patients, respectively, within a timeframe close to the biopsy date. The tumor markers were missing for 16 patients. We calculated the sensitivity for both CEA and CA15-3. **RESULTS:** Of the 16 patients with a CEA, 6 had an elevated level. Of the 30 patients with a CA15-3, 23 had an elevated level. The sensitivity of high CEA and CA15-3 as a signal for metastatic breast cancer was 37.5% and 76.7%, respectively. **CONCLUSION:** With this limited data, CA15-3 seems to be a better marker than CEA for detecting metastatic breast cancer recurrence. These tumor markers are obtained from the serum, are non-invasive, and have the potential to aid in the diagnostic process; however, more data is needed before conclusions can be established.

Dr. Jacob McGavin and Dr. Neil Sengupta – Victoria Family Medical Centre and Byron Family Medical Centre  
**Factors associated with family physician follow-up 30 days post-discharge from a Canadian academic emergency department**

Faculty Lead: Dr. Daniel Grushka

Project Type: Research

Despite benefits of family physician follow up after emergency department (ED) discharge, prior studies have shown most patients do not receive follow up. Further, there remains a paucity of Canadian studies investigating potential factors that influence follow up. This retrospective cohort study aimed to elucidate factors associated with follow up within 30 days at two urban, academic Family Medicine centres using binary logistic regression on SPSS. Patients aged 18 years or older with an LHSC ED visit within a set 5 month period met inclusion criteria. Of the 367 cases that met criteria, 220 (60%) patients followed up within 30 days. Number of medications and being seen in clinic 90 days prior to the ED visit were significantly predictive of follow up with odds ratios of 1.12 ( $p=0.003$ ) and 2.51 ( $p<0.001$ ), respectively. Non-significant trends were also observed with increased likelihood of follow up with documented follow up instructions from ED physician (OR 1.50,  $p=0.128$ ) and decreased likelihood of follow up with increasing Charlson Comorbidity Index (CCI) (CCI 1-2 vs CCI 0: OR 0.561,  $p=0.079$ ). This data suggests that patients with more medications and those seen regularly in clinic are more likely to follow up within 30 days after discharge from an urban ED. Based on these results, as well as the trends previously discussed, family physicians may consider using factors outlined in this study to identify patients less likely to follow up when receiving ED discharge notifications.



Dr. Jacob Bender and Dr. Jeremy Cavers – Windsor

**Assessing and improving primary care practitioners' understanding of and comfort with recommending and prescribing diabetes technology**

Faculty Lead: Dr. Dale Ziter

Project Type: Quality Improvement

Diabetes is a disease that is largely managed through the primary care practitioner (PCP). In addition to advancements in oral antidiabetic agents, there have been multiple technological advancements made in the field of diabetes care which aim to improve key metrics of diabetes management. Namely, reduction of acute events such as severe hypoglycemia (which can lead to seizure, syncope, hospitalization), as well as long term events such as micro and macrovascular disease related to diabetes (MI, stroke, retinopathy, nephropathy). Through our experience residents in primary care settings thus far, we have noticed that there is a large proportion of PCPs that are either unaware or misinformed with respect to these new diabetes technologies. This leads to a potential gap in optimal treatment strategies for their patients with diabetes. This QI project aimed to assess how frequently and severely this issue exists, develop and distribute educational tools based on the data to directly address those areas of deficit, and measure the impact. The key metrics assessed were: PCPs knowledge surrounding the available technologies used in treating and monitoring diabetes, their indications, their impact on the health of their patients, their coverage criteria, and their comfort in prescribing such devices. The outcome measure was a composite score reflecting those key metrics. After three PDSA cycles, there was a 57.8% improvement in the composite score. This improved knowledge of diabetes technology availability, indications, and coverage eligibility should lead to improved health outcomes for patients.

Dr. Fady Andraous, Dr. Ali Chasm Khavari, Dr. Sara Vazirian, and Dr. Bolutife Yusuf – Byron Family Medical Centre

**Improving the documentation and patient education in Prediabetes**

Faculty Lead: Dr. Sonny Cejic

Project Type: Quality Improvement

**BACKGROUND:** Prediabetes is defined as a HbA1C of 6-6.4, this is the state where the glycemic levels are above normal but not high enough to be considered diabetes (1). Diabetes represents a heavy healthcare cost burden in Canada, accounting for \$573 million in direct medical costs associated with diabetes care, while the costs associated with the complications of diabetes such as cardiovascular disease are even higher, estimated at \$637 million (2). Data from long-term research suggests the risk of progression of prediabetes to diabetes can be decreased by lifestyle interventions alone (5). The aim of this project was to improve the identification, documentation, and education of BFMC patients who meet the criteria of prediabetes by 20% in 3 months.

**METHODS:** We organized an education session for BFMC residents and clinical staff on the prevalence and implications of correct identification of patients with pre-diabetes. Clinical staff was requested to add the diagnosis of prediabetes to each patient chart who met the criteria and provide educational handouts to them. This was ensured by adding physical reminders in each examination room. Patient charts were assessed pre and post this intervention.

**RESULTS:** Documentation of patients with prediabetes increased from a baseline of 9% to 29.5% by 3 months.

**CONCLUSIONS:** Documentation of prediabetes and subsequent patient education was greatly improved with a series of simple interventions including an information session and placement of physical reminders. No clinical staff raised a concern around lack of time or interference with other clinical duties.

### Room 1120: Session G

Time	Presenter	Presentation
2:00 pm	Dr. Alex Anagnostopoulos and Dr. Elizabeth Mandur	QI initiative - improving smoking cessation discussion
2:10 pm	Dr. Albert Vo	Application of post-visit summaries in the Family Medicine Clinic
2:20 pm	Dr. Sophia Frost, Dr. Emel Ghafari, Dr. Oksana Lavasova, and Dr. Isha Narula	Deprescribing proton pump inhibitors (PPIs) in appropriate adult candidates

### Room 1150: Session H

Time	Presenter	Presentation
2:00 pm	Dr. Jimmy Ha, Dr. Matthew Hewak, Dr. Paul Phares, and Dr. Aaron Wang	Improving residents confidence providing introductory cognitive behavioural therapy for mental illness: A quality improvement initiative
2:10 pm	Dr. Vincent Luong and Dr. Dylan Russelo	Practice patterns of CCFP-EM graduates over the last five years
2:20 pm	Dr. Aquila Gopaul	Practice patterns of Care of the Elderly (CoE) trained physicians: Cross-sectional survey
2:30 pm	Dr. Shawn Albers	Evaluating emergency department management of nontraumatic dental conditions: A retrospective chart review at London Heath Sciences Centre

## Session G

Dr. Alex Anagnostopoulos and Dr. Elizabeth Mandur – Byron Family Medical Centre

### **QI Initiative - Improving Smoking Cessation Discussion**

Faculty Lead: Dr. Sonny Cejic

Project Type: Quality Improvement

The detrimental sequelae of smoking are well-documented across medical literature. Data from uWaterloo Public Health report prevalence of cigarette smoking at 9.9% in Ontario; this is just below the national rate of 10.3%. Review of the BFMC EMR determined that 406 patients were recorded as active smokers. This QI initiative aimed to increase the percentage of smoking cessation discussions had with patients at the Byron Family Medicine Centre who smoke by 25% by the end of April 2023. The outcome measure implemented was to measure smoking cessation discussions through tracking of E079 billing codes. After completion of PDSA cycles, the percentage of smoking cessation discussions was overall increased by 22%.

Dr. Albert Vo – Mount Brydges

### **Application of Post-Visit Summaries in the Family Medicine Clinic**

Faculty Lead:

Project Type: Quality Improvement

Physician-patient communication has been recognized as a key aspect of Family Medicine (FM). The importance of this communication is highlighted when physicians explain the management plan at the end of the clinic visit. These discussions often include treatment options, investigations, and condition prognoses. Despite this, very few studies have investigated the quality of these post-visit instructions in the FM clinic setting. In contrast, there have been several articles published on interventions designed to improve Emergency Department (ED) discharge instructions. For this project, an electronic fillable form, titled the “Clinic Post-Visit form” was designed to be distributed to patients. The AIM statement for this project was, “To increase Western resident’s perceptions of their patients’ comprehension of their post-visit instructions by 10% by June 30, 2023.” Balance measures for this project included time spent completing the Clinic Post-Visit form and patient confusion with regards to the form. The anticipated results for this project are that FM residents will report a modest increase in their perceptions of their patients’ understanding of their post-visit instructions, i.e., less than a 10% increase. It is also predicted that some residents participating in the quality improvement project will not use the Clinic Post-Visit form due to difficulties accessing the form or a lack of time. In conclusion, physician-patient communication is an essential aspect of the FM clinical encounter. One way to enhance this communication at the end of the patient encounter may be the use of a structured written Clinic Post-Visit form.

Dr. Sophia Frost, Dr. Emel Ghafari, Dr. Oksana Lavasova, and Dr. Isha Narula – Strathroy  
**Deprescribing Proton Pump Inhibitors (PPIs) in Appropriate Adult Candidates**

Faculty Lead: Dr. Sara Puente

Project Type: Quality Improvement

PPIs are commonly prescribed in primary care for symptomatic relief of dyspepsia and acid reflux. Although evidence suggests benefit for only 4-8 weeks for these conditions, many patients remain on these prescriptions chronically. This provides unclear benefits and increased exposure to medication harms such as nutritional deficiencies, *C. difficile* infection, and osteoporosis. We aimed to identify patients on long term PPI prescriptions and to taper or deprescribe if appropriate. Within our rural family medicine clinic 483 patients had PPI prescriptions of a total roster of 4171 patients (ie. 11.6%). For our first PDSA cycle, we followed up on pharmacy renewal requests for PPIs received within a one week period and contacted patients by phone to discuss tapering and/or deprescription. For our second PDSA, we identified patients booked in for family medicine clinic visits who had ongoing PPI prescriptions in a one week period and discussed tapering and/or deprescribing within regular clinic appointments. In PDSA 1, we identified 7 candidates of whom 3 initiated a taper regimen. In PDSA 2 we identified 10 candidates of whom 2 initiated a taper regimen. Our goal was to decrease PPI prescriptions by 10% (ie. 48 patients) which we were not able to achieve. We identified 17 patients on chronic PPIs and were able to start a taper on 5 patients. The main limitations of our study included short timelines, patients lost to follow-up, inability to contact patients, and difficulty with extracting data on indications for PPI use from our EMR.

## Session H

Dr. Jimmy Ha, Dr. Matthew Hewak, Dr. Paul Phares, and Dr. Aaron Wang – Mount Brydges

**Improving Resident's Confidence Providing Introductory Cognitive Behavioural Therapy for Mental Illness: A Quality Improvement Initiative**

Faculty Lead: Dr. Sara Puente

Project Type: Quality Improvement

In the post-COVID era, mental health concerns and visits are on the rise. In Family Medicine, treatment for mental health conditions is a large component of one's practice. CBT is a first line treatment for many mental health conditions. Despite the strong evidence for the efficacy of CBT, access to this therapy continues to be a challenge for many patients. General Practitioners are uniquely poised to: 1) Educate patients about CBT and/or 2) Provide CBT to their patients in a way that eliminates many barriers to its access. Unfortunately, despite these facts, education about CBT in medical education is fairly limited. With this QI project, we sought to identify whether targeted education sessions could increase PGY1 Residents': 1) Confidence in their knowledge about CBT (Process measure) 2) Participation in CBT with their patients (Outcome measure) In PDSA cycle #1 a 1.5h teaching session was delivered during a Wednesday teaching session. This resulted in an increase of average Resident confidence in CBT from 3 to 3.6 on a 5-point Likert scale and an average increase in Resident participation in CBT sessions from 1.6 to 2.4 on that same scale. In PDSA cycle #2 a self-learning module was developed for completion during participant's own independent learning time. This resulted in a further increase of average Resident confidence in CBT to 4 (from 3 at baseline) on a 5-point Likert scale. The reported subjective effect on balance measures were: 1) Increase in appointment duration. 2) Decrease in projected earnings.



Dr. Vincent Luong and Dr. Dylan Russelo – PGY3 Emergency Medicine

**Practice patterns of CCFP-EM graduates over the last five years**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** The analysis of practice patterns of Canadian College of Family Physicians with Emergency Medicine Certification (CCFP-EM) graduates has been sparse with minimal studies referencing postgraduate practice patterns. In addition, these studies were looking at institution specific graduates and there have been no nationwide assessment of CCFP-EM practice patterns. Given the current healthcare climate and resource strain especially in emergency room care, the analysis of this group's practice location and patterns are critical to understand. Given the breadth of the respondents, this study is a collaborative project between Western University and the University of Calgary. The primary objective of this study is to determine practice patterns of CCFP-EM designated physicians across Canada who have graduated in the last 5 years. With this information, gaining a further understanding of human resource disparities within emergency medicine may be able to be elicited.

**METHODS:** The method of data collection will be a web-based multi-modal question survey delivered via email using a modified Dillman methodology. Descriptive statistical analysis will be performed on incoming data. There will be a combination of qualitative and quantitative data analysis. The survey will aim to identify various sociodemographic data including; age, gender, size of community, current residing location (i.e. urban vs. rural vs. suburban). It will also request information surrounding practice patterns including; location of previous medical training, location of CCFP-EM training, current and previous practice locations, and additional non-clinical responsibilities (academic appointments, research, etc.).

**RESULTS:** Currently in collection.

**CONCLUSION:** To be Determined

Dr. Aquila Gopaul – PGY3 Care of the Elderly

**Practice Patterns of Care of The Elderly (CoE) Trained Physicians: Cross-Sectional Survey**

Faculty Lead: Dr. Corrine Coulter

Project Type: Research

The geriatric population (older adult population) is expected to increase by 68% between 2017 and 2037. The over 75+ population is expected to be over 10.4 million people across Canada. The complexity and comorbidity of this population is also rising and need/require specialized geriatric providers. This growth has been outpacing the capacity of care providers and geriatric resources. In 2017 the CFP introduced certificates of added competencies in CoE was one of them. A comprehensive list of priority topics and key features for the assessment of enhanced skills CoE was established. GPs chose to attain additional CoE to better serve their elderly population in the community and increase competency. However, 2018 only 30% of GP CoE engaged directly geriatric services and not in a fulltime capacity. Motivations and factors that influence practice choices of CoE physicians is largely under-explored. Given that CoE could provide quality care in areas of geriatric care and bridge the gap - we aim to conduct a cross-sectional survey to explore the make-up of early career CoE practices, and factors that influence these practice choices.

**Methodology/Analysis:** Survey targeted toward CoE physicians who attained certification in 2017-2023 and current trainees across Canada. The survey will be done via RedCap and delivered via Program Director email. We will summarize data through standard deviations and frequencies/proportions. We will use t-tests and Chi-Square tests to determine differences between groups where appropriate.

Dr. Shawn Albers – PGY3 Emergency Medicine

**Evaluating emergency department management of nontraumatic dental conditions: A retrospective chart review at London Health Sciences Centre**

Faculty Lead: Dr. Munsif Bhimani

Project Type: Research

**INTRODUCTION:** Nontraumatic dental concerns present frequently to the Emergency Department (ED), accounting for up to 1% of all visits. Access to dental care is increasingly difficult resulting from a variety of factors including out of pocket cost, and dental provider availability, resulting in a high number of non-urgent presentations to the ED.

**Objectives:** This study aims to investigate patient factors, management patterns and possible systematic barriers that influence ED management and disposition of patients with nontraumatic dental conditions.

**METHODS:** We conducted a retrospective chart review of 175 randomized adults over the age of 18 who presented to the ED at London Health Sciences Centre between September 1<sup>st</sup> 2021 and September 1<sup>st</sup> 2022. Statistical analysis included descriptive statistics and Pearson's Chi-square test using SPSS.

**RESULTS:** 166 patients with a mean age of 40 (+/- 12) were included in this study and 94 (57%) were male and 72 (43%) were female. 33 patients (20%) left the ED before being seen by a physician. 53 (32%) patients had a history of problematic substance use (SU) but accounted for nearly half of patients (49%) who left before physician assessment. Patients without a SU history were more likely to receive analgesia in the ED (55%) compared to those with a SU history (40%,  $p < 0.05$ ). Similarly, 28% of patients without a history of SU received a prescription for analgesia and only 18% with a SU history received a prescription. Patients with a history of problematic SU had higher average number of previous ED presentations for dental conditions (3.9 visits vs 0.67 visits,).

**CONCLUSIONS:** A history of substance misuse appears to be an important factor in ED management and disposition for patients who present with nontraumatic dental conditions. Future studies should examine the utility of implementing early access to dental care as an intervention to reduce ED dental visits.