

Resident Project Day

Abstract Collection

June 9, 2021

Department of Family Medicine



Learning Objectives

- Identify research and scholarly work in family medicine
- Acquire primary care knowledge through research
- Support public recognition of the resident projects
- Assess residents through feedback evaluation
- Participate in discussion about the resident projects

Accreditation Statement

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 2.0 Mainpro+ credits. Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

This program has no commercial support.

25% of this program is dedicated to participant interaction.

Resident Project Day

Department of Family Medicine

Wednesday, June 9, 2021

1:30 pm	<p>Welcome and Opening Remarks</p> <p>Dr. Stephen Wetmore Chair, Department of Family Medicine</p> <p>Dr. Julie Copeland Postgraduate Program Director, Department of Family Medicine</p>
1:40 – 2:25 pm	<p>Concurrent poster sessions</p> <ul style="list-style-type: none"> - Breakout 1: Screening & Vaccines - Breakout 2: Deprescribing & Education
2:25 – 2:30 pm	Break
2:30 – 3:40 pm	<p>Concurrent Lightning Oral sessions</p> <ul style="list-style-type: none"> - Breakout 1: Emergency Medicine Education - Breakout 2: Preventative Care - Breakout 3: Prescribing Medications, Ageing Patients, & Palliative care - Breakout 4: Medical Education & Telemedicine
3:40 – 3:45 pm	<p>Awards Presentation</p> <p>Best PGY2 Poster Presentation</p> <p>Best PGY3 Poster Presentation</p> <p>Best PGY2 Lightning Oral Presentation</p> <p>Best PGY3 Lightning Oral Presentation</p> <p>Dr. Michael Craig Postgraduate Academic Program Director, Department of Family Medicine</p>
3:45 – 3:50 pm	<p>Conclusion</p> <p>Dr. Julie Copeland Postgraduate Program Director, Department of Family Medicine</p>

Poster presentations – Concurrent Rooms 1-2

Breakout Room 1: Screening & Vaccines

1:40 pm	Drs. Diana Cuckovic, Thomas Mckeough, Brendan Cassidy and Alexander Reidel	Strategies for Increasing Shingrix Uptake in the Adult Population
1:45 pm	Dr. Salaha Umer	Improving the rate of tetanus vaccination at Strathroy family health organization (SFHO)
1:50 pm	Drs. Shiva Ahanchian, Aryan Shojaei Fard and Erandi Wickramasekara	Improving HPV vaccine screening by 20% in females 14-45 years old and males 14-26 years old at SJFMC
1:55 pm	Drs. Sidra Abid, Nikita Chemparathy, Audrey Mayfield and Paige Parent	Increasing the rate of abdominal aortic aneurysm (AAA) screening at BFMC
2:00 pm	Drs. Shivum Kale, Joseph Truong and Harjit Sidhu	Increasing AAA screening completion
2:05 pm	Drs. Laura Ball, Tianna Koreman, Sophia Liu and Dylan Tucker	Improving STI screening practices in community-based family teaching practice
2:10 pm	Drs. Cara Dhaliwal, Matthew Lee and Wais Darwish	Improving documentation of ECGs during diabetes checkups
2:15 pm	Dr. Aditya Devgan	Improving the rate of tetanus vaccination rate uptake at West Middlesex Health Center (WMHC) during in-clinic visits.
2:20 pm	Drs. Ryan Labelle, Jeffrey Dietrich and Courtney Mellish	Improving Abdominal Aortic Aneurysm Screening in men aged 65-80: A QI Project

Breakout Room 2: Deprescribing & Education

1:40 pm	Drs. Nelson Chow and Thomas So	Deprescribing Non-indicated Long-term Proton-pump Inhibitors
1:45 pm	Drs. Ahmed Hijazi and Paxton Moon	Evidence-based management of Osteoarthritis of the Knee in Primary Care
1:50 pm	Dr. Ahmed Mahdi - cancelled	Assessing the effectiveness of a cadaveric workshop in improving resident physicians' confidence in performing ultrasound-guided joint injections
1:55 pm	Drs. Ramsha Khan, Rebecca Robinson and Jennifer Salmon	Quality Improvement Initiative for increasing the percentage of naloxone discussions with opioid prescriptions
2:00 pm	Dr. Robert McAllister	EMR-based documentation templates and educational interventions did not reduce inappropriate antimicrobial prescribing for acute pharyngitis in a community family health organization
2:05 pm	Dr. Chris Doiron - cancelled	Healthcare Burden of Drug Abuse in London Ontario during the COVID 19 Pandemic
2:10 pm	Dr. Priya Patel - cancelled	Paraneoplastic myositis presenting with recurrent stage III melanoma: A case based review
2:15 pm	Dr. Behnam Nowrouzi-Kia	Using a modular based virtual teaching method in neurology teaching for family medicine residents

Lightning Oral Presentations – Concurrent Rooms A-D

Breakout Room A: Emergency Medicine Education

2:30 pm	Dr. Lakshmi Kamala	CCFP-EM Resident Location Preference of Emergency Medicine Rotations During Training
2:40 pm	Dr. Alvin Yang	Free Open Access Medical Education: A National Needs Assessment
2:50 pm	Dr. Ada Gu	CCFP-EM education during the COVID-19 pandemic: Adapting and revolutionizing residency education through free open access medical education (FOAMed)

Breakout Room B: Preventative Care

2:30 pm	Dr. Michael-Anthony Ferrato	Addressing Sleep in Family Practice
2:40 pm	Drs. Bilal Akil, Joseph Vincelli, and Adam Roath	Vaporizing Vaping: awareness on the dangers
2:50 pm	Drs. Erica Cleto, Trevor Peterson, and Daryoush Safdari	Improving documentation of family cardiac history in EMR to improve ease of FRS calculation
3:00 pm	Drs. Victoria Chan, Osman Raza, and Talal Awan	Increasing the use of the Adverse Childhood Experiences (ACE) questionnaire as a screening tool during Primary Mental Health Care Visits at the Victoria Family Medical Centre
3:10 pm	Dr. Fei Fei Shao	Early implementation of mifegymiso for therapeutic abortion – A retrospective chart review at LHSC
3:20 pm	Dr. Cassandra Schulz	Preventative Health for Patients with Immune-mediated Rheumatic Disease
3:30 pm	Drs. Stephen McDonald, Alex Nedeljkovic, Leah Sinai, Jocelyn Traher, and Matthew Wu	Using resident teaching tools to facilitate lifestyle management discussions for patients with Type II Diabetes

Lightning Oral Presentations – Concurrent Rooms A-D

Breakout Room C: Palliative Care, Ageing Patients, & Prescribing Medications

2:30 pm	Dr. Spencer Ler	Dexmedetomidine in Terminal Delirium: A brief case report
2:40 pm	Drs. Benjamin Welkovich, Calvin Tang, Jeremy Soo, Safiyyah Mahomed, and Tommy Lin	Improving Frequency of Documented End-of-Life (EOL) Care Discussions in a Primary Care Setting
2:50 pm	Dr. Yesul (Brenda) Hwang	The New “Geriatric Giants”: Improving primary care screening of Loneliness and Social Isolation in the older adults
3:00 pm	Drs. Hussein Ataie Fashtami and Sahar Farzi	Increase in assessment of fall risk
3:10 pm	Dr. Jordan Lafranier	Psilocybin in Palliative Care: Exploring Palliative Care Physician's Attitudes and Barriers
3:20 pm	Drs. Victoria Brzozowski, Jeffrey McCormick, Zahra Syavash Vahabi, and Alexander Yan	Opioid contracts for patients prescribed opioids for chronic non-cancer pain: A quality improvement project at BFMC

Breakout Room D: Medical Education & Telemedicine

2:30 pm	Drs. Andrei Dobrin and Madhav Bole	Telemedicine for Workplace Injury Triage
2:40 pm	Drs. Elyse Epp, Matthew VanTil, and Benjamin Lau	Primary care and all aspects of medicine have been affected by the outbreak of the COVID-19
2:50 pm	Dr. Obaidullah Khan	Training of Canadian family medicine residents in POCUS screening of AAAs: a feasibility study
3:00 pm	Dr. Daniela Keren	Sexual assault and domestic violence: are family medicine residents learning enough?
3:10 pm	Dr. Karan Chawla	Effect of the COVID-19 pandemic on residents' training experiences
3:20 pm	Dr. Melissa Cookson	Faculty Engagement in Distributed Medical Education
3:30 pm	Dr. Yeshale Chetty - cancelled	Wrist Joint for MSK Crash Course (Within Family Medicine Study Guide App)

Poster Presentation Abstracts

Breakout Room 1: Screening & Vaccines

Residents: Drs. Diana Cuckovic, Thomas Mckeough, Brendan Cassidy, and Alexander Reidel

Type of project: Quality Improvement

Home site: Windsor

Faculty Supervisor: Dr. Valerie Hill

Project Title: Strategies for Increasing Shingrix Uptake in the Adult Population

Abstract: Background: Addressing childhood immunizations with parents is a regular part of practice, however adult immunizations are often neglected. In our respective clinics, we often found adults to be unaware of indications for the Shingrix vaccine, or they had forgotten to discuss them with their physician.

Methods: Three interventions were tested including Electronic Medical Record (EMR) Shingrix vaccine reminders, Shingrix patient education pamphlets, and an email blast of the Shingrix pamphlet delivered to all patients signed up for the online clinic portal. Each intervention was done in two week intervals and the percentages were calculated after each intervention. This allowed us to address barriers including the physician remembering to talk to the patient, providing the patient information without reducing the quality of the appointment, and reminding patients to book their appointment when eligible.

Conclusion: Overall the Shingrix vaccination percentage of eligible patients across all four clinics increased from 12.30% to 20.20% after all interventions were completed over the study period. The most effective intervention was sending an email blast to all patients containing pertinent information about the Shingrix vaccine including who is eligible and encouraging them to book an appointment. Lack of in-person assessments due to the COVID-19 pandemic was a significant challenge encountered. More time could be given for each intervention, and work should continue to develop interventions that do not require EMR software. If modified, these strategies could be applied to other adult vaccines.

Resident: Dr. Salaha Umer

Type of project: Quality Improvement

Home site: WMHC

Faculty Supervisor: Dr. John Marcou

Project Title: Improving the rate of tetanus vaccination at Strathroy family health organization (SFHO)

Abstract: Introduction: Preventive health is an integral part of primary care and immunization is one of the components. Tetanus booster needs to be administered every 10 years, but there is no consistent way to discuss/implement it properly. Other factors include refusal, lack of awareness or unclear reasons. Physicians at our center try to screen and administer, but it was easily forgotten. Adequate counselling and educating the patients were important but also reminding the physician to discuss it. Therefore, I decided to implement changes in order to improve the rate of tetanus vaccination in men/women aged 20-70, at SFHO by 25% by the end of October 2020.

Methods and Changes: I reviewed 282 patients charts to assess completed Tetanus vaccination and only 110 patients received vaccination with proper documentation in CPP. The process and balance measures included number of patients who were offered, refused and reasons of refusal. Many patients were not offered vaccination given several changes in the clinical setting specially difficulty with retrieving vaccination given infection prevention measures (pandemic related), attempts to minimize in person exposure hence focus on the acute problems, more virtual visit and at times, forgetfulness. I observed significant variation between different PDSA cycle and was able to collect and use the Binary data. PDSA 1 cycle looked promising with significant increase in the proportion of patients who received vaccination

(66% from a baseline of 45%). From PDSA 1 to PDSA 2, this proportion dropped and continued to fluctuate throughout the PDSA Cycle 2- 27%, to Cycle 3-32% and Cycle 4-36%. The maximum increase was by 21%, which occurred 2 weeks after PDSA 1 was implemented. The reminders in EMR, discussing with colleagues, involving the front desk staff to remind patients about tetanus boosters were the changes implemented. These strategies looked promising; however, the pandemic affected the QI project negatively.

Residents: Drs. Shiva Ahanchian, Aryan Shojaei Fard, and Erandi Wickramasekara

Type of project: Quality Improvement

Home site: SJFMC

Faculty Supervisor: Dr. Eric Wong

Project Title: Improving HPV vaccine screening by 20% in females 14-45 years old and males 14-26 years old at SJFMC

Abstract: The HPV vaccine has been reported to be highly effective in preventing the targeted HPV types, as well as the diseases caused by them. We investigated ways that would increase awareness of the vaccine among our patients, as well as offering them the choice of the vaccine if they were not vaccinated. Our project goal was to increase screening rates by 20% in patients that were eligible to receive the vaccine, whether or not they had received it. This was meant to be the first step towards increasing HPV vaccine uptake at St Joseph's Family Medical Centre. Our initial review of eligible patients indicated that approximately 6.6% of patients were screened at SJFMC, prior to our PDSA initiative. Our process measures our PDSA initiative examined the number of patients that were eligible to receive the HPV vaccine and were screened by residents, and the number of HPV vaccine prescriptions provided to patients. A total of 462 patients were included in our study. Improvement initiatives included: identifying patients who were in the eligibility age range at the beginning of the day, electronic and paper-based reminders for residents to screen and discuss the vaccine, and an educational session with the residents. The rate of screening was increased to twenty-three percent by the end of the project. We learned that in order to increase screening rate there should be efforts to increase staff awareness of the task at hand, to improve tracking of immunized patients, and to create effective annual reminders for eligible patients.

Residents: Drs. Sidra Abid, Nikita Chemparathy, Audrey Mayfield, and Paige Parent

Type of project: Quality Improvement

Home site: BFMC

Faculty Supervisor: Dr. Sonny Cejic

Project Title: Increasing the rate of abdominal aortic aneurysm (AAA) screening at BFMC

Abstract: AAA (abdominal aortic aneurysm) screening in men between the ages of 65-80 is a relatively new preventative care guideline in Canada, and was recommended in 2017. The outcome measure of our project was to increase the total number of discussions about and/or completed AAA screenings. The baseline rate of this in the clinic was found to be 42%, and our goal was to increase this by 15% over the course of our 4 PDSA cycles. PDSA 1 and 2 comprised of placing reminder stickers and posters in the resident rooms, followed by the staff and nursing rooms. PDSA 3 involved the addition of an AAA tick-box on the male preventative care form used during annual physicals. PDSA 4 involved the addition of a colorful 'AAA screen' reminder button at the top of the EMR. Data was collected every 2 weeks on a total of 447 encounters and over the course of the project we saw a steady increase in our outcome measure, from 42% up to a maximum of 64% - a total increase of 22%. Clinic staff found it only added a few short minutes to the duration of an encounter and were agreeable to send patients for ultrasounds, which are inherently low risk. Another balance measure we assessed was colon cancer screening, which was not affected by the increased rate of AAA screening. Overall, we found that this was a sustainable project which could be continued in the future.

Residents: Drs. Shivum Kale, Joseph Truong, Harjit Sidhu

Type of project: Quality Improvement

Home site: BFMC

Faculty Supervisor: Dr. Sonny Cejic

Project Title: Increasing AAA screening completion

Abstract: An abdominal aortic aneurysm (AAA), is a focal abnormal dilation of ≥ 3.0 cm of the abdominal aorta. They have the potential for significant morbidity and mortality (85%) if they rupture. Although most patients with AAA are asymptomatic they can often come to medical attention by findings of a pulsatile mass on physical examination, incidentally through abdominal imaging, or through ultrasound-guided screening programs for AAA. Risk factors for developing AAAs are increasing age, gender, smoking, hypertension, and a positive family history. Predictors for rupture include size of aneurysm, rate of expansion, and other factors including continued smoking and uncontrolled hypertension. Ultrasound, with its availability and cost-effectiveness, remains the imaging modality of choice for diagnosing AAAs. Treatment can range from careful monitoring, to medical therapy, and even surgical or endovascular repair. Therefore, identification and prevention is prudent. In 2017, the Canadian Task Force on Preventative Health Care (CTFPHC) published an article for AAA screening in primary care. Their suggestion is a one-time screening of men aged between 65 to 80 years old with an abdominal ultrasound. This screening, however, is often missed or rarely done. This quality improvement (QI) project will implement strategies to encourage patients to ask their Family Physicians about AAA screening and also encourage Family Physicians to order AAA screening on eligible patients. The strategies used in the QI project are the inclusion of AAA screening in the preventative care section tab in the EMR, and posting information in the patient waiting area and reminders in the resident computer rooms. We expect the results of our QI project to show an increased AAA screening completion rate of ~25% in males aged 65 to 80 and data will be updated and displayed within a Shewhart chart. These simple strategies proved to be useful methods in increasing AAA primary care screening. It can be concluded that the addition of a tab function within the EMR, along with posted information and reminders, help to increase the rate AAA screening in males aged 65-80.

Residents: Drs. Laura Ball, Tianna Koreman, Sophia Liu, and Dylan Tucker

Type of project: Quality Improvement

Home site: SWMHC

Faculty Supervisor: Dr. Kyle Carter

Project Title: Improving STI screening practices in community-based family teaching practice

Abstract: In Canada, the reported cases of sexually transmitted infections (STIs) are on the rise, and Canadian guidelines recommend annual screening for those aged < 25 . Early diagnosis and treatment of STIs lead to better health outcomes. We aimed to assess the rates of appropriate STI screening among our specified population of asymptomatic, sexually active patients within the high-risk age range of 18-25, and who attended an appointment at our community-based teaching practice. Our objective was to implement change ideas to increase screening rates by 20% from a baseline screening rate of 15.38%. Due to the COVID-19 pandemic we modified our outcome measure to include completed screening as well as counselling on screening. Following our PDSA cycles including a message forwarded through our EMR and a virtual education session, we reached a screening/counselling rate of 50.00% after our final PDSA cycle in our target population. With growing cases of STI reported in Canada, screening for asymptomatic patients is essential to ensure timely treatment for individuals as well as controlling transmission rates among communities. Through this QI project, we have successfully improved our clinic's screening practices with the hope that this will ensure timely diagnosis and treatment for our patients. Changes made to our outcome measure midway through the project are a significant limitation of this project.

Residents: Drs. Cara Dhaliwal, Matthew Lee, and Wais Darwish

Type of project: Quality Improvement

Home site: VFMC

Faculty Supervisor: Dr. Christina Cookson

Project Title: Improving documentation of ECGs during diabetes checkups

Abstract: Diabetes increases the risk of developing coronary artery disease (CAD). Many of these patients will not experience symptoms before a major cardiac event such as a myocardial infarction. It is important to identify at-risk individuals with diabetes before a major cardiac event occurs. Resting ECGs can be used to identify established CAD. The Canadian Diabetes Association recommends that an ECG be completed at baseline and subsequently every 3-5 years for diabetic patients >40 years old and in those younger than 40 years in the presence of diabetes-related complications.

In Victoria Family Medical Centre, only 13.79% of individuals who presented for a diabetes checkup from January 18 to February 18, 2020, had documentation of a completed ECG within the last 5 years in the diabetes flowsheet. Lack of knowledge on current guidelines by resident physicians, time constraints during checkups, and hard-to-use EMR flowsheets have been identified as contributing factors that can be remediated by a quality improvement project.

This project seeks to increase up-to-date ECG documentation through change ideas consisting of an oral presentation to improve knowledge, a handout to re-duce clinician cognitive load during diabetes checkups, and an update to a new EMR. After 2 PDSA cycles, ECG documentation has improved, although it is unclear whether this is due to automatic data population by the new EMR or a conscious effort by the clinician, and whether this will lead to an improvement in patient outcome.

Resident: Dr. Aditya Devgan

Type of project: Quality Improvement

Home site: WMHC

Faculty Supervisor: Dr. John Marcou

Project Title: Improving the rate of tetanus vaccination rate uptake at West Middlesex Health Center (WMHC) during in-clinic visits.

Abstract: Tetanus is a nervous system disorder characterized by muscle spasms caused by a toxin producing anaerobe. Tetanus vaccinations are an effective method of preventing this disease.

Unfortunately, tetanus immunity has been waning in the adult population leading to an increased risk of disease which is entirely preventable. There is strong evidence that discussion of preventative health measures increases compliance. Over a two-week period in October 2020, it was noted that only 4.7% of eligible patients received their tetanus vaccine during their in person visit. A quality improvement project was designed with the goal of increasing the uptake rate of tetanus vaccine by eligible patients by 25% by February 5, 2021. After running four PDSA cycles, the project demonstrated a proof of concept that vaccine uptake rate can be increased by co-delivery of preventative health interventions leading to an improved average tetanus vaccine uptake rate to 41.9% between the periods of November 3 – February 5, 2020. We believe that engaging patients in preventative health measures, engaging relevant stakeholders, and patient education in the benefits of proposed measures may also be effective interventions in increasing adherence to preventative health measures.

Residents: Drs. Ryan Labelle, Jeffrey Dietrich, Courtney Mellish

Type of project: Quality Improvement

Home site: Hanover

Faculty Supervisor: Dr. Nick Abell

Project Title: Improving Abdominal Aortic Aneurysm Screening in men aged 65-80: A QI Project

Abstract: The Canadian Task Force on Preventive Health Care has a weak recommendation that men aged 65-80 should be offered a one-time screening ultrasound to assess for abdominal aortic aneurysm (AAA). This has been shown to reduce emergency repair, rupture, and aneurysm-related death with a number needed to screen (NNTS) of 311 at the 13-15 year follow-up mark. Our study population is located approximately two hours from the nearest hospital that routinely performs emergency repairs

for ruptured aortic aneurysms, amplifying the importance of early identification through screening. A chart review of patients assigned to residents in the Hanover Medical Clinic showed that only 20% (n=55) of male patients aged 65-80 had received imaging that ruled out AAA. This quality improvement project aimed to increase the percentage of male patients at the Hanover Medical Clinic who underwent screening ultrasound (in the form of either a point-of-care ultrasound or a formal ultrasound) to assess for AAA. Patient adherence to screening recommendations was heavily impacted by the COVID-19 pandemic. The first PDSA cycle was to offer a point-of-care ultrasound (POCUS) to screen for AAA to a small subset of patients aged 65-70. Only 1/7 (14%) of patients received a POCUS. PDSA cycles 2 to 4 instead offered a formal ultrasound, which had a greater adherence, and expanded the age range for screening. Our work led to an overall increase in AAA screening from 20% to 38% of eligible patients.

Breakout Room 2: Deprescribing & Education

Residents: Drs. Nelson Chow and Thomas So

Type of project: Quality Improvement

Home site: Windsor

Faculty Supervisor: Dr. Ryan Mills

Project Title: Deprescribing Non-indicated Long-term Proton-pump Inhibitors

Abstract: Proton-pump inhibitors (PPI) are highly effective in the treatment of acid-gastric disorders, such as non-erosive gastroesophageal reflux disease (GERD), but often are found used on an ongoing basis without a long-term indication. PPIs are well tolerated, but nevertheless have associated adverse effects and contribute to pill burden in many older patients. Our project aimed to identify patients on PPIs when not clinically indicated for long-term use and to develop methods to encourage step-wise measures to either reduce dose, wean to as needed use, or completely discontinue.

The project completed 3 PDSA cycles. Cycle 1 consisted of pre-assessment review eligible patients for PPI deprescribing and provider-initiated discussion if deemed appropriate. 77 patients were found to be eligible, 34 were counseled, and 19 agreed to a PPI dose reduction, step-down to as-needed, or a taper strategy. 2 patients went back to daily dosing due to rebound symptoms. Discussions averaged 3-5 minutes. Overall this is a 22% (17/77) success rate. PDSA 2 was an attempt to utilize EMR search and email an information pamphlet to patients to facilitate patient-initiated discussions. However, due to limitations with the EMR, only 116 patient charts could be reviewed, 27 identified as eligible and emailed. 7 responded and made telehealth appointments to discuss or requested through their pharmacy a change, representing a 25% success rate. The exam room poster method generated 2 patient-initiated discussions but no reductions.

The project's data suggests simple, direct counseling and methods to facilitate such would be effective in PPI deprescribing.

Residents: Drs. Ahmed Hijazi and Paxton Moon

Type of project: Quality Improvement

Home site: Petrolia

Faculty Supervisor: Dr. Firas Al-Dhaher

Project Title: Evidence-based management of Osteoarthritis of the Knee in Primary Care

Abstract: Osteoarthritis is a common diagnosis in primary care and the approach to its assessment and management is variable. In an effort to standardize the approach, the CEP, CFPC and AAC developed the OA Tool. No study had assessed the utilization of the OA Tool in primary practice and thus we set out to conduct a Quality Improvement project at our site to investigate this. Following a baseline survey of 6 staff physicians at our practice, only 33% reported familiarity with the tool and none used it routinely in practice. Our goal was therefore to improve the utilization of the OA Tool at our site and to do this we conducted 2 PDSA cycles. The first tested the impact of an email detailing key aspects of the tool that

could be applied to both inpatient and virtual care assessments of patients with OA and then conducted a chart review of patients diagnosed with OA in the 1 month period that followed to determine the use of this tool in their management. No change compared to baseline was observed and our second PDSA cycle focused on a more interactive presentation on knee pain, hip and knee OA and some of the recommendations within the tool. After analysis, we found this did increase the implementation of OA Tool recommendations without increasing the use of the tool itself; largely due to the complexity of the tool and the time required to use it.

Resident: Dr. Ahmed Mahdi

Type of project: Research

FM PGY3 program: Sport and Exercise Medicine

Study team members: Dr. Jane Thornton and Dr. Graham Briscoe

Faculty Supervisor: Dr. Jane Thornton

Project Title: Assessing the effectiveness of a cadaveric workshop in improving resident physicians' confidence in performing ultrasound-guided joint injections

Abstract: The use of point of care ultrasound (POCUS) in the medical field has been rapidly expanding. One area where the use of POCUS has greatly expanded is with ultrasound-guided joint injections. Workshops using cadavers have been shown to be an effective method to teach ultrasound-guided procedures. Our study aims to assess the use of a workshop using a cadaver to teach ultrasound-guided joint injections to resident physicians. We will be doing this by first holding a teaching session for the resident physicians on the basics of using POCUS. After this we will be holding a session where we will demonstrate performing the various ultrasound-guided joint injections on a cadaver followed by the study participants themselves practicing these injections. We will ask the study participants to complete a survey to assess their confidence in performing ultrasound-guided joint injections pre- and post-workshop. The survey will also assess the participants' interest in educational workshops using cadaveric specimens and their confidence in performing landmark based injections in their future practice pre- and post-workshop. The survey data will be analyzed using descriptive statistics. For paired and non-paired questions we will report the mean and percentage distribution for each answer option. We will compare pre- and post-workshop scores for paired questions using the Wilcoxon signed rank test. The results of this study will help determine the usefulness of such a workshop and as such will have implications from a medical education standpoint in designing future similar workshops and ultrasound-guided joint injection curriculum development.

Residents: Drs. Ramsha Khan, Rebecca Robinson, and Jennifer Salmon

Type of project: Quality Improvement

Home site: VFMC

Faculty Supervisor: Dr. Christina Cookson

Project Title: Quality Improvement Initiative for increasing the percentage of naloxone discussions with opioid prescriptions

Abstract: Rates of concurrent opioid prescriptions and naloxone discussions were analyzed at Victoria Family Medicine Centre. We subsequently developed a quality improvement initiative in which we aimed to increase the percentage of encounters for opioid prescriptions (with more than 50 morphine equivalents daily) involving a discussion of naloxone to 25% by October 2020.

Eligible encounters were defined as prescriptions with 50 or more morphine equivalents daily. This project explored methods that attempt to increase the rates of naloxone discussions that physicians have with patients.

Change ideas included a resident teaching session, posters in examination rooms, and electronic medical record prompting; each of these change ideas was developed into a PDSA cycle. PDSA 1 and 2 involved a resident teaching session and poster placement, respectively, and did not result in any change.

However, our third PDSA cycle, which was creating an electronic medical record prompt, increased the rates of discussion by 25% from baseline.

Reasons for not discussing naloxone with patients were explored following each PDSA cycle implementation. Common reasons listed were that naloxone was not indicated, there was not sufficient time, or the prescriber forgot to mention it.

Each PDSA cycle provided us with valuable information to reflect upon and develop subsequent cycles. Although we were able to reach the goal outlined in our aim statement, there continues to be room for improvement of increasing the percentage of encounters with opioid prescriptions and naloxone discussions.

Resident: Dr. Robert McAllister

Type of project: Quality Improvement

Home site: Stratford

Faculty Supervisor: Dr. Stacey Snider

Project Title: EMR-based documentation templates and educational interventions did not reduce inappropriate antimicrobial prescribing for acute pharyngitis in a community family health organization

Abstract: Acute pharyngitis, or sore throat, represents more than 1% of all visits to a typical primary care office. Although Group A Streptococcus (GAS) is the most-commonly identified bacterial pathogen resulting in pharyngitis, the overall incidence of bacterial etiology is low. As well, evidence supports that antibiotics do not substantially reduce complications of GAS pharyngitis, nor do they substantially reduce the burden of symptoms. Antibiotics themselves can be associated with harms including antibiotic-associated diarrhea, and allergic reactions. Despite this, inappropriate prescription of antibiotics for acute pharyngitis is common among clinicians, a practice which is one of the targets for reduction in the Choosing Wisely Canada campaign.

In this QI project, I sought to reduce the proportion of patients presenting to the Avon Family Medicine Centre with a complaint of sore throat who were inappropriately prescribed an antibiotic. At baseline, 16.2% of pharyngitis patients were prescribed antibiotics inappropriately. An EMR-based stamp designed to increase use of the Mclsaac score to guide testing and prescription failed to influence inappropriate prescription rates, at 16.7%. Similarly, an educational session on relative benefits and harms of antibiotics in confirmed or suspected GAS pharyngitis showed no effect on inappropriate prescription rates, at 17.9%. Overall, this project highlighted the difficulty in influencing clinician prescribing practices through passive interventions. It was also significantly limited by changes in patient presentation volumes and clinician practice during the COVID-19 pandemic. Lessons learned will hopefully be applicable to future improvement projects in the area of antimicrobial stewardship.

Resident: Dr. Chris Doiron

Type of project: Research

FM PGY3 program: Emergency Medicine

Faculty Supervisor: Dr. Terry Skoretz

Project Title: Healthcare Burden of Drug Abuse in London Ontario during the COVID 19 Pandemic

Abstract: Aim 2020 saw the start of the COVID-19 pandemic. Governments across the globe including Ontario instituted strict restrictions on businesses, borders, travel, and gatherings to curb viral spread. These restrictions contributed to a decrease in all cause Emergency Department visits across the province in the early stages of the pandemic. This was all on the background of the ongoing parallel opioid and illicit drug pandemic that continues to ravage our young adult population. The objective of this study was to determine if illicit drug-related ED presentations, hospital admissions, and hospital mortality amongst the adult population increased during the initial phases of the COVID-19 State of Emergency at London Health Sciences Center.

Methods A retrospective chart review comparing all adult patients 18 and older presenting to LHSC for illicit drug related intoxications between 23 March 2020 and 12 June 2020 to similar time periods in the two preceding years was completed. These dates in 2020 correspond to the first day that all non-

essential businesses were ordered closed via the Ontario COVID-19 Emergency Order and the date when Ontario transitioned from stage 1 to stage 2 of its phased reopening, respectively. Variable means and percentages for 2018 and 2019 were averaged and compared to 2020 using the standard chi square test for most variables.

Results 2018 saw 263 total presentations from 215 unique individuals while 2019 and 2020 saw 426 visits from 317 individuals and 387 visits from 290 individuals, respectively. The proportion of illicit drug presentations increased significantly in 2020 to 1.9% of all ED visits from 1.2% in the previous 2 years combined. In 2020, stimulant encounters increased significantly to 53.2% from 40.5% while opioid encounters decreased significantly to 35.1% from 44%. Hospital admissions and length of stay did not differ significantly. There were 4 opioid related fatalities in 2020 and one in each of the preceding two years. This was not statistically different.

Conclusion Despite a significant drop in overall ED presentations, the proportion of encounters for illicit drug intoxications and overdoses increased significantly in the early stages of the COVID-19 pandemic. A shift from opioid to stimulant related encounters was seen.

Resident: Dr. Priya Patel

Type of project: Case Report and Literature Review **PGY3 program:** Oncology

Faculty Supervisor: Dr. John Lenehan

Project Title: Paraneoplastic myositis presenting with recurrent stage III melanoma: A case based review

Abstract: Background: Dermatomyositis (DM) and polymyositis (PM) are rare paraneoplastic phenomena of malignant melanoma (MM). Previous studies have shown that myositis associated with stage IV MM is linked to very poor prognosis.

Objective: We sought to explore the outcomes in patients presenting with stages I-III MM and DM/PM, as this is unclear.

Methods: We first describe a novel patient case of recurrent stage III MM associated with DM. A comprehensive literature review was conducted using PubMed, Medline and EMBASE databases from 1961 to April 2021 to identify relevant cases. Information about patient age, sex, site of MM, stage of MM, timing of DM/PM, treatment and outcomes were recorded.

Results: Six case reports were identified that associated stages I-III MM with DM/PM. Similar to our case, all of the patients were treated with surgical resection of the MM, and most received a combination of steroids and/or immunosuppressive medications for their DM/PM. The majority of patients, including the current case, had positive outcomes and disease remission at the time of publication. This could be explained by increased provider awareness to screen for malignancy when DM/PM are present.

Conclusion: Our case report and literature review suggest that the presence of DM/PM in stages I-III MM is not a marker of poor prognosis. The majority of patients have good survival, provided they receive appropriate treatment and surveillance. Multiple flares of DM in a short time period, and a longer duration between the diagnosis of MM and occurrence of DM may be markers of poorer prognoses.

Resident: Dr. Behnam Nowrouzi-Kia

Type of project: Self-reflective project

FM PGY3 program: Hospitalist

Study team member(s): Justin Jain

Faculty Supervisor: Dr. Mary Jenkins

Project Title: Using a modular based virtual teaching method in neurology teaching for family medicine residents

Abstract: Background: During the COVID-19 pandemic, there has been a substantial shift to virtual and online methods of education. Neurology education has greatly profited from this switch to virtual

teaching methods, including online modules and virtual quizzes. These new methods have improved knowledge acquisition and student engagement. These virtual training methods have also been integral in resident academic half-days during the pandemic. The current hospitalist enhanced skills program in Windsor does not have structure teaching during the Wednesday afternoon sessions. As both a resident in the program and a rotation student in neurology, a self-reflective teaching exercise was undertaken to create teaching resources for future family medicine residents.

Methods: The project proposes four key neurology modules geared at family medicine residents doing an off-service rotation in neurology. The topics chosen were discussed with neurology residents at Western University as well as faculty in the department of Neurology. The topics include Stroke, Diplopia, Anisocoria, Cranial Nerve Palsies. The lectures were peer-reviewed by Drs. Justin Jain, Dr. Michal Krawczyk and Dr. Mary Jenkins. Lectures were recorded using ZOOM and stored as MPEG-4 files. These files uploaded to Youtube for future reference by residents.

Results: Four modules encompassing the topics of Stroke, Diplopia, Anisocoria, and Cranial Nerve Palsies are uploaded and can be used for residents, especially those interested in further improving their knowledge in neurology.

Lightning Presentation Abstracts

Breakout Room A: Emergency Medicine Education

Residents: Dr. Lakshmi Kamala

Type of project: Research

Home site: SJFMC

Faculty Supervisor: Dr. Kevinjeet Mahngar

Project Title: CCFP-EM Resident Location Preference of Emergency Medicine Rotations During Training

Abstract: Western University's Canadian College of Family Physicians – Emergency Medicine certificate (CCFP-EM) residents have the flexibility to choose the location for some of their Emergency Medicine (EM) blocks. Their options include tertiary centers like London, Regional centers like Windsor and St. Thomas, and rural centers like Goderich and Tillsonburg. The aim of this study is to determine CCFP-EM resident preferences in location for EM rotations and the factors affecting these preferences. A cross sectional survey consisting of 8 questions was distributed to 63 graduates of the CCFP-EM program between 2014-2020 through the CCFP-EM administration. We received 17 responses with a mean of total number of EM blocks of 5.7 ± 2.2 . The distribution of EM blocks included an average of 3.06 ± 1.7 tertiary blocks, 2.31 ± 1.1 regional blocks and 0.5 ± 0.7 rural blocks. Respondents identified acuity, opportunities for procedures, on shift learning, anticipated location of practice and autonomy as the most prominent factors driving their choice of rotation location with 100%, 100%, 94%, 94% and 88.2% respectively assigning values of important and very important. Teaching opportunities, scheduling control and proximity to home ranked the lowest with 82.4%, 50% and 47.1% respectively assigning values of neutral, unimportant, and very unimportant. This study highlights some of the factors affecting CCFP-EM resident choice in distribution of rotations; however, further studies on this topic are necessary to understand the trends in distribution of EM blocks and the relationship between these factors and resident choice as well as how they ultimately impact residents' career development.

Resident: Dr. Muaiad Elhag

Type of project: Research

FM PGY3 program: Emergency Medicine

Faculty Supervisor: Dr. Munsif Bhimani

Project Title: The Impact of COVID-19 on the Learning Experience of Emergency Medicine Residents in Canada

Abstract: BACKGROUND: COVID-19 has altered all areas of our daily lives including social and professional endeavors. The impact of the pandemic on the learning experience from a front-line resident's perspective has not been studied in much detail.

OBJECTIVE: Examine the impact of the COVID-19 pandemic on the learning experience of Emergency Medicine Residents in Canada.

METHODS: This was a cross-sectional survey of medical residents in the Emergency Medicine Postgraduate Program in Canada (Royal College, years 2-5). An anonymous survey hosted on Qualtrics was sent to 280 eligible candidates registered with the Royal College Emergency Medicine program at twelve English-speaking universities across Canada. The survey was distributed by the program directors to the eligible respondents. The survey consisted of 14 questions and the participants were asked about the impact of the COVID-19 pandemic on their learning experience, including cancelled electives, simulation sessions, reduction in procedural exposure, and stress levels. Descriptive statistics for categorical variables are summarized as percentages. Chi-square test was performed to detect differences between proportions.

RESULTS: Out of the 280 eligible residents, 19 completed the survey, resulting in a response rate of 6.9%. Survey findings suggested that 63% had some form of formal teaching on approaching a suspected COVID-19 patient. An equal number of residents indicated that online classes were less effective or that electives with unique experiences have been cancelled. Procedure exposure was reduced in 79% of respondents. Almost 90% of residents specified that their stress levels have increased during the pandemic; however, we found no difference in stress levels according to resident seniority ($\chi^2=5.3$, $p=0.073$).

CONCLUSIONS: COVID-19 has caused an increase in cancelled courses, electives, simulation sessions and conferences across Canada, impacting emergency medicine residents. Most respondents found online teaching to be less effective, which poses the question whether programs have been able to uphold their academic standards. Although formal teaching around the approach to COVID patients was given to most residents, more than one third have indicated that none was included. These are perhaps only a few of the factors that may have caused an increase in burnout rates experienced by residents during the pandemic.

Resident: Dr. Alvin Yang

Type of project: Research

Home site: SWMHC

Study team member(s): Dr. Maria Mathews, Adrienne Wakabayashi

Faculty Supervisor: Dr. Munsif Bhimani

Project Title: Free Open Access Medical Education: A National Needs Assessment

Abstract: Introduction: Free Open Access Medical Education (FOAM) refers to the collection of online medical educational resources. We described resident and program director (PD) usage of FOAM in Emergency Medicine (EM), assessed residents' needs for increased faculty support, and described PDs' perceptions of adopting FOAM into their curricula.

Methods: An online survey was distributed in 2020 to Canadian residents and PDs of Family Medicine, Family Medicine Enhanced Skills in Emergency Medicine, and Emergency Medicine programs that offered training in English. Research objectives were represented using descriptive statistics.

Results: The survey was completed by 161/1322 (12.2%) residents and 23/40 (57.5%) PDs. Nearly all residents (99.4%) used FOAM each week. Many residents never or rarely evaluated evidence quality (50.3%) despite a majority wanting their resources to be evidence-based (92.9%). Most residents valued faculty recommendation (76.8%) and at least sometimes wanted more program guidance on FOAM use (70.1%); however, they rarely or never received it (79.3%). A majority of PDs (52.6%) believed their programs could possibly benefit from more FOAM integration, although top barriers were lack of faculty

familiarity (73.7%) and lack of evidence quality assurance (68.4%). The top strategy for integration was distributing a list of residency-approved resources (76.5%).

Discussion: Residents frequently used FOAM to learn EM concepts but rarely evaluated evidence quality. They desired increased faculty guidance but rarely received it. PDs were open to incorporating more FOAM into their curricula but lacked familiarity. Future directions could involve the creation of a curated list of residency-approved resources for resident dissemination.

Resident: Dr. Ada Gu

Type of project: Research

FM PGY3 program: Emergency Medicine

Study team member(s): Erica Figgins

Faculty Supervisor: Dr. Munsif Bhimani

Project Title: CCFP-EM education during the COVID-19 pandemic: Adapting and revolutionizing residency education through free open access medical education (FOAMed)

Abstract: Background: The COVID-19 pandemic has presented significant challenges to providing emergency medicine education, however, the educational barriers that have arisen from the COVID-19 pandemic have created unique opportunities for program assessment and development. This has involved implementing more web-based tools for online/remote learning including free open access medical education (FOAMed) and online platforms. This study aimed to examine FOAMed use in CCFP-EM programs across Canada during the COVID-19 pandemic and assessed resident perspectives on integrating more FOAMed into the formal emergency medicine curriculum in response to in-person learning restrictions.

Methods: This study is cross-sectional in design. An anonymous online Qualtrics survey was distributed to all residents attending English-speaking CCFP-EM programs in Canada, approximately 94 possible respondents. A modified Dillman method was used to recruit responses. The first part contained questions pertaining to CCFP-EM residents' perspectives on (1) their current medical education curriculum during the COVID-19 pandemic, (2) FOAMed integration in response to pandemic restrictions, and (3) curriculum enhancement through FOAMed. The second part assessed current FOAM tools used for resident education and social media use.

Results: The total number of respondents was 12. 100% of respondents believed that restrictions on in-person learning affected their medical education and 100% of respondents were concerned about their level of competency compared to CCFP-EM graduates from previous years due to disruptions from the COVID-19 pandemic. A majority of residents believed their program should integrate more FOAMed into the curriculum beyond the COVID-19 pandemic including podcasts, FOAM websites and phone applications. 66.7% of respondents were following their program on social media platforms at the time of survey completion, however most of these respondents did not believe their program had an effective social media presence and did not receive value from their program's accounts.

Conclusion: The COVID-19 pandemic has presented challenges to providing quality, comprehensive education across Canada. FOAMed and web-based tools may be positive adjuncts to current curriculums and are already being integrated into some CCFP-EM programs. Currently most residents perceive their program's social media presences to be ineffective; the pandemic may drive programs to review their social media accounts to find ways to improve their online presence, particularly given the transition from in-person to virtual communication and education this year. Many programs already have social media presences that are followed by CCFP-EM residents are another form of communication between the programs and residents and toward the rest of the medical community. Future research in this field should focus on identifying curriculum weaknesses and optimizing FOAMed integration to account for changes in the learning environment due to COVID-19.

Residents: Dr. Kelly Lien

Type of project: Research**FM PGY3 program:** Emergency Medicine**Study team member(s):** Branka Vujcic**Faculty Supervisor:** Dr. Victor Ng**Project Title:** Attitudes, behaviour, and comfort of Canadian emergency medicine residents and physicians in caring for 2SLGBTQI+ patients

Abstract: OBJECTIVES: Physicians working in EDs will interact with two-spirited, lesbian, gay, bisexual, transgender, queer/questioning and intersex (2SLGBTQI+) persons as colleagues and patients. These patients have unique healthcare needs and encounter negative experiences when seeking medical care, leading to poorer health outcomes and inequities. This study aims to explore the attitudes, behaviour, and comfort of Canadian emergency medicine (EM) physicians in caring for 2SLGBTQI+ patients.

METHODS: An anonymous survey was distributed to EM staff physicians and residents through the Canadian Association of Emergency Physicians network and social media channels. Demographic information was collected, and participants were asked about their comfort, current knowledge, and desire to gain new knowledge in caring for 2SLGBTQI+ patients. Personal perceptions and practice patterns in treating cisgender-heterosexual (cis-het) and 2SLGBTQI+ patients were analyzed using five-point Likert scales. Residents were asked additional questions regarding availability of learning experiences during training. **RESULTS:** 266 surveys were included in the final analysis consisting of 229 (86%) staff physicians and 37 (14%) residents. 97% (n=258) of all respondents believed 2SLGBTQI+ patients deserve the same quality care from medical institutions as other patients. Further, 83% (n=221) respondents agreed that they would like to increase their knowledge in taking care of 2SLGBTQI+ patients, while 34% (n=91) agreed that performing physical examinations on transgender or intersex patients was more challenging than on cis-het patients. Among resident respondents, 46% indicated a lack of didactic teaching devoted to 2SLGBTQI+ care during residency (n=17/37), while 38% encountered discrimination towards 2SLGBTQI+ patients, with most comments from senior faculty and nursing staff. **CONCLUSIONS:** This study suggests that Canadian EM physicians feel that 2SLGBTQI+ patients deserve equitable care when compared to cis-het patients. Future work should focus on educational needs and curricular enhancements in residency programs and continuing professional development for physicians to improve care for 2SLGBTQI+ patients in the ED.

Resident: Dr. Lawrence Yau**Type of project:** Research**FM PGY3 program:** Emergency Medicine**Study team member:** Ms. Branka Vujcic**Faculty Supervisor:** Dr. Matthew Davis**Project Title:** Comparing the frequency of ST-elevation myocardial infarction bypasses and their associated short term outcomes during and before the COVID-19 pandemic

Abstract: Introduction: It is important to understand the impact of the COVID-19 pandemic on patients suffering from other acute illnesses in the prehospital setting. The purpose of our study is to examine the frequency and short-term outcomes of patients transported by Emergency Medical Services (EMS) under ST-elevation myocardial infarction (STEMI) bypass protocol before and during the initial reopening stages of the COVID-19 lockdown in Ontario.

Methods: This retrospective cohort study enrolled adult STEMI bypass patients transported by EMS to a tertiary-care centre equipped with a cardiac catheterization lab. The COVID cohort included patients from March 11 to July 17 in 2020. The pre-COVID cohort included patients from 2017, 2018, and 2019 during the same time period. We collected standardized variables including history, length of stay, admission rates, discharge diagnosis, and mortality rates. Chi-square test and two-tailed t-test were used to compare the COVID cohort to pre-COVID cohorts.

Results: 156 patients were enrolled (mean age 64.0 years, 35.6% female, 27.5% with known cardiac history). There was no statistical difference when examining hospital LOS, ICU admission rates, 30 day mortality rates. There was a greater proportion of patients discharged with a diagnosis of STEMI in the

COVID cohort compared to the 2017 and 2019 pre-COVID cohorts ($p=0.02;0.01$), but not when compared to the 2018 pre-COVID cohort ($p=0.11$).

Conclusions: During the initial re-opening stages of the COVID-19 pandemic, there was a similar total number of STEMI bypasses when compared to previous years. There appears to be no significant differences in the short term outcomes.

Breakout Room B: Preventative Care

Resident: Dr. Michael-Anthony Ferrato

Type of project: Quality Improvement

Home site: Windsor

Faculty Supervisor: Dr. Dale Ziter

Project Title: Addressing Sleep in Family Practice

Abstract: Driven by a societal glorification of productivity and working long hours, sleep is often readily sacrificed by individuals looking to get ahead. Literature reports estimate that 20-30% of adults consistently sleep less than 6h per evening, placing them at increased risk for hypertension, diabetes mellitus, obesity, coronary artery disease, heart failure, cerebral vascular disease, cancer, dementia, depression, anxiety and other co-morbidities. While sleep disorders such as insomnia and sleep apnea contribute to this alarmingly high population of “short-sleepers” (sleeping <6h per night), a substantial portion of these are individuals who willingly deprive themselves of sleep. Whether this be due to a lack of knowledge of potential consequences or a misguided view of sleep as a lifestyle impediment, the majority of short-sleepers never report their poor sleeping habits to healthcare providers. As such, this project was directed at increasing the rate at which sleep habits were screened in the diabetic population of our primary care practice, a setting where lifestyle habits are ideally addressed. By incorporating a reminder to screen sleep in our diabetic visit EMR template we more than doubled the rate at which sleep was reviewed in our diabetic population (5.25 patients vs. baseline 2.2 patients per 4 weeks). This intervention was easy to implement, required little clinical resources and allowed us to identify short-sleepers and provide them with appropriate intervention. Therefore, the intervention in this project was successful as it allowed us to identify and intervene on an important lifestyle factor that previously would have gone unidentified.

Residents: Drs. Bilal Akil, Joseph Vincelli, and Adam Roath

Type of project: Quality Improvement

Home site: Windsor

Study team member(s): Drs. John Day, Paul Ziter, Jeffrey Dennison

Faculty Supervisor: Dr. John Day

Project Title: Vaporizing Vaping: awareness on the dangers

Abstract: This quality improvement (QI) project aimed to bring a greater awareness to the dangers related to E-cigarette use and vaping. This topic remains precedent in today’s popular culture and global media, although research within this area remains fairly scarce. Our team observed how well understood the dangers of vaping and related illnesses were among young adult populations with the hope of initiating a small campaign towards reducing the prevalence of vaping within our local clinic communities. Our methodology included greater physician awareness through information sessions as well as through the integration of precautions regarding regular vaping practices during patient encounters as a part of routine practice.

A total of two PDSA cycles were undertaken in this project. This first included physician-oriented information sessions to promote specific discussions of vaping. The second PDSA cycle involved further implementation of a pre-fabricated electronic medical record form as a prompt to discuss vaping during patient interactions.

The proportion of patient encounters among those aged 13-21 involving vaping discussion was calculated as 47% during the first cycle with a further increase to 76% in the second cycle.

Although further research on vaping as it relates to individual and population health is needed, this QI project showed that through brief physician education, additional adolescent health promotion can certainly be perpetuated. With an increased prevalence of E-cigarette and vaping use, these ramifications are very likely to garner more importance in the near future and family physicians must remain prepared to screen their patients most at risk.

Residents: Drs. Erica Cleto, Trevor Peterson, and Daryoush Safdari

Type of project: Quality Improvement

Home site: SWMHC

Faculty Supervisor: Dr. Julie Copeland

Project Title: Improving documentation of family cardiac history in EMR to improve ease of FRS calculation

Abstract: The Framingham risk score was designed to provide a 10 year risk estimation for cardiac events based on risk factors for coronary artery disease. The Framingham risk score is used to support clinical decision making and in society recommendations, including Canadian Primary Care recommendations on statin initiation. Thus, based on the calculation of this score and its use, primary interventions can be done to reduce a patient's risk of having an acute coronary syndrome in the future. In practice, there are several impediments to calculating this score, including dedicated time, access to data like true blood pressure readings and lipid profiles, and the presence of this information in the EMR. At our primary care clinic, our teams have worked hard to provide excellent periodic and incidental preventative care and to record data. However, it was found that most patient charts (in the case of two of our four teams, less than 20% on initial data collection) did not have adequately documented family history of myocardial infarction. A lack of access to this information, or inadequate detail (in not recording age or sex of parent with MI) leads to an inability to calculate the FRS during the most common instance of review, which is during receipt of lipid profiles when the patient is not in the clinic, thus delaying preventative statin prescription. Our goal was to improve the baseline documentation of family cardiac history to 60%, tripling charting compliance. Our data was collected by referring to charts from two weeks of diabetic visits from each of the four teams. Two PDSA cycles were recorded. The first cycle occurred after presenting our project idea to our resident group, and the latter after discussion with staff physicians as well as a reminder to residents about our project.

Residents: Drs. Victoria Chan, Osman Raza, and Talal Awan

Type of project: Quality Improvement

Home site: VFMC

Faculty Supervisor: Dr. Christina Cookson

Project Title: Increasing the use of the Adverse Childhood Experiences (ACE) questionnaire as a screening tool during Primary Mental Health Care Visits at the Victoria Family Medical Centre

Abstract: Through our shared lived experiences at the Victoria Family Medical Centre clinic, we have all seen how the social determinants of health influence the daily lives of our patients. The Adverse Childhood Experiences study developed a questionnaire to help identify childhood adverse experiences that may have contributed to later-life physical and mental comorbidities, and for healthcare professionals to address these experiences especially in aiding patients in managing their mental health issues. Through our quality improvement project, our outcome measure was to evaluate the percentage of patients presenting for Primary Mental Health visits who were administered/offered the ACE questionnaire. We aimed to improve the administration of the ACE questionnaire in at least 30% of these patients presenting to the clinic. Through our planned PDSA cycles, we were able to increase our outcome measure by nearly a 39% administration of the ACE questionnaire in our clinic for in-person Primary Mental Health visits. Analysis of our process measure showed that we educated 4 Staff Physicians, 8 Residents, 6 Nurses, and 3 Reception Staff. In considering balance measures, 4/55 of the appointments where ACE questionnaires were administered went overtime. Additionally, none of the

appointments where ACE questionnaires were administered lead to subsequent no-shows. We believe that the ACE questionnaire should be implemented as a standard of practice and serve patients as a screening tool for those presenting with mental health concerns.

Resident: Dr. Fei Fei Shao

Type of project: Research

Home site: SJFMC

Faculty Supervisor: Dr. Cynthia Chan

Project Title: Early implementation of mifegymiso for therapeutic abortion – A retrospective chart review at LHSC

Abstract: The mifepristone-misoprostol regimen (Mifegymiso) for first-trimester medical abortions (MA), considered the international gold standard for MA, became available in Canada in January 2017. This project was undertaken to capture the early implementation of Mifegymiso at the LHSC Pregnancy Options Program (POP), characterizing its usage, efficacy, and safety outcomes in comparison to reported findings in international and Canadian studies. Following Western Ethics and Lawson Health Research Institute approval, de-identified encounter data were collected from patients who had a Mifegymiso abortion between Jan. 1, 2018 and Dec. 31, 2019. The primary outcome was successful abortion, defined as expulsion of pregnancy without uterine aspiration. In total, 483 patient encounters were identified, 441 of whom (91.3%) had documented follow-up. Between 2018 – 2019, while the total number of therapeutic abortions remained level, the absolute number of MA encounters increased by 71% and MA as a proportion of therapeutic abortions completed for pregnancies ≤ 14 GA increased from 13.1% to 22.6%. Among the women with successful follow-up, 397 (90.0; 95% CI 86.8-92.7) had successful abortions and 44 (10.0, 95% CI 7.3-13.2) required a dilatation & curettage (D & C) and categorized as MA failure. 25 women (5.7%) had emergency department visits, 5 of whom (1.1%) were treated for infection, and 1 of whom (0.2%) received blood transfusion. Our findings of increasing MA utilization, low rates of adverse events, high success rate are consistent with previously published data, thereby supporting the use of Mifegymiso for first trimester MA in a Canadian setting.

Resident: Dr. Cassandra Schulz

Type of project: Literature Review

FM PGY3 program: Primary Care Rheumatology

Faculty Supervisor: Dr. Gina Rohekar

Project Title: Preventative Health for Patients with Immune-mediated Rheumatic Disease

Abstract: Patients with immune-mediated rheumatic disease (IMRD) are at higher risk of specific cancers, osteoporosis, and cardiovascular disease, and may require special prenatal care and vaccination administration. Consider and discuss annual cervical cancer screening in women with systemic lupus erythematosus (SLE) or taking immune suppressing medications, and complete regular skin examinations for patients receiving biologics. Bone mineral density measurement should begin in menopausal women or men aged 50 or older if diagnosed with rheumatoid arthritis (RA), and in patients aged less than 50 years who have been treated with glucocorticoids for at least three months in the previous year at a dose equivalent of 7.5 milligrams or more daily. Bisphosphonates should be considered during prolonged glucocorticoid treatment. Due to elevated cardiovascular disease risks, patients with inflammatory diseases such as RA, SLE, ankylosing spondylitis (AS), or psoriatic arthritis (PA) should be screened for dyslipidemia regardless of age. Rheumatologic medications should be reviewed for pregnancy compatibility prior to conception, and referral to maternal-fetal-medicine should be considered in pregnant patients with active IMRD. Avoid live vaccines in young infants if the mother was treated with biologic medications during the second half of pregnancy. Inactivated vaccines, such as those for influenza, herpes zoster and COVID-19 may be offered to all patients. Live vaccines should be administered prior to administering biologics, and if biologics have already been initiated, suspension of these medications is indicated prior to vaccination. Family physicians may improve health

outcomes for patients with IMRD by providing this nuanced health promotion, screening, and treatment.

Residents: Drs. Stephen McDonald, Alex Nedeljkovic, Leah Sinai, Jocelyn Traher, and Matthew Wu

Type of project: Quality Improvement

Home site: MCFMC/WMHC/SWMHC

Faculty Supervisor: Dr. Michael Craig

Project Title: Using resident teaching tools to facilitate lifestyle management discussions for patients with Type II Diabetes

Abstract: Type II diabetes is a chronic disease that, over time, can lead to significant microvascular complications and comorbidities. The Canadian Diabetes Association recognizes that lifestyle intervention, including diet, exercise, low alcohol intake and quitting smoking, is a critical component of this chronic disease management.

At three family medicine teaching centers, residents checked off the nutrition and exercise counselling boxes only 39% of the time. This project aimed to increase the number of lifestyle discussions with patients through resident teaching and engagement.

Three PDSA cycles were completed. An email was sent to residents with a handout describing lifestyle management in diabetes. Then, the handout was printed and given to each resident. Finally, a recorded presentation about lifestyle management in Type II diabetes was sent to residents to watch.

After the email intervention, 50% of charts had documented that residents discussed lifestyle interventions with patients. When the handout was given to residents, 56% of charts had documented lifestyle discussions. After the recorded presentation was sent, 54% of charts had documented lifestyle discussions.

This project demonstrated that through resident teaching and engagement, more lifestyle discussions with patients regarding Type II diabetes were completed. Future studies could clarify whether these discussions enhance glycemic control.

Breakout Room C: Palliative Care, Aging Patients, & Prescribing Medications

Resident: Dr. Spencer Ler

Type of project: Case Report

FM PGY3 program: Palliative Care

Faculty Supervisor: Dr. Gil Schreier

Project Title: Dexmedetomidine in Terminal Delirium: A brief case report

Abstract: Dexmedetomidine is a selective alpha₂ agonist traditionally used in perioperative settings as a general anesthetic and in the ICU for sedation of mechanically ventilated patients. It has been found to significantly decrease days of ICU delirium and days spent in the ICU when compared to Haldol. In palliative care, there have been reports of dexmedetomidine used in patients with delirium and intractable pain with relief of symptoms while allowing patients precious quality time with their loved ones. We present a brief report of 2 patients admitted to the Palliative Care Unit at London Health Sciences Center over the last year in which a continuous subcutaneous administration of dexmedetomidine was provided for terminal delirium. In both cases, trials of methotrimeprazine and Haldol were initially tried with minimal efficacy. In both cases, the patient's delirium was adequately managed with use of dexmedetomidine, with a brief period of quality time with loved ones.

Dexmedetomidine is a potentially useful medication for the symptomatic treatment of terminal delirium. Further cases are currently being recruited for a more robust case series. More research is required to compare dexmedetomidine infusion to standard symptomatic treatments.

Residents: Drs. Benjamin Welkovics, Calvin Tang, Jeremy Soo, Safiyyah Mahomed, Tommy Lin

Type of project: Quality Improvement

Home site: SJFMC

Faculty Supervisor: Dr. Saadia Jan

Project Title: Improving Frequency of Documented End-of-Life (EOL) Care Discussions in a Primary Care Setting

Abstract: Background: Advanced care planning in the form of End-of-life (EOL) care discussions allows for patients to convey their preferences for acceptable medical interventions in settings where they are no longer capable of doing so. Literature search performed supports that EOL documentation and discussion leads to better outcomes, decreases stress, anxiety, and depression, and leads to higher patient and family satisfaction. Despite this, the prevalence of individuals with documented advanced directives varies widely within Canada. This Quality Improvement project looks to increase frequency of documentation of EOL care discussions in patients over 65 at SJFMC.

Methods: A total of 3 PDSA cycles were completed between January to April 2021. Between each PDSA cycle, the results of the cycle and intervention were studied. Based on these results, a new intervention was implemented for the subsequent PDSA cycle and assessed. The frequency and methods of reminder for participants were targets for intervention between cycles.

Results: Pending

Conclusion: EOL discussions are an important part of comprehensive family medicine care. Many barriers exist to facilitating these conversations including lack of time, familiarity with the topic, and remembering to initiate the conversations. Another potential barrier was the change to largely virtual visits. The lack of face to face interactions may have made it more difficult for many residents to initiate the conversations and made patients reluctant to engage in them.

Resident: Dr. Yesul (Brenda) Hwang

Type of project: Quality Improvement

FM PGY3 program: Care of the Elderly

Faculty Supervisor: Dr. Matthew MacDonald

Project Title: The New “Geriatric Giants”: Improving primary care screening of Loneliness and Social Isolation in the older adults.

Abstract: Loneliness and social isolation are increasingly recognized but underreported psychosocial determinants of health. Older adults are particularly vulnerable to the associated physical and mental health risks of these conditions. Unfortunately, we do not routinely screen our elderly patients for loneliness and social isolation in clinical practice. In this QI project, we wanted to increase the rate of screening for loneliness and social isolation in patients within a single family practice from a baseline of 0% to 20%. Patients were selected based on age criteria of 65 years or older. Several Plan-Do-Study-Act (PDSA) cycles were implemented using different strategies to screen for loneliness and social isolation with selected patients, including educating health care providers and using the stamp feature on our EMR for ease of documentation. This resulted in a median screening rate of 54% thereby achieving our goal of increasing screening rate to 20%. Based on the results of this study, it is feasible to screen elderly patients for loneliness and social isolation in a primary care setting. Some of the identified challenges included time constraints and selection bias when approaching patients to participate in the study. Future research could focus on implication of these psychosocial determinants on the elderly in different settings including Long Term Care residences, leading to advocacy for better access to social services and resources for older adults in our communities.

Residents: Drs. Hussein Ataie Fashtami and Sahar Farzi

Type of project: Quality Improvement

Home site: MCFMC

Faculty Supervisor: Dr. Darren Van Dam

Project Title: Increase in assessment of fall risk

Abstract: We aimed to increase the percentage of patients 65 years or older with associated risk factors for fall by 30% at Ilderton clinic by February 2021. Associated risk factors included: Being diagnosed with Osteoarthritis, taking 4 or more medications, taking anti-hypertensive medications, taking anti-diabetic medications. The first change was planned to be implementing a routine for fall risk assessment. If we identified a patient as being at risk of fall, we were supposed to assess them in a separate session for fall risk severity. Our process measure was to investigate how many patients rebook for assessment and also what fraction of them actually appear. Unfortunately, due to Covid-19 pandemic, we were not able to schedule patients for the actual office visit and perform the evaluation. If there was not such situation, we were planning to assess orthostatic hypotension, Timed up and Go test, and mobility/gait. If we had the chance to collect data as per plan, we might have encountered some obstacles/limitations in which we were supposed to implement some modifications. For instance, it was possible that the timing would not let us perform the initial evaluation for recruitment during the visit or patients might have denied getting re-scheduled for the actual office evaluation. If every step of our project had occurred as planned, we were able to decide if the project should be continued or not. However, Covid pandemic changed the process of our project completely. However, we learnt that there are many aspects in our practice that has been taken for granted and accepted as routine while looking from a different angle. Being more proactive, we can make great effects with small changes in our management.

Resident: Dr. Jordan Lafranier

Type of project: Mixed Qualitative/Quantitative Survey Research **FM PGY3 program:** Palliative Care

Faculty Supervisor: Dr. Patricia Valcke

Project Title: Psilocybin in Palliative Care: Exploring Palliative Care Physician's Attitudes and Barriers

Abstract: Existential distress, emotional and spiritual suffering is common in the palliative care setting with limited therapeutic options available to patients. In the last 20 years, there has been a growing body of research into the benefits of psilocybin, the active component of hallucinogenic mushrooms, for the treatment of depression, anxiety and existential distress associated with end of life. For example, a study by Ross et al. (2016) showed that "in conjunction with psychotherapy, single moderate-dose psilocybin produced rapid, robust and enduring anxiolytic and antidepressant effects in patients with cancer-related psychological distress". As of August 2020, Canadian patients with life limiting illness have successfully applied for exemption of section 56(1) of the controlled substances and drug act (CDSA) allowing compassionate treatment using psilocybin. This study aims to examine the attitudes of current physicians working in palliative care regarding this potential therapy as well as exploring potential barriers to use in the clinical setting. Palliative physicians in Ontario were recruited through the OMA Section of Palliative Care to be involved in this study. A cross-sectional survey design was used to collect both qualitative and quantitative descriptive data. Our hypothesis is that there is variability in attitudes towards psychedelic based therapies with barriers of use including concerns regarding efficacy, access and safety. At this time, results are currently pending.

Residents: Drs. Victoria Brzozowski, Jeffrey McCormick, Zahra Syavash Vahabi, and Alexander Yan

Type of project: Quality Improvement

Home site: BFMC

Faculty Supervisor: Dr. Sonny Cejic

Project Title: Opioid contracts for patients prescribed opioids for chronic non-cancer pain: A quality improvement project at BFMC

Abstract: In the last few decades, the use of opioids for chronic non-cancer pain has increased in Canada, and with that there has also been an increase in prescription drug abuse. The opioid agreement can act as a clear guideline for both the physician and the patient that helps to guide shared decision making regarding the prescription and maintenance of opioid medication.

Baseline data from the rosters of 4 physicians was collected at BFMC and showed that 30% had an opioid agreement completed in the last 2 years. The aim of this project was to increase that percentage to 80% for all patients seen at BFMC over a 3-month period from November 2020 to February 2021. Various interventions were attempted including a handout to providers with instructions how to document opioid contracts, a discussion on how to navigate opioid contracts in virtual/phone encounters with patients and providing a script on how to address opioid contract encounters with patients.

By the end of the project, 50% of patients being seen who were using opioids for chronic non-cancer pain had a signed and documented opioid agreement on file.

Challenges encountered during these interventions included a significant transition to telephone encounters and a corresponding decreased opportunity for an organic discussion with patients regarding opioid contracts. The logistics of dealing with paperwork via the phone also decreased provider buy-in. The project identified different directions outside of opioid agreements that could be further pursued to decrease risk of inappropriate opioid use.

Breakout Room D: Medical Education and Telemedicine

Residents: Drs. Andrei Dobrin and Madhav Bole

Type of project: Research

Home site: BFMC and SWMHC

Study team members: Adrienne Wakabayashi, Maria Mathews, Jennifer Parr

Faculty Supervisor: Dr. Sonny Cejic

Project Title: Telemedicine for Workplace Injury Triage

Abstract: Objective: The proportion of patients presenting to a regional Canadian primary care clinic and emergency department that could have been safely managed via telemedicine.

Design: Retrospective chart review of Form 8s from Southwest Middlesex Health Centre between January 1, 2017 and March 31, 2020. Two Canadian medical residents assessed each case to determine whether it could have been safely managed through telemedicine. We define safe triage as any patient encounter which did not result in an in-office procedure or have a physical exam finding which subsequently changed management of the encounter. Chi-square testing was performed to determine whether injury mechanism was predictive of safe telemedicine assessment.

Setting: Southwest Middlesex Health Centre and Strathroy Middlesex General Hospital.

Participants: Any initial clinical encounter within an episode of care resulting in the completion of a Form 8 within the study window. Flares of pre-existing conditions and charts with incomplete data were excluded.

Main Outcome Measure: Percentage of episodes of care that could have been safely managed through telemedicine.

Results: 252 charts were accessed, 45 were excluded. Patient demographics corresponded to an average Canadian clinical setting. 30% of patients were assessed in the emergency department by their own family physician. 57.5% of total patients could have been safely managed through telemedicine. Chi Square testing of mechanism of injury vs amenability to telemedicine was significant at $p < 0.05$.

Conclusion: The majority of patients could have been safely managed via telemedicine, with the mechanism of injury being a prognostic factor in helping make this determination.

Residents: Drs. Elyse Epp, Matthew VanTil, and Benjamin Lau

Type of project: Quality Improvement

Home site: Chatham

Faculty Supervisor: Dr. David Huffman

Project Title: Reduction of In-Patient Follow-up and Emergency Department Visits in the Setting of Telemedicine during COVID-19 Restrictions.

Abstract: Primary care and all aspects of medicine have been affected by the outbreak of the COVID-19 pandemic. With restrictions in place this has led to a decrease in the ability to see patients in a traditional office setting to avoid the spread of the virus. Primary care remains an essential service and to serve patients better we sought to try to determine which patients could best be served by a phone visit. Prior to the start of our project 10.2% of patients who had a telemedicine appointment required follow up visits or were seen in the emergency department within two weeks of their assessment. By targeting different chief complaints to be seen initially for an in-person appointment we hoped to decrease the percentage of in person follow up visits to 5%. Overall, by implementing our change idea we were able to decrease the rate of in person visits by 1.1%. While not statistically significant, there were several factors that impeded our implementation. Further implementation by including medical comorbidities may have a positive impact on improving this change idea.

Resident: Dr. Obaidullah Khan

Type of project: Research

Home site: SWMHC

Study team members: Dr. Ian Lobb, Dr. Lawrence Yau, Dr. Craig Olmstead, Adrienne Wakabayashi, Melissa Bloomfield, Maryanne Risser, Dr. Daniel Grushka

Faculty Supervisor: Dr. Kyle Carter

Project Title: Training of Canadian family medicine residents in POCUS screening of AAAs: a feasibility study

Abstract: An abdominal aortic aneurysm (AAA) refers to the pathologic dilation of the abdominal aorta of 3.0cm or greater.(1) About 20,000 Canadians this year will receive the diagnosis, which carries up to an 80% risk of death if ruptured.(2,3) Detecting AAA therefore is an important strategy to preventing asymptomatic rupture and death. Screening is now strongly recommended by the Canadian Society of Vascular Surgery for men aged 65-80.(4) A recent systematic review showed a risk reduction of 34% in AAA mortality rate and 35% in AAA rupture over 13-15 years, driven by one-time AAA ultrasound (US) screen coupled with improved surgical technique.(2)

Our view is that family physicians are in a unique position to screen for AAA using point-of-care ultrasound (POCUS) in the outpatient clinic.(5–8) Focused AAA scans done via POCUS by family physicians carries a sensitivity and specificity of 100%,(6,7,9) correlating well with formal US scans.(5,6,9) This would also address the issue of occasionally poor attendance rates for outpatient imaging studies,(10–12) and may also reduce additional imaging and associated costs.(8)

Our primary objective is to determine if FM residents, after completing a half day of POCUS training can screen for AAA in the outpatient setting vis-à-vis formal ultrasound. Our secondary objective is to assess, via a survey filled by residents, whether screening for AAA in clinic is an achievable skill in the two years of FM residency. Our hypothesis is that there will be no statistical difference of resident-led POCUS scans against the gold standard of formal ultrasound.

Resident: Dr. Daniela Keren

Type of project: Research

Home site: SJFMC

Study team member(s): Adrienne Wakabayashi

Faculty Supervisor: Dr. Susan McNair

Project Title: Sexual assault and domestic violence: are family medicine residents learning enough?

Abstract: Background: Sexual assault and domestic violence (SADV) are important healthcare issues worldwide. Family physicians are uniquely able to provide comprehensive and longitudinal care to those experiencing SADV. However, emphasis on SADV training in Canadian family medicine (FM) residencies is declining, and FM physicians endorse insufficient comfort and competence when managing SADV

cases. This study aimed to explore FM residents' learning needs, attitudes and ideas regarding SADV teaching in residency.

Methods: We conducted a qualitative in-depth interview study at Western University. We collected data from eight semi-structured interviews of first- and second-year FM residents, which were audio recorded and transcribed. We analyzed the data using reflexive thematic analysis.

Results: Participant characteristics included both international and national undergraduate medical training, and both rural and urban residency settings. Participants' learning experiences to date either positively or negatively influenced their competence regarding SADV. Intrinsic and extrinsic factors influenced their motivation to learn about SADV. Learning experiences were limited by disparate exposures and preceptorship. Perceived barriers included teacher, patient and learner discomfort, and relative unimportance of the topic to some. All participants felt inadequately trained and desired increased teaching regarding SADV, particularly through small-group learning and hearing patient stories.

Conclusions: Understanding FM residents' experiences and ideas regarding SADV teaching is critical for enabling residency programs to graduate future physicians who are equipped to care for this vulnerable population. In identifying key motivators and barriers to learning around SADV, this study provides a foundation for curricular development with respect to SADV.

Resident: Dr. Karan Chawla

Type of project: Research

Home site: VFMC

Study team members: Firas Ahmed, Adrienne Wakabayashi, Munsif Bhimani

Faculty Supervisor: Dr. Daniel Grushka

Project Title: Effect of the COVID-19 pandemic on residents' training experiences

Abstract: Introduction: Residency training is based off of patient interactions, practice of procedural skills, and lecture based teaching. The coronavirus pandemic led to a situation in which these methods of training were altered or even removed all together. This project aims to determine what particular aspects of Family Medicine and Enhanced Skills training were affected, and how residents feel it will impact their confidence as independent physicians.

Method: Our study was conducted through an online survey. The survey was distributed to residents enrolled in Family Medicine or Enhanced Skills at Western University.

Results: A total of 34 responses were received. 70% of participants felt that their training had been significantly impacted by the pandemic. 83% of PGY-2 and PGY-3 residents felt that they would not be able to recuperate learning opportunities lost as a result of the pandemic. However, 70% of residents felt their eventual readiness to practice would not be impacted. Nearly 70% of residents also felt that they are now well equipped to handle a future pandemic. Residents learned new skills such as tele-health communications, personal protective equipment stewardship and pandemic planning.

Conclusion: Overall, our research suggests a significant impact on resident training. Although most residents currently did not feel that their eventual readiness to practice was impacted, further disruptions in training will likely have negative consequences on our clinical skills. We hope this project highlights the need for programs to find new and safe ways to provide teaching to residents to ensure no further learning opportunities are lost.

Resident: Dr. Melissa Cookson

Type of project: Research

Home site: SJFMC

Faculty Supervisor: Dr. George Kim

Project Title: Faculty Engagement in Distributed Medical Education

Abstract: INTRODUCTION Distributed medical education is increasingly becoming a key component of all Canadian medical schools. The concept of engagement has been used in the healthcare context, in medical education, and most recently in distributed medical education. In order to maximize engagement of faculty in distributed medical education sites, it is important to understand what physicians in these regions experience in their immediate work environment. As research in faculty engagement in distributed education is limited, clarification of contributing factors to distributed faculty's engagement would provide opportunities for Faculties of Medicine to more fully engage their faculty.

METHODS We conducted 17 semi-structured interviews with distributed faculty members across Canada by phone. Key relevant topics were analyzed thematically

RESULTS Main themes identified that affect distributed faculty engagement include recognition and feedback, institutional supports, personal factors, and local work factors and time.

CONCLUSION The factors that affect engagement can be categorized into facilitators and barriers which can further be classified as those involving the institution, the immediate workplace and individual/personal factors. In this study, we found broad categories that faculty identified with, being institutional support, personal factors as well as local support and time. The theme of recognition and feedback spans all three of these levels of influence.

Resident: Dr. Yeshale Chetty

Type of project: Educational App Contribution

FM PGY3 program: Sport and Exercise Medicine

Faculty Supervisor: Dr. Graham Briscoe

Project Title: Wrist Joint for MSK Crash Course (Within Family Medicine Study Guide App)

Abstract: The Family Medicine Study Guide was created as a non-profit project. 100% of the revenue goes towards ensuring the sustainability of the app and towards donations to various charities around the world. Since the start of the project there has been over 40,000\$ donated to international charities, with 15,000\$ of this total amount being in 2020 alone. The contributions are made by physicians and are peer reviewed with an aim to help medical students and family medicine residents enhance their knowledge of Family Medicine topics and to prepare for the CFPC exam.

The app has been downloaded over 13,000 times in 105 countries. Currently it includes 85 'SAMP' case studies with 429 short answer questions, 150 'Rapid Fire' questions, 5 'Quick pix' dermatology cases with 152 related questions and approximately two and a half hours of 'Mini-Podcasts'. There is also an MSK crash course that is being updated. Currently the course covers the Knee Joint presented as 6 different courses. The 6 courses are broken down into age (pediatric, adult, geriatric) and timing for each (acute or chronic).

My project will follow the same outline as the Knee Joint Crash Course. Included is an acute pediatric wrist case as a buckle fracture, chronic pediatric wrist as a physeal stress reaction, acute adult wrist as a scapholunate tear, chronic adult wrist as De Quervains Tenosynovitis, acute geriatric wrist as a fragility fracture of the distal radius, and chronic geriatric wrist as 1st carpometacarpal osteoarthritis. Each course will be presented in a case format that will allow the user to work through the whole assessment and evaluation. The goal is to help family medicine physicians feel comfortable in the assessment of common MSK wrist conditions.